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Geography

Evolution of Frobisher Bay as a Major Settlement

THE EVOLUTION OF FROBISHER BAY AS A MAJOR SETTLEMENT
IN THE CANADIAN EASTERN ARCTIC

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MASTER OF ARTS

The evolution of a small military establishment into a major government administrative centre in the Canadian Arctic is traced. A case study of the settlement is presented to show what can happen in other Canadian Arctic settlements unless certain problems met in Frobisher Bay are overcome. The physical growth of the settlement and the change from its dual role as a military and civilian government centre to its present purely administrative function is described along with the development of the public and private sectors and the activities of the population groups. Efforts by the government to formulate rational plans for the settlement's development and to integrate the large Eskimo population into its economy are treated. Problems facing planners now concerned with Frobisher Bay's future are defined and possible future courses of development of the settlement are considered.

THE EVOLUTION OF
FROBISHER BAY
AS A MAJOR SETTLEMENT IN
THE CANADIAN EASTERN ARCTIC

A Thesis

by

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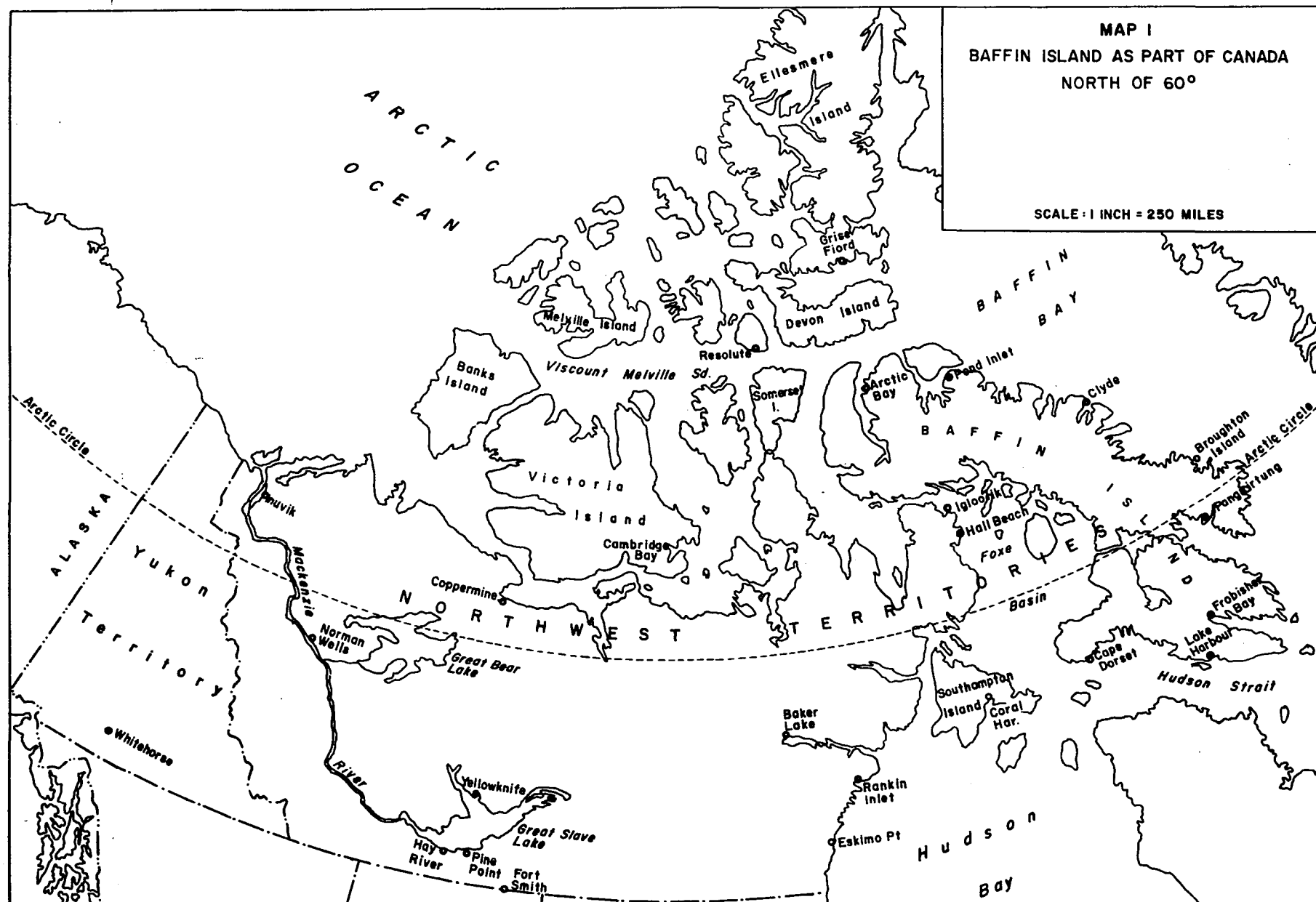
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INTRODUCTION

This thesis is a case study of the Eastern Arctic settlement of Frobisher Bay, located on southern Baffin Island in the Northwest Territories of Canada.

The present site of the settlement was uninhabited until 1942, when United States military forces established an airbase there. Subsequent U.S. uses of the base over the next 20 years arose largely because of the presence of the airfield and related facilities. From approximately 1953, various agencies of the Government of Canada began using the settlement. During the next decade, Frobisher Bay served a dual-purpose role, a military side not concerned with the settlement itself or even with Canada, and a civilian administrative side concerned directly with the settlement itself and with Canada's national purpose in the North. This dual function ended with the withdrawal of American military forces in 1963. Since that time, Frobisher Bay's central role has been as a regional administrative centre for the administration of the Canadian Government's programs for development of the northern Territories and the support of the indigenous peoples there.

During its first 20 years, growth of the settlement was erratic, taking place in bursts as use of the base rose and fell. Each wave of activity brought more local Eskimos into



the settlement in search of wage employment. By 1960, there were no longer any permanent outlying Eskimo camps left in the bay region. All the Eskimos lived within the settlement. Their traditional subsistence economy was gradually supplanted, until by mid-1966, the period for which Frobisher Bay is examined in some detail in this thesis, they were earning a living by a variety of occupations.

The thesis shows the rapid and somewhat haphazard evolution of the original small military establishment into a major government administrative centre. This centre has never had any traditional economic base. Government authorities, faced with the consequences of its unplanned evolution, have been called on from time to time to determine its future. Over the years, large sums have been expended in capital improvements; regional services have been concentrated there. The local Eskimos having been attracted to the settlement have given up their former hunting economy. So far, nothing has taken its place for many of the older Eskimos, while most of the younger ones who have received some education and training have little opportunity to utilize it in the settlement. Both the settlement and its Eskimo population face an uncertain future.

In recent years there has been a strong and concentrated resurgence of interest in Canada's North, an interest even more intense than that of a decade ago. It was sparked in part by

development of the Pine Point Mine which began operation in 1965 and led to a flurry of mining exploration all over the North. Concurrently, there was new interest in the political development of the northern Territories which led to a commission of enquiry on development of government in the Northwest Territories (Carrothers Commission, 1965). Over the past two years, active interest in the formulation of a rational development plan for the North has grown in both government and private circles. Government attempts to initiate comprehensive planning has resulted in the exploration of many possibilities including that of phasing out many of the small, isolated settlements in favour of concentrating their populations in a few large regional "growth" or "attraction" centres. Possibilities for the introduction of industry into Arctic settlements have long attracted government interest and continue to do so. Ways and means of fitting northern indigenous residents into the rapidly expanding non-renewable resource industry are being sought.

In light of such active concern with future northern development, particularly that related to attraction centres, a study of Frobisher Bay is desirable at this time for several reasons. The settlement is now so large that there can be no question of it being phased out. It will necessarily be an attraction or concentration centre. Other such centres will be elsewhere in the North. Study of the growth of Frobisher Bay

and the problems which accompanied it provide useful lessons in connection with the selection and planning of other possible northern concentration centres. At the same time, a clear definition of the future function of Frobisher Bay itself is needed so that rational planning can be brought to bear on its future development.

This case study of Frobisher Bay treats the settlement itself and the resident population groups, non-Eskimo and Eskimo. However, no attempt is made to analyse the effects of life in Frobisher Bay on the Eskimos (or non-Eskimos) as individuals, i.e., their attitudes and mental reactions to settlement living. Sociological aspects are entirely outside the scope of the study and are not being considered. An admirable assessment of the sociological factors involved in the urbanization of Frobisher Bay Eskimos may be found in the Honigmanns' Eskimo Townsmen (1965). Yatsushiro (1958a, 1958b, 1962) also studied such aspects at Frobisher Bay. Other studies on sociological aspects of Eskimo life in urban situations in the Canadian Arctic exist. Although not related to Frobisher Bay, nevertheless they do shed light on the subject. For example, A.M. Ervin's New Northern Townsmen in Inuvik (1968) assess the degree of success of natives in adapting to the new urban environment at Inuvik, while J. Mailhot's Inuvik Community Structure - Summer, 1965 (1968),

analyses community associations and relations between various groups of people in Inuvik. J.D. Ferguson's (1959) study of Tuktoyaktuk and F. Vallee's (1962) work on the Baker Lake area and Van Stone's (1959) study of Eskimo Point, to name but the smallest number of such studies, offer other samplings of studies made of sociological and cultural implications of contacts between natives and non-natives and problems in adaption to new ways of life among the peoples of smaller settlements than either Inuvik or Frobisher Bay. The northern literature is full of sociological studies made of the "adjustment problems" of Indians and Eskimos moving into settlement-dwelling situations for the first time; little would be served in assessing the particular situation in Frobisher Bay in a work of the nature of the present thesis. It is sufficient to say that study of much of the literature, particularly that on Inuvik, a large settlement similar in size to Frobisher Bay and with many similar problems, will shed light on the problems encountered by the Frobisher Eskimos in adjusting to their urban situation.

Other Canadian Arctic settlements might have been chosen for study. However, Frobisher Bay was selected, partly because of its interesting history, so different from that of other major northern centres; partly because it has been the scene of various government attempts to promote rational plan-

ning; and partly because no other major study in terms of its economic development had been done.

The settlement is unique in terms of its origin and development. Unlike so many Canadian Arctic settlements, it had no pre-history, no early history as a trading post, whaling centre or trans-shipment centre; it was not established because there were mineral reserves in the vicinity. Unlike the government-conceived and -developed settlement of Inuvik, Frobisher Bay's founding and early development were entirely without benefit of direction or of a master plan (Baird, 1960; Fairfield, 1967; Merrill, 1956; 1963).

By the time agencies of the Government of Canada were faced with full responsibility for the settlement, it had already attracted the largest group of Eskimos living in any one settlement in Canada, if not anywhere else. The government had immediately to administer the Eskimo population and the settlement itself. Thus, no planning attended the settlement's first 10 to 12 years of growth, and only minimal planning was brought to bear there until recently.

One has only to consider Frobisher Bay in the light of planned, non-permanent communities studied by V.J. Parker (1963), the resource frontier towns examined by I. Robinson (1962), Yellowknife, studied by L.S. Bourne (1963) or Dawson City, J. Lotz (1964), to name but a very few examples to recog-

nize that Frobisher Bay differs dramatically as regards origin, economic base and continuing function. It is certainly unlike towns located at similar or higher latitudes in Scandinavia, e.g., Kiruna, Sweden (Watts, 1955), Kirkeness, Norway (Lloyd, 1954; Allefresde, 1960), Tromsø, Norway (Allefresde, 1960), which had well established traditions of local settlement long ago. In terms of present function and economic base, Frobisher Bay and Inuvik are similar in that both are northern government administrative communities serving as "county seats" for large regions, having based within them field headquarters of Federal Government agencies concerned with carrying out policies relating to northern development and the care of the indigenous peoples. However, Inuvik differs in a number of ways: it is located within a region which has an established economy; it has developed a definite commercial core comparable to larger communities in remote areas of southern Canada (Bissett, 1968; Wolforth, 1968), Frobisher Bay has not; Inuvik lies within a mineral-rich region; Frobisher Bay does not.

This study differs from others done on northern urban situations in that it deals with a settlement lacking a usual form of economic base such as exists in the towns treated by Robinson (1962) or Parker (1963). Few studies exist which are concerned with Arctic settlements of the nature of Frobisher Bay.

Even fewer exist on Frobisher Bay itself.^{1/} Of the great body of literature concerned with various aspects of the Canadian Arctic, by far the majority which deal with settlements are concerned primarily with sociological aspects, particularly those of acculturation, cultural shock, stresses imposed upon indigenous residents by the urban situation, and related topics. Omissions from this study of such topics as reaction of the Eskimos to urban living or their efforts to manipulate the urban situation, detailed hunting practices of the local Eskimos or the number of dog teams remaining in Frobisher Bay in 1966, are deliberate. The economy of the Eskimo population is considered only as it forms a part of the overall picture of the settlement; that population is studied only in so far as is necessary in relation to the past, present and possible future courses of development of the settlement.

Part I of the thesis consists of five chapters which contain background information on Frobisher Bay and its immediate region. Since any consideration of the growth and possible future development of an Arctic settlement must take account of the physical factors, the study begins with a short statement

^{1/} The majority of such studies as have been done on Frobisher Bay were concerned with the first government plans for the settlement (e.g., Dunwoody, 1957; Kettle, 1958; Hees, 1959; White, 1959; Fenner, 1960).

about the physical environment of Frobisher Bay. Certain aspects of that environment also had a direct bearing on the founding of the settlement at its present site and have been important factors in subsequent uses made of it. A brief history of the region follows, intended to point up the fact that until World War II, no interest had even been shown in the location other than seasonal transient visits paid by the Eskimos. The distribution of the local Eskimo population is covered in order to show how it was distributed about the bay region prior to the founding of the settlement. Chapter 4 describes the development of Frobisher Bay during its first 20 years and points up its dual function, military and administrative, during that period. The general historical descriptive background of the settlement is concluded with a discussion of the first unsuccessful attempt to develop a rational plan. This material covers an important period in Frobisher's history and it effectively illustrates the pitfalls likely to be encountered in attempts to plan development of northern centres on traditional economic bases.

Part II of the thesis examines the settlement as it was in 1966. Because the government function is the most important - in fact the reason for the settlement's present existence - it is treated first (Chapter 7). The three subsequent chapters deal with private enterprise and the activities of the Eskimo and non-Eskimo components of the population, respectively. The dis-

cussion of private enterprise serves to illustrate how under-developed the private sector is. Treatment of this sector is necessary in any discussion concerning the future of Frobisher, since planning must work toward balanced development. Eskimos form the majority of Frobisher's population. Their activities and participation in the settlement's present economy must be considered in relation to its possible future development.

In Part III, the new (current) government development for Frobisher Bay is treated, followed by a brief survey of conditions in the settlement in 1969. The latter illustrates how rapidly the situation in a northern settlement can change, and what drastic effects even the most slender threads of knowledge about the future can have on activities in such a situation as prevails in Frobisher Bay. The final chapter points up factors requiring consideration in terms of Frobisher Bay's future development and suggests, in a qualitative way only, some possible future lines of development.

The thesis makes no attempt to prescribe specific solutions to Frobisher Bay's problems or to define precise courses of action which should be followed. Through its treatment of the subject as a case study, it is intended to present in one volume a body of knowledge about one Canadian Arctic settlement which may be useful to planners and researchers con-

cerned with the future course of development of northern settlements. Its primary contribution would be one of providing general knowledge for use by specialists applying the tools of specific professions to various aspects of economic and social development in the northern situation.

Much of the preliminary material for this thesis was gathered during late 1965 and early 1966. The author made a two-week reconnaissance trip to Frobisher Bay in February, 1966, while major field work was done by the author in Frobisher Bay between mid-April and late August, 1966. Assistance during the latter period was provided by Miss Luci Evaluordjuk of Frobisher Bay, who served as research assistant and interpreter.

While it was necessary to make extensive use of files and other document sources for material concerning the physical background and historical aspects of the settlement's development, most of the information pertaining to the situation in Frobisher Bay in 1966 and 1969 was obtained at first-hand by the writer. Frobisher Bay is a government settlement. Little relevant information is available on many aspects except for that contained in government files. Data obtained from such sources coupled with those obtained at first hand allowed the preparation of a more detailed and useful study than would otherwise have been possible.

All material obtained from files and government documents plus that obtained from interviews and personal observations was collected by the writer and is used in this thesis with the permission of the Department of Indian Affairs and Northern Development. Its use and interpretation for purposes of this thesis are the sole responsibility of the writer and do not necessarily reflect the views of the Department. All other sources of information used are plainly identified.

P A R T I

EVOLUTION OF AN ARCTIC

FRONTIER

SETTLEMENT

CHAPTER 1

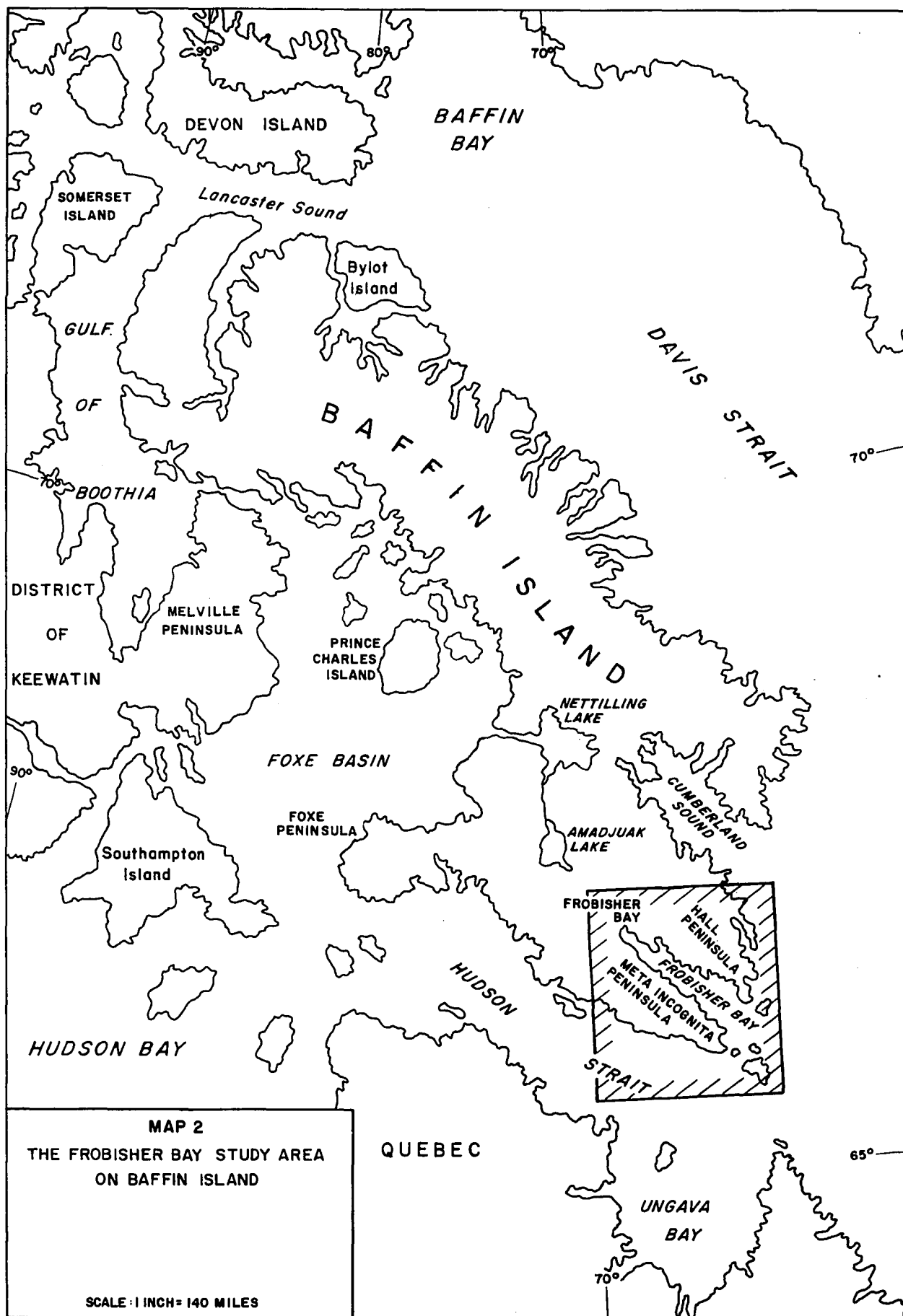
THE PHYSICAL BACKGROUND

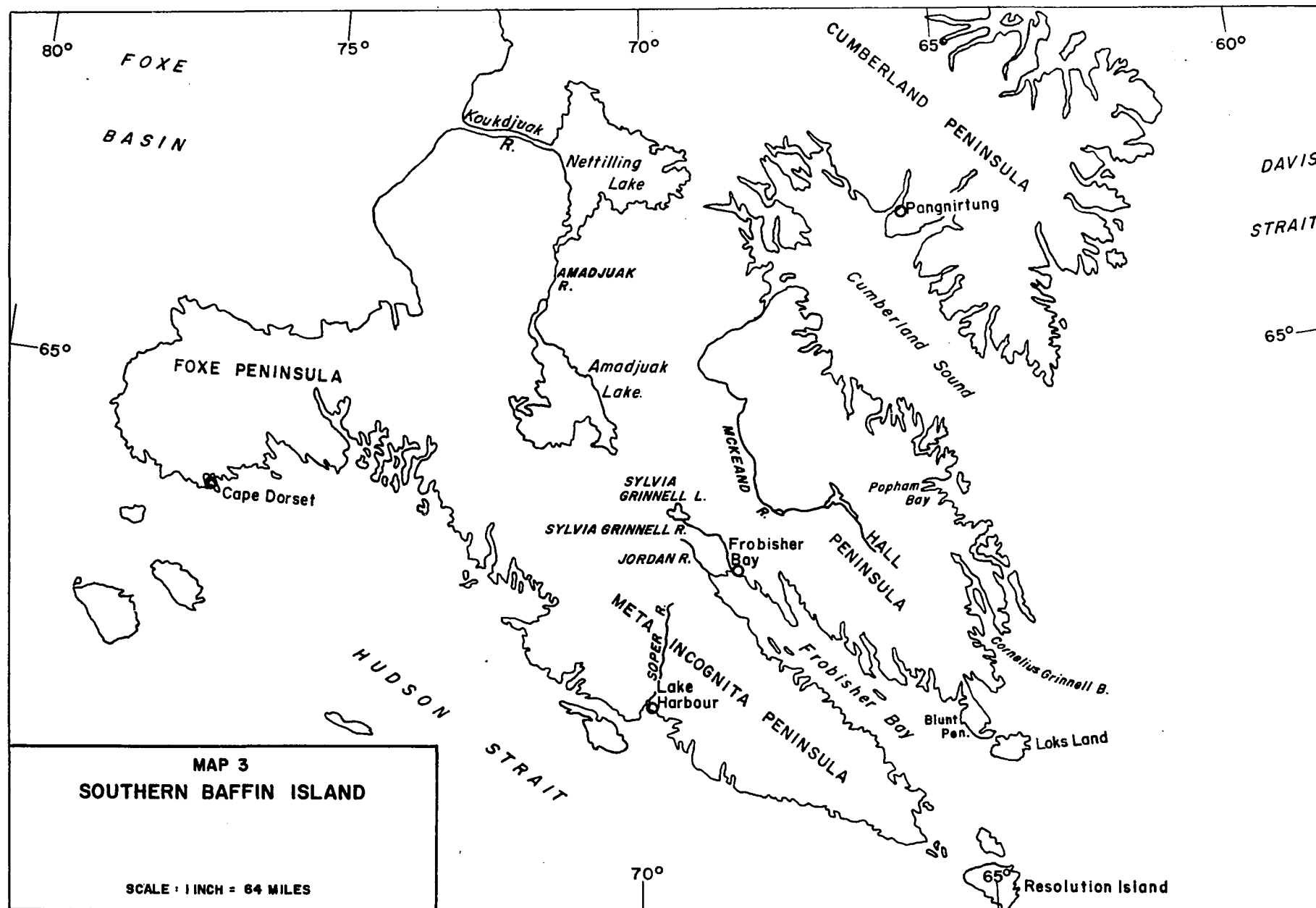
THE LAND

Baffin Island is Canada's largest island. Just under 1,000 miles long from north to south, it presented a formidable obstacle to early European mariners seeking a Northwest Passage to the Orient. The east coast of the island, heavily indented with fiords, offered what may have appeared to be promising channels leading to the Northwest Passage. Explorers soon discovered, however, that they would need to circumvent the island, either to the north, via Lancaster Sound, or to the south and west through Hudson Strait (Map 1).

The settlement of Frobisher Bay is located on southern Baffin Island. The Frobisher Bay study area, comprising the settlement, the bay and the hinterland contained within approximately a 50-mile radius of the settlement, is shown in Maps 2 and 3.

Baffin Island forms the eastern edge of the Canadian Shield which has been sharply up-tilted in the east to produce the mountainous coastal belt extending from the Cumberland Peninsula to Bylot Island (Map 2). The topography of southern Baffin Island has developed primarily on the granites and rela-



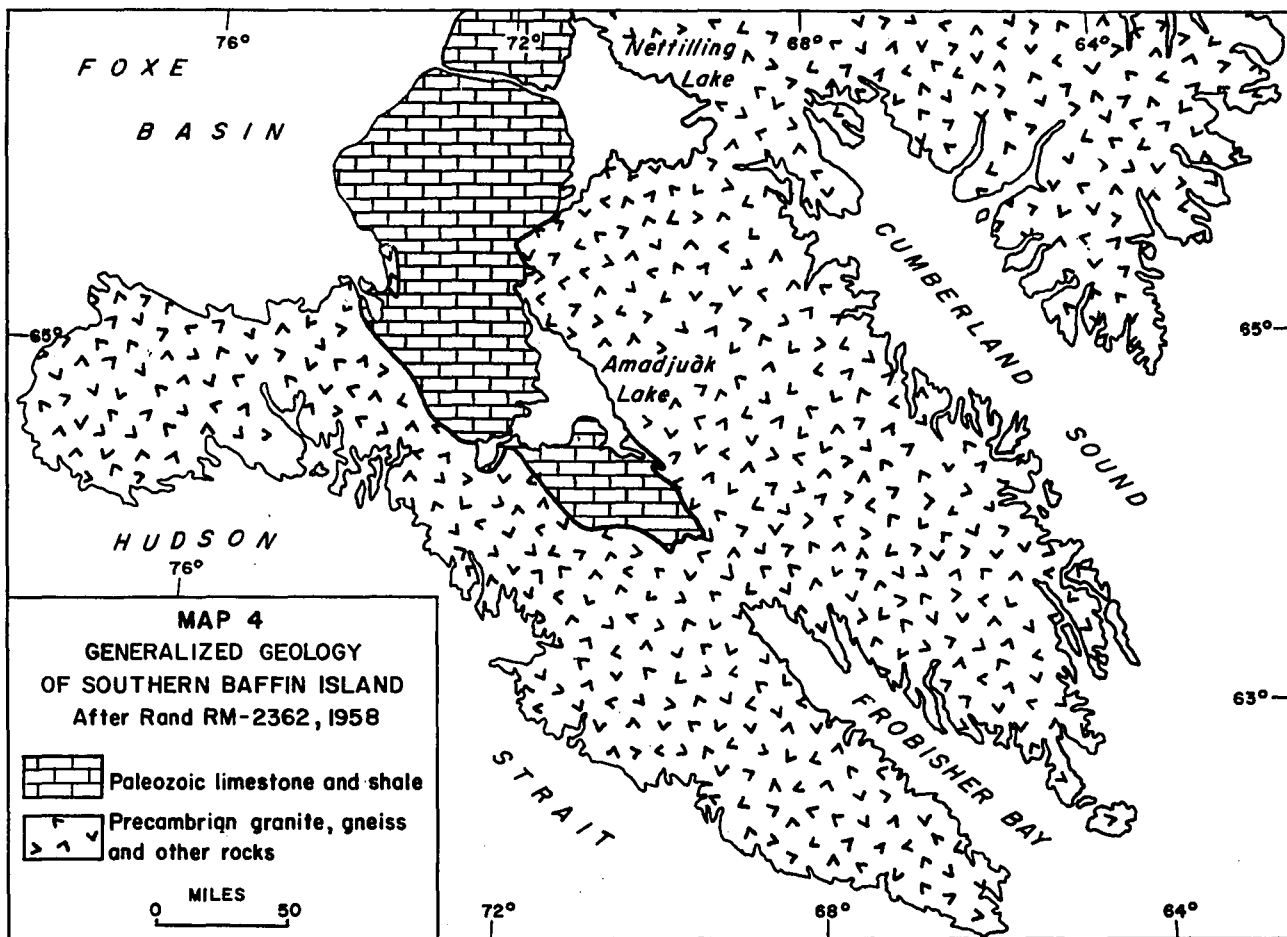


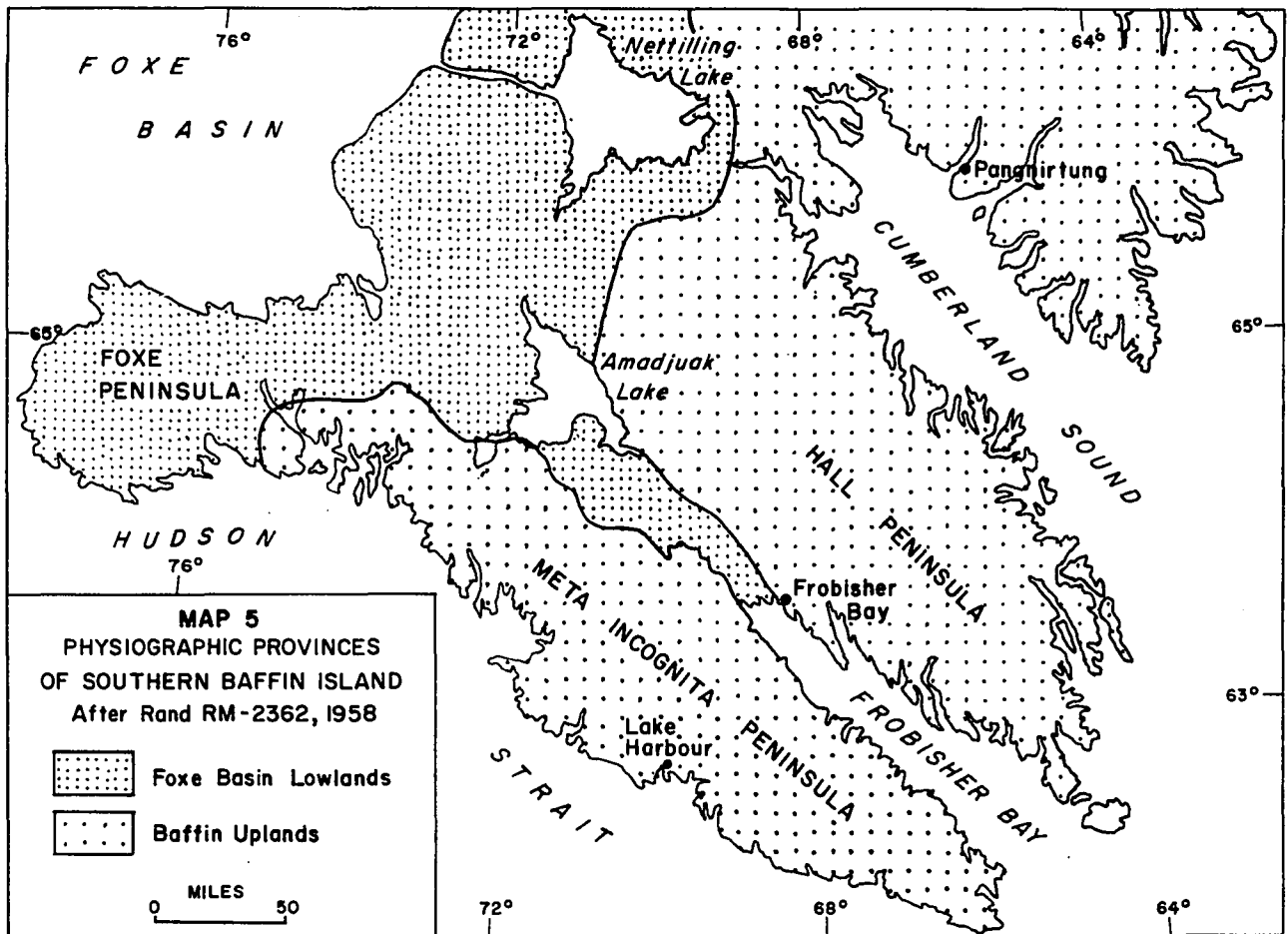
ted rocks of the Pre-Cambrian Shield.^{1/} From heights of over 6,000 feet above sea level on the Cumberland Peninsula, southern Baffin Island slopes away to the west to a central plateau region with an elevation of around 2,000 feet above sea level, most of which is developed on the basic Shield structure. This central plateau in turn gives way to an extensive plains area having a mean elevation of under 500 feet above sea level. In this western lowland region, which covers most of the Foxe Basin side of the southern half of the island, there is a large area of sedimentary paleozoic limestone overlying the Shield rocks (Map 4).

Three major physiographic provinces have been identified on Southern Baffin Island. Only two of these, the "Foxe Basin Lowland" and the "Baffin Upland", are represented within the study area (Map 5).

The Foxe Basin Lowland is an extensive area of flat silt plains, low plateaus and scattered hills which covers much of the southwestern part of the island. A small extension of this sedimentary lowland structure is developed within the immediate Frobisher Bay region, running southeast from Amadjuak Lake and reaching right down to and forming the bottom of

^{1/} Unless otherwise specified, material for much of those parts of the present chapter dealing with the physiography and climate of the Frobisher Bay region has been drawn from the RAND report on southern Baffin Island (RAND, 1958).





Frobisher Bay. Near the head of Frobisher Bay, numerous rock ridges with a southeast-northwest alignment have been produced by the effects of glacial erosion on the exposed, somewhat soft rock surfaces of the Foxe Basin Lowland material. In the bay itself these rock ridges protrude to form rock headlands.

Much of the southeastern half of southern Baffin Island, and over 75 per cent of the study area, falls within the physiographic province termed in the RAND report (1958) the Baffin Upland, developed on the hard rocks of the Canadian Shield. In contrast to the western side of southern Baffin Island, southeastern Baffin contains some highly spectacular scenery. Frobisher Bay is bracketed by two peninsulas, Meta Incognita on the south, and the Hall Peninsula on the north, between Frobisher Bay and Cumberland Sound.

The core of the Meta Incognita Peninsula is a highly dissected plateau, much of which is over 2,000 feet above sea level. This plateau ends abruptly in cliffs overlooking Frobisher Bay which form what appear to be an impenetrable barrier to the inner part of the peninsula when viewed from Frobisher Bay. The entire Hudson Strait coast of Meta Incognita is heavily indented and has many reefs, headlands and offshore islands, all of which are exposed to the strong tides of Hudson Strait.

The Hall Peninsula is dominated by a central upland plateau with elevations in excess of 3,000 feet above sea level in some parts. In contrast to the Meta Incognita plateau, however, that of Hall Peninsula has a rolling surface relatively free of lakes and broken only occasionally by deep valleys. On the Frobisher Bay side of the central part of the plateau, the level drops, being some 600 to 700 feet below the level of the eastern, or Cumberland Sound, side.

Along the Frobisher Bay coast of Hall Peninsula there is a plateau between the water level of the bay and the primary upland surface. The coast has been broken up into many rectangular blocks, the majority of which form long peninsulas. A discontinuous belt of low rocky islands, geomorphologically similar to the Norwegian strand-flats, lies offshore within the coastal zone in the bay (RAND, 1958:267). The many rocky islands and associated promontories are of glacially smoothed rock, and have very little drift cover and no vegetation. Blunt Peninsula, Loks Land and the numerous islands in Frobisher Bay are all part of this off-shore island complex.

VEGETATION

Despite the underlying permafrost, meagre soil and arctic climate conditions, the Frobisher Bay region has an abundance of natural vegetation. The mountainous topography

of much of the southern part of Baffin Island provides more diversified habitats and hence more variety of local plant species than exists over much of the rest of the Canadian Eastern Arctic (Porsild, 1964).

The predominantly tundra-type vegetation varies in extent of cover and number of species according to the type of bedrock. In those areas in which the Foxe Basin Lowland type of rock and soil conditions predominate, the vegetation is generally restricted to isolated clumps except in marshy areas, such as near the numerous small lakes of the region, where cover becomes more continuous. In contrast, the soils formed from the dominant Pre-Cambrian rocks of the area are more hospitable to plant growth. Therefore, around Frobisher Bay, there is a wide variety of habitats and the varied topography of the immediate bay area gives many sheltered situations where vegetation may be relatively luxuriant (Porsild, 1964). Many woody species are in evidence in the region, although, as elsewhere in the Canadian Arctic, they do not grow to any height.

The vegetation cover at the head of Frobisher Bay, particularly on the northeast side, is quite extensive and, in places, almost luxuriant, even to the eye of the visitor from southern Canada. There are many stretches of green meadow-like flats where grasses are fairly tall, and there are extensive lichen-heath meadows. Dwarf willow is very much in evidence

inland from the main settlement, particularly in the vicinity of Apex Hill, the southernmost extension of the settlement.

CLIMATE

In addition to the important climatic controls by latitude which affects the duration of sunlight and hence the amount of solar radiation received, and the general pattern of atmospheric circulation, there are two other factors of extreme importance in the climate of southern Baffin Island. One is the effect of the large bodies of water surrounding the island. Even during the winter months there is a great deal of moisture in the air around southern Baffin, due largely to the fact that open leads remain in Baffin Bay, Davis and Hudson Straits, all important source areas for winds passing over Baffin Island. The second important factor is the nature of the topography of southern Baffin and the effect it has on the circulation of the air. Although the prevailing circulation over the island carries moist air throughout the greatest part of the year, penetration of this air into the interior of the island is quite often obstructed by the high, ice-capped mountain range running the length of the east coast.

The source area for the majority of the disturbances affecting Baffin Island is Baffin Bay, where strong temperature contrasts between land and water make this a region of cyclonic

activity throughout the year (RAND, 1958:71).

From approximately November to May, Baffin Island lies under the western flank of the extensive Icelandic Low. This Low and its western extension, the Baffin Bay Trough, maintain a general northwest to southeast pattern of circulation over the Eastern Arctic. Generally speaking, throughout this period Baffin Island is under the influence of a moderately strong flow of air from the north, from the Arctic Ocean or from Greenland. Many travelling cyclonic disturbances originating in Baffin Bay are carried over Baffin Island during the winter. Only a very few from the Western Arctic penetrate as far east as Baffin Island. Because the majority of the travelling cyclones affecting Baffin Island lack the high water vapour content of mid-latitude storms, they bring comparatively little precipitation to Baffin Island. Moisture from those reaching the island from the east is precipitated along the east coast of the island and on the eastern flanks of the mountain range. The settlement of Frobisher Bay receives relatively little precipitation compared to the amounts received at Resolution Island or other coastal stations on the island (Tables 1 and 2). The southeastern coastal part of Baffin Island receives the highest snowfall of any place in the Canadian Arctic (RAND, 1958:102).

During the period June to August, pressure gradients across the Canadian Arctic become less pronounced as the high

TABLE 1 Averages and Extremes of Climatic Data for Frobisher Bay, Northwest Territories
63° 45'N, 68° 33'W 68 ft. a.m.s.l.

Month	(°F) at Station Level							Mean Monthly Precipitation (inches)					Mean Cloud Amount, 10ths of sky covered	Wind		Mean Days With	
	Daily Mean	Mean Daily		Mean Monthly		Absolute		Precipitation	Rainfall	Snowfall	Rain Days	Snow Days		Most Prevalent Direction	Percentage	Fog ^{1/}	Blowing Snow ^{2/} (a)
		Maximum	Minimum	Maximum	Minimum	Maximum	Minimum										
January	-14.9	-7.7	-22.1	25	-39	39	-49	1.27	0.03	12.4	*	11	5.1	NW	33	2	8
February	-12.7	-4.7	-20.6	22	-41	38	-49	1.38	T	13.8	*	12	5.2	NW	36	2	8
March	- 6.1	2.5	-14.7	26	-34	39	-43	0.94	T	9.4	*	9	4.6	NW	44	1	9
April	8.3	16.9	- 0.3	35	-20	41	-29	1.02	0.14	8.8	1	9	5.3	NW	45	*	6
May	28.0	33.7	22.3	45	5	56	-15	0.83	0.15	6.8	2	9	7.7	NW	34	1	2
June	39.0	44.6	33.4	60	26	71	17	1.65	1.39	2.6	9	3	7.7	SE	34	5	1
July	46.6	53.4	39.7	68	33	76	30	2.76	2.76	0	13	0	7.6	SE	44	6	0
August	44.6	50.7	38.5	63	33	74	30	2.30	2.28	0.2	14	*	7.8	SE	34	5	0
September	36.8	41.4	32.1	55	24	58	5	1.49	1.10	3.9	8	6	8.1	NW	43	2	1
October	23.0	28.1	17.8	39	2	45	- 6	1.69	0.19	15.0	1	14	7.9	NW	44	*	6
November	7.2	14.1	0.3	34	-18	42	-32	1.56	0.06	15.0	*	10	6.8	NW	42	1	8
December	- 7.0	0.8	-14.7	25	-32	36	-44	1.10	T	11.0	*	12	5.5	NW	44	1	10
Annual	16.1	22.8	9.3	69	-44	76	-49	17.99	8.10	98.9	48	95	6.6	NW		26	59
Years of Observation	1951 - 1960					1942-1960		1951 - 1960									

Source: Canada Department of Transport, Meteorological Service (1965)

* average less than 0.5 (a) period 1955-1960 ^{1/} visibility less than 5/8 ^{2/} visibility 6 miles or less mile.

TABLE 2 Averages and Extremes of Climatic Data for Resolution Island, Northwest Territories
61° 18'N, 64° 53'W 127 feet a.m.s.l. ,

Month	(°F) at Station Level							Mean Monthly Precipitation					Mean Cloudiness 10ths of sky covered	Wind		Mean Days With					
	Daily Mean	Mean Daily		Mean Monthly		Absolute	(inches)					Precipitation		Rainfall	Snowfall	Rain Days	Snow Days	Most Prevalent Direction	Percentage	Fog ^{1/}	Blowing Snow ^{2/} (a)
		Maximum	Minimum	Maximum	Minimum	Maximum	Minimum														
January	-0.4	4.7	5.5	27	-21	35	-36	0.59	0.03	5.6	1	11	7.1	W	22	2	9				
February	1.1	6.4	-4.2	27	-20	35	-32	0.41	0.01	4.0	*	8	6.1	SW	20	1	9				
March	7.0	11.6	2.3	29	-12	37	-22	0.41	0.02	3.9	*	10	6.1	W	21	1	8				
April	16.0	20.3	11.6	33	- 3	39	-20	0.36	0.07	2.9	1	8	6.4	NE	18	2	6				
May	27.8	31.0	24.6	38	15	45	- 2	0.57	0.22	3.5	4	6	7.8	W	22	7	2				
June	33.7	36.9	30.4	46	25	58	16	1.02	0.92	1.0	9	2	8.0	NE	22	13	0				
July	37.9	42.0	33.8	52	29	59	26	1.48	1.48	0	9	*	7.3	E	19	16	0				
August	37.9	41.4	34.3	50	30	61	26	1.67	1.67	0	12	0	7.8	E	20	20	0				
September	35.0	37.8	32.1	46	26	60	14	1.76	1.56	2.0	12	3	7.8	W	18	12	*				
October	28.9	31.8	25.9	39	16	45	- 1	1.21	0.43	7.8	5	8	8.0	W	22	4	4				
November	21.2	24.7	17.6	33	7	39	-10	1.12	0.06	10.6	1	14	8.1	W	20	1	12				
December	9.4	13.7	5.0	30	-10	35	-22	0.86	0.01	8.5	*	17	8.1	W	19	*	15				
Annual	21.3	25.2	17.3	54	-23	61	-36	11.46	6.48	49.8	54	87	7.4			79	65				
Years of Observation	1951 - 1960					1929-1960		1951 - 1960													

Source: Canada Department of Transport, Meteorological Service (1965).

* Average less than 0.5 (a) Period 1955-1960 ^{1/} Visibility less than 5/8 mile ^{2/} Visibility 6 miles or less

pressure areas of the Canadian Arctic retreat westward, and the low-pressure Icelandic Low withdraws to the east. The latter leaves behind it, however, a pronounced low pressure area which remains off Baffin Island, becoming stationed over Hudson Strait by July. A second minor low pressure area becomes situated over the northern end of Baffin Bay during the summer. Baffin Island thus remains very much under the influence of travelling cyclones in this season, also (Rand, 1958:68). The effect of this situation on weather conditions at Frobisher Bay may be seen from Table 1, from the column giving mean cloud amounts which reveals that 6.6/10ths is the average sky coverage. Each month of the year thus has a relatively high incidence of cloud cover in the bay region, with conditions ranging from the standard "partly cloudy" observation through to heavy cloud.

There are often considerable differences in conditions between coastal stations and inland stations in the same general region at any given time. Comparison of the data for Frobisher Bay and Resolution Island, presented in Tables 1 and 2, respectively, show that conditions vary quite widely for key climatic parameters such as precipitation, fog, incidence of blowing snow and wind direction. In general, although receiving more precipitation than Resolution Island, Frobisher Bay shows greater stability and consistency in respect to wind

direction, a much lower incidence of fog, and less blowing snow. The more unstable conditions observable at Resolution Island result largely from its proximity to a large body of water, Hudson Strait, and to the fact that it is more exposed to the rapidly changing weather conditions of the region, and is closer to a minor storm centre located over Nottingham Island than is Frobisher Bay. Despite its location at the head of a large bay, Frobisher Bay is in effect an inland station, in contrast to Resolution Island which is at the mouth of the bay. Comparison of the two locations also reveals differences in mean daily temperatures (Tables 1 and 2) which show that Frobisher Bay has wider temperature ranges, lower minimum and higher maximum mean temperatures than Resolution Island.

The summary of climatic data for Frobisher Bay (Table 1) shows an extreme low record temperature of -49°F . Such low temperatures are seldom sustained for long periods owing to the constant cyclonic activity in the region. It is rare for a deep, cold high pressure area, bringing extremely low temperatures such as those which hang over the Keewatin Region on the mainland west of Hudson Bay, to persist over Frobisher Bay. Generally, the most persistent weather hazard in terms of maintenance of the settlement and of air transport operations in the region is blowing snow. On the average, weather conditions

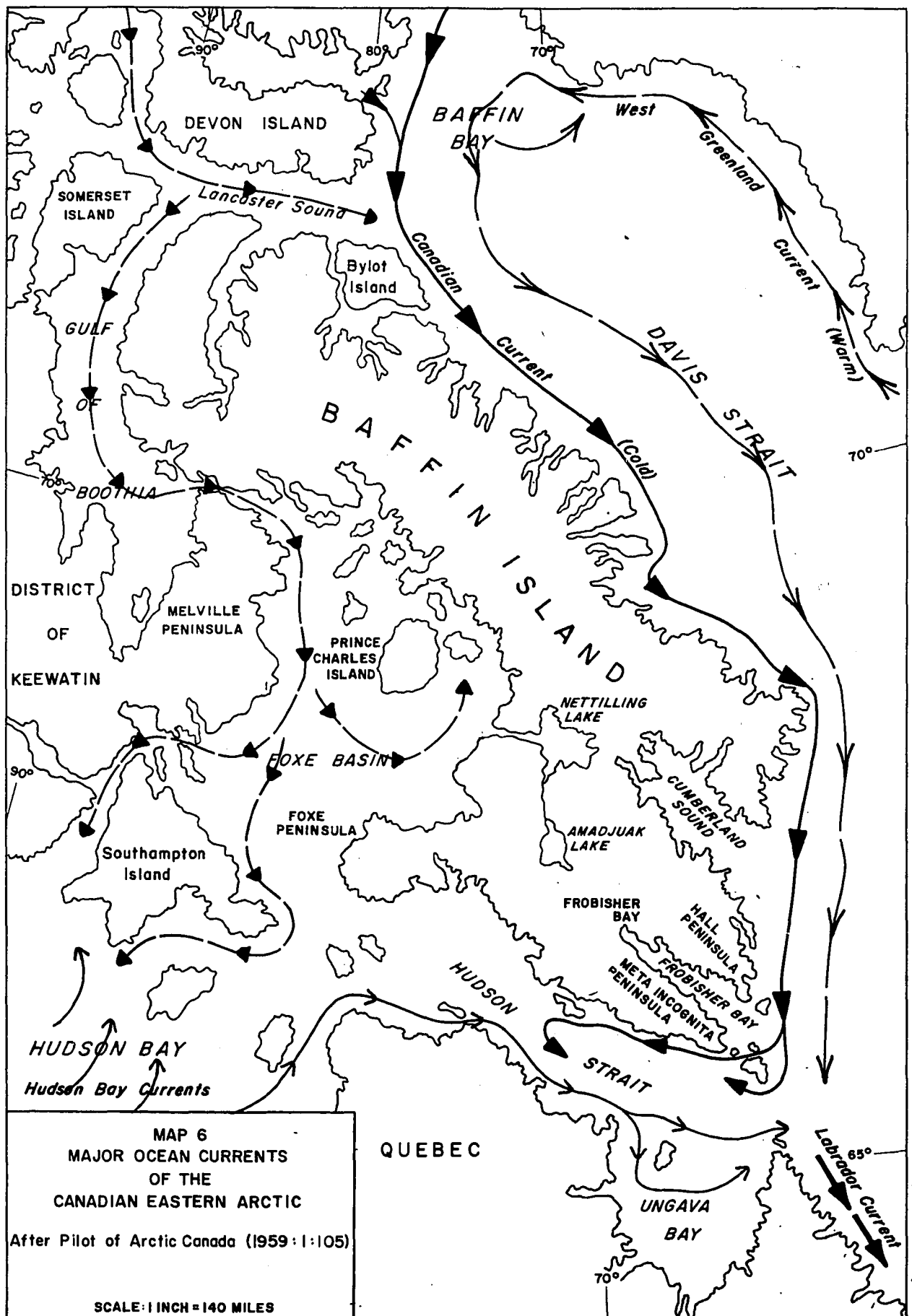
for the Frobisher Bay region, specifically the immediate settlement, are unfavourable for aircraft operation for only a few days of each month, relative to prevailing conditions over Resolution Island.

COASTAL WATERS AND ICE

As is evident from study of Map 6, Baffin Island is strongly influenced by the major ocean currents which circulate in Davis Strait. These control the movement of ice around the island, acting directly or indirectly on conditions in Frobisher Bay.

Ice movement within Davis Strait is controlled by the north- and south-flowing currents. During June and July, heavy fields of closely packed ice move down the Baffin Island east coast. In some years considerable quantities of this ice may remain in Baffin Bay throughout much of the summer. Under such conditions, particularly if southeasterly winds prevail for long periods, the entrance to Frobisher Bay may be blocked by ice until as late as August, interrupting shipping into the bay.

Hudson Strait, on the south coast of Baffin Island, has the greatest tidal range in the Canadian Arctic; the variation in the range of tides from springs to neaps is twice as great as in the Bay of Fundy. The surging volumes of water passing through the strait exert an effect on the waters of



Frobisher Bay which reaches all the way to the head of that bay, an effect made the more pronounced by the constricted shape of the bay (Pilot of Arctic Canada, Vol. 1, 1959:103; Vol. II, 1968:3).

Ice in Hudson Strait is derived from three sources, Baffin Bay, Foxe Channel and locally formed winter ice. In terms of access to Frobisher Bay by ship, ice from Baffin Bay via Davis Strait is the most significant. It is carried into Hudson Strait by the Canadian Current (Map 6), and usually envelops the eastern end of the strait any time from the middle of November, although it may be held back sometimes by southerly or westerly winds. On the average, this ice remains in the eastern extremities of the strait until mid-July, blocking access to Frobisher Bay. Western Hudson Strait is usually clear of ice by early August, although in some years, the eastern end may be blocked by the jam created when the opposing currents, each carrying ice, meet in the narrow eastern neck of Hudson Strait, a situation which effectively blocks entrance to or egress from Frobisher Bay (Ibid, 1959, Vol. 1:108).

Ice piling through into Hudson Strait from Davis Strait usually begins to fill the entrance to Frobisher Bay in early November, although it may be held offshore for considerable periods of time, depending on the wind direction. Ice may begin to form within the upper bay in late September, but it is usually

late October or early November before a solid ice cover forms over the whole of the upper bay (Allen, 1964:74). The central part of the lower bay may, however, have large open stretches of water at any time during the year. The ice edge, the boundary between the landfast ice of the upper bay and the open or partially open lower bay, varies in location from year to year according to severity of weather conditions and the date of freeze-up.

Ice formed within the bay generally begins to break up in June. The time at which the entire bay becomes free of ice and thus possible for navigation depends, of course, on wind and tide conditions, and on the amount of ice in Hudson Strait. Although the strong tidal currents of the lower and middle parts of the bay help break the ice up rapidly once the process is begun, break-up in Koojesse Inlet may be delayed by as much as two weeks relative to that in the rest of the bay. Until word is sent out from the settlement that the ice is out of Koojesse Inlet, vessels do not begin the long, tortuous trek up Frobisher Bay to the settlement.

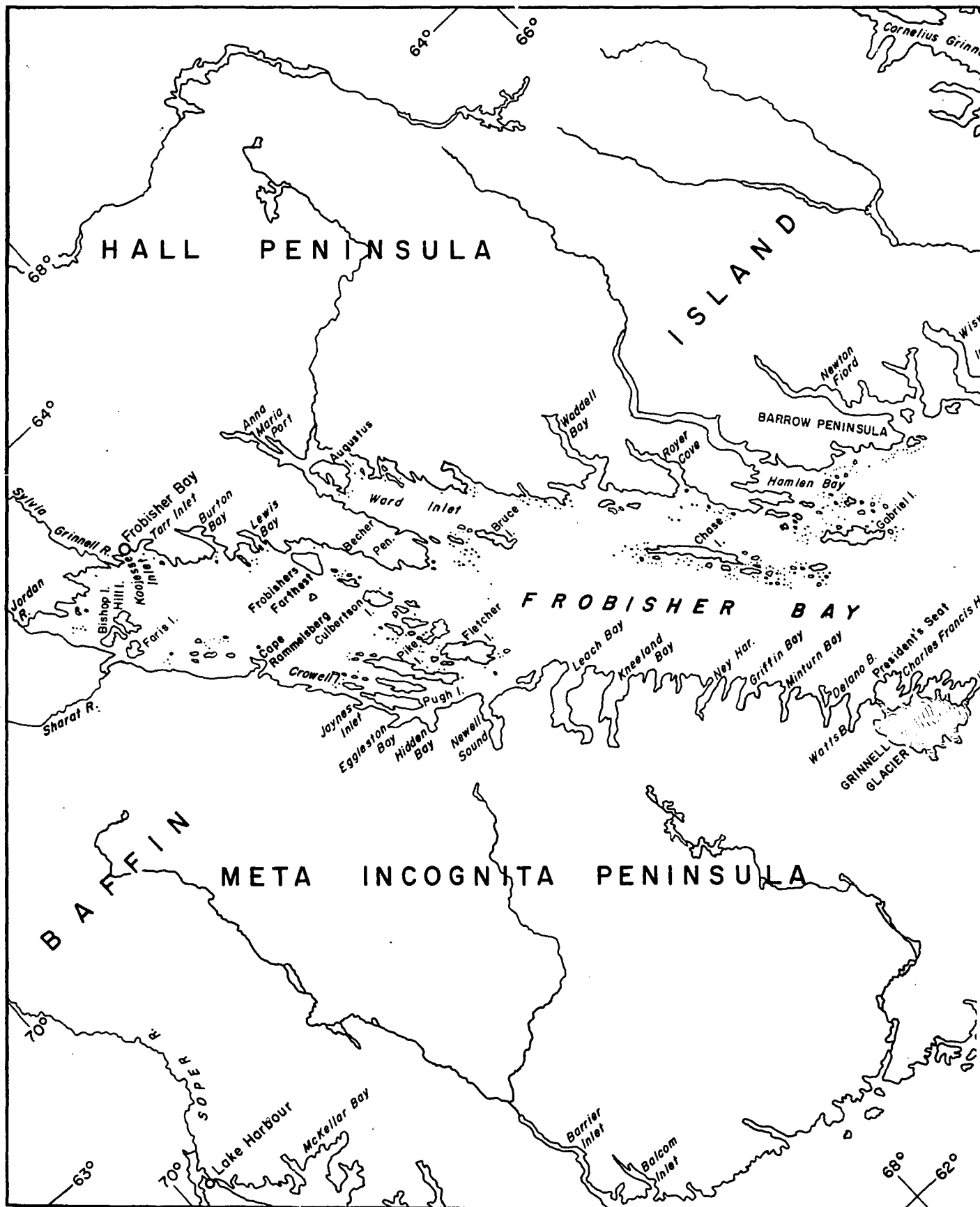
NAVIGATION

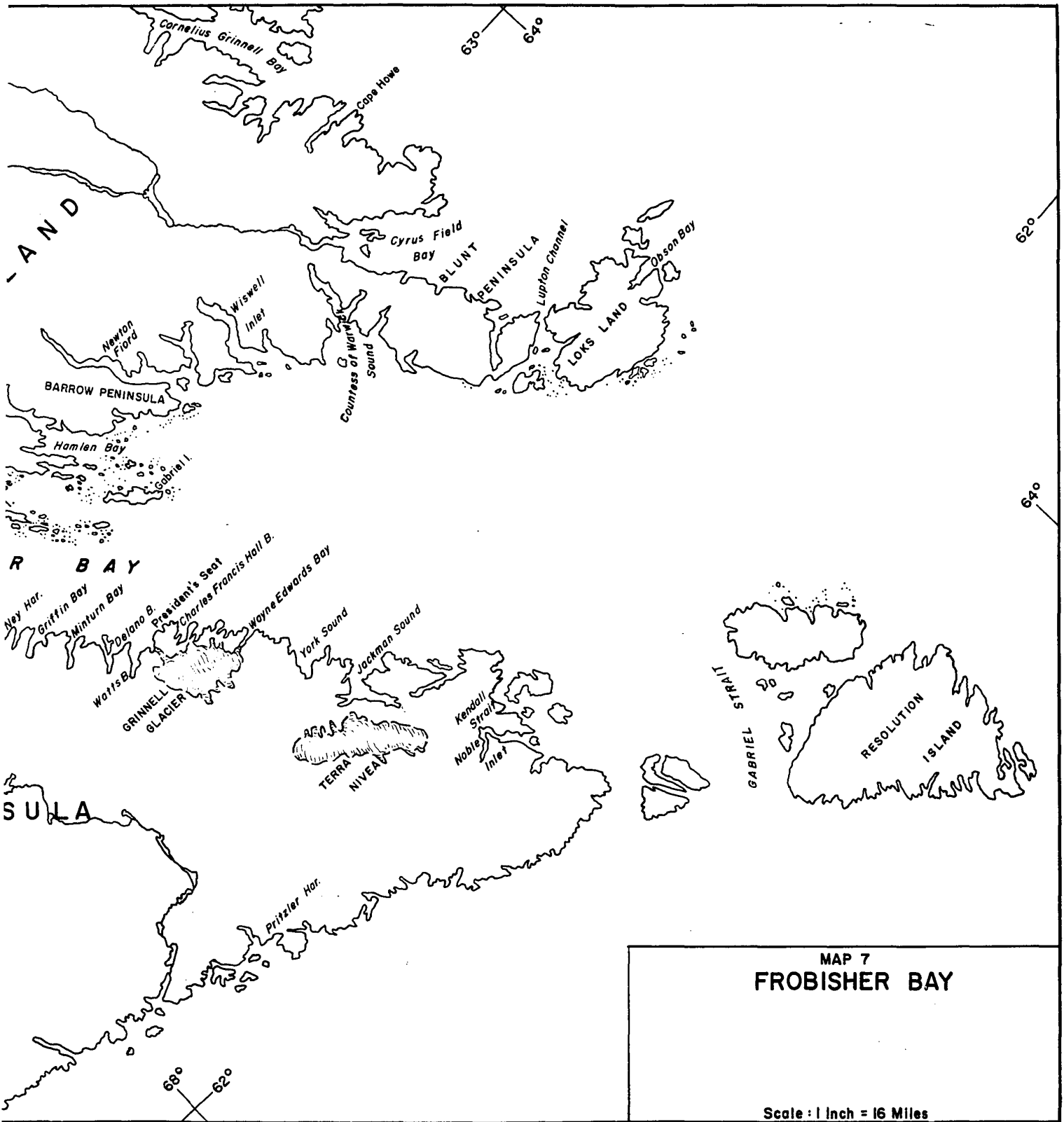
Frobisher Bay stretches inland for 150 miles from its main entrance between Resolution Island and Loks Land. The bay falls into two separate parts, the upper bay and the lower bay,

divided by a group of islands approximately 110 miles from the mouth of the bay (Map 7). The most significant, and easily observable, whether from the air or on a map, feature of the bay is the great number of islands contained throughout most of its length. The outer part of the upper bay is nearly choked by a highly intricate maze of islands of all sizes and shapes with associated ledges, reefs and shoals. Channels suitable for navigation by large vessels are generally extremely narrow, many of them impassible at low water. Mud flats are common along much of the southeastern coast and around many of the islands in this upper part of the bay.

The water at the head of Frobisher Bay is not deep and large tidal flats are exposed for considerable distances offshore at low tide. In Koojesse Inlet, the principal anchorage for the settlement of Frobisher Bay, the northeastern shore is low-lying and at low tide the head of this inlet becomes mud and sand flats for nearly a mile offshore. Ships must stay in the outer part of the inlet over on the eastern side where the water remains sufficiently deep at all times to accommodate vessels of some size.

Exceptionally high tides in the bay contribute to the considerable difficulties of its navigation by ship. At Frobisher's Farthest, an island just 30 miles from the bay's





entrance (Map 7), average high tide is 30 feet, with spring tides reaching 36 feet, neaps 24 feet. At Koojesse Inlet the mean tidal range is $24\frac{1}{2}$ feet, the maximum range being 37 feet (Ibid., Vol. II, 1968:139). Here at the head of the bay, however, the shelving nature of the coast gives the impression of minimizing the magnitude of the tide; but the appearance of a mile of mud at low tide serves to emphasize the extreme tidal ranges.

Strong tidal currents, a result of the pressure exerted on the waters of the relatively narrow bay by the extreme tidal ranges of Hudson Strait, are another feature to be contended with in navigating within Frobisher Bay. Currents are extremely strong at the entrance to the bay, particularly around Loks Land. At groups of islands lying across from Becher Peninsula, tidal currents reaching velocities of up to seven knots run between the various islands. These often set in opposite directions at the same time (Ibid., Vol. II, 1968:138).

PHYSICAL ENVIRONMENT AND THE SETTLEMENT SITE

Unlike a large number of present day Canadian Arctic settlements, Frobisher Bay had no pre-modern history as a settlement. The particular site was not the location of a trading post tied to the fur trade like many Northwest Terri-

tories settlements such as Fort McPherson, nor a settlement which grew up primarily as a result of whaling activities, e.g., Pond Inlet, nor the site of an early mission such as Chesterfield Inlet (Jenness, 1964). No showings of minerals attracted large numbers of miners to the region such as occurred at Yellowknife or at Dawson City, Yukon (Lotz, 1964); and it was not at the crossroads of travel routes or the jump-off spot for excursions into the wilds like Aklavik. It was not even the site of a traditional Eskimo community. The local Eskimo population passed through the area at the head of Frobisher Bay on a seasonal migration pattern which brought them there in time for the Arctic Char runs in the Sylvia Grinnell River. The settlement was founded on a previously uninhabited site, indeed an unwanted one, removed from world travel routes.

Physical factors influenced the choice of the site by U.S. military authorities in 1941. These included: location on the Great Circle Air Route to Europe; local weather conditions; the availability of sufficient flat terrain upon which to build an airfield; accessibility by ship for a certain part of each year; and a local supply of fresh water. An airfield was required in that general area. Reconnaissance of southern Baffin Island revealed that the bay's head offered what appeared at the time to be the best flying conditions in terms of pre-

cipation, incidence of blowing snow, fog, mean cloud cover and consistency of wind direction. As noted in the discussion of climate, the settlement of Frobisher Bay is in effect an inland station, offering more stable conditions than those of a coastal site such as Resolution Island.

Construction of a runway required a large amount of flat land and the availability of gravel or medium-coarse material for use as fill. These conditions could not be met elsewhere in the bay region at any site which would also allow relatively easy access by sea. Despite the drawbacks of Koojesse Inlet as an anchorage, it nonetheless afforded a deep water anchorage protected from local storms unlike sites closer to the mouth of the bay. Although difficult to navigate, the bay offered a relatively long ice-free period and channels sufficiently deep for the passage of large transport ships required to supply the settlement with food, fuel and other supplies.

Many of the factors which influenced choice of the site for a military camp have served to also prolong the life of the settlement. In the post-war period the presence of the airfield led to other uses. Later it became a regional administrative centre for government activities in the Eastern Arctic largely because of its easy access and good flying conditions. The relatively mild local weather reduced problems of operation

and maintenance. Not to be overlooked was the simple fact that it was there -- and more or less ready for use.

The settlement of Frobisher Bay was located at the most favourable site in the area. It occupies the only flat land of sufficient area to accommodate a settlement of some 1,500 to 2,000 people, and still allow room for expansion. There are few large outcrops of exposed bedrock in the settlement area, and these have been relatively easily removed. There are large lakes in the immediate vicinity from which the local water supply is drawn. Permafrost is present, but in the settlement itself it is discontinuous and does not offer unusual difficulties in building; and there is ample fill material available for use in gravel pads for buildings.

Accessibility by water for between three and four months each year remains one of the prime favourable features of the site. There is, however, one drawback which has added considerably to the costs of operation, and that is the distance at which vessels must anchor off shore. This necessitates use of barges for offloading supplies and a long pipeline network for remote-control unloading of oil tankers. These must anchor off the end of Innuvit Point on the west side of Koojesse Inlet and pump oil into a long pipe which carries it to the bulk oil storage tanks placed at various locations around the settlement. However, the protected nature of the inlet serves

to ensure that this operation is carried out each year without undue difficulty.

Other than by air or water, there is limited accessibility to the settlement. In general, the terrain surrounding Frobisher Bay is rugged and difficult to traverse with trucks or even large tracked vehicles. The traditional overland routes of the Eskimos between Frobisher Bay and the southwestern part of Baffin Island were through areas in which maximum use could be made of the natural alignment of the ridges and valleys and other places where the snow would pack sufficiently for easy running for dog teams and sleds. The same routes offer the best travelling conditions for the modern Skidoo used extensively now by Frobisher Bay Eskimos.

Although the local weather conditions are sufficiently favourable to allow for year around flying operations, they do present another aspect in terms of settlement life. The wind blows almost continually, stirring the snow and causing drifting. This must be taken into account in the siting of buildings, the maintenance of roads in the settlement and in the operation of the airfield. Blowing snow often becomes a hazard in that it can produce "whiteout" conditions when visibility is reduced to zero and the outdoor life of the community comes to a halt. No one may travel even a very short distance under

severe white-out conditions, which serves to interrupt (internal) communications, preventing people from going or coming to work, the delivery within the settlement of fuel oil and water, as well as disrupting air transport schedules.

Ice conditions in the bay directly affect the residents of the settlement, Eskimo and non-Eskimo alike. Delayed break-up hinders the necessary sealift operation on which the settlement is dependent for delivery of major food supplies, materials and fuel oil. If a late break-up and an early freeze-up occur in the bay in the same season, a not uncommon occurrence in many Arctic coastal regions, insufficient supplies may reach the settlement. Under such conditions, costly airlift of vital supplies may be necessary. Delay or interruption of the annual sealift often results in the imposing of a careful rationing of certain food supplies and of fuel required for furnaces, the diesel-electric power plant which supplies electricity for the settlement and for aircraft.

Early freeze-up and a severe winter often accompany each other, interrupting construction work in the settlement and thereby causing costly delays in building programs as well as resulting in a shortage of housing and terminating seasonal wage employment for those Eskimos hired as casual labour for the outside phases of construction work. Such a combination of weather conditions also affects those members of the Frobisher

Bay Eskimo population still primarily dependent on seal hunting for their livelihood. Early freeze-up interrupts the autumn seal hunting; a harsh winter may bring severe ice conditions in the bay with the result that the ice-edge may be quite far down the bay so that Eskimo hunters may have to travel as far from the settlement as Hamlen Bay, approximately 70 miles, under difficult conditions to pursue their winter seal hunting at the floe edge.

Certain more or less favourable aspects of the physical environment influenced founding of the settlement at its present location. The unfavourable aspects must also be considered in any study of the development and probable future of the settlement. So far, both the positive and negative aspects of the local physical environment have been touched upon. The renewable and non-renewable resources of the region are discussed in those parts of this thesis which deal with the activities of the population and the economy of the settlement.

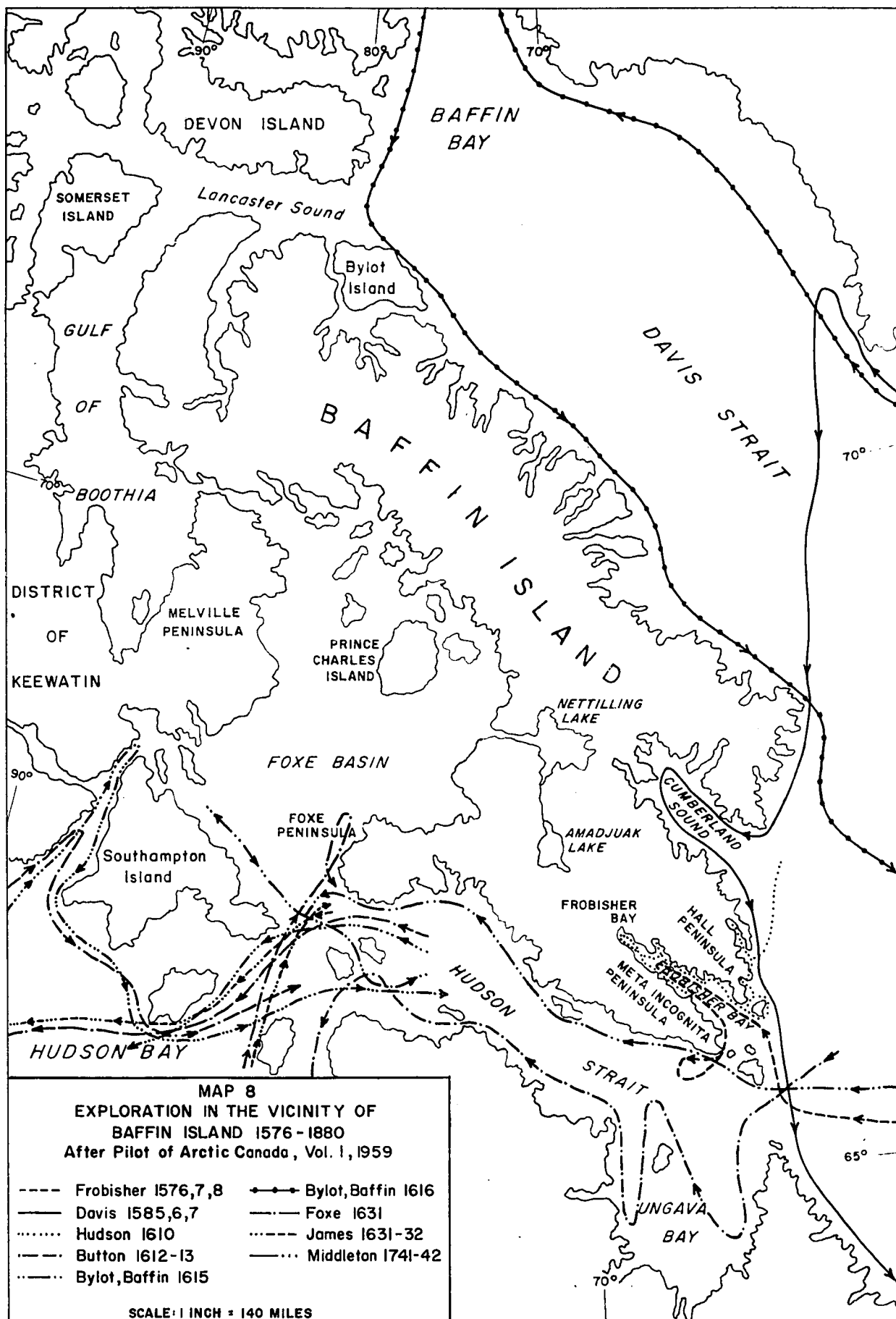
CHAPTER 2

THE HISTORY AND POPULATION OF THE FROBISHER BAY REGION PRIOR TO THE FOUNDING OF THE SETTLEMENT

DISCOVERY AND EXPLORATION 1578 - 1930

Frobisher Bay was discovered in 1576 by Martin Frobisher, an English mariner. Frobisher sailed into the bay thinking it to be a strait through which he could pass to the Northwest Passage. Forced to turn back by ice conditions, he went ashore near the mouth of the bay, where he discovered what he thought to be gold. The excitement generated in England by this discovery led to the mounting of two further expeditions to the region in 1577 and 1578, both led by Frobisher. Upon his return from the 1578 trip, he found himself in disrepute, owing to the fact that the "gold" had been identified finally as iron pyrites (Collinson, 1867; Hall, 1866). All further plans for continuation of work at what was the first European mining venture in Canada were thus abandoned.

After its initial discovery, Frobisher Bay was almost totally by-passed for nearly 300 years, despite the spate of exploration activity in the vicinity of Baffin Island (Map 8). So far as can be determined, no European explorer or whaler penetrated the waters of Frobisher Bay beyond its mouth between 1578 and 1860.



The search for Sir John Franklin, presumed lost in the Canadian Arctic in 1845, resulted in the discovery and exploration of large parts of that inhospitable region by individuals lured there in the hope of learning of Franklin's fate - and of earning the substantial reward offered by Lady Franklin. One such explorer was the American, Charles Francis Hall. Sailing north with an American whaling barque, Hall was unexpectedly detained on south Baffin Island. Forced to spend two years there with the whaling vessel, Hall explored Frobisher Bay and discovered that the "Straites of Frobisher" was in fact a bay and not a strait.

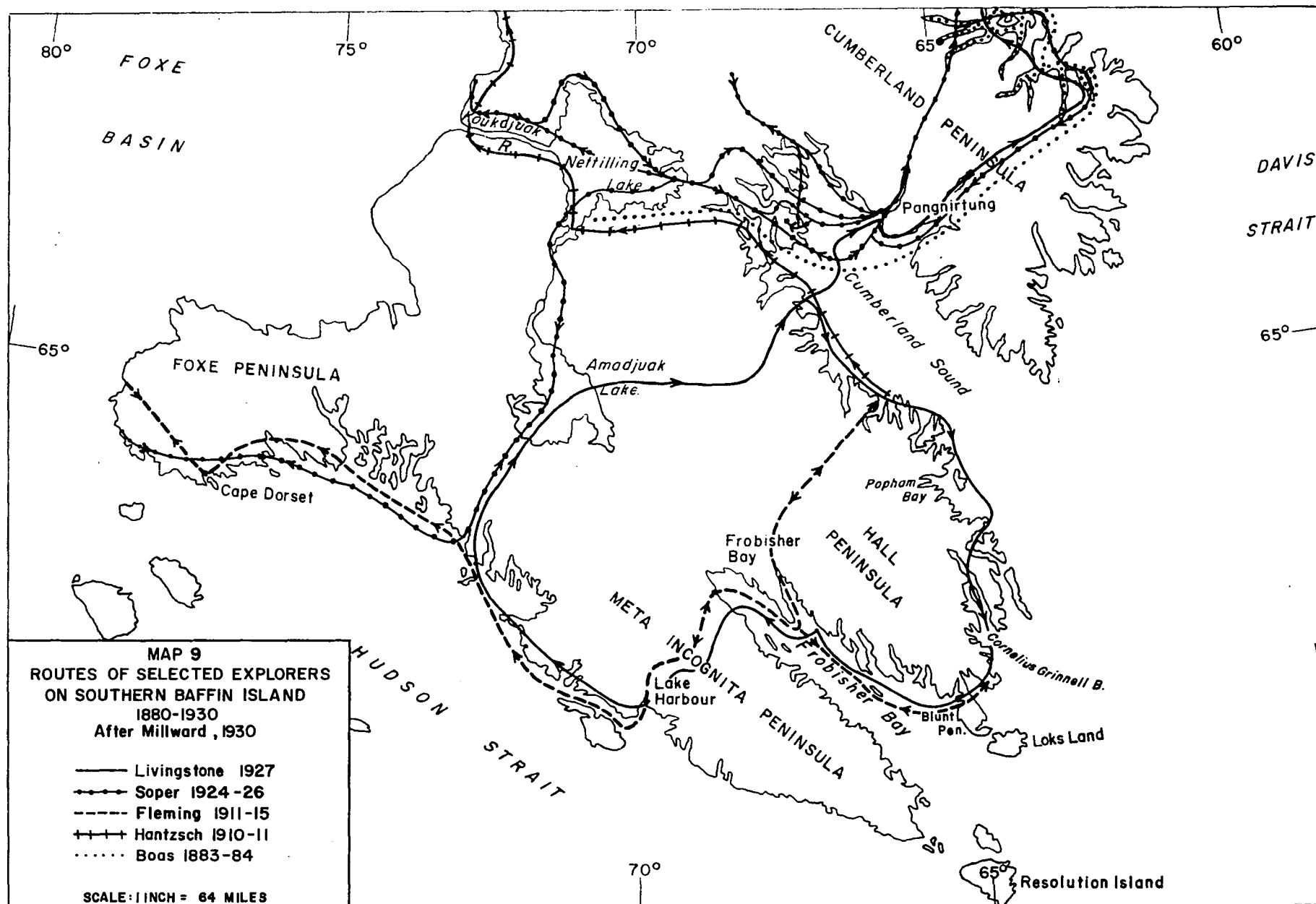
Many of the names shown on present day maps of Frobisher Bay are those given to various geographical points by Hall who generously remembered his financial backers by bestowing their names and those of their relatives on land forms, water bodies and islands throughout the immediate Frobisher Bay region (Hall, 1866; Loomis, 1966).

Beyond the small stir caused in geographical and exploration circles by Hall's discovery, little further attention was paid to the Frobisher Bay region for many years after his final departure from there.

Canadian Government interest in the Arctic Archipelago was first stirred in 1874 by a request from a lieutenant in the

United States Navy for a mining claim in the Cumberland Sound area of southern Baffin Island. As was the custom, this application was forwarded to the Foreign Secretary in London and then to the Colonial Office, then responsible for such matters. On the strength of this and other similar applications, the Colonial Office made representation to the Government of Canada concerning the advisability of the Dominion taking official possession of the islands in the Arctic Archipelago (Millward, 1930:9). Negotiations concerning the formal annexation of the islands to Canada culminated with the issue of an Imperial Order in Council on July 31, 1880. By this order, the Arctic Islands were formally transferred from British to Canadian sovereignty (Millward, 1930:9 - 12). Subsequently, the Government of Canada began a series of exploratory and scientific expeditions into Canada's newest possessions.

Many of the government-mounted expeditions made in the period 1884 to 1930 were to Baffin Island. However, although southern Baffin Island was subjected to fairly intensive exploration in this period, the Frobisher Bay area attracted little attention from either government officials or scientific parties. Most of the scientific expeditions undertaken between 1880 and 1930 were made to southwestern Baffin or to the Cumberland Sound region (Map 9). In 1914, the Hudson's Bay Company opened



a small trading post at Ward Inlet, 40 miles from the present settlement of Frobisher Bay. This post seems to have been of little interest to anyone but local Eskimos. Ward Inlet and the Frobisher Bay area were visited in 1927 by Dr. L.D. Livingston, a government medical doctor sent north to investigate and report on conditions among the Eskimos in 1927 (Millward, 1930:88 - 90). Infrequently, patrols by members of the Royal Canadian Mounted Police stationed at Lake Harbour and Pangnirtung were made through Frobisher Bay. The most usual route between Pangnirtung, on Cumberland Sound, and Lake Harbour, on the Hudson Strait coast of the island, however, by-passed Frobisher Bay.

Map 9 shows the routes followed by some of the better known northern travellers of the period, notably the scientists Soper, Boas and Hantsch, Dr. Livingston, and the missionary A.L. Fleming. Study of accounts of expeditions given by Millward (1930) and Bethune (1934) covering the period between 1880 and 1930 shows that scientists had no particular interest in the Frobisher Bay area.

THE ESKIMO POPULATION 1576 - 1941

Martin Frobisher and his expedition of 1576 were probably the first Europeans to make contact with Eskimos of the Frobisher Bay region. He did not comment at length on the

numbers of Eskimos he saw in his three expeditions to the area (Collinson, 1867).

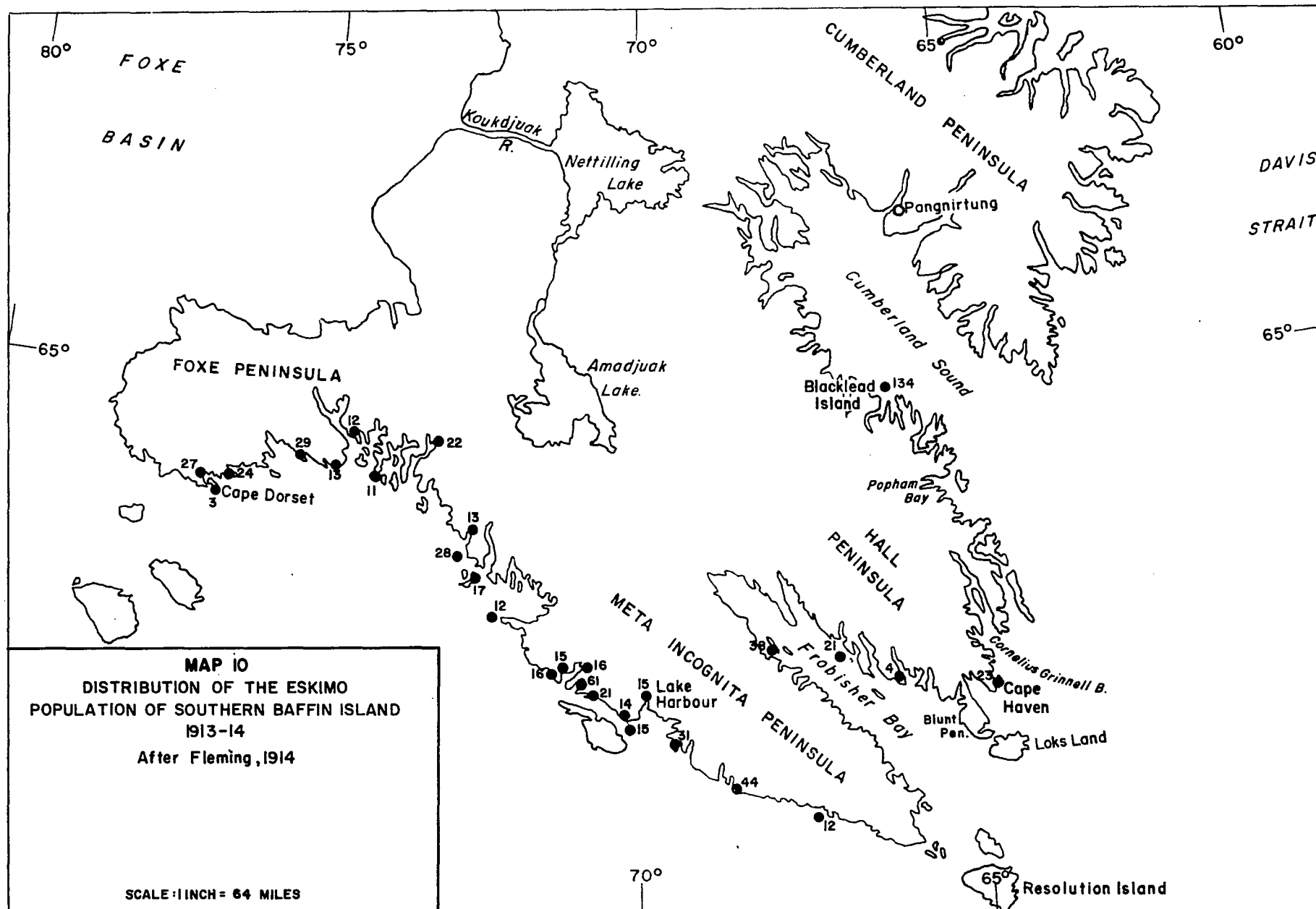
Charles Francis Hall, although not the first white man seen by Frobisher Bay Eskimos, was the first to describe conditions in that particular area. Unfortunately, his accounts are woefully short of precise facts. So intent was he on obtaining clues to Franklin's whereabouts and in observing life in the North, that he failed to spend any time counting heads, a fact noted by Boas (1888:14). He observed Eskimo encampments up the bay as far as Ward Inlet, and reported a population of at least 100 Eskimos living around Cornelius Grinnell Bay where his ship was anchored throughout most of its two-year stay (Hall, 1866: 220).

Franz Boas (1888) studied the distribution and relationships of the various Keewatin and Baffin Island Eskimos, concluding that they could be clearly defined in distinct subgroups. The Eskimos of Frobisher Bay, called by Boas the "Nugumiut", were one of four groups he identified on the south coast of Baffin Island (Boas, 1888:14). From his own research and from Charles Francis Hall's material, Boas concluded that the Nugumiut were concentrated around the tip of Hall Peninsula in Cyrus Field Bay, Cornelius Grinnell Bay and the Countess of Warwick Sound (Map 7), and around Jones Cape (62°57'N, 66°00'W)

inside Frobisher Bay. The Nugumiut people were almost exclusively seal hunters, but each year worked their way up the bay to fish for Arctic Char at its head, and in the early autumn went inland to hunt caribou near Amadjuak Lake. Boas estimated the population of the immediate Frobisher Bay area for the late 1880's at 80 (Boas, 1888:18).

In the winter of 1913-14, the Reverend A.L. Fleming, Missionary of the Church of England in Canada, carried out a census of the Eskimos of southern Baffin Island. For that part of the island between Frobisher Bay and Cape Dorset, Fleming arrived at a figure of 557, distributed in camps as shown in Map 10 (Fleming, 1914).

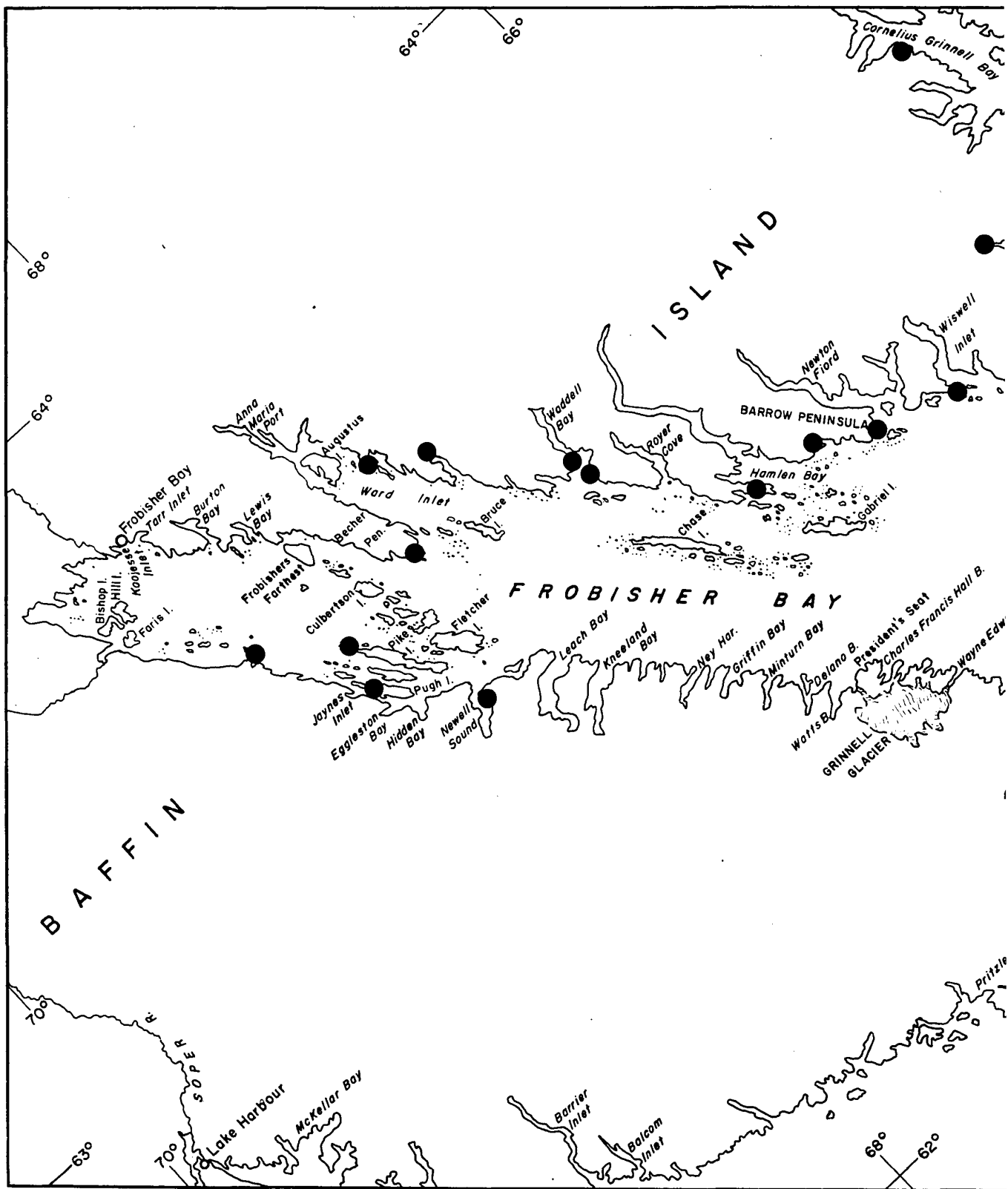
The 1931 Census of Canada was the first formal national census to contain population figures for Canadian Eskimos. This census of Eskimos was prepared from returns from all over the North submitted by the Royal Canadian Mounted Police, missionaries, fur traders, and the medical doctors sent in to the North from time to time by the Federal Government. At best, the figures were only approximate, owing to the almost continual movements of the Eskimo people. Not all settlement nodes were included in the 1931 census, apparently; most of the Cumberland Sound area appears to have been omitted. The 1931 census gives a total of 790 Eskimos and 23 non-Eskimos for the south coast of

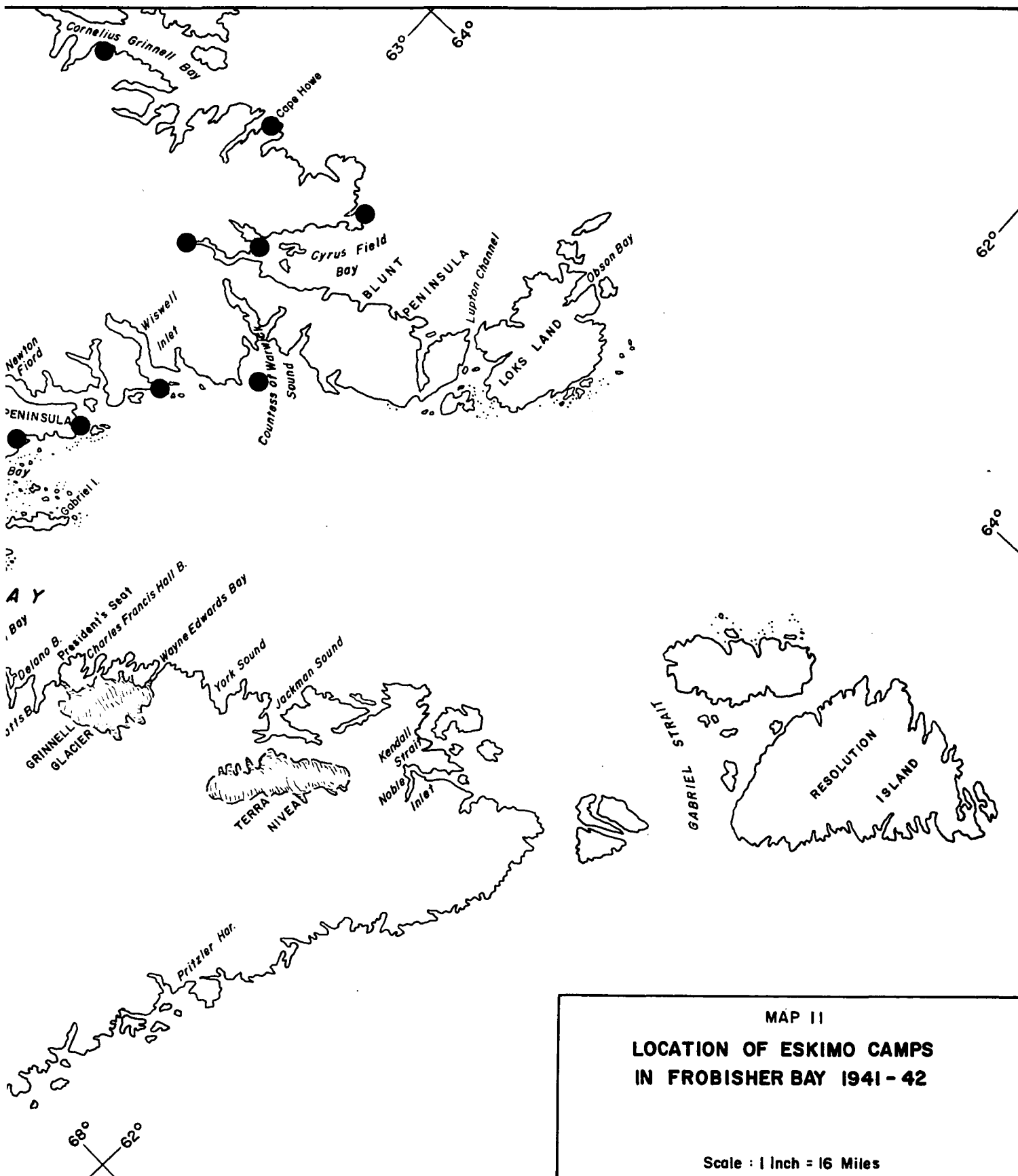


Baffin Island between Foxe Peninsula and Frobisher Bay; another 541 Eskimos and 14 non-Eskimos were listed as living in the region between Cumberland Sound and Coutts Inlet (72°04'N, 75°06'W) (Bethune, 1934:42-3).

The Eskimo population of the immediate Frobisher Bay region was apparently never large, particularly when compared with that of the Cumberland Sound region (Haller 1967a:50-1). Until the establishment of the Hudson's Bay Company trading post at Ward Inlet in 1914, most Frobisher Bay Eskimos appear to have lived in the vicinity of Cornelius Grinnel Bay (Map 7).

In 1966, the writer conducted interviews with 75 Eskimo male heads of families in Frobisher Bay. The questionnaires for this purpose developed by the writer were coupled with the use of a detailed map of the Frobisher Bay area. Each informant was asked to give details of where he had lived before moving into the settlement of Frobisher Bay to live permanently. Each was asked to give information on the numbers of people who had lived in his particular area. Wives were also asked to participate in this exercise, and extra maps were always available for the use of any visitors who might be present in a home in which an interview was being conducted. Map 11 was compiled from the data collected from those respondents who reported as having been living in camps in the immediate Frobisher Bay area at the time of commencement of construction of the airbase in





1942. No attempt has been made to attach numbers of people to the various sites, however.

The Census of Canada gives 183 as the population of the Frobisher Bay region in 1941. As evident from Map 11, it was a sparsely distributed population, one still on the land, dependent primarily on utilization of the area's rich renewable resources. The rapid change in this situation is discussed in Chapter 4 which deals with the movement of the local Eskimo population in response to the growth of the settlement.

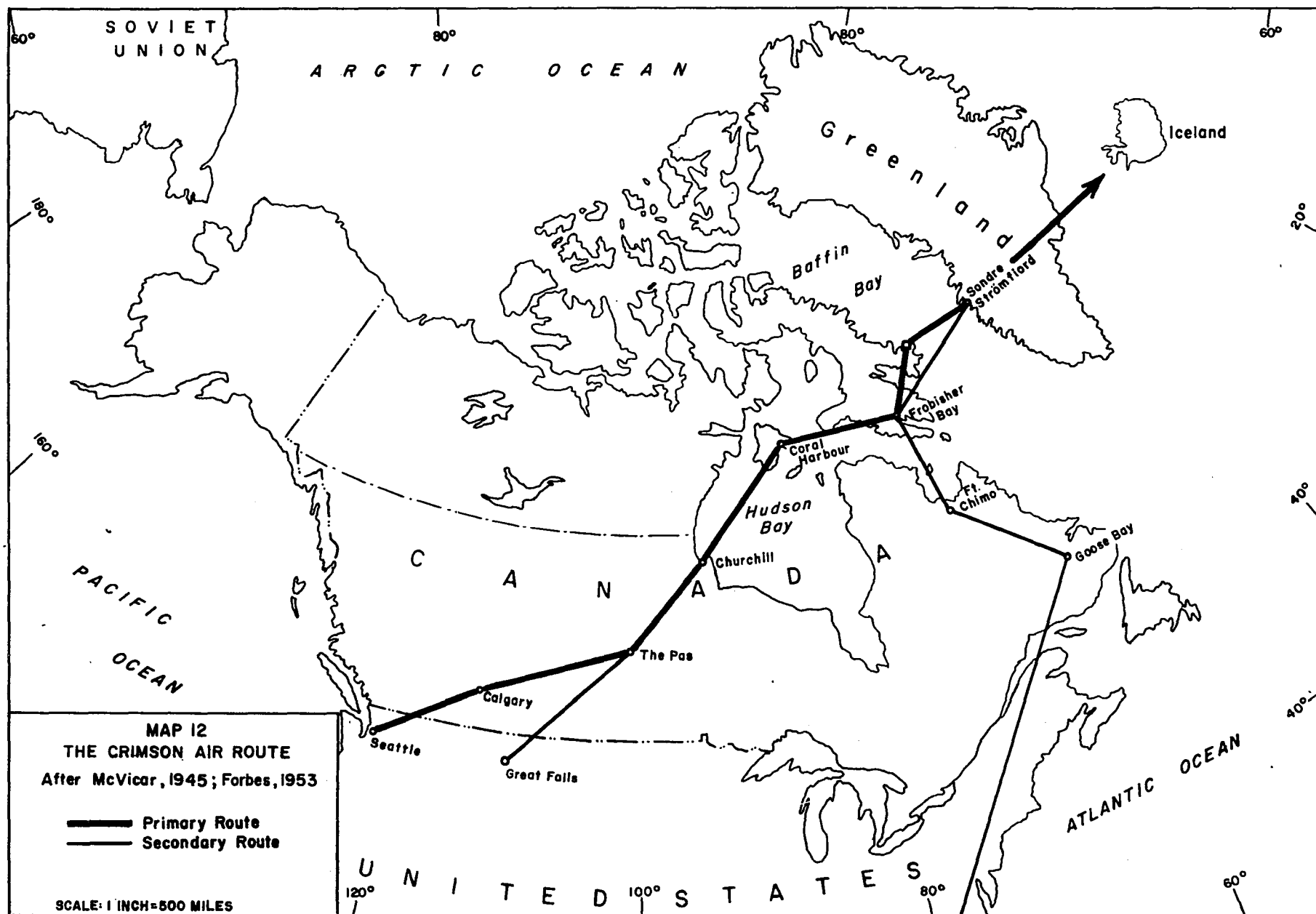
CHAPTER 3

THE FOUNDING OF THE SETTLEMENT OF FROBISHER BAY

ESTABLISHMENT OF AN AIRBASE

The United States did not become actively engaged in World War II until December, 1941. The U.S. Government had, however, been concerned with supporting the Allied war effort in Europe throughout much of the preceding year, primarily through the supply of strategic materials to Great Britain. One problem was quick and safe dispatch of fighter aircraft to Britain. Whereas most bomber aircraft could be flown over the Atlantic, fighters had too short a range and were sent by ship. Many were lost through the attacks on convoys by German submarines in the North Atlantic.

A solution suggested in early 1941 was to develop a chain of airfields along northern Great Circle Routes. The northernmost route, designated the Crimson Air Route, involved construction of a series of bases across the northern parts of Canadian provinces and through Arctic Canada, the airfields along this route to be not more than 500 miles apart (McVicar, 1945) (Map 12). Short-range fighter aircraft, incapable of making the long hop across the Atlantic, could be flown by short stages along this route from the factories of the American western states, hopping from the Canadian Eastern Arctic across the



North Atlantic via Greenland and Iceland. Other routes were also mapped out to cover various parts of North America, along which aircraft could be ferried to the battlefield, and also by which wounded fighting men could be brought quickly back to North America by air for treatment. While several of the routes did not have the northward extension of the Crimson Air Route, some were planned to join it, including one which provided access from the eastern United States to the northern route to Britain (Map 12).

In the early planning for the northern air routes, a tentative choice for one of the airfield sites was made in the Frobisher Bay area. In the autumn of 1941, advance parties were established at the prospective sites of airfields along the proposed Crimson Air Route, including the Frobisher Bay location. A wintering party set up camp on an island in the bay now known as Crowell Island after the party's commander, located on the west side of the bay approximately one-quarter of the distance from the bay's head (Map 7) (Forbes, 1953).

Little was known about Frobisher Bay in 1941. The maps in use for the area were based on those made by Charles Francis Hall nearly 100 years before. Air reconnaissance had revealed three possible sites for an airfield: two on islands, one of which was Crowell Island, in the upper bay, and one at

the bay's head at Koojesse Inlet. The wintering party was to obtain all possible information which would aid in selection of the most suitable site. During the summer of 1942, parties were sent in to reconnoitre the area and begin charting of the bay. The Koojesse Inlet site was picked as having the necessary qualifications. Surveying for the airstrip began in August, 1942, and construction began that autumn. The Frobisher Bay airfield was operational by 1943 (Forbes, 1953).

All the bases along the Crimson Air Route were completed in 1943. Those in Arctic Canada, including one located at Fort Chimo in Arctic Quebec, were never used for aircraft ferrying operations (Forbes, 1953). Nor were they ever used as stop-overs for the in-transit medical care of wounded men flown back from overseas. By the time of their completion, technological improvements in aircraft allowed them to be flown over longer distances without re-fuelling. Also, once the United States became an active participant in the war, it was no longer necessary to avoid use of routes through that country for passage of aircraft overseas, a convention which had to be observed before the entry of the U.S. into hostilities in December, 1941. Prior to that time, the U.S. was a neutral country and thus required under international law to be not too obvious in supplying strategic materiel to the combatants. The possible use of the sites as medical centres also ceased with the U.S. entry

into combat, as medical facilities for wounded men were quickly set up in Great Britain.

BASIS FOR CHOICE OF THE SITE

Some uncertainty surrounds the choice of the Frobisher Bay area as the location of one of the Crimson Air Route sites. Forbes (1953), who was actively involved in many aspects of the operation, was unable to positively identify the source of the inspiration for use of a site in or near Frobisher Bay.

Vilhaljmur Stefansson states quite flatly in his autobiography that he was against the choice of any site in Frobisher Bay. Stefansson claimed that he and Charles Lindbergh had rejected the area in the 1930's as a possible location for a refuelling base for trans-Atlantic flights by Pan American World Airways, because they regarded the local weather conditions as terrible, and because they felt that ice conditions in the bay were such that only a short shipping season would be possible (Stefansson, 1964:344-51).

Another source noted that choice of the Frobisher Bay site was made by the simple expedient of scaling off distances via the Great Circle Air Route between points in the American West such as Seattle, Washington, and Greenland with dividers being used to scale off 500 mile intervals for the establishment of airfields (Lloyd, 1969).

Certainly the tentative identification on existing maps of the large expanse of flat land at the head of the bay, coupled with its location on the Great Circle Route, within 500 miles of the most suitable site to the west (Coral Harbour on Southampton Island), were the combined factors which convinced planners that an on-the-ground survey should be made. The wintering party was able to obtain data on location conditions through its own observations, which, added to that of the survey parties who examined the area in 1942, convinced the U.S. military planners that Frobisher Bay was a suitable site for an airfield.

Beyond information collected by these parties, there would have been little useful data available on local weather conditions. One source of information on weather and ice conditions in the bay might have been the Hudson's Bay Company which had maintained a trading post in Ward Inlet since 1914. Like all Canadian Arctic trading posts at coastal locations, this post was re-supplied by ship each year and thus would have a record of relevant data such as break-up dates, dates of arrival and departure of the supply vessel and freeze-up dates.

Another point of interest concerns the basis of Stefansson's strong arguments against the choice of a Frobisher Bay site. One wonders if he had information not available to those faced with making the final decision on location of the

site. If in fact he had such information, the question arises as to where he obtained it. Stefansson did have some general knowledge of the southern Baffin Island region, dating from his association with a scheme to introduce reindeer herding into the area during the early 1920's. However, Stefansson's partner in this venture carried out the on-the-ground research, spending some time in the vicinity of Amadjuak Lake studying grazing potential (Jenness, 1964:27).

From evidence readily available to this writer, it appears that neither Stefansson nor the United States Government had all the requisite information for making a decision on the location of an airfield at the head of Frobisher Bay. Time was of the essence, there was a war on, and establishment of the Crimson Air Route was given high priority in view of the perceived needs of the time.

Given the factors to be weighed under the circumstances, the only possible decision was made. The subsequent non-use of Frobisher Bay (and the other Crimson Air Route bases) for the original plan had nothing to do with, for example, the discovery that local weather and ice conditions were unsuitable. Rather, it was a simple case of technology having progressed more rapidly than the planners of the Crimson Air Route had anticipated, coupled with the change in the military situation which had dictated the original need. These two factors, changes in

technology and changes in the military strategic situation, both of them entirely extraneous to Frobisher Bay itself, continued to play important roles in the subsequent development of the settlement.

CHAPTER 4

FROBISHER BAY - THE FIRST 20 YEARS

THE AMERICAN PRESENCE IN FROBISHER BAY

In the first 20 years of its existence, American military forces were in the settlement of Frobisher Bay for much of that time. After conclusion of construction in 1943, the airbase at Frobisher Bay was manned by a small force of United States Army Air Force personnel who operated the base as a satellite to the much larger American airbase at Goose Bay, Labrador. In 1944, the United States military personnel were withdrawn from Frobisher Bay, replaced by a skeleton force of Canadian government personnel who manned the base for the next six years.

Strategic considerations arising from the world situation at the time of the Korean War caused U.S. military authorities to look again at Frobisher Bay in the latter part of 1950. American forces were then preparing a massive military airbase installation at Thule, Greenland. Frobisher Bay was looked upon as a possible link between bases in the northeastern United States and Greenland. In 1951, U.S. forces returned to Frobisher Bay, using the base there as a trans-shipment point for materials being air-lifted to Greenland from the U.S.

In 1955, construction was begun of the Distant Early

Warning Line (DEW Line), a chain of radar bases strung across the most northern half of the North American continent from Alaska through Arctic Canada to Greenland. This network was intended to provide an early warning system against possible manned aircraft or guided missile attacks from the Soviet Union. Frobisher Bay became an important trans-shipment and communications and construction centre for establishment of the eastern posts of the DEW Line. The more westerly sites on the long radar line were supplied from other centres farther west, such as Churchill, Manitoba, and Edmonton, Alberta.

Until 1957, command of the Frobisher base had been under the U.S. Air Force Northeast Air Command, part of the local system for the defence of North America. At that time, command of the base was transferred to the U.S. Strategic Air Command which operated long range bomber aircraft over North America, Greenland and beyond. The Strategic Air Command required a build up of its in-flight refuelling capabilities in the northeastern sector of North America. Frobisher Bay was chosen as the base for a tanker aircraft group. Personnel and aircraft moved into Frobisher Bay in 1959, remaining there until 1963 when all American military forces withdrew from the region.

THE CANADIAN PRESENCE IN FROBISHER BAY

During the Second World War, the Frobisher Bay airbase was manned exclusively by American forces and authority over the base was in American hands. A single member of the Royal Canadian Mounted Police (R.C.M.P.) was stationed there to serve as liaison between the U.S. forces and the Canadian government and to oversee the welfare of the local Eskimos. Prior to that time, policing of the area had been carried out by the R.C.M.P. detachments at Pangnirtung and Lake Harbour.

Just before the end of the war, the U.S. group withdrew, but there was little more than token occupation of Frobisher Bay by the Canadian government. In the latter part of the 1940's, the Royal Canadian Air Force functioned at the base for a short time, but soon withdrew and left Frobisher Bay to the Department of Transport personnel responsible for the airport and the meteorological station. During the war, the Hudson's Bay Company trading post had been moved from Ward Inlet to a site a mile and a half along the shore south of the airbase. This move was partly in response to the general northward shift of the Eskimo population toward the head of the bay, drawn by the activities at the airbase, but mostly so that the post would benefit from the improved transportation and communications established in the area as a result of the airbase.

The advent of World War II had brought a surge of development to many parts of the Canadian Arctic, development which served to make the Government of Canada more actively aware of its responsibilities with respect to this part of the country than it had been previously. Although legislation in respect of the Federal Government's responsibilities to the indigenous peoples of the North had long been in existence, little active attention had been paid by the government to the needs and problems of northern Eskimos and Indians. In the early 1950's, a number of factors combined to serve to focus government attention on matters pertaining to northern development. Among the most significant of these factors were: military considerations arising out of the circumstances of the Cold War; substantiated reports of famine among various groups of indigenous people, particularly the Eskimos of the Keewatin Region of the Northwest Territories (Jenness, 1964; Mowat, 1951); and a growing awareness of the development potential of northern non-renewable resources.

Improved communications and transportation facilities in the North, along with increased travel there, largely as a result of wartime developments, combined to ensure that more knowledge about northern life and conditions were disseminated to the nation at large than had been the case prior to the war. As a result, reports coming out of the North concerning cases

of starvation among Eskimos through the medium of people such as Farley Mowat (1951), served to stir the national conscience of the Canadian people who were moved to demand that the Federal Government do something to save the Eskimos. At the same time, i.e., during the immediate post-war years and the early years of the 1950's, government authorities had become aware of changes which had occurred in the North largely through war-stimulated developments. Whereas previously the bulk of the northern indigenous population had lived a transient or nomadic life, tied to the utilization of renewable resources, with only an extremely small portion of the native population having any contact with wage employment, the situation was found to have changed in those areas touched by war effort-generated activities such as building of the bases of the Crimson Air Route, for example (Map 12). The Federal Government, which heretofore had left such social programs as existed for indigenous northern peoples largely in the hands of church missionary groups, was forced to take immediate action on behalf of Canada's Eskimos and northern Indians.

An initial start in this direction was made just after the war when the Indian Affairs Branch of the Department of Citizenship and Immigration began a school building program for Indians of the Mackenzie District of the Northwest Territories

and in the Yukon, while the Department of Resources and Development, then holding responsibilities for Canadian Eskimos, began a limited school building program also in the Mackenzie District, building its first Federal school at Tuktoyaktuk in 1947 (The Canadian Superintendent, 1964). However, a more concerted effort appeared to be required as the government became increasingly aware of the need for more direct action in the North in respect particularly to the indigenous population.

In 1953, research, policy and program development for Canada's northern territories were centralized in one arm of the Federal Government with the formation of the Department of Northern Affairs and National Resources, organized on the base of the former Department of Resources and Development. This new department had as one of its specific responsibilities in respect to northern development the welfare of the Eskimo people. The Department established a network of field administrators throughout the Northwest Territories at existing settlements to aid in the carrying out of these responsibilities. In late 1953, one of these administrators, or "Northern Service Officers" was sent to Frobisher Bay to administer programs of the Department of Northern Affairs aimed at the care and welfare of the Eskimos of the local region.

Concentration of Federal Government activities in

Frobisher Bay progressed rapidly from that time, as did the growth of the settlement, both in terms of physical facilities and population. At the end of its first full decade of existence, Canada was represented in Frobisher Bay by personnel of four Federal Government Departments, Northern Affairs and National Resources, Transport, National Defence and Justice (R.C.M.P.).

By the end of Frobisher's second decade, when the United States Air Force concluded its activities there, the agencies of the Government of Canada were in full control of the settlement for the first time since its founding.

RESPONSE OF THE LOCAL ESKIMO POPULATION

In the early 1940's, the Eskimo population of Frobisher Bay was distributed about the bay in a number of locations (Map 11). Dependent on the renewable resources indigenous to the region, they pursued their traditional seasonal rounds and showed no inclination to settle at any one location in large numbers. Despite the Hudson's Bay Company store situated at Ward Inlet, they do not appear to have settled there, and indeed there would have been little incentive for them to do so. For the majority of the Frobisher Bay Eskimos, contact with non-Europeans over the previous years would have been limited to that with the Hudson's Bay Company store manager, local R.C.M.P.

constables patrolling the bay or with the occasional travelling scientist or missionary. It may be assumed, therefore, that the presence of the U.S. military party passing the winter of 1941/42 on Crowell Island was a major topic of conversation around camp fires all that winter.

With the arrival of the survey and construction crews at Koojesse Inlet in the summer of 1942, Eskimos began drifting up the bay to the construction site to see what was going on. Despite efforts by military authorities to discourage them from camping near the base site, many Eskimo families persisted (Forbes, 1953).

Over the first decade of the existence of the settlement, however, the influx of Eskimo families who took up permanent residence into it was slow, even after the Hudson's Bay Company store relocated near the base. Some families settled relatively permanently around the base, but lack of economic opportunity and lack of encouragement of this practice by military officials resulted in a slow process of change to settlement living by the local Eskimo population. Employment of Eskimos on the base was not encouraged, and owing to the general lack of skills and knowledge, there were few jobs which Eskimos could do. Of the total of 304 Eskimos listed by the 1951 Census of Canada as living in the Frobisher Bay region, only about 50 lived in the settlement the year around. In the

summers of the early 1950's, however, more casual wage labour became available for Eskimos. Each year, approximately 20 to 30 Eskimos obtained summer jobs and would camp near the base, remaining as long as there was work for them. Occasionally, a family would elect to remain in the settlement, thus adding to the numbers of permanent settlement dwellers.

Beginning with the onset of DEW Line construction in 1955, increasing numbers of Eskimos found their way into Frobisher Bay, lured there from all over southern Baffin Island by the possibility of finding wage employment.

The greatest growth of the in-settlement population of Frobisher Bay took place in the period from 1956 to 1963 (Table 3), a growth attributable almost entirely to immigration (Honigmann and Honigmann, 1965:95). This immigration occurred in direct response to: (i) the establishment of the Department of Northern Affairs and National Resources in the settlement in 1953-54 with a consequent increase in social services provided for Eskimos; (ii) the establishment of a rehabilitation centre by the Northern Affairs Department in 1956, intended to form a "half-way house" for Eskimos returning north after prolonged medical care in southern Canada; (iii) commencement of DEW Line construction activities in 1955 and continuation of associated construction and supply functions within the settlement until 1958; (iv) return of the U.S. Air Force in 1959-60 with an

TABLE 3

Growth of Population of the Settlement
of Frobisher Bay 1942 - 1969

<u>Year</u>	<u>Non-Eskimo</u>	<u>Eskimo</u>	<u>Total</u>	<u>Source</u>
1942	500	N/A	500	I.A.N.D. 1000/169
1950	66	appr. 25	91	I.A.N.D. 1000/169
1956	93	258		<u>Ibid.</u> and Honigmann (1965:249)
1958	441	650		I.A.N.D. 1000/169
1959	437	654	1091	I.A.N.D. 1000/169
1960	983	770	1753	I.A.N.D. 1000/169
1961	1040	761	1801	Honigmann (1965:249)
1963	713	906	1619	Honigmann (1965:250)
1966	566	1036	1602	MacBain (1966); R.C.M.P. (1966)
1969	530 (est.)	1174	1704	R.C.M.P. (1969)

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accompanying accelerated construction program; and (v) an extensive government construction program in Frobisher Bay in connection with an overall development plan for the settlement (Chapter 5).

Each of these events had a distinct effect on the Eskimo population of southern Baffin Island. While the majority of these stimuli to immigration to the settlement affected primarily only the Eskimos of south Baffin Island, particularly the Lake Harbour and Pangnirtung groups, the rehabilitation centre drew Eskimos from all over the Eastern Arctic and even from the Western Arctic. Many of the rehabilitants remained at Frobisher, even after the centre was closed in 1964. The opening of schools in the settlement by the Department of Northern Affairs and a gradual increase in enforcement of school attendance regulations brought in those remaining Eskimos of the bay who had continued to live in hunting camps, resisting the attractions of the settlement to continue their life on the land.

By 1963, the permanent Eskimo population of the settlement had nearly doubled in size from the population of 494 reported by the R.C.M.P. for 1957 to 906, as estimated by Honigmann and Honigmann (1965:25). There were no longer any permanent camps anywhere within the bay area by 1963. Although many families spent large parts of each year on the land, all

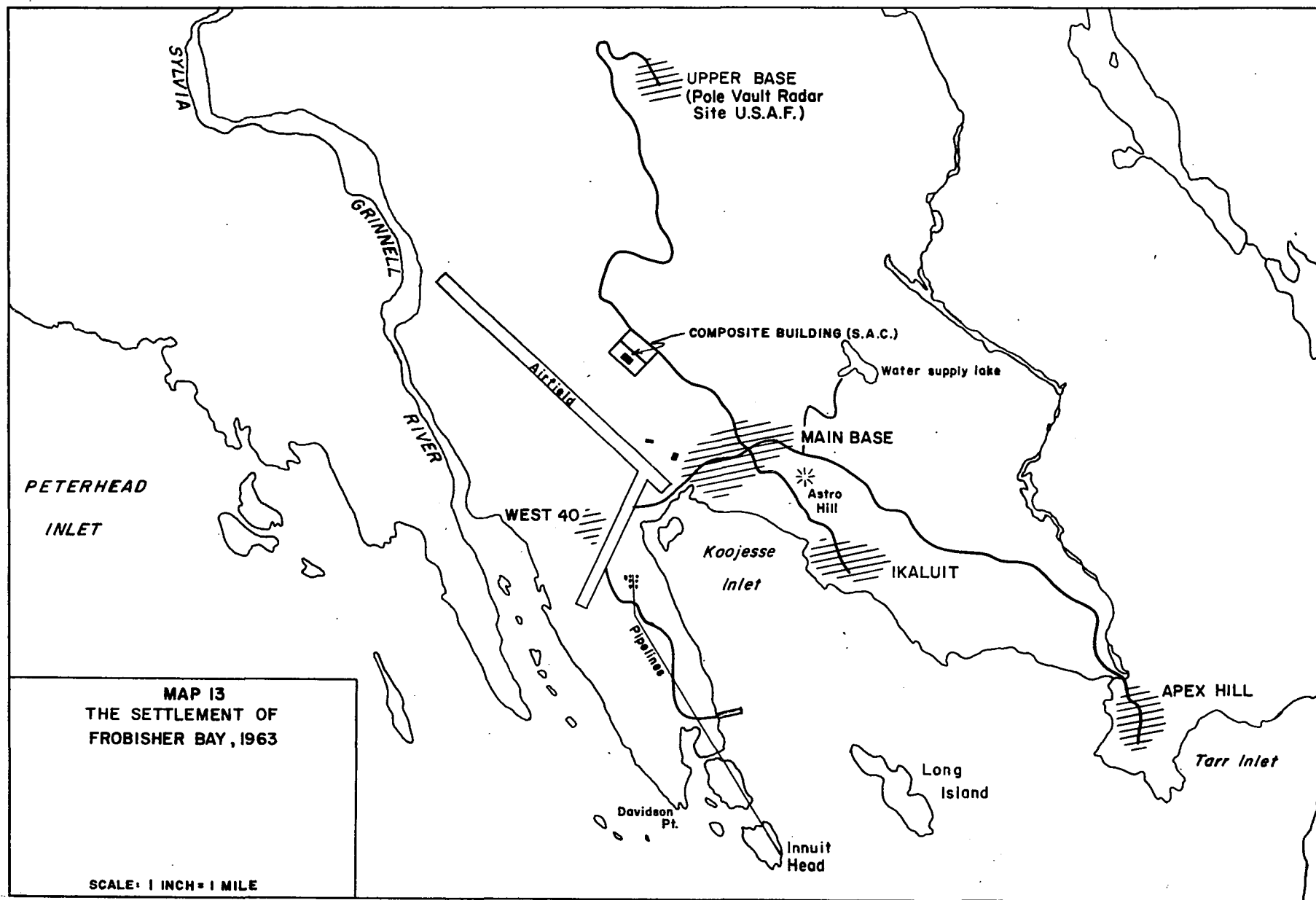
could by then be considered as permanently based within the settlement.

PHYSICAL GROWTH OF THE SETTLEMENT

The first buildings of the embryo settlement of Frobisher Bay were strictly utilitarian military structures, many of a temporary nature, located to the south of the original airstrip in the area which became known as the Main Base (Map 13). The focus of non-Eskimo activity in the settlement centered around this area for the next 10 years.

Those Eskimos who trickled into the base during its first decade tended to settle along the shore of Koojesse Inlet to the south of the Main Base, building huts and shacks of tar paper and waste materials from the construction sites. This area was called Ikaluit.

In 1954, Frobisher Bay's original radar and communications system was enlarged by the addition of a "Polevault" radar installation, part of the mid-northern "Pinetree Line", which was located at some distance north of the Main Base at the top of a hill. During the period of DEW Line construction, a further tentacle of habitation reached out from the central area of the settlement with the establishment of a complex of warehouses and seasonally occupied bunkhouses to the west of the airstrip in the "West 40".



Following their practice at other Canadian Arctic settlements, the Department of Northern Affairs and National Resources chose to establish their staff and offices at some distance from the establishments of other government agencies and the military camp. The site selected was at Apex Hill ($63^{\circ}43'N$, $68^{\circ}27'W$), just over a mile south of the Main Base by boat, some three and a half miles by road. The reasoning behind this choice of an isolated location may have derived from the official view of the Department, as the only agency directly concerned with the welfare of the Eskimos, that the Department and those it served should be far removed from the demoralizing and unhealthy effects of contact with military personnel. The fact that a large Eskimo population was already happily settled down within a stone's throw of the Main Base did not deter officials from selecting Apex Hill as the official Departmental enclave. In 1955, the Department built an elementary school in Apex Hill, following this with the rehabilitation centre begun in 1956. Many houses for the Eskimo rehabilitants were built near the rehabilitation centre.

During the tenure of the U.S. Strategic Air Command unit at Frobisher Bay between 1959 and 1963, many of the installations now so much a part of the Frobisher scene were built. Foremost among these was a large composite building constructed north of the Main Base close to the runway. This structure,

later known as the Federal Building, housed the crews of the tanker aircraft stationed at Frobisher Bay.

By 1963, the settlement had grown and spread out from the original airbase to form a sprawling, disaggregated settlement in which six distinct areas of occupance existed (Map 13). The heart of the settlement was the Main Base, occupied largely by American military personnel, but also by personnel of Canadian government agencies. Immediately to the south of the Main Base lay the all-Eskimo settlement of Ikaluit. Until their departure, the U.S. Air Force occupied the Composite Building beside the runway, approximately one mile from the Main Base. Apex Hill, the Polevalut radar site and the West 40 formed the "suburbs" of Frobisher Bay. Only between Apex Hill and the Main Base was there regular commerce. The West 40's function as a seasonal dormitory site and year around warehouse complex had been added to by the installation there of a communications centre manned by Royal Canadian Navy personnel, as a result of which the West 40 was largely a restricted area, as was the Polevault site. Such private enterprise as existed in the settlement was centred in the Main Base; the exception was the Hudson's Bay Company which had its main store in Apex Hill, with a small commissary operation in the Main Base.

DISTRIBUTION OF THE POPULATION

The overall picture of Frobisher Bay at the end of its first 20 years as presented in the previous descriptions and from Map 13 is one of a disorganized agglomeration spread over a large area, consisting of many discrete sub-centres, each with its own particular function and its own distinct population group.

In the period 1942 to 1953, the non-Eskimo population of Frobisher Bay was concentrated in the Main Base area. Prior to the founding of the Northern Affairs Department's complex in Apex Hill, only the non-Eskimo employees of the Hudson's Bay Company lived there. Over the following years, the non-Eskimo component of the total Frobisher Bay population became divided between the Main Base and Apex Hill. Personnel of the two major government departments, Transport and Northern Affairs, tended to split, employees of the former keeping to the Main Base, those of the latter congregating at Apex Hill. This split could be regarded as a logical result of the disparate functions of the two organizations. The Department of Transport was responsible for the provision of essential services in the settlement as a whole from approximately the mid-1950's until the mid-1960's, for the operation and maintenance of the airport facilities and runway in conjunction with the U.S. Air Force, and for the

meteorological station. In the early years of its presence in Frobisher Bay, the Department of Northern Affairs had sole responsibility for the care and well being of the Eskimo population, except in cases concerning the disruption of law and order, which came under the jurisdiction of the R.C.M.P. In the latter 1950's, Northern Affairs extended its activities beyond Apex Hill with the building of a large elementary school in the Main Base. As the Department's establishment enlarged, increasing numbers of its personnel lived in the Main Base along with that of the Departments of National Health and Welfare, Public Works, National Defence and the Crown Corporation Northern Canada Power Commission.

The U.S. military component of the non-Eskimo population, with the exception of the Composite Building and Polevault site, was in the Main Base throughout the time of the American occupation of Frobisher Bay.

As already indicated, most of the first Eskimo families to settle in Frobisher Bay during the first 10 years camped around the Main Base and along the beach in Ikaluit. When the Department of Northern Affairs began providing houses for Eskimos, the majority were located at Ikaluit which grew into an all-Eskimo sub-settlement. Another Eskimo sub-centre grew up in Apex Hill around the rehabilitation centre. Apex Hill was a

mixed settlement of Eskimo and non-Eskimos.

As with the non-Eskimo population, there were divisions within the Eskimo population. In the early days of the settlement, the population of Ikaluit was composed of Eskimos from the immediate Frobisher Bay region. In the mid-1950's when the influx of Eskimos from other parts of Baffin Island began in response to the construction of the DEW Line, Eskimos from Lake Harbour and Cape Dorset, along with some Pangnirtung people settled in Ikaluit, grouping themselves according to family ties. At Apex Hill, however, many "foreigners" - Eskimos from Arctic Quebec and other parts of the Canadian Arctic - passed through the rehabilitation centre. Many of these people settled permanently in Frobisher Bay, the majority at Apex Hill. In its early years, Apex Hill thus became a little enclave of "outlanders" who were there in greater numbers than the local bay Eskimos (Honigmann and Honigmann, 1965).

AT THE END OF 20 YEARS

In the course of its first two decades, Frobisher Bay grew to become the largest settlement in the Canadian Eastern Arctic. It grew from a small, self-contained unit having one function, that of a military base, with a small homogeneous population, non-Eskimo, predominantly American military personnel, to a large, scattered settlement having several func-

tions, none related to each other, with a heterogeneous population. It did not grow according to any set plan or as the result of the establishment and continuation of a viable industrial or commercial activity. As the third decade of the settlement began, its future was very much open to question.

One attempt was made to guide the development of Frobisher Bay, however, during its first two decades, an attempt which had the effect of focussing official attention on the settlement for the first time with a view toward defining what the future role of Frobisher might be. A study of its evolution to its present status would not be complete without examination of the first efforts made to introduce some basic elements of planning to the settlement's random growth. The first planning activity carried out for Frobisher Bay is discussed in Chapter 5.

CHAPTER 5

THE FIRST PLAN FOR FROBISHER BAY

BASIS FOR PLANNING

At the time of the final American departure in 1963, Frobisher Bay was in the midst of one of its great periods of physical development, a "boom" period in the economy in terms of local employment. The American departure thus had little direct effect on the local economy at the time. This "boom" was related to efforts on the part of the Government of Canada through the Department of Northern Affairs to initiate a scheme for the rational development of the settlement of Frobisher Bay.

In the mid-1950's, government planners in Ottawa began to concern themselves with assessment of the future of Frobisher Bay. American forces were still firmly occupying the settlement, but it was the contention of many officials connected with northern development programs that U.S. military forces would not remain indefinitely in Frobisher Bay. The settlement population was growing so rapidly during this period that authorities felt they must have a contingency plan for the future, some rationale for continuing activities in the settlement after the cessation of the settlement's military function.

It was felt at the time that Frobisher Bay would have three main continuing functions:

- (i) As a major airfield, particularly for re-fuelling trans-Atlantic commercial airliners flying the Northern Great Circle Route between the United States West Coast and Europe;
- (ii) As a centre for mineral exploration and development;
- (iii) As a government administrative centre for the Canadian Eastern Arctic.

Expectations in terms of (i) were based on the rapidly increasing volume of air traffic across the North Atlantic between Europe and North America, pioneered by the Scandinavian Airlines System's scheduled flights via the Northern Great Circle Route begun in November, 1954 (Lloyd, 1969). The runway at Frobisher Bay could accommodate large aircraft, and the settlement was right on the main northern circle route between northern Europe and cities of the American and Canadian west. Thus, it appeared to have a bright future as a primary re-fuelling base and as an alternate field for aircraft with mechanical difficulties and those weathered out of primary airports. At that time, the Frobisher Bay airfield was the centre of a great deal of activity, used by civilian operators as well as military. Pan American World Airways, Scandinavian Airlines System and the Canadian Pacific Airlines were using

Frobisher as a technical stop. Other air transport companies were making enquiries concerning regular use of Frobisher's facilities in connection with the growing market for commercial flights between North America and Europe. It was estimated that extensive facilities would be required for servicing aircraft, accommodations for crews, ground personnel and passengers. Estimates made placed the population at an expected level of 1,200 people by 1959 (I.A.N.D. 1000/169; 303/169-6; Snowden, 1958). Around its central function as a major air centre, Frobisher Bay was expected to develop associated service industries and commercial activities.

The basis for optimism in terms of (ii) above are somewhat more difficult to understand. Little was known of the detailed geological conditions in the southern Baffin Island region. Therefore, there was relatively little solid foundation for expectations in terms of Frobisher Bay's development as a mineral exploration staging centre. Baffin Island, however, like so much of the rest of the Northwest Territories, is largely of Pre-Cambrian Shield rock and was regarded as having great prospects for mineral occurrences.

With respect to (iii), the Department of Northern Affairs and National Resources had so expanded its services and programs throughout the Canadian Arctic, that it had begun organizing a regional and sub-regional system for its field

office network. Frobisher Bay was expected to become a major administrative field headquarters in the Eastern Arctic. In addition, departmental officials hoped for a beginning of industrial development in the settlement. Northern programs of the time for Eskimos emphasized initiation of cottage industries and renewable resource-based activities which might eventually stimulate a more sophisticated economic base among the Canadian Eskimo population. It was reasoned that Frobisher Bay with its airfield, building complexes and large population could serve as the hub for commercial or industrial activity in the Eastern Arctic.

By 1958, sufficient preliminary research had been done to bring the Federal Cabinet to the conclusion that the combination of anticipated government and private development at Frobisher Bay made it both necessary and desirable to draw up an orderly plan for the settlement's future development. A team of consultants together with a government interdepartmental study group was formed as the Frobisher Development Group (I.A. N.D. 303/169-6). The consultants engaged by this group comprised a consortium of architects and engineers who were instructed to investigate the site thoroughly, study cases of towns located at similar latitudes in other countries and produce a proposal for a design for a town which would meet both the present and future needs of the community.

After three years of intensive study and planning research, a detailed master plan for the future town of Frobisher Bay as envisioned by the planners was submitted to the Federal Government in mid-1961. At an estimated cost of over \$12,000,000, this plan called for construction of hospital facilities, improved roads, numerous building complexes for the housing of cottage industry projects, warehousing, staff housing, office accommodation, a student residence hostel in association with a vocational training school, and expanded elementary school facilities. The plan also contained provision for extensive utilidor systems for water and sewage, a water treatment plant and a large, central power generating plant for electricity supply (I.A.N.D. 303/169-6; 1000/169. The central focus for the proposed new town was to be Astro Hill, a large rocky outcrop to the east of the Eskimo sub-centre of Ikaluit (Map 11). A substantial portion of the plan's \$12,000,000 price tag was associated with the dynamiting and excavation of this granite outcrop to make room for the town centre.

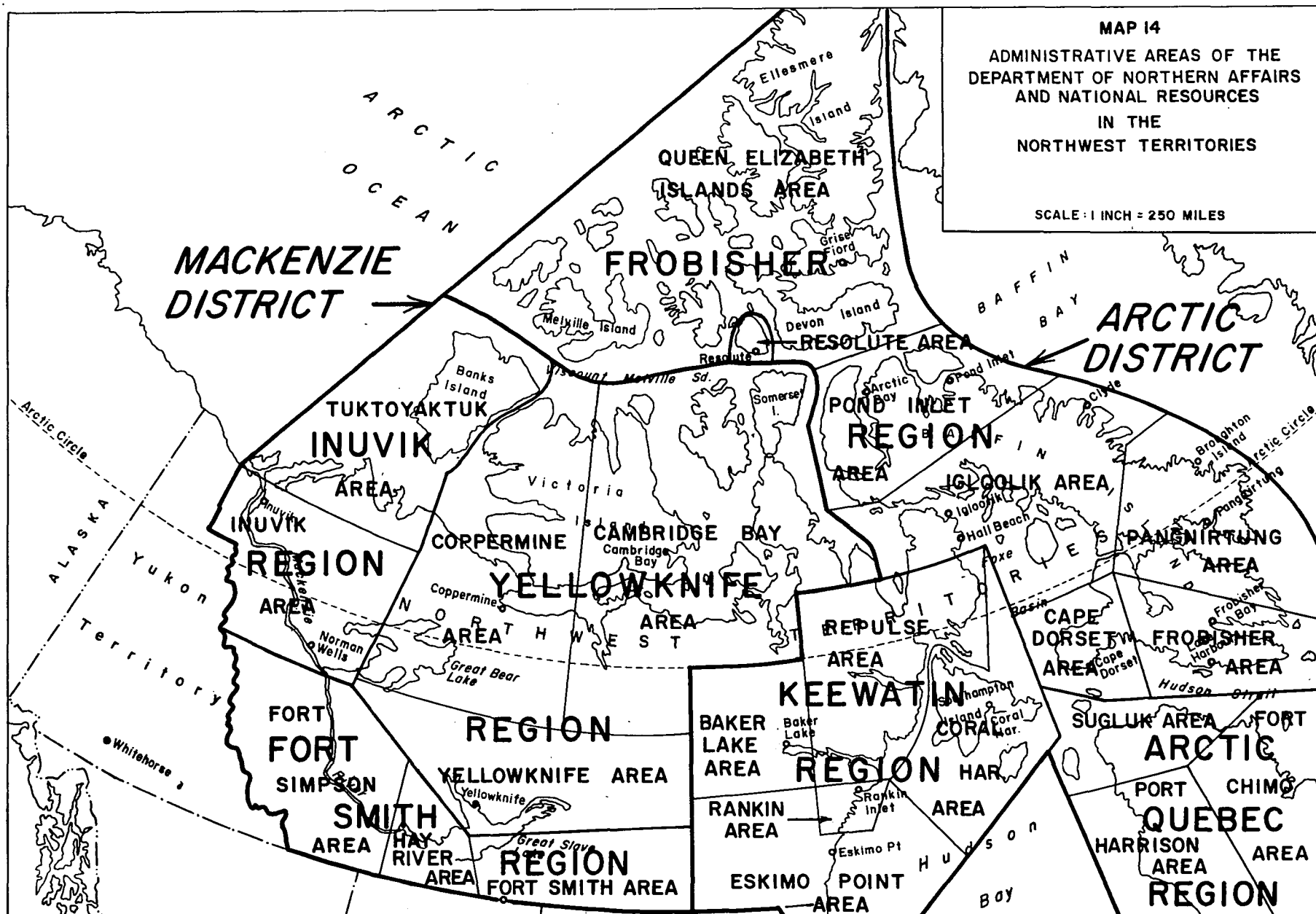
DESIGNATION AS REGIONAL HEADQUARTERS

From the time of its formation as the Department of Northern Affairs and National Resources in 1953, the Department had been working to establish a network of field offices through-

out the Northwest Territories through which its policies and programs would be administered on the ground. The Territory was divided into two Districts, each District into Regions, and each Region into Areas (Map 14). District Office headquarters for the Mackenzie District was located in Fort Smith, that for the Arctic District in Ottawa. Each District Office was a small Department of Northern Affairs, having internal organization corresponding to that of Headquarters at Ottawa. Each Regional Office was similarly organized, although staffed with less personnel than District Offices. The Area Offices functioned at a much lower level, staffed usually only by an Area Administrator having a small staff of clerk, mechanic, welfare specialist (under ideal conditions), in addition to personnel connected with school activities in those settlements having schools. This network was organized according to a basic concept for decentralization of functions and authority and was intended to ensure maximum responsibility for administration of funds and programs by those officers located in the field. A settlement chosen as a Regional Headquarters had to have some combination of the attributes of relative ease of year around access by air, and a long open water season, since many supplies or equipment which might be needed in an Area Office were usually concentrated at the Regional Office; a reasonably central location, since Area and Regional staff had to be able

MAP 14
ADMINISTRATIVE AREAS OF THE
DEPARTMENT OF NORTHERN AFFAIRS
AND NATIONAL RESOURCES
IN THE
NORTHWEST TERRITORIES

SCALE: 1 INCH = 250 MILES



to communicate readily; and a suitable site location which would allow for expansion of facilities within the settlement.

While the work of the Frobisher Development Group for the planning of Frobisher Bay was going on, the Northern Affairs Department designated the settlement as the Regional Headquarters for a Region comprised of the eastern Arctic Archipelago and Melville Peninsula (Map 14). Although not having a central location within the Region, Frobisher Bay was a logical choice for a Regional Headquarters for the very same reasons which had (i) led to its original founding, i.e., sufficient flat land for an airfield and associated facilities, good local flying conditions, ease of accessibility by air and water, and (ii) led to its continuing occupation and re-occupation by American military forces, i.e., the existence of the runway and facilities added to the settlement complex with each American return. A third factor influencing the choice of Frobisher Bay as a Regional Headquarters arose from the heavy involvement there which the Department had managed to get into in just a few short years of its presence in the settlement, particularly the rehabilitation centre and all its associated projects. In short, development plan or no development plan, the Department of Northern Affairs, by 1959, already had such heavy financial and administrative commitments in Frobisher Bay, that it could hardly have chosen any other site in the Baffin Region as the

site for the Regional Office.

CHANGES IN EXPECTATIONS

Unfortunately, by the time planning for the new Frobisher Bay was completed, events had overtaken the planners. The course of development of the settlement was once again changed by developments in technology. Commercial airlines flying the North Atlantic runs had introduced high speed, large capacity jet transports capable of flying the Atlantic non-stop. As a result, Frobisher's role as an aircraft servicing centre declined drastically in importance within a very short period of time.

At the same time, the optimistic view held of the settlement as a potential mining exploration and development centre received a setback. Research which had been carried out over the southern Baffin Island region during a period of years revealed that no marketable mineral deposits were located on the southern half of the island. Beyond low-grade iron ore showings in the southwestern portion (Higgins, 1968), mineral prospects were poor. In 1962, the rich iron ore body at Mary River (70°N, 80°W) on northern Baffin Island, many hundreds of miles from Frobisher Bay, was staked (Freyman, 1967). The size of the Mary River deposit along with the strong possibility for location of other types of large, high quality mineral deposits

in that general region of the island suggested strongly that mining activity on Baffin would be centered on the northern half of the island, thus having little direct effect on Frobisher Bay.

Development of the physical plan for the settlement was further hindered by the state of the national economy. Beginning in 1961, the Canadian Federal Government instituted many economies in government operations and plans which served to effectively curb plans held by the Department of Northern Affairs for northern development, including the Frobisher Bay Development Plan. It was recognized that Frobisher Bay had evolved as a classic example of an unplanned, unco-ordinated community whose helter-skelter growth had created many social problems among its inhabitants and many administrative problems for the government. It was agreed that sound developmental planning was required. Nevertheless, the Frobisher scheme was subjected to intensive federal scrutiny in the light of prevailing economic conditions in the country as a whole. Many cuts were made in the original plan. An acceptable minimum plan was finally approved in principle late in 1961. Designated as Phase I of the Frobisher Development Plan, contracts were let for its undertaking in the summer of 1962. Construction of this first phase was to begin in 1963. Phase I called for construction of a hospital, roads, limited sewer and water systems including the water treatment plant, some warehousing

and site preparation, the latter being the blasting away of much of Astro Hill. Costs for this first phase of the total proposed plan were estimated at something over the amount of \$4,000,000 (I.A.N.D. 303/169-6).

At the time work was begun on Phase I of the Frobisher Development Plan, the U.S. Air Force announced its withdrawal from Frobisher Bay. Although anticipated as an eventuality, the actual fact of withdrawal had not been planned for in any detail. However, this move could not have come at a more opportune time for both the proponents of development at Frobisher Bay and those against any such development as laid out in the plan. Those in favour of attempts to establish Frobisher Bay as a major northern centre were faced with prospects of carrying forward their plans on a severely reduced financial budget; withdrawal of the American Air Force freed many costly installations for use by the Federal Government, resulting in a savings on building construction costs which would benefit construction of other facilities. The availability of the American buildings appeased somewhat members of the government and civil service who opposed costly construction ventures in the settlement. Upon the U.S. withdrawal, the Strategic Air Command building beside the runway was taken over by the Government of Canada, along with all other facilities, re-named the Federal Building and put to use as office accommodation for

government agencies functioning in Frobisher Bay and as living quarters for single employees of these agencies. With the withdrawal of the U.S. Air Force, the Northern Affairs Department ceased all planning for construction of a vocational training school and associated pupil residence as well as for further staff housing in the settlement, and began a complete re-study of the possible future courses of its development.

For the next three years, only the minimum of new construction was carried out in the settlement. The original Frobisher Development Plan was set aside. In a later part of this thesis, new planning schemes for Frobisher Bay are discussed. It is pertinent at this point, however, in the light of foregoing material on the physical background, the early development of the settlement, and its evolution over a 20-year period to the status it achieved during that time as a major government administrative centre on the northern frontier, to examine Frobisher Bay as it was at the end of nearly 25 years of existence. The next four chapters of this thesis examine the settlement as it was in 1966, just prior to its being subjected to another wave of development planning by the Federal Government.

P A R T I I

FROBISHER BAY
AS A
GOVERNMENT ADMINISTRATIVE
CENTRE

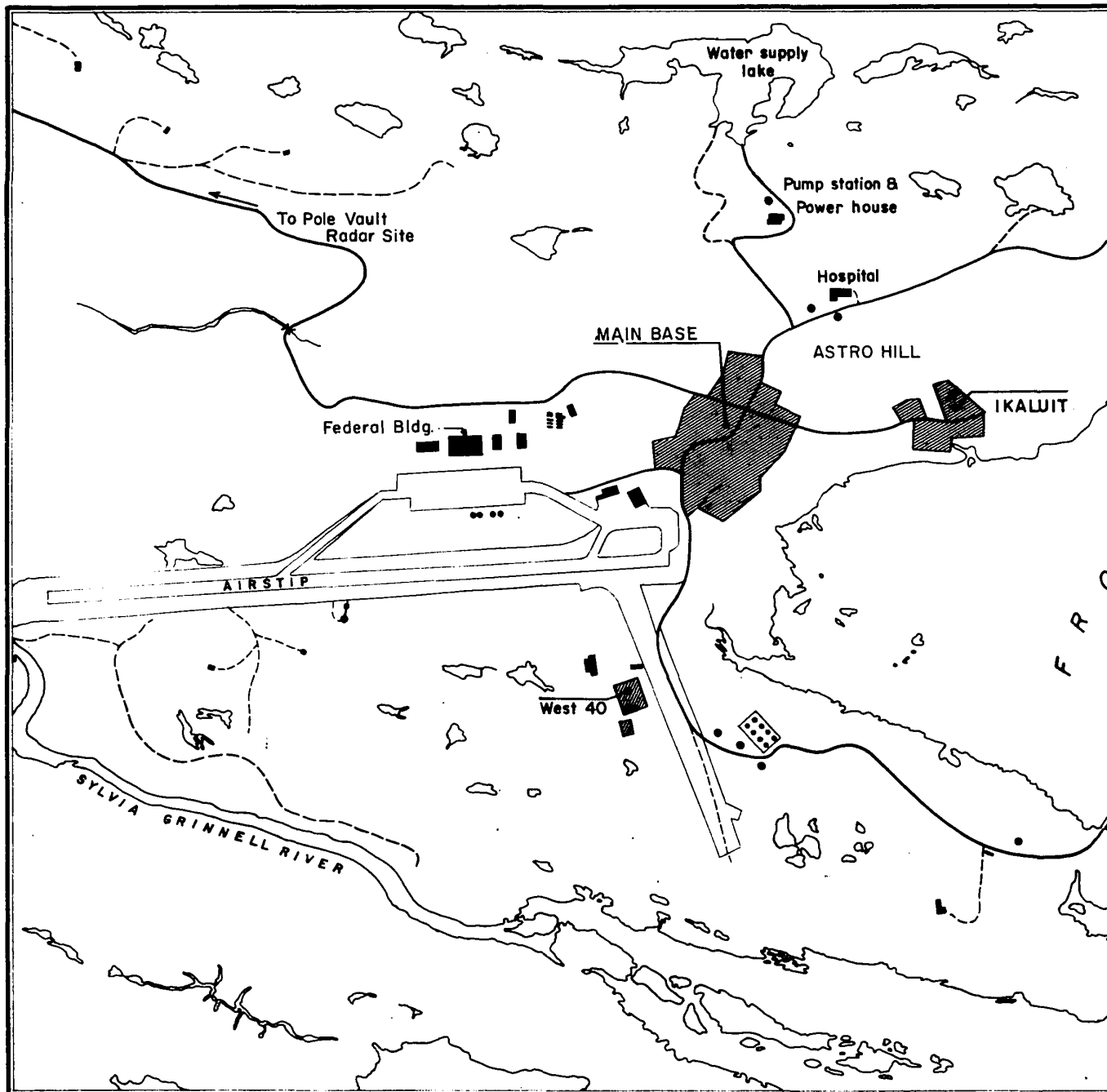
CHAPTER 6

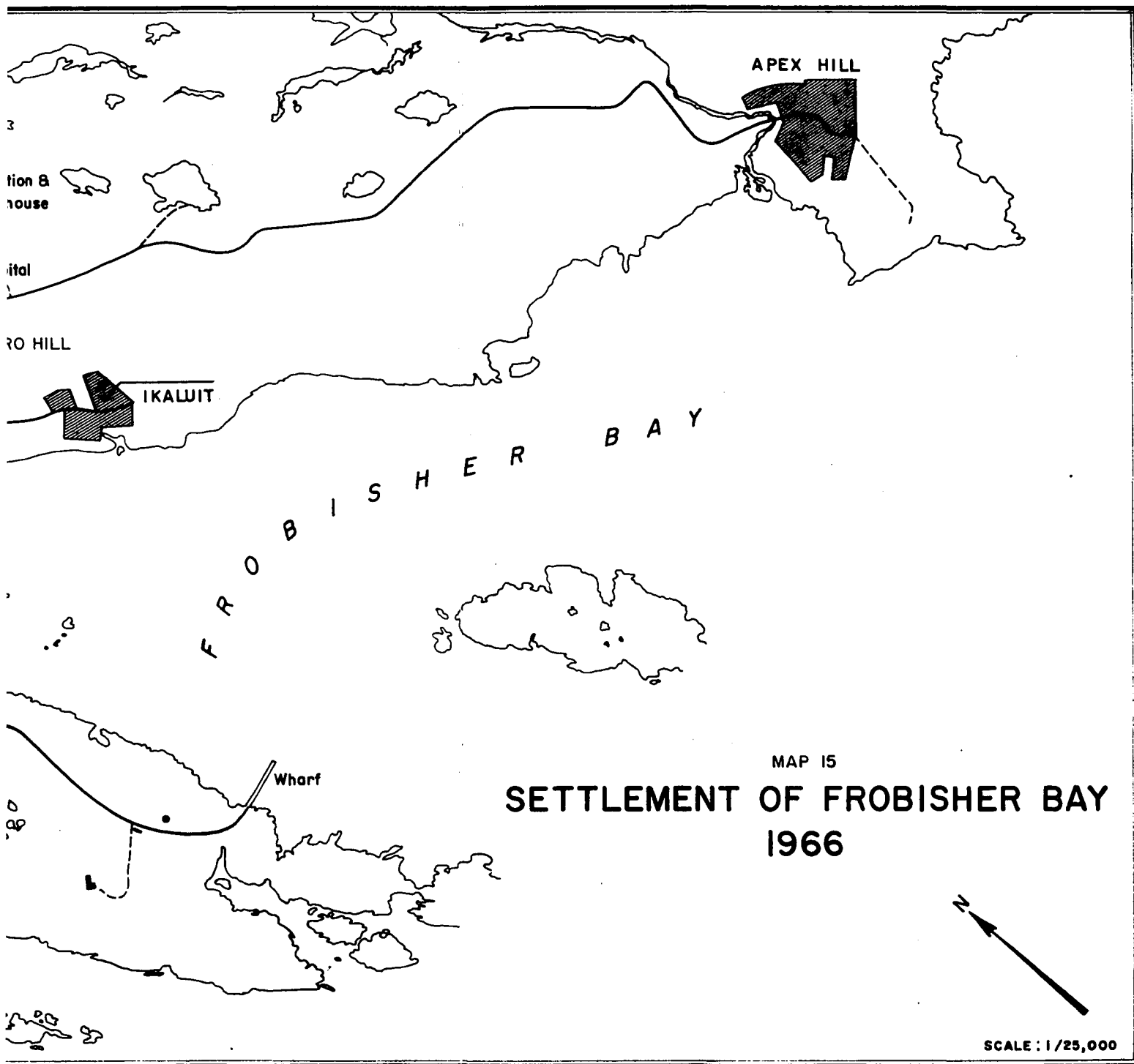
THE GOVERNMENT SETTLEMENT OF FROBISHER BAY

THE EXTERNAL FACE, 1966

The external face which the settlement of Frobisher Bay presented to the visitor in 1966 was essentially the same as it had been in 1963. Viewed from the air, the settlement presented a straggling appearance, with groups of buildings in discrete knots hugging the shoreline of Koojesse Inlet. The separate sub-centres were clearly visible from the air as were the long distances between each. Two new large structures not yet constructed in 1963 had been added to the scene, occupying some of the great amount of space between the Main Base and Apex Hill. Constructed as part of Phase I of the Frobisher Development Plan, these were the 28-bed hospital and the large powerhouse complex, both located to the north of Astro Hill (Map 15).

The population of Frobisher Bay in 1966 had not changed substantially in total numbers from 1963, but the relative sizes of the two components of the population had changed. In 1963, the Eskimo population stood at 906 (Honigmann and Honigmann, 1965); by 1966, it had risen to 1,036, an increase of 12 per cent. The non-Eskimo population had, on the other hand, taken a 20 per cent decline, falling from 713 in 1963 to





566 in 1966, largely the result of the departure of the American forces (Table 3, above, p. 58). The distribution of the population within the settlement in 1966 was essentially as it had been in previous years, one difference being that the Federal Building complex now contained people who contributed to the activities of the settlement, in contrast to the U.S. Air Force group which was a self-contained unit having little connection with the daily life of the settlement.

The most immediately obvious fact to a visitor arriving for the first time in Frobisher Bay in 1966, was the almost total non-existence of any easily discernible form of the types of commercial enterprise normally to be found in southern Canadian towns of similar size. To the resident or visitor looking for diversion, "downtown" Frobisher Bay presented two snack bars, a commissary run by the Hudson's Bay store and a liquor outlet maintained by the Territorial Government. Groceries and staples could be obtained only in the main Hudson's Bay Company store in Apex Hill; nothing of this sort was to be had in the Main Base or "core" area of the settlement. Visitors could obtain accommodation only in the Federal Building operated by the Department of Northern Affairs. Recreation was confined largely to attendance at movies run at various locales almost every night of the week, unless one were a member or

were invited to the local Royal Canadian Legion establishment or to one of the clubs formed by employees of one of the government agencies. Such was the face of Frobisher Bay in 1966.

It had not yet developed beyond the stage of being a frontier administrative outpost. Its remote location and physical environment and the lack of some form of normal economic base had mitigated against the development of those commercial and service activities usually associated with even very small towns in the south. Frobisher Bay's origin as a military camp had dictated the nature and pattern of its early growth; the camp had been entirely self-sufficient, independent of the surrounding land and its resources. All services within the settlement had been provided by the military organization. When, following the end of World War II, Canadian government agencies began moving in, they took over responsibility for provision of essential services for the civilian components of the population. By 1963, the Government of Canada, through the Department of Transport, had complete control over the maintenance and administration of the settlement, a picture changed only slightly in 1966, when the Department of Northern Affairs took over complete management of the settlement from Transport and had effected the introduction of private enterprise into some aspects of services provision within Frobisher Bay.

Nowhere in the settlement could one escape the presence of the Federal Government; in one form or another, i.e., through government departments, Crown Corporations or private firms on contract to the Northern Affairs Department, the essential services were all concentrated in the Federal Government. Services normally provided by municipal, provincial or even private enterprise in southern Canadian communities, were provided only by Federal Government agencies. The various government activities were clearly differentiated in the settlement, the spheres of responsibility and influences of each being easily discernible. The sheer size of the government establishments and the vital nature of the services they performed caused them, their policies and actions to dominate the settlement.

Exactly as they had for the past nearly 15 years, the functions of these government agencies within Frobisher Bay fell into distinct groups: administration and public services; operation of the airport and meteorological station; administration of programs concerning the Eskimo population. Virtually all functions normally carried out by the provincial level of government were carried out on behalf of the Government of the Northwest Territories by agencies of the Federal Government.

There were areas of overlap, although not of duplication, among programs of the government agencies, particularly those which were concerned in any way with the Eskimo population. Some agencies operated exclusively in the settlement of Frobisher Bay; others were also concerned with provision of services throughout the vast region of which Frobisher Bay functioned as the "capitol". The interested reader is referred to Appendix A for the details of the Government agencies active in Frobisher Bay; the balance of the present chapter discusses only the overall aspects of the programs pertaining to the settlement.

ADMINISTRATION AND PUBLIC SERVICES

By 1966, all aspects of municipal administration had been transferred to the Department of Northern Affairs and National Resources from the Department of Transport which had held this function for many years previously. The Department of Northern Affairs was thus responsible for provision and allocation of housing for Eskimos and non-Eskimos alike, engineering services and public works, education facilities and programs for the entire population, municipal services, i.e., garbage disposal and water supply, and for a full range of welfare services. The Department and the local R.C.M.P. detachment shared various legal functions which would have been

the prerogative of municipal or provincial levels of government. Thus, for certain types of licenses or permits, application was made to Departmental officials, acting on behalf of the Territorial Government.

Built as a part of the Frobisher Development Plan, the large diesel electric generating plant which served the settlement was operated by a Crown Corporation. This agency also operated a water treatment plant and utilidor system connecting the power plant with the hospital and the Federal Building.

Health services in the settlement were provided by a Federal Government department. No private doctors served Frobisher Bay; all medical care for the settlement population and that of the entire Baffin Region was dispensed by this federal agency.

As in the majority of the Canadian provinces, enforcement of law and order in the Northwest Territories rests under the jurisdiction of the R.C.M.P., which also functioned in Frobisher Bay as the municipal police force. Members of government agencies served in the capacities of justice of the peace and coroner.

In 1966, two personal service industries which would normally be components of the private sector of the economy were provided in Frobisher Bay by the Federal Government, and thus must be included as part of the discussion of public ser-

vices. One was a bakery; the other a laundry, both begun as projects under the auspices of the Northern Affairs rehabilitation centre. Projects of this nature were intended to serve as training projects for their Eskimo operators who were expected eventually to take them over as private businesses. For a variety of reasons, the take-overs never materialized. The Department had continued to operate a laundry and a bakery since the closing of the rehabilitation centre in 1964 since there was a definite need for such services. Prices charged the public for dry cleaning and laundry in no way defrayed the costs of operation of the plant. The bakery was operated by the Northern Affairs Department until mid-1966, when it was transferred to a private company already established in the settlement under contract to the Department.

TRANSPORTATION AND COMMUNICATION

Transportation and communications functions in Frobisher Bay were approximately equally distributed between Federal Government agencies and private companies in 1966.

One private airline provided air service between Frobisher Bay and points south, and between Frobisher Bay and Resolute Bay at the northern end of the Baffin Administrative Region. Other private companies operated charter services for local travel about the region, the business of these originating

entirely from government agencies. As elsewhere in Canada, operation and maintenance of the airport was handled by the Department of Transport which also had responsibility for administration and regulation of the annual sealift operation to the settlement.

Transportation within the settlement was provided in a variety of ways by both private and government agencies. A very poor bus service, augmented by more reliable taxi service, both privately operated, offered some means of movement about the settlement to its residents. Transportation for government employees and for school children was provided by government departments, the Northern Affairs Department having by far the largest operation.

The communications sector showed a blending of private and government enterprise. Local and long distance telephone services were provided by a private company; telecommunications by a Crown Corporation. In addition, some government departments, the Hudson's Bay Company and the Roman Catholic Mission had their own radio networks. A local radio station was operated by the Canadian Broadcasting Corporation.

TERRITORIAL GOVERNMENT

The Government of the Northwest Territories was represented almost exclusively by the Federal Government, specifi-

cally, the Department of Northern Affairs and National Resources, in Frobisher Bay in 1966. A Territorial Liquor Control outlet, opened in the settlement in 1960, was the sole territorially-operated activity in 1966, staffed by a territorial employee.

At the time of the establishment of the Department of Northern Affairs in 1953, there had already existed for some time clear-cut legislative definitions of the responsibilities of the Federal and Territorial Governments in respect to Canada's northern Territories. The Federal Government had responsibility for the care and well being of the indigenous residents, Indians and Eskimos; the Territorial Governments for programs pertaining to non-indigenous territorial residents. In addition, the Federal Government maintained control over all land matters and over the non-renewable resources. Prior to the end of World War II, little action in their respective fields had been taken in the Northwest Territories by either government. When it became apparent that direct action was required on many fronts in the North, particularly in the areas of social welfare and development programs for northern Indians and Eskimos, the Northwest Territories Government was not financially able to do more than provide the bare minimum of services to the part of the population coming under its direct responsibility in the more settled western half of the Territory,

let alone establish additional services throughout the vast Arctic regions. Since the population was predominantly Eskimo, the Federal Government logically became more involved in these regions than the Territorial Government. It was also quite logical that such territorial functions as might be required in the remote outposts of the Territory be handled by the department having the greatest interests in such areas. Therefore, in Frobisher Bay, as in all other Eastern Arctic settlements and those stretching along the coast from Igloolik to the Mackenzie Delta, the Department of Northern Affairs carried out its own programs as well as other functions on behalf of the Government of the Northwest Territories. In Frobisher Bay in 1966, therefore, the Federal Government was actually the government authority at all levels, including municipal.

MUNICIPAL GOVERNMENT

Reference to the Ordinances of the Government of the Northwest Territories concerning municipal status will reveal that the attainment of municipal status by any settlement is a step by step procedure. The Commissioner of the Northwest Territories may, under this Ordinance, designate a settlement a town if he is satisfied that, among other conditions, the proposed town will have not less than 50 ratepayers. Ratepayers are defined as a "person of the full age of 21 years whose name

appears on the current assessment roll, or, in the case of a municipality having no assessment roll, any person of the full age of 21 years who owns assessable property therein" (Government of the Northwest Territories, Municipal Ordinance, 1963, 2nd Session, c. 19, s. 2).

By 1966, Frobisher Bay had not achieved even the lowest rank of municipal status under this Ordinance. Municipal functions were carried out by Federal Government agencies. The settlement had a town council, the Frobisher Bay Community Council, but this had no legal powers. Although formed entirely of elected representatives, the council had only the power to recommend, not to legislate, owing to the unincorporated status of Frobisher Bay.

Ratepayers can be defined only in places in which there is either (i) an assessment roll or, (ii) assessable property. In general, there is likely to be assessable property only in situations in which individuals have the opportunity to obtain title to land or to obtain long term leasehold. Conditions in Frobisher Bay had never been conducive to the operation of private enterprise on any but the most reduced scale. As a result, there had been little or no activity with respect to land transactions on the part of private entrepreneurs. In 1966, there was no taxable property and thus no ratepayers in the settlement. Owing to insufficient demand for land parcels

in Frobisher Bay up to that time, neither the Federal nor Territorial Governments had felt it necessary to have a legal land survey carried out for the settlement.

GOVERNMENT TOWN

Frobisher Bay's circumstances of founding and growth had led almost inevitably to its status in 1966 as a government administration centre. Up to that time, neither government activities nor those of private enterprise had in any way stimulated dynamic growth of the settlement. It remained essentially a government town whose primary function had not yet been officially proclaimed, although government authorities then concerned with its future were coming close to making a decision in this respect. Before proceeding to examination of the economies of the settlement's population groups, it is worth looking at the role played by private enterprise in a place like Frobisher Bay.

CHAPTER 7

PRIVATE ENTERPRISE IN FROBISHER BAY

In the first ten to twelve years of Frobisher Bay's existence, private enterprise there was confined to contracting firms retained by the military authorities for operation and maintenance of certain of their facilities. The shift from military domination to civilian government administration resulted in the arrival of government employees and their families and an expansion of the base of the settlement's social activities. As might be expected among any large group of people gathered together from many backgrounds and many parts of the country, indeed the world, to serve in a remote area, many diverse skills, hobbies and interests were introduced into the settlement. In addition to the social and recreational activities engaged in by the population, small commercial ventures were begun, some lasting only as long as the initiators resided in Frobisher Bay. The majority of such undertakings through the years were personal service businesses, operated on a part-time basis by the owner, usually a government employee, by a partnership of such persons, or by wives or relatives.

Another type of private enterprise was that represented by firms with head offices in southern Canada, located

in Frobisher Bay to provide needed or essential services to the population as a whole, but not tied by contract to the government agencies in the settlement. Still another type of private business had operated in Frobisher Bay for some years, the southern-based firm on contract to the Federal Government, usually to provide some form of service function.

In 1966, all these classifications of private enterprise were operational in Frobisher Bay. Although present in small numbers, they, together with other business activities which were not easily classified owing to their heavy dependence on the Department of Northern Affairs, provided what little spark of "normal" commerce existed in the heavily government-dominated agglomeration that was Frobisher Bay.

SMALL LOCAL BUSINESSES

The small businesses in Frobisher Bay in 1966 were all either one-man or one-family operations, all operating out of the Main Base area. They comprised a taxi and bus service, two snack bars each with attached pool rooms, and a barber shop.

To the visitor interested in seeing the sights of Frobisher Bay, or to the researcher faced with the need of getting about the settlement to carry out a field program, the need for a reliable bus or taxi service or combination of the two, is glaringly obvious. The long distances between the separate

parts of the settlement make either access to a private vehicle or to some form of public transport service mandatory. Bus and taxi services have been the most consistently pursued private ventures throughout the history of Frobisher Bay, particularly since the establishment of Apex Hill, nearly four miles by road from the Main Base, in 1954. Although either or both components of a transport service would appear to be suitable and highly lucrative in a settlement spread over the area of Frobisher Bay, both have been consistently plagued with difficulties, and there is a long history of abortive ventures in the transportation business in Frobisher Bay.

In 1966, a combined bus-taxi service operated by a husband and wife team attempted to serve the settlement. He was a government employee, however, and had little time throughout the week to devote to the business, with the result that whereas the taxi service flourished and was reasonably reliable, the bus service did not flourish and was far from reliable. The bus was an old government surplus model which the operator had reconstructed and managed to keep running from the cannibalization of other old busses. The taxi, the operators' own private car, could be plugged in at night beside their house. The bus required a garage, many repairs and a continuous stream of spare parts. The difficulties in obtaining parts and in keeping the bus garaged and repaired at extremely high costs,

coupled with the inability to keep a reliable driver all served to keep the bus non-operational most of the time. It was seldom that the vehicle managed to make its full scheduled complement of hourly 20-mile round trips between the hours of one o'clock and midnight each day. In conversations with the writer, the operators maintained that such a business could be sufficiently profitable for them to operate as their only means of livelihood if they could overcome the difficulties presented by the high overhead costs in the settlement. Unable to obtain their own garage, and scarcely able to pay the rent on the one they were using, they were facing the prospect of defeat in mid-summer, 1966. The rates charged were beyond the means of a large part of the Eskimo population, but sufficient numbers still used it to make the operation stand a reasonable chance of success. Raising of the rates would have cut sharply into the number of passengers and thus proved self-defeating. In short, the Frobisher Bay bus service had many of the same problems faced by every public transport company in North America; but there was no municipal government to turn to for subsidies.

The two snack bars, both located in the Main Base, had been in operation for some years. They offered little more than quick snack or take-out service; hot meals could be obtained but the menus were limited and the food had to be eaten at the counter in both establishments. Nevertheless, they were highly

popular, particularly among the younger generation, primarily because of the pool rooms, coin machine games and juke boxes which both offered. One was operated by the Territorial liquor vendor and his wife; the other by a young man who augmented his snack bar business with income received from the renting of food vending machines in the Federal Building. Neither establishment had a liquor license. Both operators reported to the writer that the market was adequate to support both these operations, even placed as they were practically next door to each other. They wished to expand into larger and more elegant surroundings, but lack of suitable buildings in the settlement and a shortage of capital hindered this. As would be the case in similar enterprises operating in any remote town not served by bus or train service, they had often problems with their supplies, particularly if the air schedule were interrupted for any abnormally long period of time.

A one-man private enterprise venture which had survived for some years in Frobisher Bay was the barber shop. Begun as a rehabilitation centre project, this shop was run by the original Eskimo rehabilitant in a little shack in the Main Base. It was the only rehabilitation project to succeed as a private business in Frobisher Bay.

Another common form of private business enterprise in Frobisher Bay, as in so many other small towns in isolated

areas throughout Canada, was the home representative type. These were usually set up by wives who represented national cosmetics firms, sold magazine subscriptions or other such products. These ventures changed continually, according to transfers of government employees and it was difficult to track them all down for any one period of time, although one of the top-line international cosmetics firms was represented in the settlement in mid-1966.

SOUTHERN-BASED FIRMS WITHOUT CONTRACTS

The Hudson's Bay Company store at Frobisher Bay predates any other non-Eskimo business ever begun in the area, beginning as it did with a trading post at Ward Inlet, established in 1914. In Frobisher Bay, the Company operated as it had all over the Canadian North for generations; buying and trading furs and skins and acting as banker and creditor for the local indigenous population. It had long been the only retail food outlet in Frobisher Bay, offering staples, fresh food and general merchandise through its main store at Apex Hill. At its small commissary store in the Main Base it offered "notions", snack foods, soft drinks, magazines and a small line of clothing, footwear and luxury items. Major purchases had to be made at Apex Hill. The main store reflected the trend evident in the Company's stores in so many of the larger northern

settlements, being more like a small department store-super market than the fur trading post of an earlier period. The increasing urban character of Frobisher Bay combined with rising wage employment among the Eskimos had caused the Bay increasingly to stock a larger line of luxury items than was formerly the case. It can truthfully be stated that the Hudson's Bay Company was the one totally independent firm located in Frobisher Bay; it had begun in business there before either the military or the Federal Government had had any interest in the area; it would continue to do business with the local Eskimo population if the government were to leave, so long as there were an Eskimo population in the area.

A major bank opened a branch office in Frobisher Bay in 1957. Another large banking firm had opened an office in 1958, but closed it in 1964, within a year of the departure of the U.S. Air Force. The settlement did not have sufficient business for two banks. The bank handled business for the large firms represented in Frobisher Bay, and in recent years had begun attracting more business among Eskimo residents in the form of small savings accounts and loans for the purchase of equipment.

The Bell Telephone Company of Canada provided telephone connections between Frobisher Bay and southern Canada,

offering long distance toll rates equivalent to those prevailing in Ontario and Quebec, even to the special rates in effect after certain hours of the evening. The Bell also provided communication links between Frobisher Bay and several of the outlying settlements of the region by means of single side-band radio-telephone.

Two large international petroleum companies were represented in Frobisher Bay in 1966. One had an extensive operation which included retail sale of automotive fuel, as well as aviation and home fuel products. Gasoline could be obtained for private vehicles either at this firm's station (which did not offer the usual services to be found at gas stations in the south) or at the Hudson's Bay Company store in Apex Hill - which also did not offer garage services.

Frobisher Bay has been served by scheduled airline service since 1957, when Nordair Limited of Montreal began operating there. In 1966, this company, the only one serving Frobisher Bay or the Eastern Arctic on a scheduled basis, carried passengers and freight between Montreal and Frobisher Bay on a regular twice-weekly basis during the winter season, three times weekly during the summer. Extra freight sections were run any time as required. Once a week in winter, twice per week in summer, the Montreal-Frobisher run was extended to Hall Beach (Melville Peninsula) and Resolute Bay (Cornwallis

Island). The company had begun its service with DC-3's, C-46 "Skymasters" and DC-4's, the latter requiring seven hours, under good conditions, for the run between Montreal and Frobisher. Later, the company shifted to extensive use of Super Constellations which were able to carry more cargo and/or passengers, and could make the trip in five hours. Nordair also kept DC-3's stationed at Frobisher Bay for charter work between Frobisher Bay and other settlements within the Baffin Region.

Two other aircraft companies operated out of Frobisher Bay in 1966; one under contract to the Department of Northern Affairs for use on Departmental business within the region; the other on contract to supply the meteorological station operated by Canadian Marconi on Resolution Island. The Northern Affairs charter contract was with a small company which supplied a DeHaviland Otter and a two-man crew for this work.

Until the entry of Nordair into the air transportation business at Frobisher Bay, the settlement could be reached only by military or charter aircraft. Following establishment of an office at Frobisher, the Department of Northern Affairs became interested in the possibilities for commercial service. The U.S. military occupation seemed likely to be impermanent and dependence on military aircraft was not satisfactory. Nordair began as a monopoly operation at Frobisher Bay, a condition

maintained through its having been granted protected status there, i.e., it was designated the only scheduled airline permitted to pick up or discharge passengers on a fare-paying basis at Frobisher Bay. Despite its dependence on government business, the firm is a wholly private firm attempting to operate a profit-making service, a difficult task for any airline in the Canadian Arctic where distances between settlements are very long and large numbers of fare-paying passengers infrequently carried. Nevertheless, the company displayed the initiative required to commence operations in the area and has continued to provide an essential service.

FIRMS ON CONTRACT

For many years, large private contracting firms were located in Frobisher Bay, fulfilling contracts primarily for the maintenance of U.S. Air Force facilities. However, these firms did not become involved in providing services to the settlement as a whole. At the time of the U.S. withdrawal in 1963, there were two contracting firms represented in Frobisher Bay, one of which was responsible for the operation and maintenance of the composite building (Federal Building), the other for providing catering services for the mess halls. Under the re-organization of administration procedures for the settlement, the Northern Affairs Department effected some changes

in practices concerning both the large building and the settlement as a whole.

Between 1957 and 1965, essential services (water delivery, sewage and garbage pickup) were carried out by Federal Government agencies, first the Department of Transport, latterly the Department of Northern Affairs. In 1965, Northern Affairs let a contract for provision of essential services to a private company based in the south. This company began operations in September, 1965, taking on all those Eskimo employees of the Department who had been engaged in that work, as well as some non-Eskimo employees. The company soon began to expand its operations. By 1966, it handled contracts for stevedoring at sealift time and for providing equipment, labour and fill material for construction excavation. Based in a large garage complex in the West 40, the company also provided the only mechanic and body work services available to those residents of Frobisher Bay who owned automobiles.

The Department of Northern Affairs let a second contract in 1965, to a firm which had been active in the settlement for some years providing food catering services. The contract called for the company to supply food catering and janitorial services in the Federal Building and the hospital. To fulfill the janitorial side of the contract, the company was

encouraged to sub-contract the cleaning operation to an Eskimo private company which had come into being in 1964. The Northern Affairs Department underwrote the costs of training Eskimos to be janitors and foremen which took place in January, 1966. In addition, largely on its own initiative, the company undertook to employ Eskimos in its food catering operation, bearing such costs as were involved itself.

These two companies might not have come into Frobisher Bay on their own initiative; there would have been no incentive if it had not been for the lucrative government contracts tendered. They both became active forces within the settlement and in 1966, were the largest private employers of Eskimos in Frobisher Bay.

ESKIMO PRIVATE COMPANY

In 1964, four Eskimo residents of Frobisher Bay got together to form an all-Eskimo private share company. The first four shareholders formed their company in order to run a bus and taxi service in Frobisher Bay. Although this particular venture failed, the company survived. In 1966, it had 27 active shareholders. This company was the first all-Eskimo corporation in the Canadian Arctic, differing from all other Eskimo organizations in that it did not begin as a government project or co-operative.

In the first two years of its existence, the company ventured into many activities, least successful of which was the bus-taxi business. Other enterprises, mostly short-term contracts for the supply of labour for local building projects in the settlement, exposed the company to business-like work habits, to the necessity of reporting for work on time and to the keeping of business records. On the basis of early experience gained by this company, and in keeping with its policies concerning social development and employment for Eskimos, the Department of Northern Affairs was persuaded to make the arrangements whereby the company obtained the cleaning sub-contract mentioned in the previous section.

ENTERTAINMENT AND RECREATION IN FROBISHER BAY

The entertainment and recreation scene in the government settlement of Frobisher Bay differs from that in a military settlement in that it is generally not organized in any way by government agencies. Such efforts as were made came largely from the population. The diverse nature of the many groups of people resident in the settlement led to the formation of many recreations and social clubs. Many of those extant in Frobisher Bay in 1963, described in detail by the Honigmanns (1965), existed in 1966. They varied from associations originally formed by groups of employees of different

government agencies to community associations such as existed in Apex Hill and Ikaluit. The predominant activity offered by each of these groups was a film show; a movie could be found somewhere in Frobisher Bay on every night of the week.

A baseball diamond near the Federal Building, a curling rink at the Main Base, a bowling alley at the latter and a large gym in the Federal Building provided seasonal recreation. As pointed out by the Honigmanns(Ibid.), the emphasis on and interest in sports activities changed from time to time, owing to the frequent shifts in non-Eskimo personnel, the driving forces behind any activity, into and out of the settlement, interest waning as soon as the main support group or instructor in a particular activity left town. That this tendency, also observed by the writer, is not unique to Frobisher Bay became clear upon the meeting of similar situations in Rankin Inlet and Baker Lake in the Keewatin Region subsequent to the writer's stay at Frobisher Bay.

THE COLLECTIVE SETTLEMENT

In this chapter and the one immediately preceding, the collective settlement has been examined in terms of the agencies, both government and private, active in Frobisher Bay in 1966. Having examined the employing agencies, it is pertinent to examine those who carry out the tasks which each government

agency or firm has in the settlement. An Arctic Canadian settlement, like a city, town, or small community in any part of the world, is made up of people who function as separate entities and as groups according to certain cultural and social patterns and traditions as well as in groups as members or employees of associations or businesses.

There are two groups of people in Frobisher Bay, Eskimo and non-Eskimo. Each has its own separate economy and each fits into the scheme of things in the settlement in a different way.

CHAPTER 8

THE ECONOMY OF THE ESKIMO POPULATION

A CHANGING ECONOMY

Before the Frobisher Bay settlement came into existence, the Eskimos of the region depended entirely upon the local renewable resources for their livelihood. Until the early part of the present century, there was only occasional casual wage employment at whaling stations at the southern tip of Hall Peninsula and in Cumberland Sound. But basically, the Frobisher Bay Eskimos were hunters. As the settlement developed over the years, increasing numbers of the local Eskimos gained experience with wage employment and the numbers depending solely on the land dwindled steadily.

In 1963, the Honigmanns (1965) identified five means by which Frobisher Bay Eskimos could support themselves: wage employment; hunting; handicraft production; transfer payments (statutory payments, such as family allowance, and social assistance, i.e., relief payments); and through the various projects sponsored by the Department of Northern Affairs and National Resources through its rehabilitation centre. The closing of the centre in 1964 removed one source of livelihood for many Eskimos. It should perhaps have been regarded as "social assistance" for most of the Eskimos engaged in the projects, since

much of the work was designed to keep them occupied.

By mid-1966, three basic sources of earned income existed for Frobisher Bay Eskimos. These were wage employment, hunting and handicraft production. Many relied on a combination of all three, in addition to support supplied by social assistance payments in times of need (Figure 1). Hunting was no longer the chief source of earned income except for a very few Eskimos. Wage employment had become the dominant element in the increasingly diverse local economy.

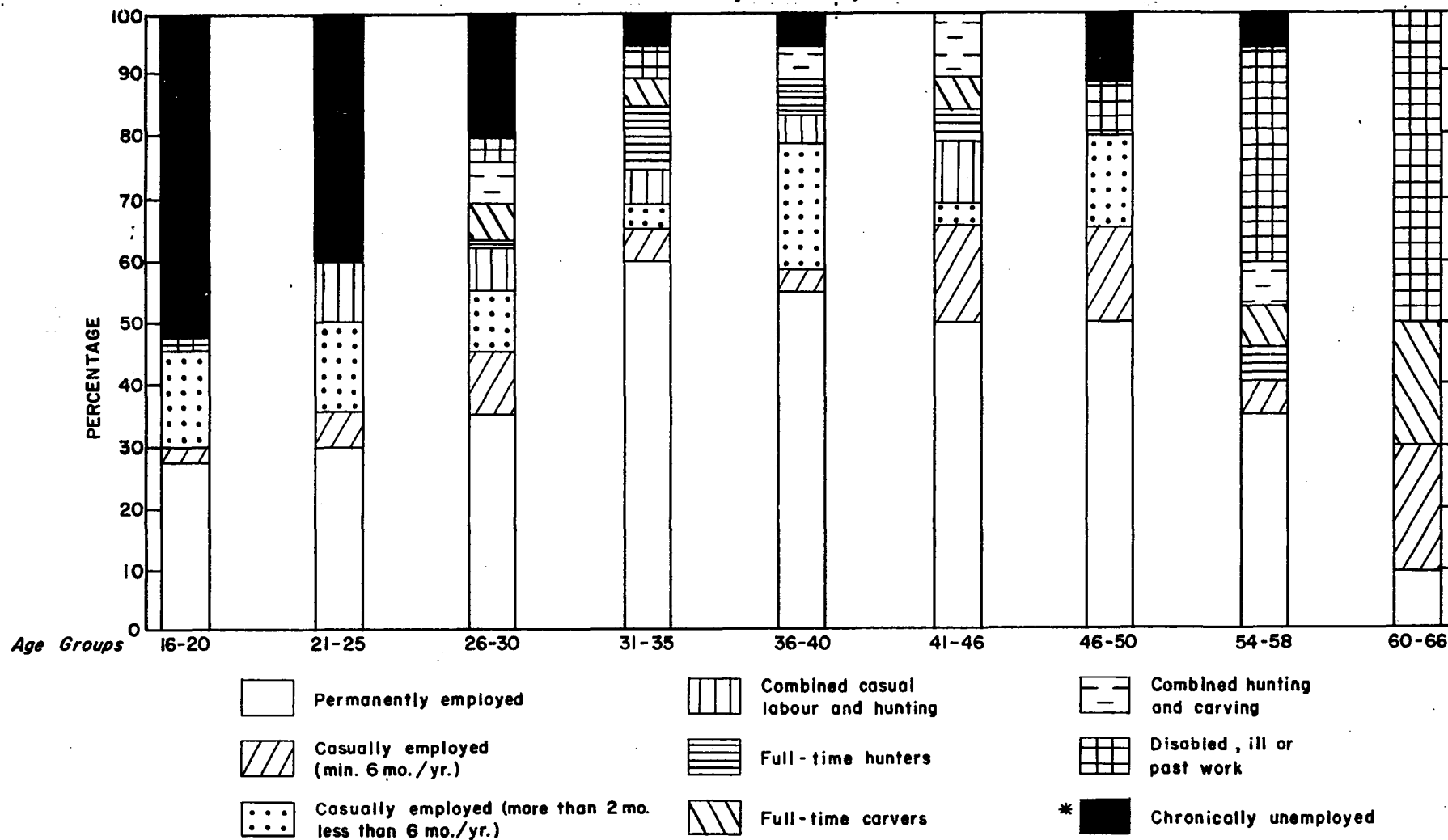
WAGE EMPLOYMENT IN THE ESKIMO ECONOMY

The chief source of wage employment for Eskimos at Frobisher Bay has always been the Federal Government. In general, government agencies were the first to provide large numbers of Eskimos with permanent, year around employment. This was because there were very few private companies in the Arctic, and the Eskimos' general lack of knowledge of English and lack of experience made them of limited use to private companies, particularly those engaged in mineral exploration and development. High operational costs are characteristic of northern operations, so companies try to keep field operations as short as possible and prefer to "import" their own labour from southern Canada. Very few were willing to take a chance on employing indigenous residents, nor were there any incentives for

FIGURE I
**PERCENTAGE DISTRIBUTION OF ESKIMO MALE LABOUR FORCE
 BY EMPLOYMENT STATUS**

INCOME PRODUCING ACTIVITY AND AGE GROUP

Frobisher Bay - July 1966

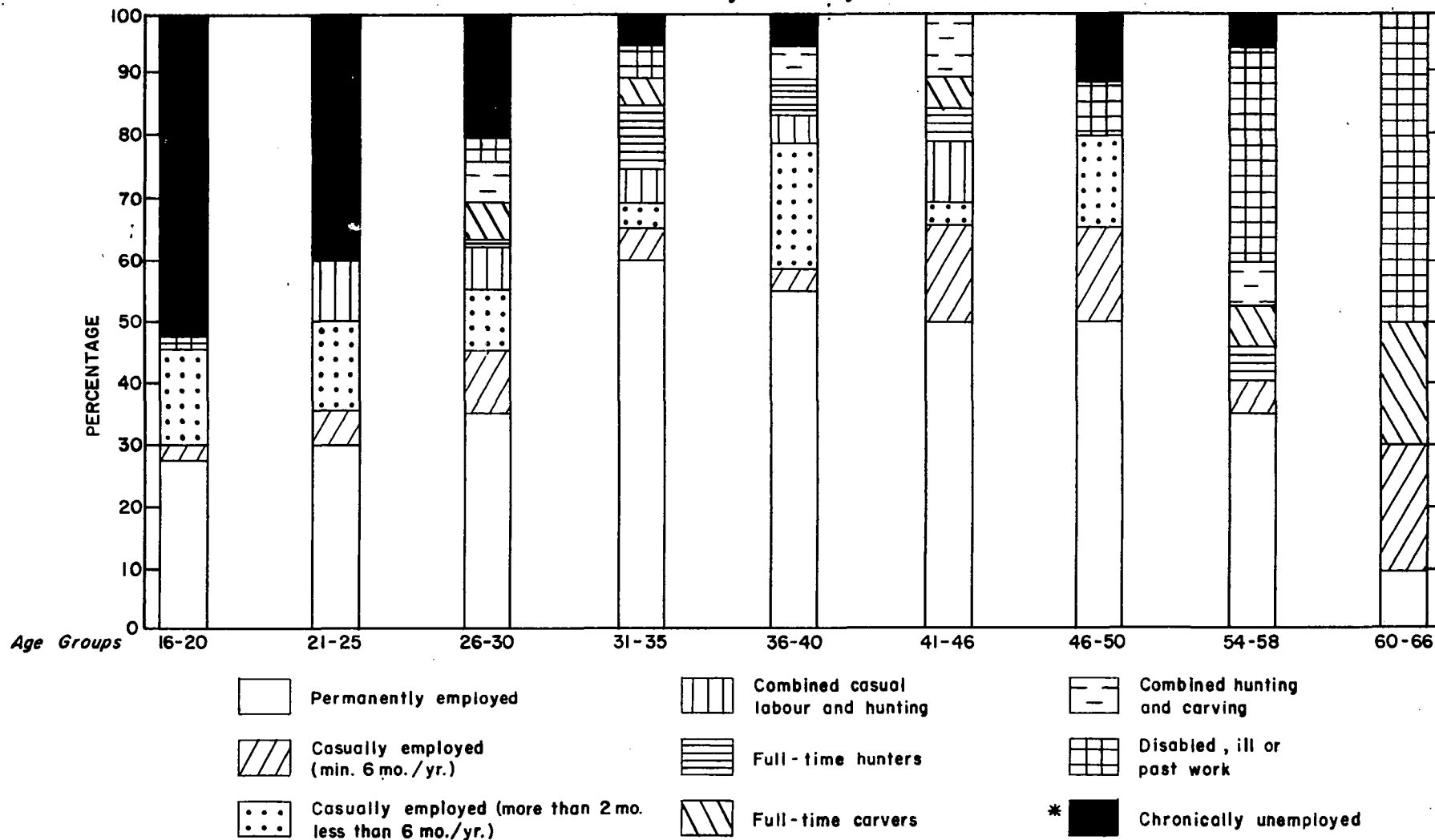


* Includes those in school and vocational training

FIGURE 1
**PERCENTAGE DISTRIBUTION OF ESKIMO MALE LABOUR FORCE
 BY EMPLOYMENT STATUS**

INCOME PRODUCING ACTIVITY AND AGE GROUP

Frobisher Bay - July 1966



* Includes those in school and vocational training

them to do so. The task of "breaking in" large numbers of Eskimos fell to the Federal Government through much of the Canadian Arctic. In Frobisher Bay, the Department of Transport was one of the pioneers, inheriting many former employees of the U.S. Air Force. As the Department of Northern Affairs increased its responsibilities and the size of its establishment in the settlement, it became the largest employer of Eskimo workers on a full-time basis.

When considering the employment of Eskimos by Federal Government agencies, certain facts need to be kept in mind. Each government department or agency usually has an employment "establishment" made up of classified civil service positions covering administrative, administrative support, clerical, supervisory, professional, and technical positions. There may also be "prevailing rate" positions, used by departments having field operations. These are generally filled by tradesmen, e.g., electricians, plumbers, etc., paid according to the scale of wages prevailing locally for the trade. Another type is the "casual employee", who is hired for a short period, usually for a specific project or for general work in a certain season of the year, e.g., extra help taken on by the Post Office Department during Christmas, those taken on by the Department of Internal Revenue during income tax time. Casual employees are hired, without benefit of civil service competition, directly

by the agency; they do not occupy permanent civil service positions within a department's establishment, and they are often not entitled to standard civil service benefits such as paid holidays or paid sick leave. In Frobisher Bay, as in other Arctic settlements, casual workers are required during the short summer season for work on construction projects, to assist during the annual sealift re-supply of the settlement, and for other outdoor work possible only during the summer months. Casual help may be taken on at any time according to need, for periods ranging from a few hours to many months. Each government agency receives, in addition to funds for the wages of permanent staff, a certain allotment of its total annual budget for casual employment funds. In a northern field operation, such as, for example, that of the Department of Northern Affairs and National Resources at Frobisher Bay, the number of casual employees varies with the time of year and the funds on hand, i.e., as the casual allotment is expended, the number of employees on casual status declines.

Government agencies operating in the larger northern settlements such as Inuvik or Frobisher Bay can provide more casual employment for local residents than smaller settlements such as Pangnirtung or Lake Harbour, for example. The more government agencies there are in a settlement, the greater the

casual employment. The general tendency is for agencies to increase the number of casual jobs from the beginning of the Fiscal Year (commencing April 1st), to reach a peak in August-September, and diminish to a minimum near the end of the Fiscal Year when funds are expended. As might be expected, the seasonal climatic rhythm also influences activities, resulting in a sharp peak of activity in the brief summer season, accompanied by a high level of casual employment, with a distinct trough in the winter extending from December to March-April. In a very large settlement, like Frobisher Bay, most government agencies require large numbers of casual employees for summer projects; for example, it is not uncommon for the work force in August to be double or even triple that of December. As is evident from the following discussion on wage employment among the Frobisher Bay Eskimos, the availability and the duration of casual employment is a key factor in the overall picture of income from wage employment.

Frobisher Bay Eskimos began working for wages in 1942. At first there were few jobs for Eskimos, and those available were mainly menial tasks calling for little skill. The first Eskimos were employed on a casual basis, and it took a decade to build up a permanent Eskimo work force. Lack of English and previous work experience were serious handicaps, as was the tendency, not peculiar to Frobisher Eskimos, to dislike giving

up the traditional hunting. After 1955, however, wage employment increased steadily. Construction of the DEW Line began about that time and associated activities which this generated in Frobisher Bay brought more jobs. At about that time, the Federal Government became more active in the settlement, some agencies increasing the sizes of their local establishments, others entering the settlement for the first time.

The numbers of Eskimos taking both casual and permanent wage employment rose annually during the next decade. In early 1955, there were 22 Eskimos with full-time employment, all employed on the U.S. Air Force base. Constituting eight per cent of the total settlement Eskimo population of approximately 250, these workers supported 50 dependents which meant that just under 30 per cent of the population was dependent on permanent wage employment. Seasonal casual employment of Eskimos had also increased, until by 1955, it was running at between 20 and 50 Eskimos each year. Many of the casual workers were not from the settlement but came in from the land during the summer to obtain short-term jobs.

By 1961, the settlement's Eskimo population had risen to 761. Although separate figures for permanently wage-employed Eskimos and those only casually employed were not prepared for that year, an indication of the increase in Eskimo wage employment can be obtained from the figures for July of that year. A

total of 136 Eskimo men, 88 of whom were married, 48 single, had wage employment and supported a total of 269 dependents (Honigmann and Honigmann, 1965:68). Thus, 53 per cent of the settlement's Eskimo population was dependent in some degree on wage employment at that time. On the basis of the data for July, 1961, probably 45 per cent of those employed had either permanent employment or employment for more than half of the year.

Using a sampling method for certain months during 1962 and 1963, the Honigmanns (1965) found that 83 Eskimos had what they termed "steady" employment in 1962/63, 81 of them employed by government agencies, two by private firms. By "steadily employed" they meant those who had drawn wages in each of the four sample months, July and December, 1962; March and May, 1963, on the theory that those months represented times of both high and low levels of employment. They defined "fairly steadily employed" men as those who had drawn wages in three of the four sample months; a "rarely employed" person was defined as one who had worked in only one of those months. In addition to the 83 defined as steadily employed, the Honigmanns estimated that a minimum of 143 men held casual wage employment during the period they investigated, these being in the employ of private construction firms operating locally (Honigmann and Honigmann, 1965:68-70). The Honigmanns' definition of steadily employed and not steadily employed does not correspond with the

definitions given above of permanent and casual employment in connection with employment practices of government agencies; nor does it correspond with definitions used later when discussing wage employment among Frobisher Eskimos in 1966. However, from the figures for 1962/63, it is clear that wage employment had increased in importance rapidly over a relatively short period of time.

By mid-summer of 1966, the number of Eskimos engaged in some form of wage employment had risen substantially over the level recorded for 1962/63 and a greater proportion of the total Eskimo wage-employed work force was permanently employed. Study of paylists covering Eskimo workers for a few years before 1966 and discussions with employers and Eskimo workers showed that those employed by government agencies fell into several categories. For example: Eskimos employed by the Northern Affairs Department, the largest single employer of Eskimos in Frobisher Bay, included three categories of wage employment: those who held prevailing rate and classified positions and thus could be designated as permanently employed; those who were strictly short-term casual employees; and a third group, defined for purposes of the present study as "permanent casuals". This group was composed of wage-employed persons who did not occupy permanent (classified) positions on the Departmental

establishment, but who had worked for the Department each year for many years for periods of not less than 10 months each year, many having worked a full 12 months. While generally paid according to the same wage scales, including isolation allowance, as their co-workers doing similar jobs who were prevailing rate employees, these men did not receive many of the benefits accruing to regular staff. Also identifiable as a distinct group within nearly all government agencies who employed Eskimos in Frobisher Bay were those Eskimos who had worked for a particular department or for the government in general for many years for periods of six to nine months each year. These are defined as "steady casuals" for purposes of the present discussion.

The Eskimo population of Frobisher Bay in July, 1966, numbered 1,085. In that month, 16 per cent held wage employment. Eskimo employees totalled 185 and supported a total of 606 dependents, making 72.8 per cent of the Eskimo population of Frobisher Bay dependent on some form of wage employment in that particular month. Out of the total of 185 wage-employed workers, 139, or 75 per cent, were permanently employed (including six qualifying as "permanent casuals", having had not less than 10 months' continuous employment in the previous year); 51 casuals, including 14 "steady casuals" comprised the remain-

ing 25 per cent. Those permanently wage-employed persons supported a total of 491 dependents, comprising 57 per cent of the total Eskimo population; those casually employed had 115 dependents, and made up 15 per cent of the total Eskimo population.

The Federal Government was the main employer in both the permanent and casual categories, employing 42 per cent and 24.8 per cent of the total work force in the respective categories. One department alone, Northern Affairs, employed 45 per cent of the total Eskimo work force, paying the wages of 41 per cent of the permanently wage-employed group, 56 per cent of the casually wage-employed. The second and third largest employers of Eskimos in the settlement were the two private firms on contract to the Department of Northern Affairs. Together they employed 49 Eskimos on a permanent basis, 26 per cent of the total wage-employed Eskimos.

Apart from wage employment available from the Federal Government and the large private organizations in the settlement, there were few opportunities for full-time wage employment for Eskimos. Only six were employed permanently by private concerns other than the two on contract to the government, or 4 per cent of the permanently wage-employed group, and 3 per cent of the total number of Eskimos having any form of wage employment. Other sources of wage employment were limited in mid-1966, and could generally be categorized as domestic and caretaking work,

almost all of it only part-time. This category was made up mainly of Eskimo women working as domestics and baby-sitters. In terms of the total wage-employed group of Eskimos, persons so employed did not comprise more than 1 per cent of the local Eskimo work force.

When Federal Government agencies began employing Eskimos in the Canadian Arctic, the classification of jobs given to Eskimos and the rates of pay were relatively simple matters since few were capable of more than general labouring work. At first, the provision of food or materials was as acceptable to many Eskimos as wages, particularly in the early days of the settlement of Frobisher Bay, when Eskimos were not used to wage employment. When the U.S. Air Force first began to use Eskimo labour in Frobisher Bay, wages were low in comparison with those paid when the U.S. withdrew in 1963. Between 1943 and 1950, the three to eight Eskimos permanently employed by the U.S. Air Force and then the Royal Canadian Air Force were paid by a combination of money and food. Those who learned to drive trucks and handle equipment earned \$.70 per hour on an average; those doing general labour earned \$.40 per hour. By 1953, Eskimos employed on the air base earned an average of \$100.00 per month, and each employee received one meal per day at the base and food rations to take home. By 1955, wages

earned by Eskimos working at the airbase ranged from a low of \$115.00 per month for janitors, messhall attendants and truck drivers' helpers, to a high of \$140.00 per month for semi-skilled tradesmen and tradesmen's helpers, experienced truck drivers, those able to serve in a supervisory capacity with their fellow Eskimos and those with a long history of employment on the base. By 1955, there were some Eskimos who had worked for nearly 10 years. By that time, Eskimos employed by government firms in the settlement were paid at approximately the same rates as were paid by the U.S. Air Force. The tendency was to classify the Eskimo workers as "labourers" and pay them a minimum wage. Comparatively large numbers were taken on to do simple tasks, a small percentage of them eventually forming the permanent Eskimo work force.

During construction of the DEW Line, however, large numbers of Eskimos from all over the Canadian Arctic obtained training and wage employment and gained work experience. Those on the DEW Line received higher wage rates than they had been used to. By about 1960, it had become necessary for the Federal Government to re-examine the basis of its pay scales for Eskimos, primarily as a result of the training and experience gained by many of them through employment on the DEW Line. Not all Eskimos employed on the construction of the DEW Line remained

with it. In addition to those who were unhappy or who got into difficulties during their DEW Line employment, there were numbers of others who were no longer required for work on the line and these returned to their homeselements, many seeking wage employment there. In order to accommodate the varying levels of skill to be found among Eskimo employees, government agencies gradually adopted a complex system of wage rates and job classifications designed for the Eskimo members of their establishments, based on rates prevailing for non-Eskimo employees and on guidelines laid down by the Department of Labour. In 1960, the decision was made to pay permanent Eskimo employees a cost of living allowance, i.e., isolated post allowance (I.P.A.) or northern allowance, long received by non-Eskimo employees working in the North, in addition to their basic hourly wage. Adjustments were also made in the rates of pay of permanent Eskimo employees working in semi-skilled positions as tradesmen, or, as usually classified, tradesmen's helpers, such that they were paid at a percentage of the full rate then prevailing and paid to non-Eskimo employees working in northern establishments in similar positions. Pay rates for Eskimo employees working in trades positions were set at various percentages of the prevailing rate because most of them were not fully qualified for the positions owing to lack of formal education and training,

but were able to perform most of the tasks of the positions under supervision.

In their study of Eskimo wage earners in Frobisher Bay for 1962/63, the Honigmanns (1965) found that some employers paid Eskimos according to the schedule specified by the Department of Labour, while the Northern Affairs Department paid all but a few Eskimo labourers a proportion of from 50 to 80 per cent of the basic hourly wage. Isolated post allowance rates were being paid to Eskimos in Frobisher Bay at the time, averaging from \$.57 per hour for single persons to \$1.00 per hour for married, in addition to the hourly straight wage rate. The bulk of the Eskimo employees in Frobisher were found to earn between \$1.00 and \$2.50 per hour, including the I.P.A., some few Eskimos earning as high as \$3.00 to \$3.50 per hour. Net or "take home" pay for Eskimo employees of government agencies in Frobisher Bay was found to vary between \$2,700 and \$5,600 per year (Ibid., 1965:74:77). Sample rates of pay for certain types of jobs held by Eskimo permanent employees of the Department of Northern Affairs are given for selected years, beginning with 1962, in Appendix B.

A study of wage employment conditions among the Eskimo work force in Frobisher Bay in mid-1966, was a nightmare owing to the bewilderingly great variety of rates of pay, hours of

work and fringe benefits. For example, the Department of Northern Affairs alone, with 50 permanently wage-employed Eskimos paid them according to 27 different rates of pay for an average of \$2.46 per hour, and casuals according to somewhat fewer rates of pay, for an average of \$1.95 per hour. Departmental employees, Eskimo and non-Eskimo alike, worked a 40-hour week between December 1st and May 1st. For the balance of the year, prevailing rate employees in the Department's engineering services section worked a 60-hour week, but others a 48-hour week during this period of the year. The engineering services section employed the largest number of permanent Eskimo employees, 35, paying them according to 20 separate rates of pay for an average of \$2.52 per hour; engineering casual employees were paid according to a mere nine rates of pay and earned an average of \$1.95 per hour. All wage rates cited for Departmental employees include the isolation post allowance (I.P.A.). Examples of annual wage earnings by Departmental Eskimo employees are given in Appendix C. The Northern Affairs engineering services section in Frobisher Bay offered not only the largest number of opportunities for wage employment, casual or permanent, for Eskimos, but also the greatest diversity of jobs in terms of skills required. It had positions covering all types of trades as well as general labour such as pick and shovel work. Of all

the Eskimos employed by the Department during that particular time, there were none designated as administrative or regulatory personnel; all those not specifically classified, as in the engineering services section, according to the trade worked at, e.g., electrician's helper, were simply listed as "labourers". This practice made it difficult to determine individual occupations and levels of skill displayed by the Eskimo workers, something possible only by means of direct observation and information supplied by supervisors. Within the Department's Eskimo establishment, there were two employees who functioned in clerical and semi-administrative capacities, although they, too, were designated as labourers (Appendix B).

Almost all other government agencies employing Eskimos in Frobisher Bay in 1966 included an isolation allowance rate in their hourly pay rates, as well as provision for overtime rates at time and a half, double time, or in one instance, double time and a half, according to circumstances. Nearly all government agencies maintained a 40-hour week, except the Northern Affairs Department. Hourly wage rates paid to permanent Eskimo employees by government agencies other than Northern Affairs averaged \$2.05, casual employees approximately \$1.50.

Wage rates paid to permanent Eskimo employees by the two large private firms operating on contracts in Frobisher Bay

were, on the average, equivalent to those paid by Northern Affairs, the companies offering a different range of fringe benefits in addition to the standard ones of paid holidays and sick leave. The services contracting firm worked on the basis of a five-day, 40-hour week, the company's schedule so arranged that each Eskimo employee had every second weekend free. (The water delivery and sewage pickup services were provided daily.) The catering firm's operation fell into two parts; the cleaning services division worked a five and a half-day week, while the food catering side had to work to a daily schedule. For the latter, the company operated a shift system for all employees. In addition to meals provided those who were on duty at meal times, this company also provided accommodation and meals in the Federal Building for its single Eskimo employees connected with the catering operation, primarily to ensure that they always arrived at work on time.

The Department of Northern Affairs operated a bus system for the transportation of its employees, and the employees of other agencies, both federal and private, were able to make use of it. In addition, some agencies operated their own transportation system, thus ensuring the prompt appearance particularly of their Eskimo employees.

In their study of the activities and life styles of the Frobisher Bay Eskimos, the Honigmann (1965) examined the

family status and ages of those Eskimos holding wage employment in their four sample months of July and December, 1962, March and May, 1963. In their results, summarized in Table 4, they found that of those Eskimos they defined as "steadily employed", i.e., employed in each of the sample months, only 7 per cent of men over 15 years of age and under 25 years of age held regular employment, while 22 per cent of that age group worked only rarely. Furthermore, they found that of all the steadily employed Eskimo men, 79 (or 30 per cent of the settlement's Eskimo population), 90 per cent of the men had families or supported dependents. They found that very few Eskimo women were employed. Their survey revealed that only four women were steadily employed, one was fairly steadily employed, and 10 rarely employed (Ibid., 68-71).

An indication of the composition of the Eskimo wage-employed work force in Frobisher Bay in July, 1966, may be obtained from Tables 5 and 6. From Table 5, which presents a break-down of wage employment by age group and sex, according to type of wage employment, it is evident that wage employment among Eskimos was dominated by men in the age group from 25 to 49 years in 1966, as it had been in 1962/63, in all employment categories, particularly that of permanent employment. By 1966, however, a higher proportion of the total number of Eskimo males in the age group 15 to 24 years was involved in some form of

TABLE 4

WAGE EMPLOYMENT OF ESKIMO MEN IN FROBISHER BAY BY AGE GROUP AND DURATION OF
EMPLOYMENT^{1/} FOR SAMPLE PERIOD IN 1962-63^{2/}

Age Group	Steadily Employed		Fairly		Rarely Employed		Total Number in Age Group in Total Male Popu- lation
	Number	% of Age Group in Male Total Popu- lation	Steadily Employed % of Age Group in Total Male Population	Number	% of Age Group in Total Male Population	Number	
L15 - 19	---	---	1	2	10	19	52
20 - 24	6	16	1	3	10	27	37
25 - 29	15	38	2	5	8	21	39
30 - 34	14	44	---	---	7	22	32
35 - 39	10	37	2	7	5	19	27
40 - 44	18	62	2	7	5	17	29
45 - 49	5	33	---	---	3	20	15
50 - 54	7	54	---	---	1	8	13
55 - 59	2	20	3	30	3	30	10
60 - 64	2	40	---	---	---	---	5
65 - 59	---	---	---	---	1	50	2
TOTAL	79	30	11	4	53	20	261

^{1/} Whether steadily, fairly steadily or rarely employed (see p.).

^{2/} Four sample months used: July and December, 1962; March and May, 1963.

Source: Honigmann and Honigmann, 1965:70.

TABLE 5
WAGE EMPLOYMENT OF ESKIMOS IN FROBISHER BAY
BY AGE GROUP AND SEX, JULY, 1966^{1/}

	Permanent Employment			Casual Employment ^{2/}			Total Employment			Total in Age Group			Employed as % of Age Group		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
15 - 19	17	2	19	6	3	9	23	5	28	56	49	105	41	10	51
20 - 24	10	6	16	6	4	10	16	10	26	32	36	68	50	28	78
25 - 29	14	3	17	5	1	6	19	4	23	28	32	60	68	12	80
30 - 34	30	-	20	8	1	9	28	1	29	36	38	74	78	2	80
35 - 39	13	-	13	3	1	4	16	1	17	26	29	55	55	3	58
40 - 44	17	-	17	5	1	6	22	1	23	28	24	52	79	4	83
45 - 49	13	1	14	4	-	4	17	1	18	22	11	33	77	9	86
50 - 54	6	2	8	1	-	1	7	2	9	9	9	18	77	22	99
55 - 59	5	-	5	1	-	1	6	1	7	18	10	28	33	110	143
60 - 64	1	-	1	1	-	1	2	1	3	6	3	9	33	11	44
65 +	-	-	-	-	-	-	-	-	-	7	7	14	-	-	-
Unknown	2	-	2	-	-	-	2	-	2	4	10	14	50	-	50
TOTAL	118	14	132	40	11	51	158	27	185	272	258	530	59	10	34

^{1/} Those working in private homes not included.

^{2/} All categories of casual employment and those part-time workers not elsewhere employed.

wage employment than had been the case three years previously. Of the total of 88 males in this group, 30.6 per cent were in permanent wage work, while only 13.6 per cent of the group held casual employment, a strong upward trend for a short period of three years. A variety of factors account for this shift, the most notable being an increase in the number of jobs available in the settlement, a decline in the number of those wishing to be hunters (owing to a growing realization that hunting would not provide sufficient cash income to support the younger men in a manner to which they had become accustomed in Frobisher Bay), and the fact that those near the lower end of the 15-24 group had received a better education or some form of training, in many cases, than had their counterparts in previous years. Additional important factors were the increase of private business in the settlement, notably the two large contract firms which were more willing to take the young men and attempt to encourage them to remain at their work than most agencies had ever been before; and the increased emphasis placed on careful placement and selection by the Northern Affairs Department which had officers assigned exclusively to the task of selecting candidates for training, finding jobs for those seeking them and counselling all Eskimo employees who experienced difficulties.

Although in 1966, Eskimo women did not form a large proportion of the wage-employed Eskimo work force - only 14 per

cent of the total - this was significantly higher than had been the case in 1962/63 when only 15 women held any form of wage employment, as compared to the 27 holding jobs in 1966. It is probable that another 12 women might be added to the Eskimo work force for 1966 if all those working on a part-time basis as domestics and baby-sitters (only those working for non-Eskimo families) had been accounted for.

In Table 6, the Eskimo wage-employed work force in Frobisher Bay in July, 1966, is broken down by marital status according to category of employment. Married males dominated the wage employment work force, 50 per cent more married men having wage employment than single men, a situation similar to that described by the Honigmans for their survey period in the settlement (Ibid., pp. 69-71). Also, more single men were part of the wage-employed work force in 1966 than had been in the period described by the Honigmans. Classification by age group and marital status would reveal, however, that in 1966, some 70 per cent of the total wage employment held by Eskimos in Frobisher Bay was held by married men in the age groups 25 to 49 years.

The relative importance of wage employment in terms of the whole of the economy of the Eskimo population of Frobisher Bay is clear when put in graphic form as in Figure 1, above, which treats all sectors of the Eskimo economy in rela-

TABLE 6

WAGE EMPLOYMENT OF ESKIMOS IN FROBISHER BAY
BY SEX AND MARITAL STATUS^{1/}, JULY, 1966

	Permanent Employment			Casual Employment ^{2/}			Total Employment		
	M	F	T	M	F	T	M	F	T
Married	84	8	92	25	2	27	109	10	119
Single	31	9	40	18	6	24	49	15	64
TOTAL	115	17	132	43	8	51	158	25	183

^{1/} Those working in private homes not included.

^{2/} All categories of casual employment, and those part-time workers not elsewhere employed.

tion to the male members of the Eskimo labour force. In all age groups except those of the youngest and oldest males in the total labour force, wage employment and, more specifically, permanent wage employment, is the major income producing activity. It is pertinent to examine now what significance this had in terms of real income to those Eskimos involved. At the same time, examination of wages paid to Eskimo workers is important in terms of the overall cost of operation of the settlement of Frobisher Bay.

In the calendar year 1965, the Department of Northern Affairs and National Resources alone paid out over \$363,000.00 in wages to Eskimos in Frobisher Bay. This Department employed a total of 154 persons in that year for periods varying from 52 weeks to less than a week, for an average net wage of \$1,900.00 per Eskimo employee (Table 7). Nearly 60 per cent of the total Eskimo population of Frobisher Bay in 1965 was dependent at some time in that year on earnings from employment just from that Department.

The same Department alone paid out over \$430,000.00 in wages to Eskimos in the calendar year 1966 (Table 8). Although 25 permanent employees of the Department transferred to the two private firms under contract to it in the latter part of 1965, its total Eskimo work force was larger in 1966

TABLE 7

TOTAL WAGES PAID TO ESKIMOS IN FROBISHER BAY
BY THE DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
CALENDAR YEAR 1965

<u>Number of Weeks Worked</u>	<u>Number of Employees</u>	<u>Total Gross Wages</u>	<u>Total Net Wages</u>	<u>Average Net Income</u>
		\$	\$	\$
49 - 52	39	205,167	160,248	4,108
40 - 48	23	90,335	77,173	3,355
27 - 39	13	26,702	23,212	1,785
22 - 26	12	14,478	12,804	1,067
14 - 21	8	7,315	6,616	827
3 - 13	32	17,353	15,752	492
4 or less	24	1,846	1,738	64
	<u>134</u>	<u>363,196</u>	<u>297,543</u>	<u>1,932</u>

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TABLE 8

TOTAL WAGES PAID TO ESKIMOS IN FROBISHER BAY
BY THE DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
CALENDAR YEAR 1966

<u>Number of Weeks Worked</u>	<u>Number of Employees</u>	<u>Total Gross Wages</u>	<u>Total Net Wages</u>	<u>Average Net Income</u>
		\$	\$	\$
49 - 52	68 ^{1/}	328,640	181,858	2,674
40 - 48	3	11,457	10,069	3,356
27 - 39	3	8,523	7,202	2,400
22 - 26	10	24,111	21,807	2,180
14 - 21	17	32,895	28,375	1,669
5 - 13	25	24,538	21,613	864
4 or less	39	3,769	3,313	85
	<hr/>	<hr/>	<hr/>	<hr/>
	165	443,933	274,242	1,662

1/ Includes permanent casuals.

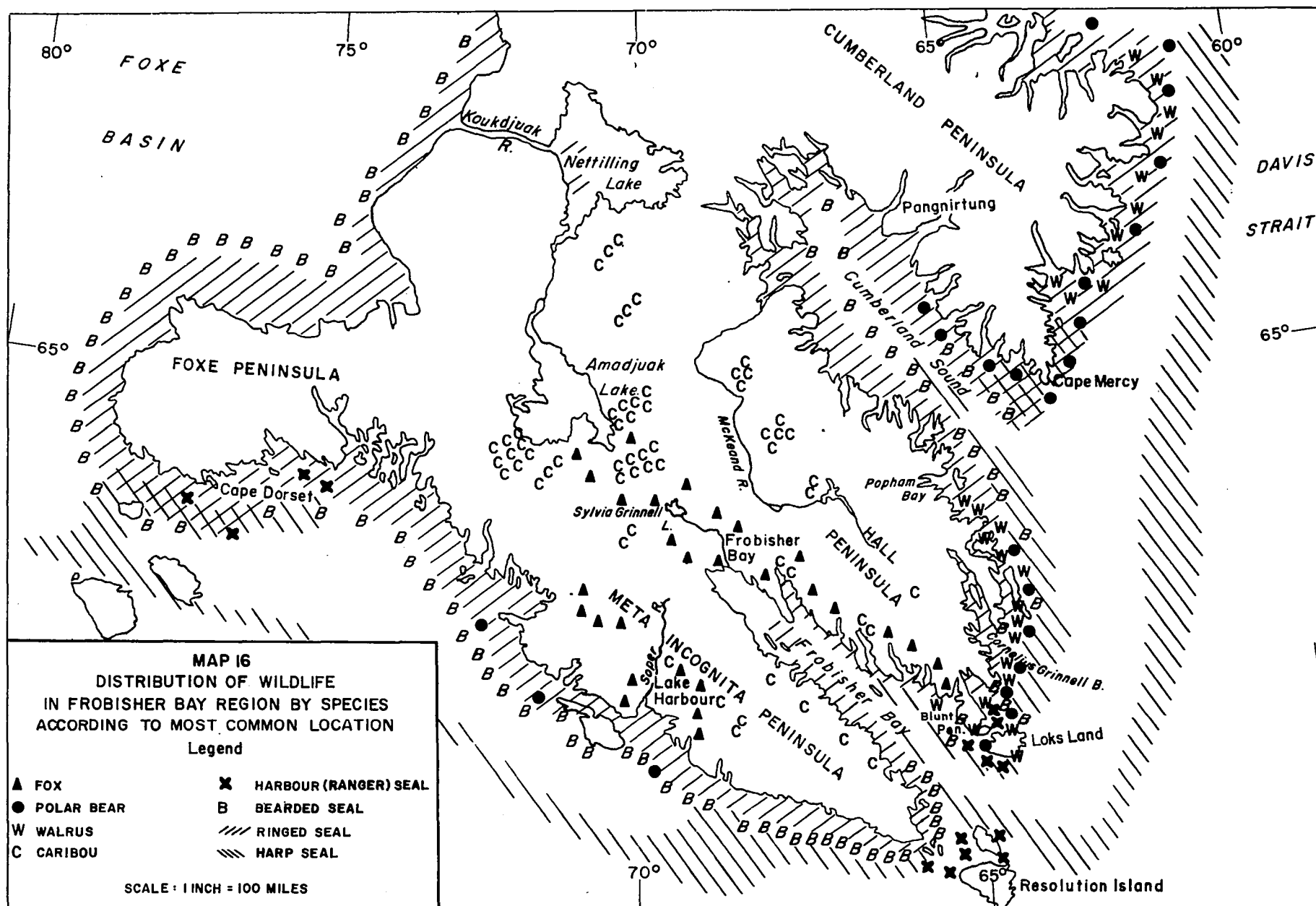
than in 1965, owing mainly to an increase in casual employment required for construction programs undertaken during the latter half of 1966. One of these programs, the Eskimo Low Rental Housing Program initiated by the Northern Affairs Department in 1966, under which all sub-standard housing occupied by Eskimos in the Canadian Arctic was to be replaced by new housing, called for the construction of over 30 houses for Eskimos in Frobisher Bay alone over the winter of 1966/67. As a result, many casual workers were taken on during the latter part of the summer and in the autumn of 1966 for preparation of housing sites, to work at sealift time unloading housing units, and to take part in the construction program. Many casual labourers who in past years normally were able to obtain work for only one to three months were in that year employed for longer periods of time. All of the large agencies, both government and private, which employed Eskimos took on larger numbers in that year than in 1965.

It is estimated on the basis of employment figures available for the key Eskimo-employing agencies in Frobisher Bay and from the level of activity there during 1966, that some \$850,000.00 were paid out in wages to around 250 Eskimos during 1966, for an average gross income of \$3,400.00. This figure, which does not fully reflect the earnings of all those who

worked as domestics, baby-sitters and part-time workers, does serve to show the impact of wage employment on the Eskimo population of Frobisher Bay. However, discussions of other aspects of the Eskimo economy in the following sections of this chapter demonstrate that this is not sufficient to support the population adequately. Nevertheless, the Eskimo wage bill forms a substantial portion of the total financial outlay required to maintain the settlement.

THE PLACE OF HUNTING IN THE ESKIMO ECONOMY

In the past, Frobisher Bay Eskimos, like those of other Arctic regions, were dependent on renewable resources for food, clothing, fuel and other necessities. The Frobisher region is rich in renewable resources, a great many of the species indigenous to the Canadian Eastern Arctic being found in or around the bay (Map 16). Traditionally, the Frobisher Eskimos centered their activities around the bay, seeking the Ringed Seal at all times of the year, other species of seal (particularly Harp and Bearded Seals) according to their location at particular seasons. They made brief inland hunting trips for caribou at places where the animals were most easily obtained, and hunted other animals according to need or desire and opportunity. As Frobisher Bay grew, more Eskimos each year abandoned camp life to live permanently in the settlement. By



the late 1950's, there were no longer any families living permanently away from the settlement, although there were several who spent long periods of each year out on the land.

In their study of Frobisher Bay, the Honigmanns discussed hunting as part of the lives of the "urban" Eskimo population. Beyond noting that they could identify only 16 "relatively consistent" hunters (without, however, defining the term), they did not consider hunting as an activity in any detail. Beyond this rather cryptic reference to the 16 relatively consistent hunters (Ibid.:78) made for 1963, there is unfortunately little precise information on the hunting activities of Frobisher Eskimos since the settlement began. As has long been done by detachments in every other Canadian Arctic settlement, the local R.C.M.P. detachment prepared an annual report on game conditions in the Frobisher area beginning with 1953. These do not, however, yield sufficiently detailed information on the numbers of hunters over the years to allow a comparative study which would demonstrate a marked decline of hunting. The reports made by the R.C.M.P. all over the North are based on the kill figures given them by Eskimos each year at the time the latter renew their Northwest Territories General Hunting Licenses, and are based on the Game Year which runs from July 1st to June 30th. In order to obtain an accurate indication of hunting activity in terms of both economic importance

to the hunters and the impact of hunting on the local game species, reports are needed on all hunters, and the kill statistics for each year need to follow the same or comparable format as in other years, so that there will be consistency in both the coverage and the data acquired. The reports for Frobisher Bay were found by the writer to be woefully inadequate; seldom did they mention the number of hunters reporting, and seldom was any estimate given of the possible percentage rate of return by hunters. The majority of the early reports from Frobisher Bay contain comments to the effect that not all hunters in the area took hunting licenses; later reports in the series, those beginning from approximately 1960, comment that the local Eskimos were showing more co-operation each year in obtaining and renewing licenses, but it is not possible to estimate the size of the hunting population from that source for any year. A key lack in Frobisher game condition reports was their failure to contain more than the most general indications of prevailing prices for such things as seal skins; therefore, in the absence of other accurate and consistent sources, it was found to be difficult to assess the economic side of hunting activities.

The opinion has been held for many years by many officials concerned with improving the economic condition of Canada's Eskimos that hunting has declined considerably in impor-

tance in Frobisher Bay, owing to the increasing numbers of Eskimos taking wage employment in the settlement and thus giving up hunting. This opinion is contained in many of the R.C.M.P. annual reports on game conditions for the settlement. Whether other government officials formed their opinions on the basis of these reports, or whether the reports reflect these opinions, is not known.

In 1966, the writer conducted a hunting survey in the settlement which was intended to determine how important hunting still was in the total local Eskimo economy, how great a part in hunting activity the wage-employed Eskimos played, and how much pressure was being placed on local species. From this, it was evident that although few Eskimos were in fact dependent exclusively on hunting as a means of livelihood, it was still an important part of the lives of Frobisher Eskimos. Hunting was found to be less a full-time occupation and more a source of recreation and a means of obtaining some extra cash income for those Eskimos both fully and partially wage-employed. Furthermore, contrary to the belief that so few local Eskimos were hunting that there was little or no pressure on the area's game resources, it was found that considerable pressure was being exerted, much of it by employed persons. Through use of skidoos in winter and powerful outboard motors in open-water season, wage-employed Eskimos with full-time jobs were able to take

advantage of weekends and statutory holidays to make short hunting forays from the settlement. In addition, every permanently wage-employed man surveyed reported that he spent nearly the whole of his annual vacation hunting. Seal and caribou hunting were found to be of greatest importance.

Seal hunting has traditionally been the most important hunting activity of Frobisher Bay Eskimos, as it has for Eskimos of coastal regions throughout Arctic Canada and elsewhere. In the fur trade, the seal was less important than the fox for many years, although it did represent wealth in terms of credit at the trading post. In recent years, however, a boom market developed for sealskins comparable to the greatest days of the white fox or the whalebone and oil trade of an earlier age; as elsewhere in the North, the demand for sealskins in the early years of the 1960's had a profound effect on Frobisher Bay Eskimos.

In the early days of the settlement, the hunters and their families used sealskins for their own needs and traded the surplus for goods at the local Hudson's Bay Company store. As the people became more involved in the wage economy, they used skins to sell for cash as well as to pay off store debts. As the settlement grew and with it the use of money, more and more Eskimos hunted seals solely as a source of ready cash. In the

latter part of the 1950's, there was a rising demand for sealskins on the world fur market, for use in fur coats and sports wear. When there had been peaks of demand for sealskins in the past, the Norwegian seal hunting industry, which dominated the market, had always met the demand. Furthermore, prior to the 1950's, the Canadian Arctic Eskimo had been dependent on the market provided by the Hudson's Bay Company stores. However, this situation changed when the government introduced schemes for Eskimo betterment, including the marketing of hunting products. Other Eskimo groups had learned this with the fox fur market, but the Frobisher Eskimos had never been active fox trappers like those of the Mackenzie Delta (Bissett, 1967), for example, or those of Banks Island (Usher, 1970).

The first small shock wave of what was to be a brief but strong demand for sealskins was felt in Frobisher Bay in 1958 when prices of from \$12.00 to \$16.00 per skin were paid to local hunters for prime sealskins and Silver Jar (baby Ringed Seal) skins. Subsequently, prices fell to the more usual levels paid in the Frobisher area, an average of \$6.00 per skin, dropping as low as \$4.00 by 1961/62. At that time, however, the slack was taken up by increased wage employment opportunities in the settlement through the undertaking of a large construction program by the U.S. Air Force there. By 1962, an unprecedented demand for sealskins on the fashion

markets of the world began, the effect of which was felt almost immediately in Frobisher Bay, as elsewhere in the Arctic. By 1963, prices paid per skin at Frobisher had risen to double the previous year's average price; by 1963/64, the peak period of the demand, the average price paid in Frobisher Bay had risen to \$10.00. In many instances, Frobisher hunters received as much as \$25.00 each for fine, prime skins. Although prices began falling the next year, they still remained sufficiently high to attract many would-be hunters, particularly as some tapering off of wage employment had occurred with the departure of the U.S. Air Force from the settlement and with the curtailment of much of the construction originally begun as part of the government's development plan for Frobisher Bay (Frobisher Development Plan I). For a period of approximately five years, therefore, great pressure was brought to bear on the Frobisher Bay seal populations and many Eskimos continued to hunt seals, among them some who had given up hunting in previous years because they had regular wage employment (Table 9).

Although sealskin prices paid in Frobisher Bay had fallen to an average of \$6.00 in 1965, heavy hunting of seals continued, and persisted into 1966. A survey made by the writer of the seal hunting activities of 61 Eskimo men for the calendar year 1965 revealed that these men alone, representing only 22 per cent of the Eskimo male population aged 16 years and over,

TABLE 9

SEAL CATCH STATISTICS FOR FROBISHER BAY
1956/57 - 1965/66

Year	Ringed Common	Seal Silver	Harp	Ranger	Bearded	Total ^{1/} Traded	Total ^{2/} Reported
1956-57 ^{3/}		500	20	1	40		
1967-58 ^{3/}	200	350			30		
1958-59 ^{4/}	12	375					
1959-60 ^{3/}	56	276					
1960-61			not available				
1961-62			not available				
1962-63 ^{5/}	781	874	19		22	1,969	2,395
1963-64 ^{6/}	991	861	337	14	21	2,424	2,100
1964-65 ^{6/}		3,137	677	17	18	3,849	2,804
1965-66 ^{6/}		2,439	673	13	20	3,145	

- 1/ Number of skins bought by Hudson's Bay Co. store in Frobisher Bay.
- 2/ Number of seals reported killed by Eskimos who reported in person to Royal Canadian Mounted Police detachment office in Frobisher Bay to hand in old general hunting licences and obtain new ones.
- 3/ These figures are based on information given by Eskimos living in the settlement and do not include animals killed by those living in camps in the region.
- 4/ Figures apply only to those skins traded at the Hudson's Bay Co. in the first half of 1959.
- 5/ Figures for each species and for "total traded" refer of combined figures of the Hudson's Bay Co. store and the Government Rehabilitation Centre operating in Frobisher Bay at the time.
- 6/ Figures by species and total traded refer to skins bought by the Hudson's Bay Co. store. These figures give a more realistic indication of the numbers of seals killed in a year than do the figures reported from hunting licence returns.

obtained 2,627 seals during that year (Table 10). Out of this group, 27 who had wage employment during 1965 for two months or less accounted for 1,977 seals of the total seal take for the sample group, or 75 per cent of the total take, as might be expected in view of the fact that they had more time to spend at hunting. The remainder, 34 men, all of whom had either full-time wage employment or had worked a full six months or more during the year, took 650 seals.

In terms of extra income for these employed men, seal hunting did not net them large gains. With an average take of 19 seals for the full year, each man would have earned \$114.00 from seal hunting if we assume an average price of \$6.00 per skin and also assume that every skin was saleable in terms of its condition and was in fact sold. This would hardly pay for the cost of each man's outlay in money for fuel, food, ammunition and equipment required for hunting trips. Even assuming a higher total number of seals taken by this particular group of men, i.e., 850 (a more likely figure judging from their activities reported for the first half of 1966 for which period their memories were reasonably fresh at the time of the survey), and assuming the same average price and sale level of skins, it would still mean only a gross of \$150.00 per man.

For those 27 men of the sample group who may be regarded as unemployed, the returns from their 1965 seal hunting

TABLE 10

SUMMARY OF SEAL CATCH STATISTICS
 FROBISHER BAY, N.W.T.
CALENDAR YEAR 1965^{1/}

<u>Ringed Seal</u>							
Hunters	Common Jar	Silver Jar	Total	Harp Seal	Bearded Seal	Ranger Seal	Total
Employed ^{2/}	290	216	506	100	37	17	650
Unemployed ^{3/}	1,228	555	1,783	133	53	8	1,977
TOTAL	1,518	771	2,289	233	90	15	2,627

1/ Based on a survey sample of 61 men.

2/ Those (34) who had employment for from nine to twelve months during 1965.

3/ Those (27) who were employed for two months of less during 1965.

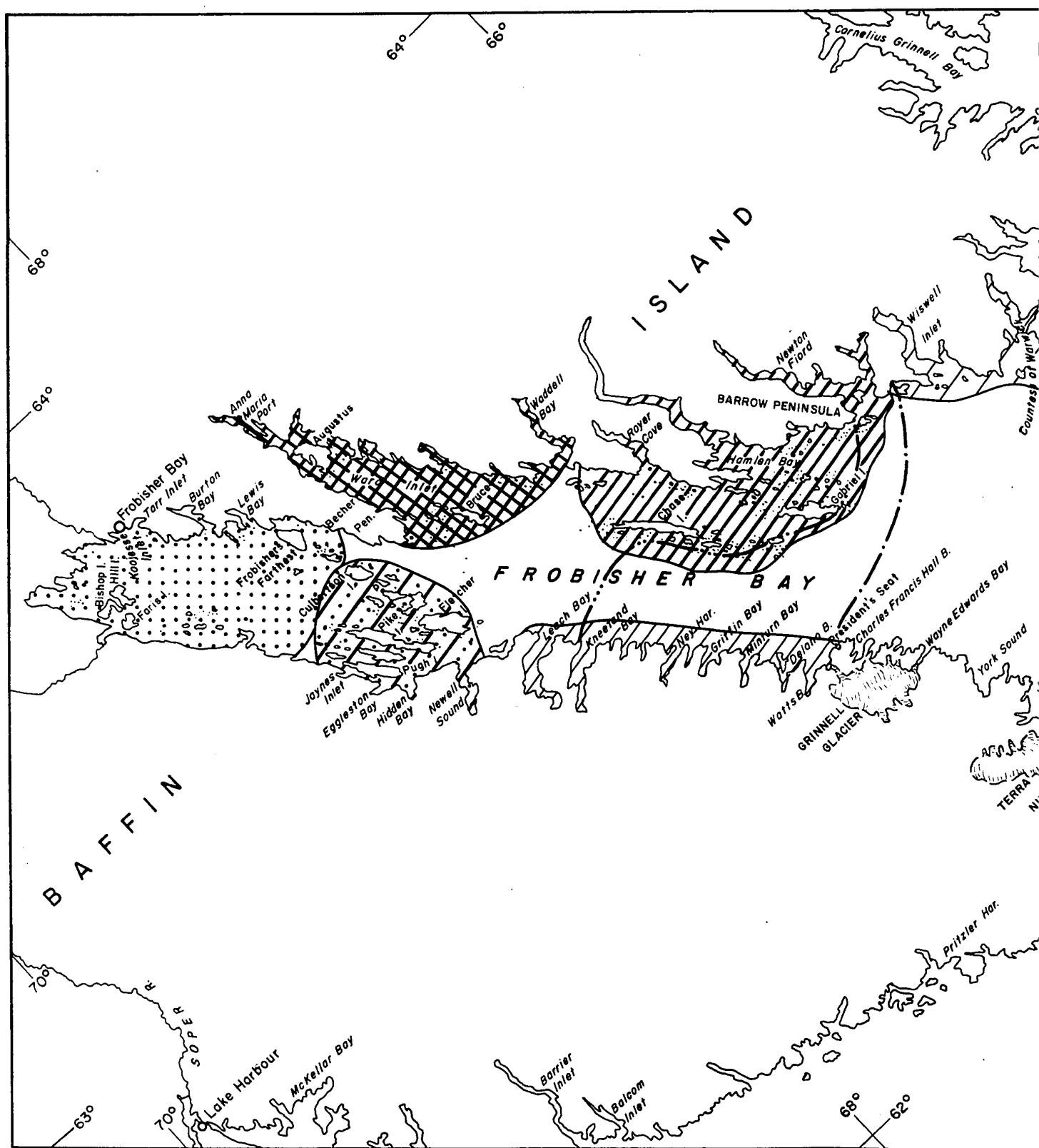
endeavours were hardly sufficient to support them. With an average take of 73 seals, assuming the same price per skin and that all skins were sold as given for the employed group, the average income per man would work out at \$438.00, hardly sufficient to support a man and his family for the year in the absence of other sources of income.

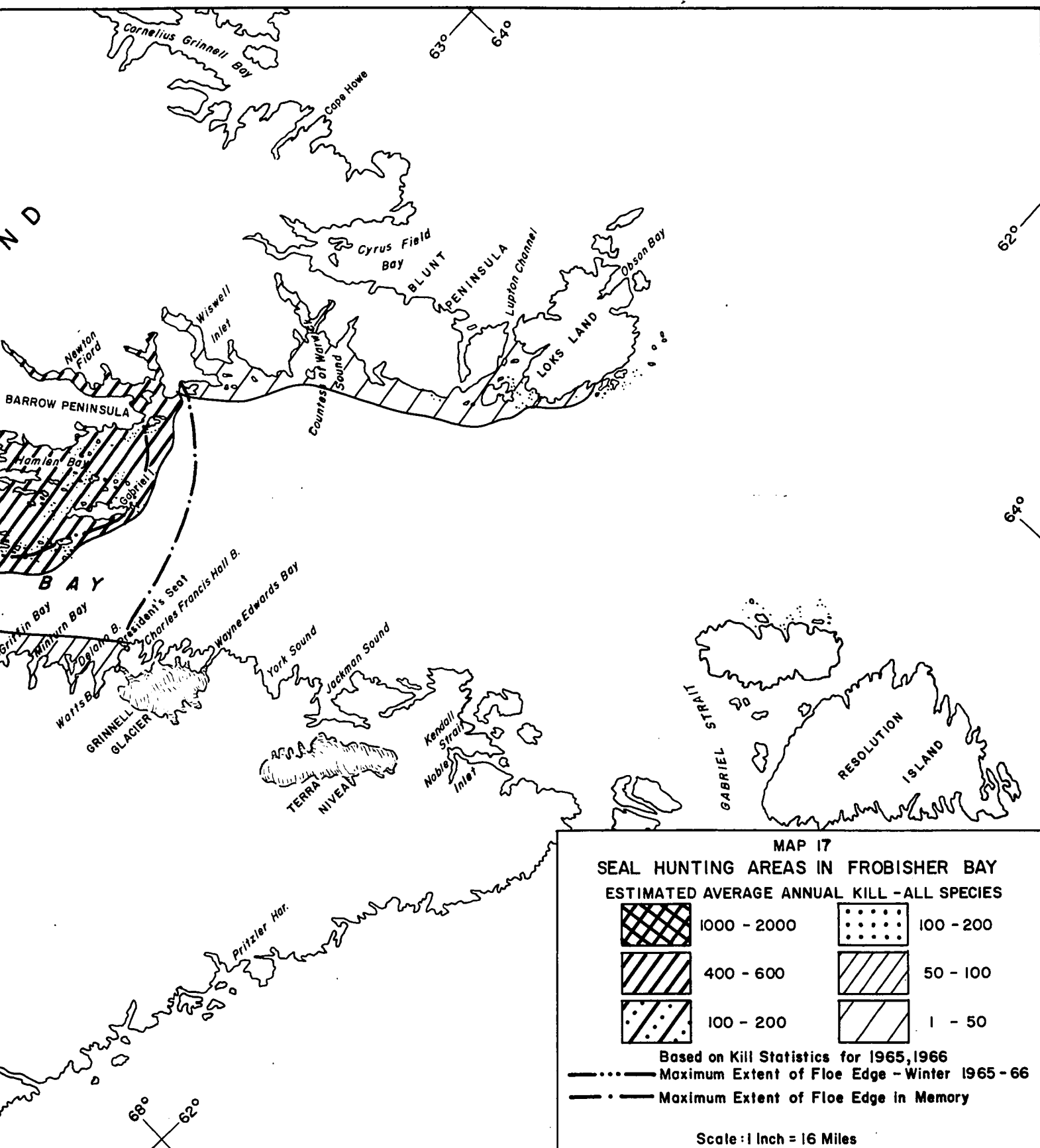
The same 61 men were interviewed concerning their seal hunting for the first six months of 1966. Of this group, only 54 had gone hunting at all so far that year, taking a total of 1,094 seals. Most of those interviewed who were permanently wage-employed had not yet had their annual vacation; all were planning on going down the bay for all or most of their holidays. Twenty-seven of the 54, still classifiable as unemployed for the first half of 1966, had taken 864 seals, less than the number taken by the employed men.

The most significant factor with regard to seal hunting by Frobisher Eskimos in the mid-1960's was not the numbers of people still hunting so extensively, nor was it the low income to be realized from seal hunting. Rather it was that, in general, fully wage-employed men were able to obtain such a large share of the total take, spending less time at it than the un- or under-employed men. Increased income, the means to purchase and the use of mechanized modes of transport, primarily skidoos, have allowed many men who have taken permanent employ-

ment to carry out seal hunting trips for relatively short periods of time. From Map 17, which shows the most heavily hunted areas of the bay, it can be seen that Ward Inlet and its immediate environs is the area in which most seal hunting is done. Approximately 40 miles from the settlement, this area is within easy reach of the hunter having a skidoo for winter travel or a powerful outboard motor for open-water travel and who has only a short time to hunt.

According to the evidence available, seal hunting in the Frobisher region had not declined much as a result of increasing wage employment among Eskimos. As more men take wage employment and obtain the means to purchase equipment such as skidoos, it is likely that seal hunting will remain at least at the level it held in 1966. Despite the large numbers of people in employment, pressure is being exerted on the seal populations. If we were to assume that all those who had employment in Frobisher Bay in mid-summer of 1966, 185, were to take the average number of seals attributed to each of the employed men in the sample group, 19, this group alone would take over 3,500 seals. To this must be added, at a minimum, the average seal take per unemployed (or under-employed) given for the sample group, 73, which as indicated for just those 27 men alone, was nearly 2,000 seals. These estimates are crude and do little more than to give an indication of the probable level of seal





hunting by Frobisher Bay Eskimos. The figures may be more significant as indicating pressure on the local seal populations than as indication of additional income generated for the Eskimo population.

It is unlikely that seal hunting will again reach the level of the early years of the 1960's. Only if it did would it contribute significantly to the local Eskimo economy. Seal hunting is the only substantial source of income in the hunting sector of the Eskimo economy. Sealskins have sale value, and are taken in greater numbers than any other animal species (Table 11).

Fox trapping was found in 1966 to be no longer a significant part of the hunting economy of the Frobisher Bay Eskimo population. According to Eskimo informants, trapping in the Frobisher region had never been as important to the local people as it had in either the Pangnirtung or Lake Harbour areas, and certainly had never even approached the level at which fox trapping has been carried out in the Western Arctic.

Caribou hunting, while not financially important in Frobisher Bay was nevertheless actively pursued. The 61 men surveyed with respect to seal hunting were also queried as to caribou hunting. In 1965, they alone accounted for 424 caribou, of which 197 were taken by the 34 permanently wage-employed men.

TABLE 11

SUMMARY OF GAME TAKES BY FROBISHER BAY ESKIMOS, BY SPECIES, BY YEAR, 1954-1965

Year	Caribou	Seals	Walrus	Polar Bear	White Whales	Foxes	Wolf	Hare	Ptarmi- gan	Ducks	Geese
1954/55	N/A	N/A	N/A	8 ^{1/}	20	178 ^{1/}	10 ^{1/}	200	N/A	N/A	N/A
1955/56	N/A	N/A	N/A	2	N/A	84 ^{1/}	N/A	100	N/A	N/A	N/A
1956/57	100	560	N/A	6	5	20	12	N/A	N/A	N/A	20
1957/58	125	750	25	6	6	50	3	N/A	N/A	N/A	N/A
1958/59	160	392 ^{1/}	30	10	10	100 ^{1/}	10	N/A	N/A	N/A	N/A
1959/60	400	450	0	6	5	65	15	N/A	N/A	N/A	N/A
1960/61											
1961/62	182			7							
1962/63	399	2,395	6	18	2	29 ^{1/}	1	50	2,350	350	16
1963/64	520	2,433 ^{1/}	7	18	0	71	2	N/A	N/A	N/A	N/A
1964/65	307	3,849	13	13	15	71	13	71	N/A	65	12

^{1/} Numbers of skins traded at Hudson's Bay Co. store.

Source: R.C.M.P. Annual Reports on Game Conditions, Frobisher Bay Detachment Area, 1954/55 - 1965/66. These figures are based on reports made by those Eskimos who take General Hunting Licenses, at the time of license renewal, and cover the period July 1 - June 30 of each year.

Just under half the total number of caribou taken by the group, 46 per cent, were taken in the vicinity of Sylvia Grinnell Lake; 44 per cent of the total take were taken between May and September and probably reflects the activity of those receiving their annual holidays. The Sylvia Grinnell region is within easy reach by skidoo of the settlement, by canoe in open-water season. Little is known of the size of caribou herds on southern Baffin Island. However, it is evident that pressure on the local herds was on the increase in 1966, judging from the results of the sample survey, summarized in Table 12 and Map 18. Even if the figures were discounted by as much as 50 per cent, owing to the difficulties inherent in obtaining such information from Eskimos, caribou hunting was of major importance. From information obtained from Eskimo informants and others familiar with hunting practices in the area, it was clear that better than 85 per cent of the total male adult Eskimo population of the settlement hunted for caribou at some time in the year. If only those employed in the settlement at the time of the survey (185) went caribou hunting and accounted for the average number taken by the whole of the sample group, (six) this would mean a total annual take of 1,110 caribou, which if sustained or increased, would deplete the local herds.

The importance of caribou hunting in the total Eskimo

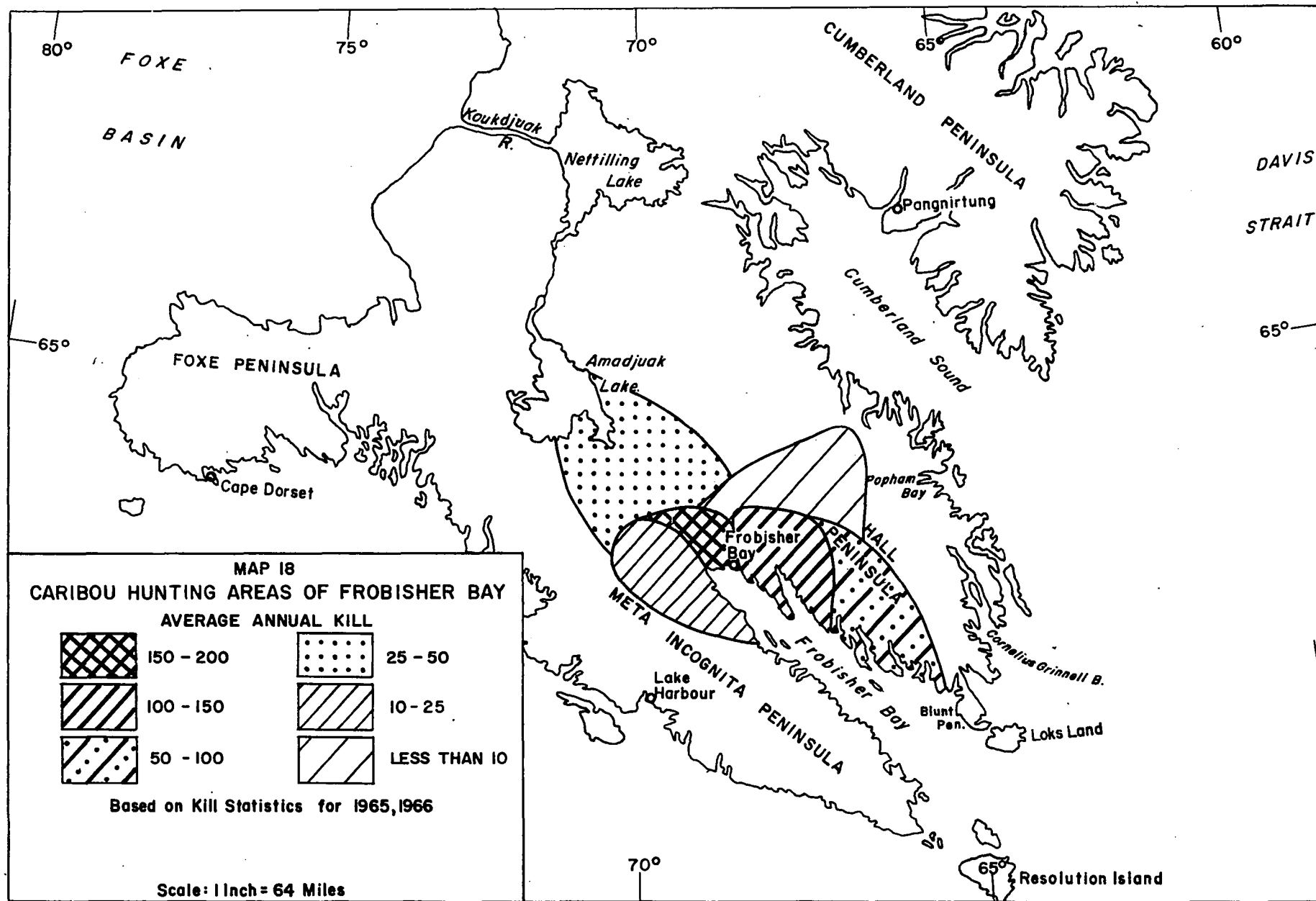
TABLE 12

SUMMARY OF CARIBOU HUNTING BY ESKIMOS
FOR CALENDAR YEAR 1965
FROBISHER BAY, N.W.T.

<u>Area Hunted^{2/}</u>	Numbers of Caribou Killed ^{1/}			
	<u>Jan.-April</u>	<u>May-Sept.</u>	<u>Oct.-Dec.</u>	<u>Total</u>
1	126	--	68	194
2	4	122	4	130
3	--	62	--	62
4	13	--	9	22
5	6	--	4	10
6	5	1	--	6
TOTAL	154	185	85	424

1/ Based on kills reported by 61 men, of whom 34 fully employed, 27 unemployed or worked only two months or less during the year.

2/ Boundaries of areas approximate only, indicating general areas of most hunting activity.



economy in Frobisher Bay is difficult to assess in terms of hard dollars. Those obtaining caribou meat do not purchase as much meat from the store as they might otherwise do. On the other hand, in order to obtain that meat, the hunters must purchase food, fuel and equipment. It is more than likely that expenses incurred by the Frobisher Eskimos who hunt far exceed any financial gain derived therefrom. This is supported by the small representation hunting has in terms of the overall Eskimo economy as shown in Figure 1. One factor virtually impossible to measure or to which to attach a monetary value, however, is the intrinsic worth of hunting to the Eskimo, the value to him of being able to leave the confines of Frobisher Bay for even a short hunting trip, a subject dealt with at length by the Honigmanns (1965) and outside the scope of this thesis. In terms of the economic picture as measured in dollars, hunting was not important in the Eskimo economy of Frobisher Bay in 1966.

HANDICRAFTS IN THE ESKIMO ECONOMY

One of the earliest programs intended to assist Canadian Eskimos improve their living standard and to teach them to manage their own enterprises was the co-operative development program begun by the Department of Northern Affairs and National Resources in the 1950's. Most of the Eskimo

co-operatives in the Northwest Territories and Arctic Quebec that now exist began as local cottage industries or resource harvesting projects. They were founded under the auspices of the Department and supervised by development officers in the various settlements until they were judged ready to be taken over by co-operatives. The Ikaluit Co-operative of Frobisher Bay began as a fishery project in 1958, based on the catching of Arctic Char in the Sylvia Grinnell River. The fish were to be fresh-frozen and marketed in the south. In 1961, this project became a co-operative and operated exclusively as a fishing co-operative for four years. Meanwhile, a handicrafts industry was started in the settlement at the Department's rehabilitation centre. There, Eskimo men and women were encouraged to develop their talents as carvers and seamstresses in order to be able to earn a living when they left the centre. When the centre was closed in 1964, a large group of carvers in Frobisher Bay lacked the means for marketing their carvings. Eventually, some of them started a carving co-operative. At about the same time, the fishery co-operative decided to sell handicraft products, primarily carvings. The carving/handicraft branch of the Ikaluit Co-operative officially began on April 1, 1965.

The home industries program of the rehabilitation centre was found by the Honigmans to be an important means by which Eskimo family incomes were augmented. Between April 1,

1962 and March 31, 1963, the rehabilitation centre paid out a total of \$40,686.00 to 288 craftsmen concerned with handicraft production. While most of the producers earned less than \$100.00 for their handicrafts over that 12-month period, a handful earned \$1,000.00 or more. Two outlets for handicrafts existed in Frobisher Bay at that time, one in Apex Hill, open one afternoon per week, and one in the Main Base, open on afternoons throughout the week and Saturdays (Ibid.: 81-82). It was noted that those families in which both the husband and wife were active handicraft producers and made articles of good quality could earn as much as \$200.00 for an average month's work. The observation was also made that in general the carvers brought more money into their households than did the women with their sewing (Ibid.: 82-83).

Review of the operations of the carving side of the Ikaluit Co-operative for the period April 1, 1965, to March 31, 1966, showed that the sale of handicrafts, primarily carvings, was still an important source of income for many Eskimos. During that period, a total of 133 Eskimo residents of the settlement selling carvings to the co-operative earned an average income of \$250.00. These average income figures do not, however, give any indication of the wide spreads in distribution of income from this source. Distribution of income from carving was as varied as the abilities of the carvers. Individual total

incomes for one year of operation ranged from as low as \$1.00 to a high of over \$2,000.00 (Table 13). Purchases of carvings made by the co-operative in the first four ranges listed in Table 13 amounted to ten per cent of the total amount which the co-operative paid out for carvings in its first year of operation. The majority of sales made within the four income brackets were single sales, made to obtain quick money. Many of the sellers in these categories were young men and boys who were merely using the co-operative as a means of obtaining cash for immediate use such as attending a movie or buying snacks at the store. The average income for those carvers in the \$0-100 range amounted to approximately \$36.00 for the fiscal year period from a total of 284 sales averaging approximately \$10.00 per sale.

On the other hand, carving was the main source of earned income for 19 Frobisher carvers over the 12-month period, all of whom were in the top three income brackets (\$500 - 2,000 plus). Sixteen of these men carved for six or more months of the year, earning an average of \$1,200.00 for the period. Nearly all those represented in the higher income brackets were older men, 50 years of age and over (Figure 2). Carving seemed to attract a wide variety of Eskimos according to age and association with other income-producing activities (Figure 1, above). The large number of young people making quick cash sales to the co-operative explains some of the difficulties

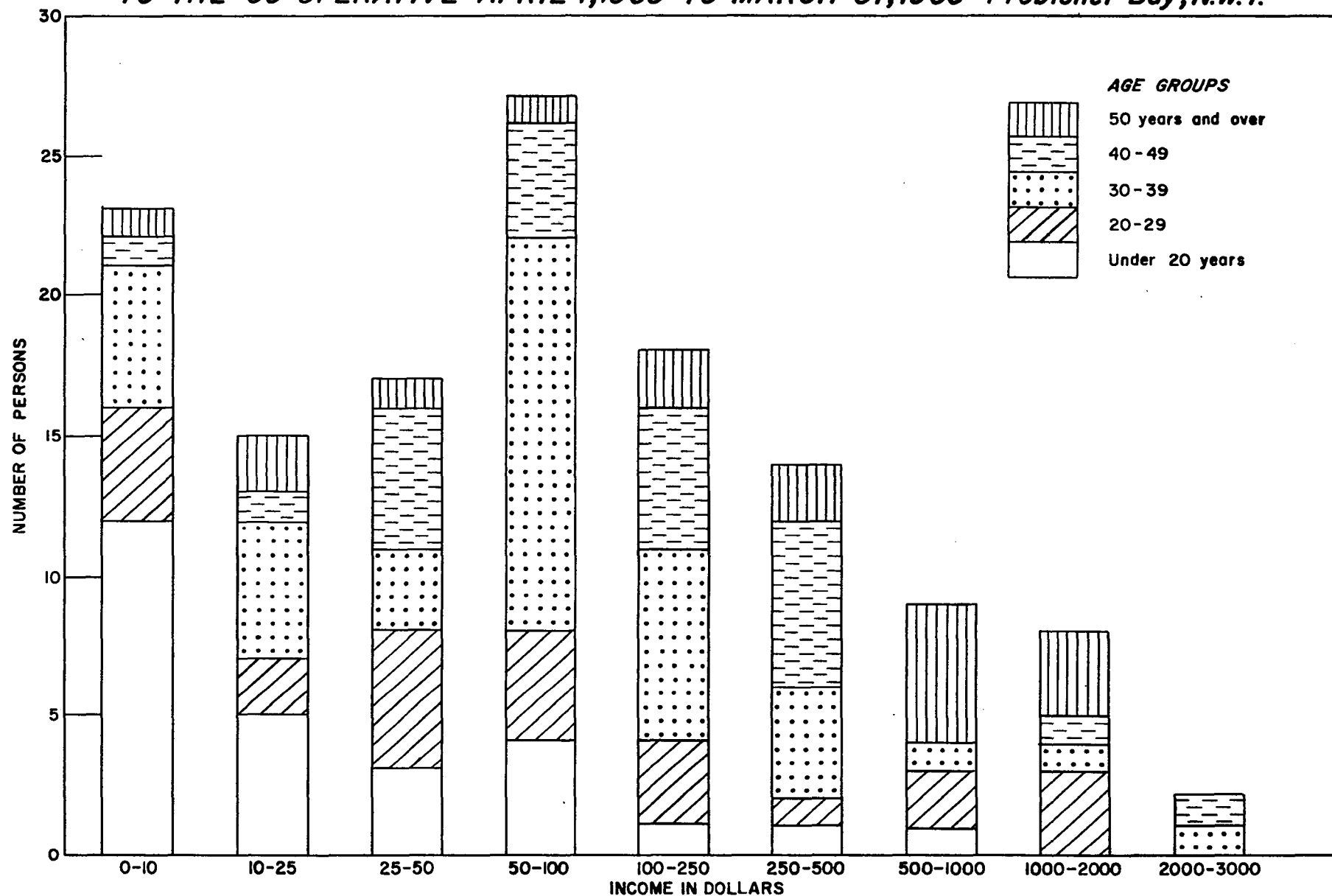
TABLE 13

INCOME FROM SALES OF CARVINGS
TO THE IKALUIT ESKIMO CO-OPERATIVE
APRIL 1, 1965 - MARCH 31, 1966

<u>Income Brackets</u>	<u>Number of Carvers</u>	<u>Average Income</u>
\$		\$
0 - 10	23	8.70
10 - 25	15	20.00
25 - 50	17	41.00
50 - 100	27	89.00
100 - 250	18	167.00
250 - 500	14	386.00
500 - 1000	9	711.00
1000 - 2000	8	1,400.00
2000 - 3000	2	2,150.00

FIGURE 2

**NUMBER OF PERSONS CARVING BY AGE GROUP AND INCOME FROM SALES
TO THE CO-OPERATIVE APRIL 1, 1965 TO MARCH 31, 1966 -Frobisher Bay, N.W.T.**



encountered by this venture during its first full year of operation.

During its first year, the carving side of the co-operative followed the policy of paying the full price to each carver for the goods purchased by the enterprise, regardless of whether a sure market existed for all the carvings on hand in the shop. In one month alone, February, 1966, over \$8,000.00 was paid out for purchase of carvings by the co-operative, representing 284 sales to 90 resident carvers for an average price paid of \$29.00 per item. This practice of paying the full price at once, coupled with a lack of overall co-ordination between buyers purchasing for the co-operative and an almost complete lack of quality control in the purchasing operation, soon led the co-operative into difficulties. Carvings were not reaching the retail market in the south quickly, and money from the sales did not enable the co-operative to build up the cash reserves necessary to buy from its local carvers. By early spring of 1966, a time of the year when casual wage employment opportunities are almost non-existent in the settlement, the co-operative was forced to cease buying owing to a lack of funds. The steady carvers, the majority of whom were in the higher income-from-carving brackets, were left without any means of earning cash. Little help was available from the local market, since mid-winter and early spring are times when few tourists frequent the settlement

and when there are few construction workers with money to spend on carvings. Although many carvers attempted to earn cash by selling their carvings privately while the co-operative was in financial distress, the market was not large enough to support all who had been dependent on selling carvings to the co-operative. By mid-summer of 1966, the co-operative was able to resume buying as it had been aided by yet another loan from the Eskimo Loan Fund of the Department of Northern Affairs.

In January and February, 1966, the co-operative had done a brisk business in the purchasing of handicrafts from local Eskimo women, until financial difficulties curtailed all buying. Handicrafts did not, however, reach the level of financial return offered by carving sales. During the fiscal year period of April, 1965 to March, 1966, some 23 Frobisher Bay Eskimo women sold handicrafts for a total of nearly \$600.00, providing an average income of \$26.00. Approximately 17 per cent of these women were wives of steady carvers, while another 13 per cent were the wives of the few remaining steady hunters in the settlement. Nine per cent were widows, the balance were wives of regularly employed men. Those earning the most income from handicrafts were the wives of regular hunters, bringing in many cases the only cash income available, and that not sufficient for the families' needs.

As with the carving operation, the handicraft side

suffered from poor management and lack of quality control. There was virtually no control of the handicraft buying. Quality varied so widely that it was virtually impossible for the co-operative to establish a few good lines of handicrafts and most of those bought were not shipped out of the store at all.

Once the carving-handicraft operation of the Eskimo co-operative obtained additional financial help, it again resumed buying from local producers during the summer of 1966. All those associated with the enterprise looked forward to a busy summer. However, there were still several handicaps to plague the co-operative in terms of its home industry products. Throughout that summer, little progress was made, either from within the co-operative itself or on the part of those government officials responsible for providing guidance to the board of directors. Another serious problem which was not solved at the time of the writer's departure in the latter part of August, was the poor marketing arrangement which had contributed so much to the co-operative's early difficulties. Officers of the co-operative found it difficult to reach a decision as to how best to effect quality control, to ensure that they bought only marketable carvings and handicrafts. With respect to the marketing of the handicrafts and carvings, two problems existed, one local, one with the southern retail marketing arrangements.

The co-operative shop was located in Apex Hill, three long miles from the Main Base and airport, four miles from the Federal Building. It had in 1966 no other outlets in the settlement. During the late spring, throughout the summer and well into autumn, Frobisher Bay received many visitors, some just passing, others bound for the smaller settlements in the region and required to wait at Frobisher for transportation. Government officials from the south show a greater tendency to travel during summer than winter, as do those few tourists interested in "seeing the North" by visiting places of relatively easy access such as Frobisher Bay. Still another potential market for the Eskimo carvings existed in the form of tourists on charter aircraft which often stopped at Frobisher Bay for refuelling, or occasionally because of mechanical troubles. Located as it was in Apex Hill, and in the absence of a reliable public transportation service, the co-operative missed out on many opportunities to make substantial sales to transients in the settlement.

Marketing of carvings and handicrafts in the south was handled through a government marketing agency with headquarters in Ottawa. Its functions were to provide advice and direction to the co-operative on quality control, market demand for certain types or sizes of products and quantities of items which the co-operatives should send out for sale, and to serve as a mar-

keting agent or distribution centre between the co-operatives and retailers. During the period under discussion here, when the co-operative in Frobisher Bay was in difficulties, this central marketing agency was highly disorganized. It had just recently been formed and was understaffed. It was unable to keep up with the volumes of produce coming from the Northwest Territories and Arctic Quebec, as a consequence of which co-operatives' crafts and carvings were not reaching the market and no money was coming in for distribution to the co-operatives. This central marketing agency did not have enough full-time travelling advisors to visit all the co-operatives on a regular basis to ensure that the co-operatives were producing saleable items. Shipments from Frobisher Bay were reaching Ottawa in such volume that the produce could not be graded, marked and sold rapidly enough to keep up with shipments. Thus, money due to the co-operative through mark-up and sale of the carvings on the retail market did not reach it. The inevitable result was financial collapse of the co-operative. At the end of the writer's field work period in the settlement, the members of the co-operative had already begun making plans to improve their organization and handling of the carving and handicraft operation, and government officials were also taking steps intended to help the co-operative achieve a more stable overall operation.

While not a source of large amounts of income to those Eskimos engaged in carving and handicrafts, the co-operative nevertheless had the potential to offer a steady income to a small part of the Eskimo population of Frobisher Bay. As with so many other small local ventures begun in northern settlements and based either upon harvesting of local renewable resources or upon the talents of a relatively small number of the local population, the Ikaluit Co-operative in Frobisher Bay was a marginal enterprise in terms of finances and was a delicately balanced operation, unable to stand any business reverses. Although its activities did not provide an adequate livelihood for Frobisher Eskimos in 1966, it was an important source of extra earned income for those with other income-producing activities. It also provided some carvers, particularly those among the older men, with the only income they received aside from transfer payments.

OTHER INCOME-PRODUCING ACTIVITIES

Other sources of earned income beyond those already enumerated were limited for Frobisher Bay Eskimos. The Ikaluit Co-operative through its commercial fishing operation provided limited income for a few.

The Ikaluit Co-operative grew out of a project begun by the Department of Northern Affairs in 1958. The commercial

fishery was based on the large seasonal spawning run of Arctic Char in the Sylvia Grinnell River. It commenced operation with a seasonal quota of 10,000 pounds. This figure, set by the Department of Fisheries, was based on an estimate of the size of the river's Char population and on the total estimated take of these fish each year by Eskimos for their own use and by sports fishermen among the settlement's residents. In 1961, the project became a full-fledged co-operative and continued to operate on the basis of an annual 10,000 pound quota. Members of the co-operative took part in the fishery, a netting operation; wives of members and other local Eskimo women cleaned and prepared the fish for freezing. Over the years, six hunters took part in the fishery each year, earning an annual average of \$275.00 each for their work, while some six women brought an average of \$120.00 each into the family earnings as fish processors.

In 1966, the life expectancy of the fishery was open to question, owing to the rapidly increasing pressure being brought to bear on the Sylvia Grinnell fish population by the combination of the commercial fishery, sport fishery and subsistence fishing by the Eskimos. The Northern Affairs Department had already begun looking elsewhere in the area for sources of Arctic Char which the Frobisher Eskimo co-operative could exploit. In 1964 and 1966, test fishing projects were run in

Nettilling Lake, north of Frobisher Bay. The stock of fish in the lake suitable for commercial use was found to be far too small to justify the expense of setting up an on-site fishery and freezing operation, or of flying the fresh-caught fish into Frobisher Bay. Examinations of the many rivers flowing into Frobisher Bay all along its length had been carried out by the Fisheries Research Board's Arctic Unit (Department of Fisheries) to determine the potential for a commercial fishery. None of the rivers was found to have other than very small fish populations; many of the rivers were located at too high an altitude or had river bed gradients too steep for Arctic Char. By 1966, it was recognized that either the fishery's 10,000 pound quota would have to be cut, or the commercial fishery would have to be abandoned, if any Char were to be left in the Sylvia Grinnell River.

In 1966, prior to the start of the fishery, the co-operative members voted the fishermen and processors a pay raise; nine fishermen, six of them full-time hunters, earned an average of \$288.00, while six women earned \$180.00 each for cleaning and freezing the fish. This was the last year in which the fishery obtained the 10,000 pound quota and the last year in which it provided incomes of the level indicated here.

The only other source of income for Eskimos in the settlement was that earned by those hunters, who rented boats

and other equipment and provided guide service for tourists, C.B.C. camera crews, local residents, researchers or government officials who wished to travel down the bay. There were few tourists wishing this service in 1966, as is the case nearly every year. Thus, this particular form of business provided only very small amounts of cash (in the order of \$100.00), for some five Eskimos.

TRANSFER PAYMENTS IN THE ESKIMO ECONOMY

Transfer payments provided the fourth source of income for Frobisher Eskimos. Transfer payments include the statutory payments, available to all Canadians, of family allowance and various pensions, and social assistance payments made under welfare programs.

Social Assistance payments, often referred to under the term "relief" are intended to serve as a means of financial assistance for people who have no other means of support. Under the welfare program for northern indigenous people, the responsibility of the Federal Government and administered for Eskimos by the Department of Northern Affairs, the chief reasons for payment are poor health of the family head, maintenance of dependent children in families unable to feed and clothe them adequately, and the principal reasons among many Eskimo groups, economic cases. The latter are people temporarily unemployed or unable to support themselves and their families on the local

resources.

The amount of social assistance paid out in Frobisher Bay has always fluctuated according to the availability of wage employment, and, to a lesser extent, on prevailing prices paid for sealskins. Economic assistance shows a strong seasonal pattern, rising in winter, falling over the summer. Hunters going through a period of bad weather or poor hunting receive aid under the economic category of social assistance. Those years in which large construction programs were undertaken have shown relatively low figures for social assistance payments made for economic reasons during the construction season.

The Honigmanns' study of Frobisher Bay was concerned with its Eskimo residents and their lives as "townsmen". They examined aspects of Eskimo life in order to determine how the people adjusted to settlement existence and how they coped with situations met in settlement life which were so different to their former experiences as hunters. One aspect with which these researchers were particularly concerned in some detail was the dependence - or lack of it - on social assistance or "welfare". To discover the role of social assistance in the lives of Frobisher Eskimos, they investigated recipients of welfare program assistance over a period of time. They chose seven sample months between August, 1962, and June, 1963, choosing the months most representative of the different sea-

sons, i.e., summer months when there would be opportunities for casual wage employment; winter months when there were no such opportunities and when poor weather conditions for long periods of time might hinder hunters. During the sample period, 72 households received some assistance. Of that 72, only 15 families drew assistance in five or more months; 19 families obtained assistance for only one month; 17 families received assistance in four months. Out of the total amount of social assistance paid out over the sample period, \$17,994.00, 47 families, well over half the total number received amounts of social assistance (of less than \$300.00 each) for the entire period; only nine families drew more than \$500.00 each. Sixty-five per cent of the total amount paid out in social assistance was in the category of economic assistance, of which 80 per cent was paid out in the months of December, January and February. The health category of assistance accounted for 33 per cent of the total, while aid for dependent children amounted to 20 per cent of the total. Assistance given for other reasons accounted for the balance.

As expected, the highest level of social assistance in all categories was paid out in the mid-winter months, 54 of the 72 families receiving aid in January, the month having the highest level of assistance, for an average of \$84.00 each. Unfortunately, for the period with which the Honigmanns were

concerned, the welfare statistics gave only "cases", i.e., families, but not the total numbers of persons involved in each case. Nevertheless, it was possible to chart the trends, on the basis of which the Honigmanns reached several conclusions. First, they found that social assistance payments in the majority of cases were paid to help household groups over periods of temporary difficulties; second, that few households depended chronically on social assistance. The most important overall conclusion reached as a result of their investigation was that while life in Frobisher Bay did not provide all Eskimos there with steady, dependable and completely adequate income from wage employment or other income producing activities, the settlement contained at the time relatively few chronically indigent Eskimo households. They found it difficult to generalize as to what sorts of families received social assistance, beyond those aged and physically incapacitated persons. They concluded that social assistance was distributed widely over the Eskimo community, functioning at various times to tide many types of families over periods of difficulty or emergency. The results of this aspect of the Honigmanns' investigations contrasted strongly with what they had come to expect in Frobisher Bay prior to their arrival on the basis of conditions among other Eskimo groups and northern Indians, some of whom were reported as constantly complaining of their material poverty and of inadequate welfare payments.

The results also failed to bear out complaints heard often in Frobisher Bay from non-Eskimos to the effect that the Eskimos were all on relief and were being ruined by an over-generous government which provided many necessities such as housing, free of charge (Ibid.: 85-93).

The Honigmanns' study of social assistance did not include the 18 families and 21 single individuals, comprising 95 adults and children, who lived under the sheltering care of the rehabilitation centre. Rehabilitants drew a cash allowance of up to \$50.00 per month, in addition to being provided with housing, clothing and either meals or food to cook at home for themselves and their families. Government officials concerned with the program hoped that many of these would return to normal lives in their own settlements, able to support themselves from the training in various skills and crafts received at the centre. However, there were many rehabilitants who would never be well enough to return to even a reduced form of their former life; others who would never be able to leave Frobisher Bay. In addition to the physically ill rehabilitants, the centre sheltered several local residents who were not physically incapacitated, but who would otherwise be in jail or on Frobisher Bay's welfare rolls. At a conservative estimate, all those connected with the rehabilitation centre, if added to the social assistance budget, would have raised that particular budget by as

much as 75 per cent for the Honigmanns' sample period.

The total social assistance expenditure in Frobisher Bay for the calendar year 1965 totalled \$59,000.00, for an average monthly figure of \$5,000.00. On average, about 300 persons (77 cases) received social assistance each month for an average monthly payment of \$16.00 per person per month, or \$63.00 per case per month. Of the total persons benefiting from social assistance, 46 per cent received assistance for economic reasons, 34 per cent for reasons of poor health, and approximately 19 per cent for maintenance of dependent children. The remainder, less than 1 per cent, received assistance under the category of supplementary assistance, paid out for such things as aid to a family whose breadwinner was in jail. In terms of cases, the 1965 break-down worked out to 45 per cent, 31 per cent, 23 per cent, and 1 per cent, respectively, as the main reasons for receipt of social assistance. The figures for the causes for assistance are comparable to those determined by the Honigmanns for the period they examined three years previously.

The same general observations and conclusions as reached by the Honigmanns were found to be valid in terms of seasonality and general distribution of assistance in the settlement in 1965. The chief long-term recipients were those families whose heads were incapacitated by illness, either in hospital in the south or convalescing at home; families with many chil-

dren in which the family head was unable to support them to standard; widows with dependents; hunters, the majority of whom had large families; and carvers, several of whom were elderly and unable to supplement carving income with earned income from other sources. Another persistent assistance-receiving group was formed of aged and infirm people who received or whose families received for them, assistance in addition to such other payments as disability or old age pensions. Much the same categories of cases were receiving some form of social assistance as would receive it in any urban community, particularly in those such as towns in rural areas in southern Canada in which farming is somewhat of a marginal occupation and in which there is little industry. Over 1965 and continuing into winter 1965/66, assistance to hunters ran high relative to the preceding few years, reflecting the drop in sealskin prices reported here in the previous section of this chapter.

THE ELEMENT OF SUBSIDIZATION

The picture of the economy of the Eskimo population of Frobisher Bay in the middle years of the 1960's as described here was one of a mixed economy comprised of elements of the traditional, land-based economy and the modern, wage employment economy, as evident from foregoing material in the present chapter and from Figure 1, above. It is a picture comparable to the

large Western Arctic settlement of Inuvik (Bissett, 1967; Smith, 1968; Wolforth, 1968), and indeed to the one for smaller settlements, where the difference is one of degree rather than of kind, such as Cape Dorset (Higgins, 1968). Generalizing very broadly, it can be said that wage employment was the dominant income-producing activity in Frobisher Bay in which a substantial portion of the Eskimo population was involved for greater or lesser periods of time. Other income-producing activities supported smaller portions of that population. Nearly the whole of the Eskimo population was dependent on one or the other or, more usually, a combination of the primary income-producing activities of the settlement. Finally, it was observed that no Eskimos in the settlement were inordinately deprived or suffering in the absolute material sense. Eskimo incomes were not high by southern (non-Eskimo) standards. However, as the Honigmanns (1965) found in their investigations in the settlement, incomes received by Eskimos there were apparently sufficient to support the Eskimo population according to its apparent needs and according to those needs as seen by government officials. While the economy of the Eskimo population was a viable economy in terms of their lives in Frobisher Bay, it might not be viable elsewhere. If the Frobisher Eskimos were taken out of the government-controlled environment of the settlement and put in a similar-sized community elsewhere, one not dominated by the

activities of Federal Government agencies, they would have to adapt to a different economic situation. The one element which allows the Eskimo population to "get by" under the prevailing economic circumstances of Frobisher Bay, the element missing in southern Canadian towns of mixed economic bases, is that of government subsidization.

In Frobisher Bay (or any Arctic Canadian settlement or area), no Eskimo would ever be in a position in which he was utterly destitute. The Canadian Eskimo population is the responsibility of the Federal Government of the nation under act of legislation. Prodded by its view of its responsibilities under that legislation and by the national conscience, the government does all in its power to maintain the Eskimo in some degree of relative material comfort. This is achieved through a variety of programs which, although designed ultimately to set the Eskimo on his own economic feet, in fact serve to cushion him so much in moving him toward that goal that real doubt exists among many administrators and researchers that the goal will ever be reached. In addition to those programs designed to help the Eskimo bridge the many and wide gaps separating him from the remainder of the Canadian population through teaching him new skills and new ways, the government has other programs which allow the Eskimo to make these adjustments without continually having to fight for his very existence. These

are subsidy programs concerned with housing and basic community and social services.

In Frobisher Bay, the subsidy programs have made it possible for the Eskimo population to have an economy, however diverse and underdeveloped that economy may appear to non-Eskimo observers. Neither Eskimo nor non-Eskimo residents of the settlement have ever paid the true or economic costs of rent and services provided them. No Eskimo could have afforded to pay economic rent in the settlement, nor monthly average expenditures for each of fuel, electricity, sanitation services or water delivery. At a conservative estimate, each Eskimo household head in Frobisher Bay, regardless of economic status, received an average monthly subsidy covering rent, fuel, water and sanitation services of approximately \$600.00 per month. While possibly more properly considered in the context of the government's operating costs in the settlement, the subsidy factor must also be considered in the context of the economy of the Eskimo population. Without this element of subsidy, no Eskimo, regardless of how long or hard he worked, even at wage rates prevailing in Frobisher Bay in the mid-1960's, would ever get off the social assistance rolls. While it is not within the scope of the present work to debate the arguments for and against total care programs for the indigenous peoples of Canada, it is valid to suggest that not even the rudimentary

level of economic development of the Eskimo population of Frobisher Bay which existed in 1966 would have been reached within the short span of the settlement's existence without the element of subsidy. In fact, the settlement of Frobisher Bay itself represents one large subsidy in so far as the Eskimo population is concerned. The Eskimo population there, as in all other Canadian Arctic settlements, is subsidized directly through the various benefits and services provided, and indirectly through payment of wages to Eskimo workers employed by agencies which would not be there except for the need for programs for the care of the Eskimos. What the future economy of the settlement's Eskimo population might be like is discussed in Chapter 12 in which possible future lines of development for the settlement of Frobisher Bay as a whole are examined.

CHAPTER 9

THE ECONOMY OF THE NON-ESKIMO POPULATION

Each of the two separate population groups in Frobisher Bay had its own economy. The diversity of the Eskimo economy has been described. In sharp contrast, that of the non-Eskimo population had only one element in 1966, wage employment. With three exceptions, all non-Eskimo members of the Frobisher Bay labour force were wage employed. Two or three individuals had small business enterprises which they operated in their spare time, which provided additional earned income; one individual in the settlement was self-employed. Unemployment among the non-Eskimo population was non-existent; no one chose to live in Frobisher Bay without some means of support. Unless one were working for one of the government agencies or the large private firms in the settlement in 1966, there were no opportunities to make sufficient income to cover one's cost of living there, with the exception of the one individual running his own small business.

Recruitment of employees to work in remote and climatically inhospitable outposts has always been a difficult task. It has been faced by every nation which has ever had a colonial empire, or a frontier region within its borders. In order to attract staff to settlements in Canada's North, both

government and private industry have traditionally had to offer large financial and material inducements. High basic wage rates, isolated post allowance and other standard fringe benefits are required at all levels of employment. An employee brought from southern Canada to a Frobisher Bay or an Inuvik or one of the smaller settlements expects to receive subsidized rental housing; a generous weight allowance for baggage applicable to each member of the family as well as the employee; travelling expenses for himself and family to the place of posting; heavily subsidized air fare once each year for travel of himself and family between the isolated post and the nearest main centre in southern Canada (Montreal in the case of Frobisher Bay). Other inducements include participation in a food ration system and a fresh food allowance.

Accommodations provided government employees in Frobisher Bay included furniture, major appliances, kitchen utensils and cookware, crockery and tableware - in fact all household furnishings except linens and glassware. Private agencies offered housing accommodation for their employees as well. In 1966, Frobisher Bay did not have housing for single employees; these were accommodated in the Federal Building which contained a mixture of single rooms and suites consisting of two bedrooms and a sitting room. There was a limited number of apartment

units having their own kitchen and bath facilities in the building. Married employees were accommodated either in apartment units or houses.

The main source of employment for non-Eskimos in the settlement was the Federal Government. The diversity of the duties and responsibilities of the various government agencies called for a wide variety of types and classifications of personnel. In 1966 in Frobisher Bay, all the administrative, professional, skilled tradesmen, technical, clerical and administrative support positions were filled by non-Eskimos from southern Canada. Each government agency establishment there had both classified civil servants and prevailing rate employees (see above, Chapter 8). Examples of the rates of pay drawn by prevailing rate non-Eskimo tradesmen are given in Table 14. Like the Eskimo prevailing rate employees, these "imported" tradesmen have many opportunities to earn overtime pay, an attraction of isolated settlement postings for many individuals seeking to earn large amounts of money.

Of a total of 308 members of the non-Eskimo work force in Frobisher Bay in 1966, 210 were government employees, of which the Northern Affairs Department alone employed 70. Private agencies in the settlement accounted for 98 non-Eskimo employees. There were approximately 566 non-Eskimo permanent residents, i.e., permanent as opposed to seasonal or transient

TABLE 14

Examples of Wage and Northern Allowance Rates Received
by Prevailing Rate Non-Eskimo Tradesmen Employed by the
Department of Northern Affairs and National Resources
at Frobisher Bay for the Months of July, 1966 and March, 1969

Classification ^{1/}	Basic Hourly Rate of Pay		Northern Allowance		Gross Month's Wage ^{1/}		Net Total Month's Wage ^{2/}	
	July 1966	March 1969	July 1966	March 1969	July 1966	March 1969	July 1966	March 1969
Electrician	3.35	4.10	.86	.83	871.00	964.00	610.00	627.00
Plumber	3.50	3.98	.68	.42	794.00	1,113.00	548.00	772.00
Oil Burner Mechanic	2.35	3.98	.42	.83	560.00	1,239.00	468.00	817.00
Labourer	1.85	3.59	.42	.42	440.00	935.00	337.00	661.00

1/ The incumbents of the position are not the same for each year.

2/ Deductions are made at source for income tax, medical/hospital insurance, union dues, rent and fuel tax (N.W.T. tax on fuel oil).

workers such as those coming to the settlement in connection with construction programs. There were far more single employees than those with families.

There were two basic differences between those jobs held by Eskimos and those by non-Eskimos. These were in the grades or levels of jobs held, and in wages rates, an indication of which may be obtained by comparison of Table 14 containing sample rates for non-Eskimo prevailing rate tradesmen with Appendices B and C which contain sample wage rates and earnings, respectively, for Eskimo prevailing rate employees in similar types of work. Another way in which non-Eskimo wage employment differed from that of Eskimo employment was in respect to seasonality. Whereas there were clear fluctuations in Eskimo employment rates according to the season of the year, such was not the case with the non-Eskimo work force permanently resident in the settlement. Government departments employed some casual help during the summer season, usually university students who worked from May to September. In general, however, large numbers of transient non-Eskimo workers appeared on the scene only during times of large construction programs. From time to time in the past, longshorement were brought in at sealift time to offload ships. In 1965, the two private firms on contract to the Department of Northern Affairs in the settlement had handled

the bulk of the sealift work, as they did in 1966, using Eskimo labour.

As of 1966, it appeared that any substantial growth in non-Eskimo wage employment would depend entirely on the future development of the settlement. Increase in non-Eskimo employment in the private sector, for instance, would depend very much on whether any industrial or commercial development would take place in the settlement. The settlement offered no prospects for growth of already existing private enterprise. Despite plans being prepared for future physical development of the settlement in 1966, examined in the next chapter, it did not appear that future development of Frobisher Bay would offer any attractions to large numbers of non-Eskimos. It seemed reasonable to believe that the great majority of the settlement's non-Eskimo population would be there only because of high wages to be earned through working for government agencies there.

P A R T I I I

THE
NEW
FROBISHER
BAY

CHAPTER 10

A SECOND PLAN FOR FROBISHER BAY

FURTHER STUDY

In the course of its first ten years, the settlement of Frobisher Bay received little attention in terms of formal planning. It just grew in response to circumstances prevailing at any particular time. During its second decade, it was subjected to intensive study by government administrators and planners who became concerned with its future course of development. Great expectations were held for the settlement, expectations which came to nothing. The first elaborate plan (Frobisher Development Plan I) for a model town was shelved, only a small portion of the total scheme being undertaken. For some two to three years following implementation of Phase I of the first development plan, little more than a holding action was undertaken by the Federal Government in the settlement.

By mid-1965, however, it had become evident that more positive action was required with respect to development of the settlement if the rapidly growing population were to be accommodated. Housing was urgently required for both Eskimo and non-Eskimo residents. Much of the existing housing consisted of "temporary" buildings thrown up by the U.S. Air Force. Many buildings dated from the 1940's and early 1950's; none had been

intended as permanent year around housing accommodation. Eskimo housing, as in many areas of the Canadian Arctic, was inadequate from the point of view of both quality and quantity; much of it was well below any conceivable minimum standard prevailing anywhere in the world.

By the mid-1960's, the Federal Government had become fully aware that it could no longer follow programs based on the premise that most Eskimos would continue to live on the land. Government planners faced the fact that the time had come to plan positively in terms of the Eskimo becoming a part of the modern Canadian economy. It was finally recognized that active steps must be taken through development of programs which would aid him to adjust in all phases of his life. One area in which concrete action could be taken was in Eskimo housing.

In 1965, the Department of Northern Affairs and National Resources announced a new Eskimo housing policy, the Eskimo Low Cost Rental Housing Plan, under which houses would be provided for Eskimos under a rental scheme geared to their ability to pay. This program would ensure that every Eskimo family, regardless of economic circumstances, would be accommodated in a house of better quality and larger size than had ever been made available to Canadian Eskimos (I.A.N.D. Press Release 1-65141, October 21, 1965). Two basic stimuli lay behind development of this plan. One was the issuing of the report of the Royal

Commission of Health Conditions in Canada in 1964, the Hall Commission Report, which roundly denounced housing among Canada's indigenous population, citing statistics on death rates, causes of diseases and relating these directly to housing conditions (Report of the Royal Commission on Health Services, 1964: Vol. 1:222-225). The second stimulus was the complete failure of earlier programs, particularly one designed to encourage Eskimos to buy houses. This particular scheme failed throughout the Canadian Arctic; few Eskimos were financially able to purchase houses. The program was poorly conceived and badly administered. In addition to being ahead of its time, the program was not accompanied by an adult education program which would inform the Eskimos of its aims or provide them with the necessary knowledge to comprehend fully all the ramifications concerned with purchasing housing.

Implementation of the new rental housing plan would mean that many houses would be required for Frobisher Bay. At the time of the announcement of the rental housing scheme in 1965, the Federal Government had already been carefully considering the future of the settlement of Frobisher Bay for some months. If some hundreds of thousands of dollars were to be invested in Eskimo housing in the settlement, it seemed to be an appropriate time to again consider the future of the settlement to ensure that such a level of expenditure there was justi-

fied.

Investigation of the expenditures made by the government in Frobisher Bay over the years revealed that a great deal of money had been spent just in maintenance of aged buildings and in patchwork construction programs undertaken to expand existing facilities and provide only the minimum of new construction. Over \$40,000,000.00 had been spent there just on capital programs up to 1963, a figure which did not include the whole Phase I of the Frobisher Development Plan. During the next two to three years, considerable capital investment had been required just to do little more than make the most basic repairs to existing buildings. By the winter of 1965/66 it had become clear to government planners that basic decisions were required concerning Frobisher Bay.

Some government authorities held that Frobisher Bay should not be expanded since it was already a socially unhealthy place, was poorly administered and lacked any form of economic base, or prospects of any, other than the activities of the Federal Government. However, to senior Northern Affairs officials, it seemed clear that Frobisher Bay had become a permanent settlement; that it would continue to grow regardless of what programs were or were not initiated there. Investment in the settlement was too great to write off. There seemed no justification at that time for establishing a new settlement

in another location to replace Frobisher. Furthermore, the settlement now contained too many people who regarded it as their home to be just written off.

Debate within the government as a whole and within the department most concerned, the Northern Affairs Department (which became the Department of Indian Affairs and Northern Development in late 1966) continued on the future of Frobisher Bay for the next three years. This future had to be considered in a broader context than had been the case 10 years previously. In 1967, Yellowknife was named the capitol of the Northwest Territories, as part of a plan under which the Territorial Government would take over administrative responsibility for many northern programs over the next few years. Yellowknife was even farther removed from the Eastern Arctic than Ottawa. Frobisher Bay acquired possible significance as a sub-capitol for the Eastern Arctic. If this happened, it would have a definite role and would continue its existence as a government administrative centre. Prior to the official policy decision on transfer of many programs to the Northwest Territories Government, thought had been given to the designation of Frobisher Bay as a primary Federal Government field administrative centre. This was part of a plan under which some decentralization of absolute control from Ottawa could be effected. Churchill, Manitoba, the Northern Affairs Regional Office for the Keewatin

Region for many years, was considered as a possible administrative centre for the whole of the Eastern Arctic. However, its location outside of the Northwest Territories posed a variety of problems. Other centres ranging from Igloolik on Melville Peninsula to Baker Lake in the Keewatin had also been proposed as sites for administrative sub-capitols. Ultimately, Frobisher Bay was selected as the settlement in which to concentrate further administrative development. Its accessible location, the massive capital investment made there over the previous two decades, the large runway, the infrastructure already concentrated there, and the sheer size of the settlement weighed in its favour in the final decision. Part of that decision concerned the formulation of yet another development plan for the settlement.

FROBISHER DEVELOPMENT PLAN II

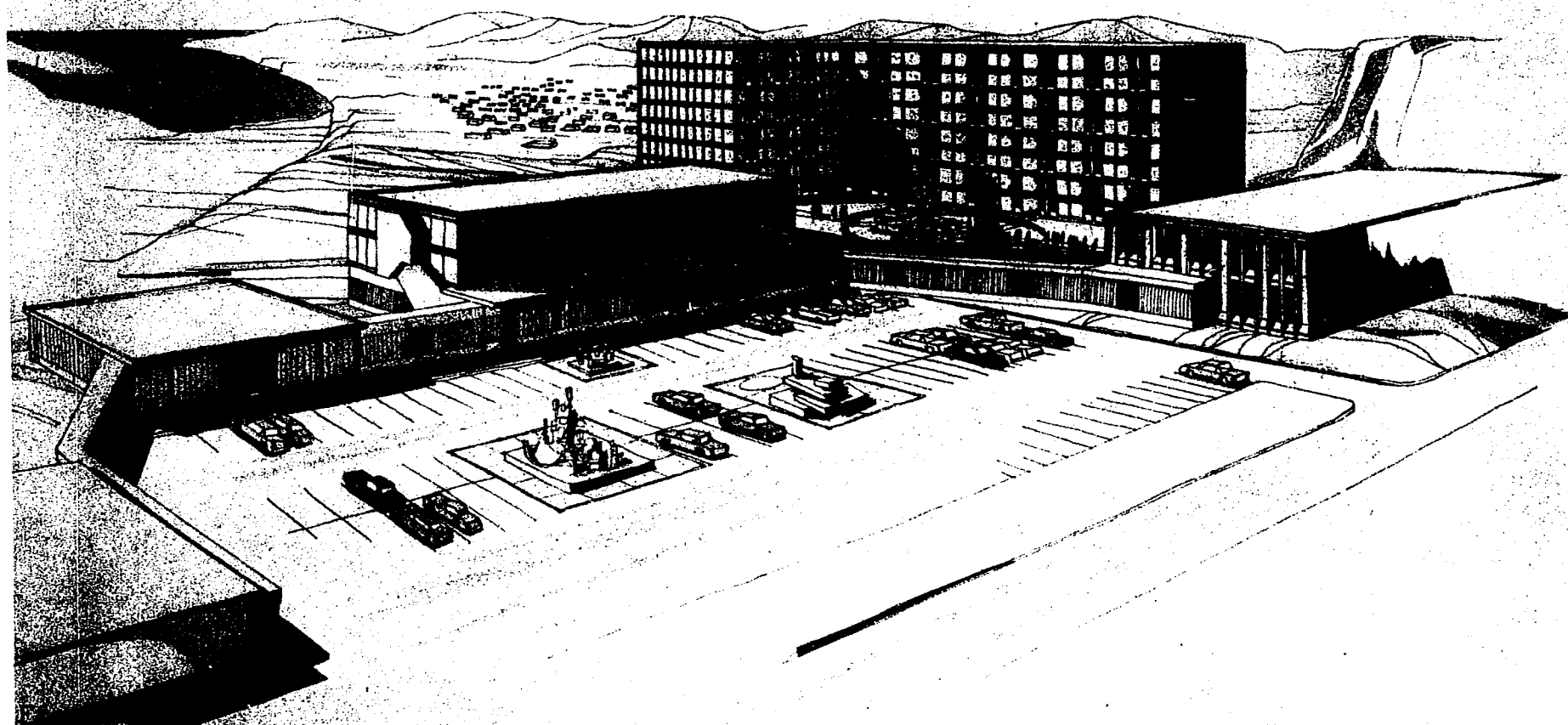
On December 23, 1968, a new plan for Frobisher Bay was announced. The new scheme would provide a modern town with businesses, shopping and recreation facilities, a six-storey apartment block and modern housing (I.A.N.D. Press Release 1-68174, December 23, 1968). The concept behind the new plan, Frobisher Development Plan II, was the creation of a regional administrative and development centre in the Eastern Arctic. A vocational training school and accompanying hostel accommo-

dation for Eskimo students from the Arctic Islands formed part of the plan.

The new development plan went far beyond the concept of previous plans devised for Frobisher Bay, and of plans for any other Canadian Arctic settlements. It called for private enterprise to not only undertake construction required under the plan, but also to operate certain facilities, e.g., the proposed office building, hotel and apartment complex (Press Release, Ibid.; Stairs, 1969). While not as radical in certain aspects of design as Frobisher Development Plan I (which had at one point called for the erection of a plastic dome over Frobisher Bay), Development Plan II nevertheless included many innovations in terms of usual Arctic construction practices (Figure 3).

Like its predecessor, Frobisher Development Plan II centered on Astro Hill (Map 19). The major complex, containing hotel, office building, apartment building and town shopping centre, was to be developed around the base of what had been Astro Hill. Building of housing, including row housing, would take place between the Town Centre and the Main Base, and from Main Base south toward Ikaluit. A major innovation comprising part of the plan was the mixing together of housing for Eskimo and non-Eskimo residents. The bulk of the new Eskimo housing

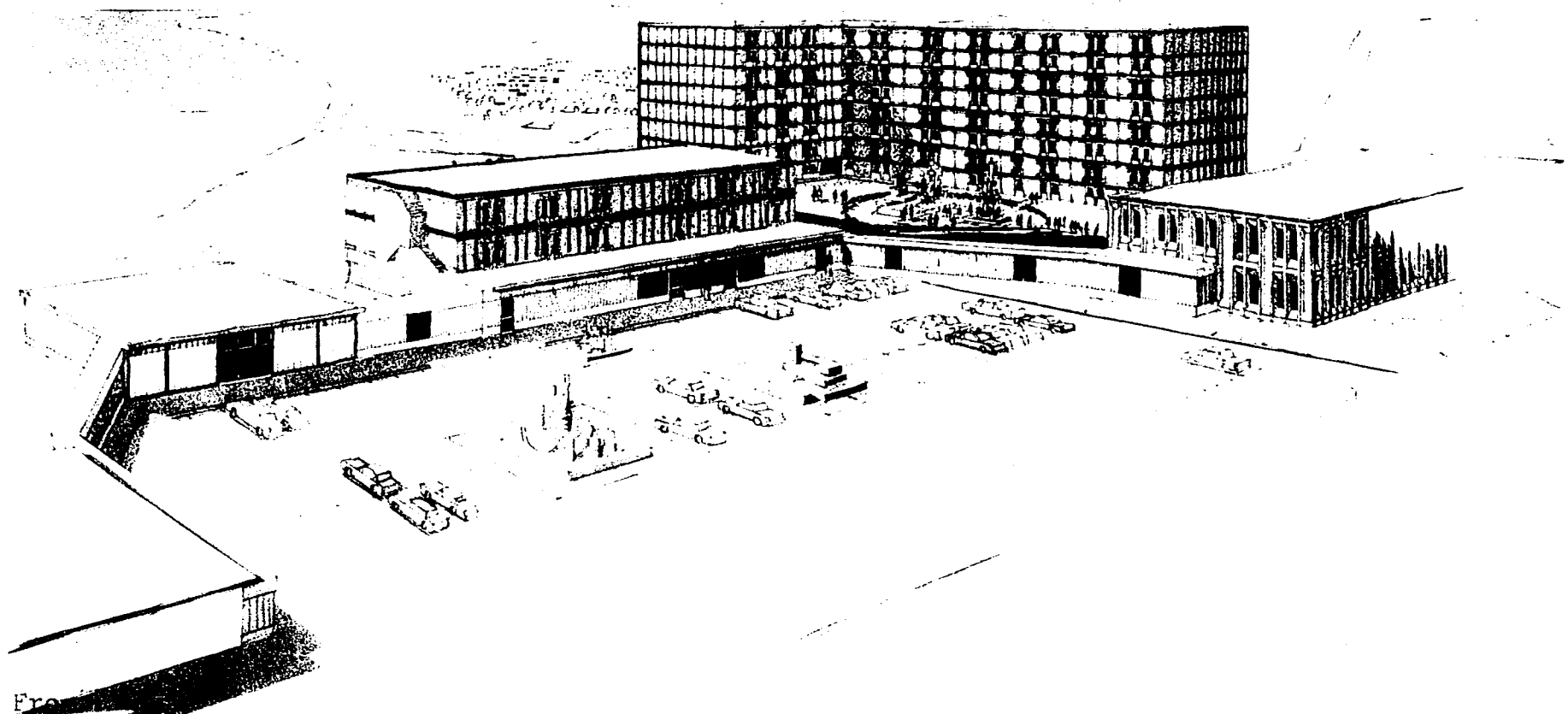
The Frobisher Complex - reading from left to right are the recreation centre, stores, hotel, high rise apartments and offices.



A.R.D. Press Release 1-68174
December 23, 1968.

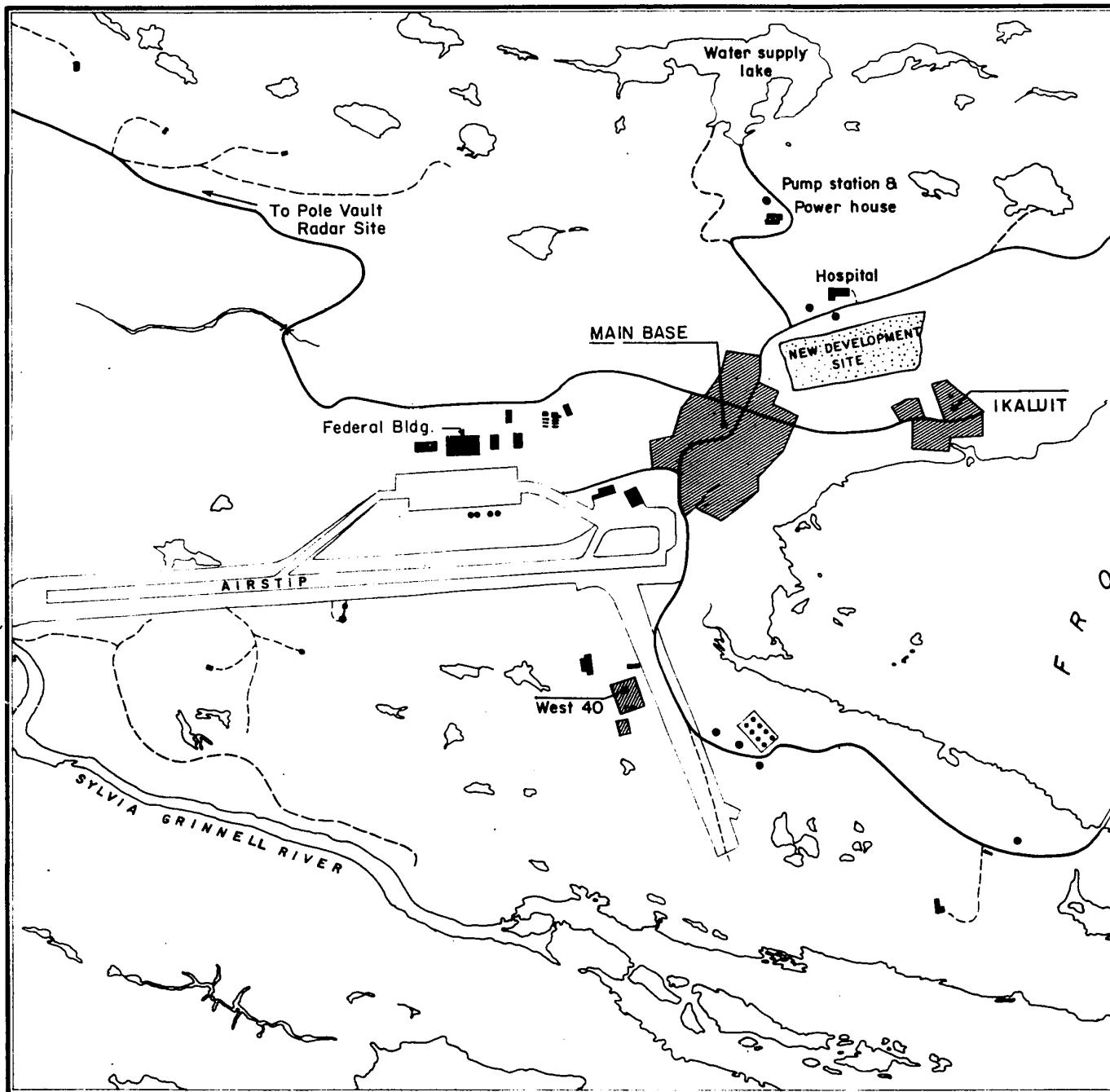
FIGURE 3

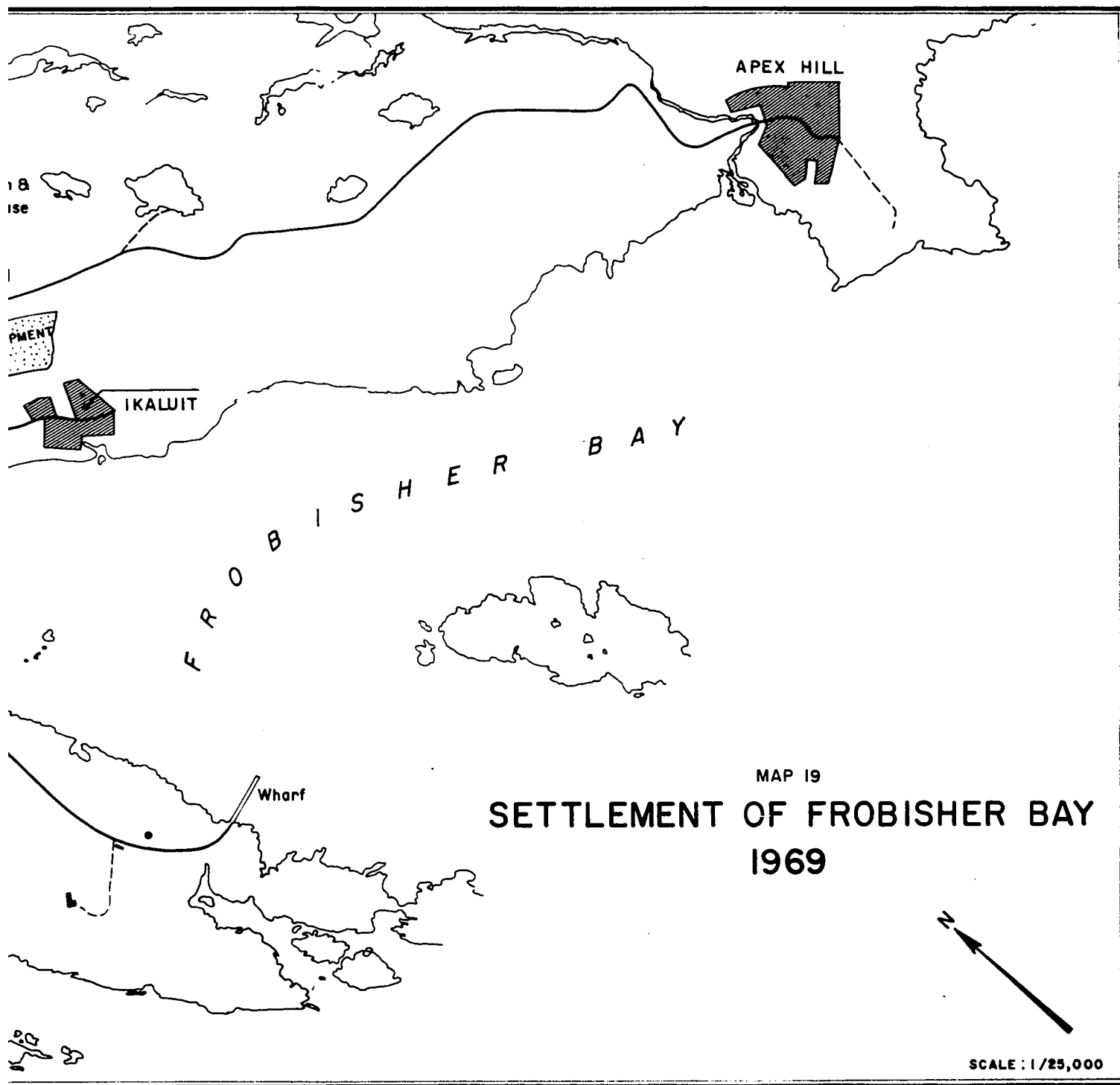
The Frobisher Complex - reading from left to right are the recreation centre, stores, hotel, high rise apartments and offices.



Fro
I.A.N.D. Press Release 1-68174
December 23, 1968.

FIGURE 3





was to be constructed along the shore of Koojesse Inlet, reflecting the wishes of the Eskimo population that their housing arrangements offer them access to the beach area. A major component of the new plan involved the modification of the Federal Building to serve as a pupil residence for the vocational training school, the latter to be erected in the vicinity of the Main Base area.

Completion of the new plan would result in considerable alteration of the face of Frobisher Bay, both in terms of provision of new buildings and in concentration for the first time of the population in one large area. In the economic appraisal of the costs of the operation and maintenance of the settlement, it had been concluded that Apex Hill should be phased out, its residents encouraged to move over into the main area of the settlement. This decision was motivated largely by economic considerations. Located nearly four miles from the Main Base over a twisting gravel road, the sub-centre had proved very expensive to maintain over the years. The road had to be ploughed in winter and graded on a daily basis in summer. Workers and school children living in Apex had to be transported between there and the Main Base and the Federal Building. The water tank trucks which drew their water from the water treatment plant adjacent to the power plant had to

make many daily trips to provide Apex residents with water. This added considerably to the cost of provision of essential services in the settlement as a whole. In the absence of any justification for doing so, the road to Apex Hill had never been paved. At the time of the designing of Frobisher Development Plan II, this road had deteriorated to the point at which it would have either to be rebuilt or abandoned as annual maintenance costs had been increasing steadily. Apex Hill was frequently cut off from the rest of the settlement when whiteout conditions occurred. Severe weather conditions often brought down the power lines serving the sub-centre, resulting in costly repairs to lines and also to pipes in buildings left without heat when the power supply failed.

Social considerations had some bearing on the decision to phase out Apex Hill. Frobisher Bay had long been a divided settlement, both physically and socially. For many years there had been little interaction between those groups living in the various sub-centres of the settlement. Each little sub-community had developed its own community centre and community activities; the separate groups, Eskimo or non-Eskimo, seldom met on common ground. The settlement as a whole had lacked a central social focal point for either of the two population groups. It was felt that by closing Apex and moving the settlement population into one central area that some sense

of cohesiveness and perhaps overall community identification could be developed. Yet another motivating influence behind the phase-out decision was a combined social-economic factor, that of the location of the Hudson's Bay Company store. The store had been located in Apex Hill since its move to the settlement from Ward Inlet. Much of the settlement's Eskimo population, however, dwelt in Ikaluit. Lack of reliable public transportation in the settlement meant that many Eskimos from Ikaluit suffered hardship in getting to the main store. Closing down of Apex Hill would cause the store to move to the Main Base or the new town centre area, making it equally accessible to all. According to the plan, Apex Hill would be phased out gradually; none of the new Eskimo houses would be built there, nor would any new staff housing be located there. No one would be "forced" to move from Apex, but after a certain date no services would be available there, nor would the road be maintained.

DEFINITION OF SETTLEMENT ROLE

A whole field of study has developed around the classification of towns and cities according to their functions or combination of functions. A classificational hierarchy exists which allows definition of urban collections of any size according to size, age, basic function and many other factors or combinations of factors. Throughout its period of existence,

Frobisher Bay could be classified according to functions. For its first ten years it was a military base; for the next ten, it was a combined military base and government administrative centre. Since its founding, however, it had had singularly unplanned and unorganized growth. Until the mid-1950's, little thought had been given to its future and thus little direction given to its development. The first formal planning brought to bear on the settlement, Frobisher Development Plan I, had been developed on the basis of the settlement's having a normal economic function in the sense that a southern Canadian town would have a function, e.g., market town, transportation centre, county seat or industrial town. In forming Development Plan I, planners and administrators had thought in terms of developing the settlement primarily as a service and transportation centre. Its administrative function was conceived only as part of the role the settlement would play. There seemed to be an unwillingness or inability to recognize that a settlement could have just a straight administrative function. The first plan was in fact unrealistic and poorly conceived, based as it was almost entirely on unjustifiable optimism concerning "normal" economic development of the settlement.

In contrast, Frobisher Development Plan II was based on the settlement's existing function as a government administra-

tive centre. This was the first time that it had been acknowledged that the settlement's future could revolve around this central activity.

Although not predicated on hopes for the growth of an industrial base in Frobisher Bay, the new plan did make allowance for possible development of the private sector. This was done through assignment of development of any commercial activity to private enterprise from the time of initiation of the plan by provision for private building and renting of the town centre's facilities. The close alliance between government and private enterprise proposed by the new plan was regarded as something of an innovation in the development of the Canadian North, although it was not the first instance of such co-operation.^{1/} It was, however, the first such joint enterprise involving a project other than a non-renewable resource development venture. The significance of the planned early active involvement of private enterprise in the development of a northern settlement, as set forth for Frobisher Bay, should not be overlooked, either in terms of Frobisher's own future or of

^{1/} In October, 1967, several of Canada's leading mining and oil firms agreed to undertake a joint exploration program for oil in the Arctic Islands. In December, 1967, the Federal Government agreed to provide additional funds under its Northern Mineral Exploration Assistance Program. Panarctic Oils Limited was thus founded as a joint government-private oil exploration enterprise.

development of other Canadian Arctic settlements.

Announcement of the new plan for Frobisher Bay produced notable results within the settlement in only a few months after it was made. In fact, rumours of a possible new development plan circulated for nearly two years before formal announcement was made and produced notable changes in the settlement. Before considering the future of the settlement, it is pertinent to briefly examine the settlement as it was in 1969, the first year of development work in connection with the new plan.

CHAPTER 11

CHANGING FROBISHER BAY

PHYSICAL CHANGES

In early 1969, the writer returned to Frobisher Bay for the first time since 1966. From the air, certain physical changes were evident, notably the filling in of the formerly empty space between Ikaluit and the Main Base area with new, modern housing. On the ground, the changes were less noticeable. There were still only two snack bars and one bank; the Hudson's Bay Company continued to operate its two outlets, one at Apex Hill, one at the Main Base. Unless one had access to a private vehicle, it was still difficult to travel over to Apex Hill; there was still no reliable public transportation service other than a (new) busy taxi service. One clearly discernible change, however, was the emergence of a distinct "downtown" sector of Frobisher Bay. Three new stores had opened in the Main Base: one a boutique offering "mod" clothes for men and women; the second a dry goods store featuring low-priced lines of clothing, notions and knick-knacks; the third a privately owned handicrafts store. This latter was quite distinct from the newly established outlet of the Ottawa-based government crafts marketing agency located right in the airport building. Through the opening of the private store and the

government outlet, Frobisher Bay carvings and handicrafts had finally been placed within the physical reach of the transients and tourists passing through the settlement.

Despite the relatively few physical changes, research revealed that there had been many significant modifications to the settlement's economy in the three-year period.

THE PRIVATE SECTOR

The first discernible change was the presence of efficient, radio-dispatched taxis which met aircraft at the Frobisher airport. Formerly, government visitors were met by vehicles from their respective departments; others used whatever means of transportation they could find to reach the government-run "hotel" (the Federal Building). The new taxi company, which had been in business for over a year, operated three vehicles, and through use of a radio dispatching system contrived to provide good local transportation service for the first time.

In addition to the three new stores mentioned, there were several other new private ventures in the settlement. There were many more small "home" businesses than there had been in 1966, including insurance, radio and appliance repairs, seamstressing and tailoring, hairdressing, movie rental and clothing rental. Several partnerships or syndicates had been initiated, dabbling in many kinds of businesses, such as under-

taking general cleanup work, building contractors, sealift unloading, warehouse cleaning. Two small businesses which had been active in 1966, one of which supplied and stocked food vending machines in the Federal Building, the other being a general contracting business, had survived since 1966, an unusual feat in changeable Frobisher Bay.

Nordair Limited, formerly only a transport company, had diversified. The company had formed Nordair (Arctic) Limited, which in addition to handling local air charter operations from Frobisher Bay and the newly established regular services between Frobisher and the outlying settlements of southern and eastern Baffin Island, had opened a fresh food order service. Residents could place orders for fresh food to be carried from Montreal on Nordair scheduled runs. Previously, either the Hudson's Bay Company ordered fresh food on request or residents ordered privately from their own sources.

Nordair Limited, the parent company of Nordair (Arctic) Limited, had markedly improved its northern services through the acquisition of a Boeing 737 twin jet aircraft which cut the Montreal-Frobisher run to three hours from the five hours required for the Super Constellation aircraft. The company's services on the island had been expanded through a September, 1968 ruling of the Canadian Transportation Commission. This ruling allowed Nordair to establish scheduled services between

Frobisher Bay and Pangnirtung, Broughton Island, Clyde River and Cape Dyer on eastern Baffin; Cape Dorset on western Baffin; and Igloolik on Melville Peninsula. It was also authorized to establish a service between Frobisher Bay and Coral Harbour on Southampton Island, which provided a new link with the rest of the Northwest Territories.^{1/}

The two large private Frobisher Bay firms on contract to the Department of Northern Affairs in 1966 (re-named the Department of Indian Affairs and Northern Development in late 1966) were still active in the settlement in 1969. The catering company had become firmly established as the central source of bread, the Northern Development Department not having re-entered that sphere of activity.

^{1/} The Canadian Transportation Commission's rulings of September, 1968, made several basic changes in existing northern air transport networks, changes designed to provide an east-west network, replacing the former north-south only situation. Nordair was affected through being permitted to fly a weekly Frobisher-Coral Harbour run which connected with Transair Limited (Winnipeg), which serves the Keewatin region, and operates a Churchill-Coral Harbour run (via other Keewatin points). The same C.T.C. rulings authorized Pacific Western Airlines (Edmonton), which serves the Mackenzie District, to extend its service to include a Yellowknife to Resolute run. Nordair's long-held Resolute-Frobisher run completed the circle. The result was that Frobisher Bay was connected with the rest of the N.W.T. through the latter run and through the connection at Coral Harbour with Transair. The latter also had a Churchill-Yellowknife run.

In 1969, there were still two services which could have been undertaken by private enterprise, but which were still provided by the Federal Government. These were the laundry and dry cleaning service and the hotel operation. Several useful services were still lacking. There was no public transportation service, the settlement did not have any restaurant facilities beyond the two snack bars, nor were there any "lounges" or other formal recreation or entertainment centres.

GOVERNMENT-SPONSORED ENTERPRISE

The difficulties faced by the Ikaluit Eskimo Co-operative in 1966 were outlined in Chapter 8. In the intervening years, the co-operative had faced additional problems which led to important changes in it. In 1967 and 1968, the co-operative's commercial fishery was carried out on a reduced quota of 5,000 pounds. The 1968 season was the final one for the fishery. On the basis of biological studies carried out periodically since the fishery began in 1958, the Department of Fisheries had concluded that the Arctic Char population of the Sylvia Grinnell River could no longer support the heavy demands made on it, and served notice that the commercial fishery would no longer be granted a quota. This left the co-operative with nothing but carving and handicrafts which had been in considerable difficulties for some years. With the assistance of co-operative

development officers of the Northern Development Department, the Ikaluit concern succeeded in rationalizing its operations to some extent.

In 1968, the co-operative shop was moved to the West 40 where it concentrated on production of carvings and handicrafts. The retail shop in Frobisher Bay was given up. The work was taken over by the government's central marketing agency which opened its own retail shop in Frobisher Bay in 1968. This shop sold not only Frobisher Bay products, but also carvings and handicrafts from all over the Canadian Arctic. The Ikaluit Co-operative continued as a purchasing agency, buying carvings and handicrafts from local artisans and selling them to this outlet, or shipping them directly to Ottawa. The co-operative had been strengthened by allowing carvers only part of the price of carvings at the time of delivery to the co-operative; they received the balance after the product had been sold either in Frobisher Bay or through the central marketing agency in Ottawa. This provided the co-operative with funds for the purchase of carvings. As the co-operative had been operating on the new basis for only a few months in early 1969, it was not possible to judge what success it would have. However, all indications were that it would continue to provide a livelihood for some Eskimos at approximately the same level as in 1966.

ESKIMO EMPLOYMENT

In 1969, the Eskimo population had the same sources of income as in 1966. Wage employment predominated. A survey by the writer of wage employment among Frobisher Eskimos in March, 1969, revealed some significant changes, however. Total Eskimo employment in March, 1969, was 197 persons, including permanent and casual workers. The Department of Indian Affairs and Northern Development remained the largest employer, with 87 Eskimo employees approximately equally divided between permanent and casual workers. The private firm on contract to provide janitorial and catering services had raised its Eskimo employment from 32 to 46 in 1969. The Crown Corporation supplying power in the settlement had doubled its permanent Eskimo staff to 14. March is traditionally a slack month for casual employment, but in 1969, the Northern Development Department had a 30 per cent higher Eskimo casual labourer complement than it had previously shown in that month, and other government agencies had equally significant increases in casual employment of Eskimos.

The most significant feature of Eskimo employment in Frobisher Bay in March, 1969, was the great increase in the number of Eskimos working in higher level jobs, e.g., clerks, clerk-typists, typists, welfare administrators, bookkeepers.

There were 10 Eskimos so employed, compared with only one in 1966.

Pay rates for Eskimo workers had undergone changes since 1966 (Appendix B), as had job classifications. Despite the fact that many Eskimo workers in Frobisher Bay had had steady employment in the same occupations for more than 10 years, many were still not entitled to receive the full rate of pay prevailing for the positions they occupied. For those employed by government agencies, this was because they had been unable to meet the formal academic and experience standards set by the Public Service Commission of Canada. In late 1968, because of new collective bargaining arrangements, examination of Eskimo tradesmen employed by government agencies began. It was shown that most of the Eskimo tradesmen employed by the Northern Development Department as "labourers" or trades "helpers" had in fact a very good knowledge of the theory of their trades as well as good practical knowledge. English language difficulties had prevented many from receiving more than 80 per cent of the basic rate paid for particular tradesmen's positions. Since most of the older men would have had difficulty in passing a written theory examination in their trade, they were permitted to undergo a practical rating test. As a result, many of them received substantial pay increases and a more definite job classification. Streamlining of the "isolated post allowance"

rates and a more rational application of them to Eskimo employees also resulted in wage increases to many permanent Eskimo employees of government agencies in Frobisher Bay.

Over the years, a combination of pay increases, work experience and seniority had allowed such permanent Eskimo employees to increase their income. Rates for casual employees doing relatively unskilled work had also increased through the years, keeping pace with the general upward trend in wage rates.

As of March, 1969, all employers in Frobisher Bay anticipated that Eskimo workers could face many years of steady employment because of construction for Frobisher Development Plan II beginning in the summer of 1969. In fact, there was every indication of a "boom" period in Eskimo employment there.

ESKIMOS AND SOCIAL ASSISTANCE

Analysis of the social assistance picture in Frobisher Bay for the calendar year 1968 indicated an appreciable drop in the total expenditure for the program and in the number of persons drawing assistance from that of 1965. In 1965, a total of \$59,200 was paid out; in the calendar year 1968, \$38,500.00. The total monthly average payment under the program had fallen to \$3,000.00 from the \$5,000.00 for 1965. The average number of recipients (family heads plus dependents) was 221, drawing an average of \$14.00 per month. In terms of cases (households)

this amounted to 48 cases for an average of \$62.00 per case, as against the 1965 figures of 77 cases for an average of \$63.00 per case or 300 individuals at an average of \$16.00 each. The most appreciable decline between 1965 and 1968 was in the number of persons - or cases - drawing assistance for economic reasons.

Although not a startling decline, the trend downward had been steady over the three-year period, despite the fact that hunting activity had remained at approximately the same levels as recorded for 1965 and 1966, and that carving had not been a stable source of income for many, owing to difficulties in the co-operative program (Table 15). The decrease in social assistance payments, particularly in the economic category, over the three-year period, which persisted through the first three months of 1969, may be attributed to increased wage employment in connection with housing construction under the Eskimo Low Cost Rental Housing Program. In addition, there had been an overall increase in employment of Eskimos by both government and private agencies. As elsewhere, there were cases for which social assistance would always be required, e.g., the aged and infirm. There was also that small percentage of Eskimos who were unable or unwilling to adapt to wage employment. In addition, those attempting to earn their livelihood only from hunting required assistance from time to time, despite their best

TABLE 15

SOCIAL ASSISTANCE PAYMENTS TO FROBISHER BAY ESKIMOS
BY REASON FOR PAYMENT, FOR SELECTED CALENDAR YEARS

<u>1963</u>	No. of Persons	No. of Cases	Cost per Person	Cost per Case
<u>Reason</u>				
Health	271	78	\$19.00	\$67.00
Dependent Child.	364	103	24.00	83.00
Economic	1,141	266	15.00	66.00
Supplement.	<u>7</u>	<u>7</u>	<u>36.00</u>	<u>37.00</u>
Total	1,783	454	\$18.00	\$70.00
 <u>1965</u>				
Health	1,237	294	\$17.00	\$73.00
Dependent Child.	668	206	21.00	69.00
Economic	1,656	421	14.00	54.00
Supplement.	<u>17</u>	<u>12</u>	<u>42.00</u>	<u>60.00</u>
Total	3,578	933	\$17.00	\$63.00
 <u>1968</u>				
Health	316	102	\$25.00	\$78.00
Dependent Child.	520	170	24.00	74.00
Economic	1,128	287	15.00	57.00
Supplement.	<u>123</u>	<u>19</u>	<u>14.00</u>	<u>90.00</u>
Total	2,087	578	\$18.00	\$67.00

efforts.

INTANGIBLE CHANGES

An additional change in Frobisher Bay of 1969 from that of 1966 was not measurable quantitatively; it was one of atmosphere, of attitudes, felt if not expressed. With the rumours, and finally, the firm announcement of Frobisher Development Plan II, a reaction occurred which might be expressed as a general feeling that the settlement would now progress. The announcement of the plan promised the settlement a future, at least in so far as the non-Eskimo residents were concerned. It was no longer just existing or holding its own, subject always to stop-gap projects. It had been given a role, a definite future, if only as an administrative centre. Businessmen and would-be businessmen expressed definite interest in the future development of the settlement and optimism with regard to business projects. Eskimo residents spoke in terms of more jobs, possibly better jobs, for everyone. As had occurred often in the settlement's brief history, Eskimos had begun moving into Frobisher from other parts of Baffin Island in hopes of finding wage employment. Many had had to be turned back in 1968, and efforts were being made to discourage others from leaving their own settlements for Frobisher owing to lack of accommodation there and to the fact that many immigrants and would-be immigrants

lacked wage employment experience, skills or sufficient knowledge of English for any but the most basic work.

The question remains whether the optimism so prevalent in the settlement in early 1969 was justifiable. In the final chapter of this thesis, prospects for the future of Frobisher Bay are discussed against the background of its history and economic situation presented in earlier chapters, and in the light of present-day knowledge of definite plans, proposals and prospects for northern development generally and of the Eastern Arctic particularly.

CHAPTER 12

THE FUTURE OF FROBISHER BAY

In slightly more than a quarter-century of existence, the Frobisher Bay settlement has evolved gradually from its beginnings as a military base to its present status as the major community in the Eastern Arctic. It is an artificial community which has continued to exist simply because the Federal Government needed to maintain officials in the region to implement programs for northern development. In a sense, it remained in existence because for most of the time no final decision about its future was reached by government planners. They could decide neither to develop it nor to close it down. While administrators speculated on the future of the region and formulated elaborate plans for a model community there, a process requiring several years, they necessarily had to pay for their indecision through expenditures of vast sums of money in the existing settlement to provide social welfare programs for the constantly increasing Eskimo population. Delay and indecision made the first rational plan out of date because of changing technology and shifting world and national economic conditions. Unable to pull out of Frobisher Bay because of the large Eskimo population and because of the considerable capital investment in administrative infrastructure there, the Govern-

ment of Canada decided to increase investment in the settlement by a second development plan. The government now recognized that Frobisher Bay's only possible function was administrative. In addition, there was nowhere else to put the local Eskimo population if the settlement were abandoned. So it was decided to make a determined effort to utilize Frobisher Bay fully as a regional centre for government administrative purposes and as a place in which social services for the Eskimo people could be concentrated.

With this decision reached, the settlement's future existence was assured for some time to come. At last it had been given a specific role. A question which remains is: what effect will this policy have on the population now in the settlement, and on the development of the settlement as a whole? Secondly, can the settlement develop additional functions? If so, what are they?

THE ESKIMO POPULATION AND ITS ECONOMY

Canadian Eskimos have a birth rate among the highest in the world.^{1/} Frobisher Bay Eskimos are no exception. In Appendices D through G, Eskimo population break-downs by age

^{1/} In the Northwest Territories in 1968, the birth rate for Eskimos was 53.3 per thousand (Canada, Department of National Health and Welfare, 1968).

group and sex are given for 1957, 1963, 1966 and 1969. From these, it is apparent that the Eskimo population of the settlement increased rapidly and steadily over that 12-year period. Whereas the increase between 1957 and 1963 was due in large measure to immigration to the settlement, the increase for the period 1963 to 1966 and from 1966 to 1969 resulted largely from natural increase (Table 16). Improved housing conditions and health care over the years have resulted in an extension of the average life span of Canadian Eskimos, nowhere more evident than in Frobisher Bay.

The Frobisher Eskimo population is young. Over the entire 12-year period for which selected years are represented in Appendices D through G, the tendency for the Eskimo population pyramid to have an extremely broad base has persisted and indeed even intensified in recent years. In 1966, 12 per cent of the total Frobisher Eskimo population was in the 0 to 4 years of age group, 20 per cent in the 10 to 19 years of age group. In 1969, the percentages were 18 and 22, respectively.

The youthfulness of the Frobisher Eskimo population must be borne in mind when considering future alternatives for both the settlement and its people. It will be necessary to formulate adequate long range plans for provision of school services and job training facilities. An immediate problem arises from the fact that over the next five years training

TABLE 16

CHANGES IN ESKIMO POPULATION OF FROBISHER
BAY BETWEEN JULY, 1966 AND MARCH, 1969

Population - 1966	1,082
New Births ^{1/}	122
Immigration ^{2/}	83
Emigration ^{2/}	67
Deaths ^{3/}	38
Population - 1969 ^{4/}	1,174
Net Numerical Increase	82

1/ Births only to those Eskimos resident in Frobisher Bay, July, 1966. New births among immigrants added to immigration figures.

2/ Actual number.

3/ Actual number of deaths resulting from accidents, old age and illness; figure does not include infant mortality figures for the three-year period.

4/ Total population figure refers to all those who "belong" to Frobisher Bay, whether physically present in March, 1969. No allowance made for those at Churchill Vocational School, Ottawa, jail or hospital in the south.

will have to be provided and employment opportunities found for the large numbers of young people at present in the 10 to 19 years of age group who have already left or will be leaving school to enter the labour force. Young people, 15-19 years, making up almost 8 per cent of the Frobisher Eskimo population in 1969, had already begun to present an urgent problem to government authorities concerned with their future well-being. Many of these young people began school late and did not complete their basic schooling before leaving. Unfortunately, many of them lack sufficient formal education for most of the available wage employment opportunities.

Another segment of the Frobisher Eskimo population urgently in need of training and opportunities for steady employment is the 20 to 30 years of age group which in 1969 formed 13 per cent of the total settlement Eskimo population. Many of the men in this group did not have steady employment in 1966 or in 1969. Lacking formal academic training, they usually have less English and less trades or vocational training than those in the younger age groups, and they lack the long employment experience of many of the older men (35 to 50+ years). Thus, the men of this age group are at a double disadvantage with respect to obtaining regular wage employment.

In addition to anticipated natural increase, the Eskimo population is expected to grow through immigration to Frobisher

Bay. Over the next two to three years, as construction work for Frobisher Development Plan II continues, families will move in from all parts of Baffin Island - as has happened in the past during "boom" periods. Many immigrants will remain in the hope of finding permanent work. An attraction of the settlement to residents of other Arctic Islands settlements will be the new vocational school scheduled to open in 1972. Parents will migrate to Frobisher to be near their children attending the school, something not possible when the children were sent to the federal vocational school at Churchill, Manitoba. Many of the parents may wish to remain in Frobisher Bay. A problem to be solved in connection with future development will be how these older people will support themselves.

From this discussion, it is clear that Frobisher Bay has served as a natural "concentration centre" for Eastern Arctic Eskimos. It is the most likely and logical centre of attraction. What will those who live there and who come there seeking wage employment, a better life, or other vague objectives do? What are the prospects of their being able to earn a livelihood? These questions require careful examination. They apply, of course, not only to Frobisher Bay, but also to other potential Arctic growth centres into which Eskimos from a wide area will either migrate voluntarily or be strongly encouraged by the government to do so.

The Eskimo economy of Frobisher Bay has developed from subsistence activity based on utilization of renewable resources to a largely wage economy based on employment provided in the settlement. The principal provider of this wage employment, and Frobisher Bay's chief industry, is "government". Removal of the government agencies would, under present circumstances, lead to the withdrawal of the private agencies, thus completely eliminating the basis of the Eskimo economy. Any addition to the government or private enterprises would strengthen the wage employment base through provision of more jobs for Eskimos. For a substantial portion of the Eskimo population, however, wage employment provides only a part of total income requirements. One reason for this is that many Eskimos depend on casual employment. Ten to 15 years ago, the average Eskimo family augmented its wage income through hunting, which provided cash income or credit through sale of sealskins, and a large proportion of the total food requirements through the use of meat. During the last decade, however, Frobisher Bay Eskimos have increasingly turned away from hunting except as a source of recreation and of popular traditional foods. They have become dependent on food from local stores. They have also become accustomed to material possessions obtainable only with cash. Development of the Eskimo economy of Frobisher Bay must, therefore, provide wage and salary employment.

The Frobisher Eskimos now depend on wage employment. What does the future hold for them? The older generation, who include semi-skilled tradesmen in government agencies, will doubtless be able to hold their jobs. What of the large number of young men and women in the settlement who have benefited from education and trade training, but have nowhere to utilize their acquired skills? Most of them are still far from qualified for even simple tasks such as file clerks and typists, jobs now held largely by persons imported from southern Canada. Behind this generation is an even larger one still in school. They will have to be fitted into the labour force - but the question remains whether the labour force will be at Frobisher Bay or elsewhere. Frobisher Bay is not unique in the Canadian Arctic in having a large proportion of its Eskimo population dependent on wage employment. It is unique, however, in the length of time that steady wage employment has been available to many of the population, and in the wealth of work experience and trade skills possessed by a large part of the Eskimo labour force. Jobs for Eskimos who have skill or experience, as well as for those who are rapidly moving into the labour force, will depend upon the growth of the settlement itself and upon the diversification of its economy. At the same time development of the settlement itself will depend in large measure on the ability of the Eskimo population to participate actively in this economy.

Many schemes have been advanced over the years both within and without the Federal Government for promotion of manufacturing industries in the Canadian Arctic. Many have been based on the premise that Eskimo labour, although unskilled, is cheap enough to warrant location of labour-intensive industries at large centres such as Frobisher Bay. As shown in Chapter 8, the Eskimo is not a cheap labourer in terms of wages and salaries. In choosing to treat Eskimo employees like non-Eskimo employees, at least in the granting of certain perquisites such as isolation pay allowance, the Federal Government brought the Eskimo worker into the ranks of high cost labour. No local manufacturing enterprise will be able to offer less than the prevailing wage rates now earned by Eskimos in Frobisher Bay. The government, first through the Department of Transport, then the Northern Development Department, has operated as a monopoly in Frobisher Bay with respect to wage employment of Eskimos. Once established, these departments remained in the settlement and were a constant source of employment which the Eskimo worker could rely on between the comings and goings of the U.S. Air Force. Over an eight-year period between 1957 and 1965, the Department of Transport built up a large body of semi-skilled and unskilled but job-experienced Eskimo employees. The (then) Department of Northern Affairs began building up its own corps in the same period, and at the

same time began inheriting Department of Transport Eskimo workers as the latter turned over its settlement management functions. It is safe to say that much of the "cream of the crop" of employed Eskimos work for the Northern Development Department. Only a private entrepreneur willing to pay the same rates can attract or hold Eskimos now working for that department. Wage rates paid to Eskimos in Frobisher Bay are high relative to the degrees of skill they provide, a factor that must be considered in plans for the economic development of the settlement.

The future of Frobisher Bay and of its Eskimo population, therefore, requires consideration of several factors. One is the considerable extent to which the Eskimos depend on wage employment. There is, therefore, an obvious need to find more jobs for them. Economic development of the settlement requires that the large Eskimo labour force be fitted into activities which will enhance the settlement's growth. Unlike the indigenous labour force of many underdeveloped countries, the Eskimos of Frobisher Bay are not low cost, but neither are they particularly skilled labour. As they have become accustomed to high wages, there may be a requirement to subsidize any private enterprise to attract it to the settlement and utilize Eskimo labour.

FUTURE NON-ESKIMO EMPLOYMENT

In 1967, the Department of Indian Affairs and Northern

Development established a policy by which 75 per cent of all its positions in the Northwest and Yukon Territories would be occupied by northern residents by 1977. In fact, at the same time, this became a Federal Government policy affecting all government departments operating in the Territories. The implications of such a policy are quite clear: government agencies hope to cut down drastically on the number of "imported" employees serving Arctic settlements, thereby reducing somewhat the direct expense of obtaining and holding southern non-Eskimo employees, while at the same time fulfilling its responsibilities for development of the North and its people. The take-over of many of the Northern Development Department's functions by the Government may alter the timetable for implementation of this policy, although not the policy itself. It is unlikely to be fully effective earlier than 1977, if then, owing to the massive education program which will be needed to train Eskimos and Indians to occupy positions now held by non-Eskimos from southern Canada. This is true even of Frobisher Bay which has a long history of Eskimo wage employment.

Any substantial growth in non-Eskimo wage employment in the private sector in Frobisher Bay will depend on industrial development in or near the settlement. Only large and rapid growth of the settlement's present population would lead existing private enterprises to increase their labour force

substantially. The same applies to self-employed non-Eskimos. Without a solid and diversified economic base, the settlement will only attract those who come for the high wages to be earned in a remote settlement from government agencies.

FUTURE GOVERNMENT ADMINISTRATION

Since the establishment of the Territorial Liquor Control outlet in 1960, the Territorial Government had only one representative in Frobisher Bay until 1968. All other Territorial functions were carried out on behalf of the Northwest Territories Government by the federal agencies there. Beginning in 1967 there was a transfer of functions and responsibilities from the Federal to the Territorial Government based in Yellowknife. This has led to an increase in the Territorial staff throughout the Northwest Territories. In 1968, a Territorial Game Management Officer and an Alcohol Education Officer were stationed in Frobisher Bay. As of March, 1969, Territorial strength in the settlement stood at four. It may be assumed that by January, 1970, the number had at least tripled, in preparation for the complete take-over of the administration, scheduled for April 1, 1970. All "provincial- and municipal-type" services performed by the Northern Development Department, excepting non-renewable resource and lands management, will be assumed by the territorial authorities. In Frobisher Bay, as

throughout the Northwest Territories, the number of Department of Indian Affairs and Northern Development employees will decrease as Territorial Government employees increase. The Department of National Health and Welfare will continue its services on behalf of the Territorial Government for some time to come. The Department of Transport is not affected by the change-over. The R.C.M.P. will continue to police the settlement and region. The Northern Canada Power Commission will continue to supply electric power for the settlement. Therefore, several Federal Government agencies will continue their activities in Frobisher Bay.

Administration and the provision of essential services in a settlement which has no tax base will prove difficult and costly for any government responsible for Frobisher Bay in future. Private enterprise is unlikely to take over completely the work now done by Federal Government agencies in managing the settlement, at least not without lucrative arrangements.

It is most unlikely that municipal status based on rate-paying can be achieved in the foreseeable future. Hence, administration and maintenance will have to be paid for by the Canadian public sector, either directly as is done now through Federal Government agencies there or indirectly through payment to a private corporation or corporations.

It is evident that Frobisher Bay will for some time to come remain in one way or another a government settlement administered directly by government or at least that costs will be borne by government. Although the Territorial Government now has responsibility for many aspects of the administration of the Northwest Territories, the Federal Government must continue to be closely involved because of its responsibilities for the indigenous peoples, the non-renewable resources and public lands. Frobisher Bay has throughout most of its history been a heavy financial burden to the Government of Canada and hence the Canadian tax payers. Without any apparent prospect of industrialization the settlement must continue to exist as a purely administrative centre and the cost must be borne entirely by government. The Territorial Government and the Federal Government will doubtless share the expense. Even if the Federal Government were not directly involved in the settlement, much of the cost would be met from federal funds since the Territorial Government is not yet able to meet its total budget for the Northwest Territories from current revenues. Is Frobisher Bay, then, to be only an artificial government community? Are there other possible lines of development for the settlement?

POTENTIAL FOR GROWTH OF THE PRIVATE SECTOR

Private enterprise has not flourished in Frobisher

Bay. Despite encouraging signs of change, it is unlikely to prosper there unless several changes occur.

The chief reasons are: (i) the scattered layout of the settlement; (ii) the quick turnover of persons from the south with business experience; (iii) the shortage of capital for small businessmen (a common problem throughout the Canadian Arctic); (iv) the difficulty private citizens have in obtaining land; (v) the absence of any industrial or similar activity in the region which would stimulate development of a service sector within the settlement.

Unlike most towns of equivalent size in southern Canada, Frobisher Bay has only recently developed more than the barest rudiments of a commercial core. The scattered settlement, the lack of dependable public transportation, and the few buildings for commercial use are some of the reasons. The central mall and shopping complex scheduled for construction under Development Plan II should overcome the lack of commercial space. Phasing out of Apex Hill and concentration of the population along the Main Base-Astro Hill-Ikaluit axis will place the population in reach of the commercial centre.

The turnover of persons with business experience from southern Canada will continue to be a problem as long as Frobisher Bay remains a government administrative centre with no other economic activity. Many government employees who serve

a tour of duty in a northern outpost do so to acquire enough savings to return to the south and attain some long cherished goal. Others remain until their children reach high school age and then return to southern Canada. Hence, the stay of these people in Frobisher Bay is generally short.

Other factors which discourage private enterprise in places such as Frobisher Bay include difficulties in obtaining financial backing for enterprises, and the problems of obtaining land titles.

Large companies seeking to invest in non-renewable resources have access to the usual national lending institutions as well as to Federal Government development loan funds. Small firms and individuals wishing to invest can count on neither. Most small private enterprises are unable to qualify for financial aid from the Industrial Development Bank. Up to the present time, neither the Federal Government nor the Territorial Government has initiated any form of development fund for small businesses in the North. Consequently, the only source of funds is the Eskimo Loan Fund administered by the Department of Indian Affairs and Northern Development and open only to Eskimos.

In addition to the problems which face all small businessmen in the Northwest Territories, Eskimos have the additional limitations of inadequate education and lack of financial and management experience. Therefore, in Frobisher

Bay as in other northern settlements, an Eskimo merchant class is unlikely to develop in the next few years.

The highly complex and restrictive regulations concerning acquisition of land by private enterprise in Frobisher Bay (as throughout the Yukon and Northwest Territories) present another serious hindrance to the development of private enterprise there. Many of the most attractive sites in or near the central part of the settlement are held in reserve by Federal Government agencies which wish to be centrally located. Much of the land in the vicinity of the Main Base not yet built upon or taken up for location of the new town centre will of necessity have to be retained in reserve for construction of housing for the growing population.

Another hardship faced by the small businessman at Frobisher Bay is the heavy cost of building and maintenance. Buildings must be well constructed and insulated heavily, and construction labour is expensive. The cost of operating a building, e.g., fuel, water, garbage pick-up and electricity is extremely high in Frobisher Bay. For example, in 1966, the electricity bill for one of the snack bars was as high as \$160.00 per month in mid-winter, while the fuel bill ran to approximately \$120.00 per month through nine months of the year (Manels, 1966). In addition, entrepreneurs and private home dwellers (i.e., those not subsidized by the Federal Government as employees) had to

meet charges for essential services as detailed in Table 17.

TABLE 17

RATES CHARGED BY PRIVATE CONTRACTOR
FOR PROVISION OF ESSENTIAL SERVICES
IN FROBISHER BAY

Service Units	<u>Water Delivery</u>				
	100 gal. or less per 1000 gal.	100 gal. or more per 1000 ga.	Liquid Sewage per 1000 gal.	Toilet Bags* per Bag	Garbage Drums per 45- gal. drum
Charge	\$28.95	\$18.50	\$18.50	\$2.20	\$2.40

* Plastic disposable bags used in chemical toilets.

Source: Ritchie, 1966; I.A.N.D. (Frobisher Bay) F1004.

The entrepreneur who has to face operating expenses of this magnitude plus the cost of building or renting, and who is unable to obtain title to the land on which all his expenses are resting, tends to become discouraged. Many are unwilling to incur such costs, particularly for only a relatively short period. Others, having already incurred the costs of building and those of several years of operation in Frobisher Bay are unwilling to relocate in the new town centre unless they are assured of adequate compensation for the buildings they leave, and of more reasonable operating costs (Manels, 1966, 1969; Alexander, 1966).

Frobisher Bay has long been "touted" as a tourist's dream but no viable enterprises have been established there.^{2/} There is no hotel. The Federal Building is operated by the Northern Development Department partly as an office building, partly as residence accommodation for single government employees, and partly as a hotel providing accommodation for visiting government officials and casual travellers. Operation of this large building as a hotel has been difficult and has not been profitable. Guests find the daily room and meal rates there too high (\$11.75 per day for government employees; \$25.00 per day for others), the Federal Building too far away from the settlement's centre, and transportation around the settlement difficult to obtain. In the past, attractions for the tourist have been far too few to allow Frobisher Bay to build a reputation as a vacation centre.

Attempts have been made by the Federal Government to interest private investors in the establishment of a hotel or tourist camp there, but with no success to date. The most

^{2/} A fishing lodge was built some years ago on the west side of the bay opposite Apex Hill, near a small river emptying into the bay. The operation was a failure for a variety of reasons. One contributing factor arose from the fact that the lodge was accessible only during high tide in the bay. During low tide boats could not approach closer than a quarter-mile off shore because of the shelving shore extending far into the bay and exposed during low tide.

salient factors against success have been high operation costs, a limited market, and lack of guarantees concerning disposition of the land on which a hotel operator would have to build.

One of the major objectives of Frobisher Development Plan II is to overcome such difficulties by offering private enterprise the opportunity to build a large hotel and office-building complex. The contract will provide for a guaranteed income through rental of the office space to government and private agencies, rental of commercial space to small businesses in the settlement and rental of a certain number of hotel rooms for transient government staff.

Other amenities now lacking in Frobisher Bay, such as a restaurant, cocktail lounge, a movie theatre (which could double as a live theatre with stage facilities), beauty salon, library, may be established in the new town centre. An entrepreneur guaranteed an adequate income from rental of office and hotel space may be inclined to invest in establishment of some of the small service businesses.

It is difficult to forecast the future of private enterprise in Frobisher Bay. Through the initiation of Development Plan II, the Federal Government appears to be demonstrating confidence in the continuing existence of the settlement. If Plan II does not become a victim of an enforced government economy plan (as happened to Plan I), then construction of the

planned central commercial complex in Frobisher Bay should stimulate private enterprise already located there to continue, even to expand.

Any substantial growth of the existing private enterprise sector in the settlement must depend on development and growth of a local regional economy. Visionaries (or idealists) point to the size of the local population in the settlement and suggest that any number of industrial possibilities present themselves: watch factories; plastics production; fur garment manufacture. Industrial analysts and economists point to the necessity of hauling the raw materials to the settlement, or in the case of a fur garment industry, of the difficulties in obtaining sufficient local raw materials; they point out the distance of Frobisher Bay from the world market places and the cost factors associated with operation and maintenance of a factory in the remote Arctic. The factors to be considered both in favour and in opposition to the location of various types of industrial production in Frobisher Bay are considered in greater detail in a subsequent section of this chapter.

Until recently, Eskimo involvement in private enterprise in Frobisher Bay has been limited to the Ikaluit Co-operative and Inook Limited. Two other co-operatives once existed in the settlement, one a housing co-operative, the other a

short-lived handicraft venture which was superseded by the Ikaluit Co-operative. The housing co-operative was founded by a group of Eskimos who wished to manage their own housing, importing pre-fabricated houses from the south and erecting them themselves. The movement arose because of their feeling that the Federal Government was not providing enough houses for the Eskimos. Several houses were delivered and constructed, and were occupied by Eskimos who made purchase payments on a monthly basis. Some of them have now been completely paid for. The need for such a housing co-operative has now largely disappeared with the introduction of the Eskimo Low Cost Rental Housing Program by the Department of Indian Affairs and Northern Development. Early in 1969, members of the housing co-operative voted to disband, and it ceased that year. Its place has been taken by an Eskimo housing association formed in conjunction with the federal rental housing plan. Its membership is made up of Eskimos who have received new houses under the housing program; its officers are Eskimos. The Frobisher Housing Association, like its counterparts all over the Canadian Arctic, is intended to take over management of the program, including rent collection, maintenance and financial administration. The Frobisher Association has undertaken a contract with the Northern Development Department to provide fuel oil to the houses, and for various other

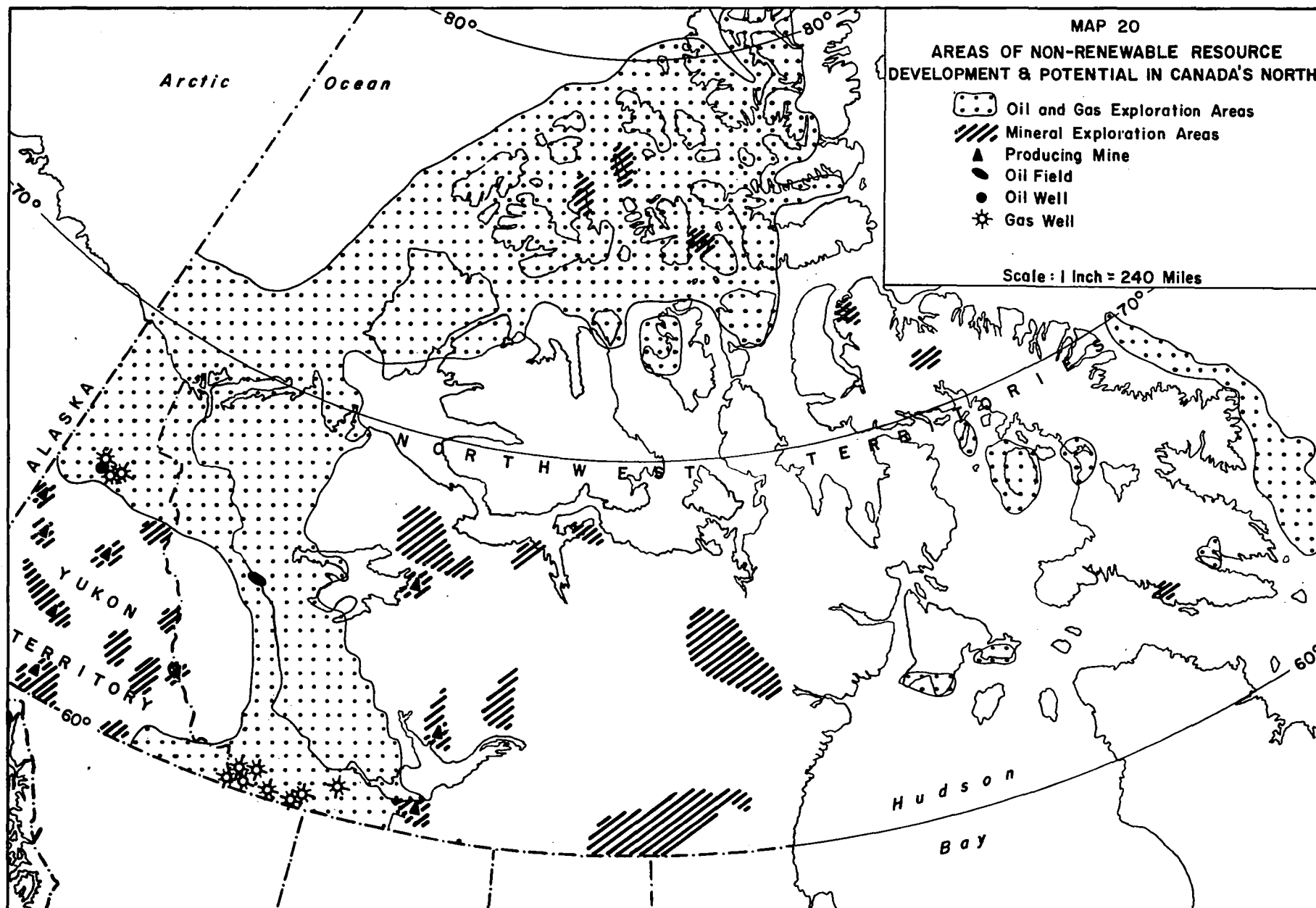
maintenance jobs in connection with the overall housing program.

The general lack of Eskimo participation in private enterprise in Frobisher Bay has been mainly due to inadequate education and lack of management experience. Inook Limited, the Ikaluit Co-operative and the other co-operatives, and the Frobisher Bay Housing Association are clearly first steps toward increased participation in community affairs by them. In the "new" Frobisher Bay, it will be necessary to encourage Eskimos to take an active part in local business as an aspect of any general plan to encourage private enterprise.

FUTURE ECONOMIC DEVELOPMENT

What does the future hold for Frobisher Bay? When preliminary investigations were being carried out in connection with Frobisher Development Plan I (Chapter 5), several possibilities were considered.

One was that it might become a staging centre in connection with mineral development. Map 20 shows the locations of the known mineral reserves in the Canadian Arctic. From this, it is clear that Frobisher Bay now, as was the case 15 years ago, has no apparent future based on such resources. The most promising mineral deposits on Baffin Island are iron ore at Mary River (70°N, 80°W), and lead-zinc on the Brodeur Penin-



sula near the settlement of Arctic Bay. If and when either of these is developed, Frobisher Bay is unlikely to play a large part. Frobisher Bay and Mary River are approximately 600 miles apart, and Arctic Bay is 750 miles from Frobisher Bay. It seems probable that the initial jump-off centre will be Resolute on Cornwallis Island.

Most of the oil exploration in the Arctic Islands is being carried out by Panarctic Oils Limited and has had no effect on Frobisher Bay. There are oil claims in Foxe Basin and Davis Strait, and within Frobisher Bay (Map 20), but no information is available as to when any active exploration might commence. The mineral exploration area indicated on Map 20 in the vicinity of Lake Harbour refers to soapstone deposits. These have been staked by the Department of Indian Affairs and Northern Development on behalf of the Eskimo co-operative at Lake Harbour which relies on local deposits for raw materials for its carving production.^{3/}

In Chapter 10, there was discussion of Frobisher Bay as a regional transportation centre with scheduled air service throughout Baffin Island and a link to the Arctic mainland. The large runway has always been taken into account in any

^{3/} Unlike the co-operative at Frobisher Bay which must import its soapstone from Quebec.

plans for the settlement. Yet it is difficult to see how its significance as an air traffic centre can grow. Resource development on northern Baffin Island will not appreciably increase traffic into and out of Frobisher Bay. Once mineral development starts either at Arctic Bay or Mary River, an airstrip capable of handling large aircraft such as the Hercules will be built at the site.

Today, Frobisher Bay is only used as a technical stop by trans-Atlantic aircraft, usually only if Sondre Strømfjord on the west coast of Greenland is closed or if the aircraft is closer to Frobisher if trouble develops. Frobisher Bay does not at present have hotel facilities suitable for accommodating airline passengers.

The initiation, growth and present state of private enterprise in Frobisher Bay were discussed in Chapter 7. Such small service enterprises requiring minimal investment of capital and little local labour, may flourish once they are relocated within the new commercial centre, and they may be joined by other similar businesses. The immediate prospect for development of manufacturing industries in Frobisher Bay in the near future is limited. As we have seen, the local costs of construction, utilities and labour are high. Other factors to consider are transportation costs and access to markets and raw materials.

Any Frobisher Bay manufacturing enterprises will need to freight in raw materials by ship or air. If airlifted, a volume must be guaranteed in order to obtain a favourable commodity rate. There must be either dependable and regular air service or the factory must produce the item in sufficient quantities to stockpile for sealift and still ensure delivery to dealers. The economics of transportation are such that only low bulk, high value-added items, e.g., watch parts, could be considered for manufacture at such a location. Put simply, the question is whether any company would open a factory in Frobisher Bay when the same product might be more cheaply manufactured in, for example, Japan, or elsewhere.

At present, Eskimo labour is unskilled, but does not possess the advantage of most unskilled labour in being cheap. The Canadian Arctic Eskimos are being so highly subsidized as to be an unrealistic alternative for an entrepreneur seeking a lower cost area than might be found in southern Canada. Even the fully employed Eskimos have housing and utilities subsidized by the Federal Government. Without a substantial incentive in the form of subsidy payments or tax relief, it is unlikely that manufacturing concerns will be attracted to Frobisher Bay in the near future.

FUTURE AS A SOCIAL DEVELOPMENT CENTRE

For much of its life, the settlement of Frobisher Bay has been a "half-way house" for Baffin Island Eskimos. Many made their first contact with settlement life and with a wage employment-based economy there. Each burst of construction brought in families from around the region and this has continued. More recently, construction connected with Frobisher Development Plan II has already exerted a pull on Eskimos of remote parts of Baffin Island, causing them to move into Frobisher in search of employment.

When the Federal Government first made serious efforts to improve the condition of the Eskimos, it was assumed that they should continue a land-based existence. These primitive people would, it was thought, take many years to adapt to modern civilization. So, they should be left to continue their traditional activities, while at the same time being brought gradually in touch with modern civilization through the careful introduction of social development programs. Despite the opening of schools and the transportation of children long distances from their homes to boarding schools, emphasis remained on encouraging the Eskimo people to continue hunting and trapping. As a result, many small settlements remained in existence throughout the Canadian Arctic, and new settlements were founded

as people were moved from areas of depleted resources to areas in which game was more abundant.^{4/} In time, schools were built in all settlements and the local Eskimo populations were told to send their children to school. This brought more families to live in the settlements for longer periods each year (while children were in school), a process hastened by a government policy to supply houses for Eskimos. As Diamond Jenness has described so well in the part concerning Canada of his series on Eskimo administration, the Canadian government seemed quite unable to come to grips with the problem of how to treat the Eskimos or to decide along what lines northern development should take place (Jenness, 1964: 93-98).

Quite soon, it became evident that the policies pursued throughout the 1950's and into the early 1960's could no longer serve. The Eskimo population of most of the Arctic could not depend on the subsistence economy alone. Nor was the combination of handicrafts, hunting and small local enterprises based on renewable resource harvesting an adequate substitute. The government at last came face to face with the fact that the Eskimos must be given the opportunity to fit into a modern

^{4/} The Eskimo settlements of Grise Fiord on Ellesmere Island, Eskimo Point on the west coast of Hudson Bay and Resolute on Cornwallis Island began this way.

economy either in the North or in southern Canada.

In recent years, efforts have been concentrated on devising suitable employment for Eskimos. Concurrently, increased attention has been given to a wide range of possible programs for northern development. Government officials have begun to consider a rational northern development plan on a regional basis (Weick et al., 1969). The many small, remote settlements dotted across the Canadian Arctic are being scrutinized carefully to determine whether they can be justified in terms of the local economies and possible growth in relation to the administrative costs of facilities and social programs. Some consider that the isolated, small settlements should be phased out and their people encouraged to move to larger centres within the region. The most obvious large centres at present are Frobisher Bay, Baker Lake, Inuvik and Yellowknife in the Northwest Territories, and Whitehorse in the Yukon.

It is not, however, simply a matter of reducing the high costs of maintaining many small settlements by moving people into a small number of large settlements. Without very careful planning, the net result of such a step might be major social and economic problems in the large communities.

Frobisher Bay has served as an "attraction centre" for Baffin Island Eskimos for much of its life. Many who moved to the settlement have been unable to find steady wage employment.

There are today not enough jobs for Eskimos already resident there. As we have seen, the outlook for economic development over the long term for either the settlement or the surrounding region is not promising. What, therefore, would become of Eskimos moved there from places such as Lake Harbour, Hall Beach, Pangnirtung? If the prospects for attracting industry to the North, and specifically to Frobisher Bay, are as dim as they appear to be, it would only aggravate the situation to bring in additional Eskimos. The cost of maintaining the many small settlements of the Baffin Region, settlements in which at least some of the people are earning a living, would be more than doubled if everyone was concentrated in Frobisher Bay. Furthermore, the social costs incurred in the phasing out-concentration process, if such were undertaken hastily and without adequate provision, might be extremely high.

Frobisher Bay (and other similar regional centres, e.g., Baker Lake, Inuvik) can, however, play a useful role in social development. It could serve as an "adaption centre" or "half-way house" for the Eskimo people of the Baffin Region. Its future as a government administrative centre is assured. The necessary infrastructure already exists. There is a hospital; there will soon be a large vocational training school. The settlement could thus become a half-way house for the region's

Eskimo children and young adults. The same would be true for those able and willing to relocate from remote areas for training and employment.

The concentration of school facilities there makes it an ideal place in which to develop an education centre where Eskimos could be introduced to concepts of urban living and wage employment through formal programs and counselling. In the past, many Eskimos who have moved to larger northern centres or southern towns have found adaption to urban life extremely difficult. The husband might fit in well at his working place, but the wife is often confused and bewildered by a new way of life which she does not understand (Stevenson, 1968). Some of the problems faced by relocated Eskimos have arisen because of lack of prior understanding of the new situation into which they are moving. Only very recently have counsellors been provided to give guidance at centres to which Eskimos have been relocated.

It is difficult to forecast what the future holds for Canada's Eskimos, but it is probable that substantial numbers of them will leave the many small settlements. Some may settle in places such as Frobisher Bay which offer exposure to urban living. With the exercise of sufficient imagination and ingenuity, it should be possible to utilize Frobisher Bay as a social development centre where, in a controlled situation, Eskimos could be brought to some understanding of the life and conditions

to be met in the south or at larger northern centres.

The cost should be no higher than those now being incurred through various "make-work" programs, social assistance payments and repatriation to the North of Eskimos unable to cope with life in southern towns.

CONCLUSION

Frobisher Bay was founded to meet an immediate need. It was not expected to have a future beyond World War II. It might in time have been abandoned. However, its strategic location on the northern Great Circle Route coupled with the existence of the airfield and other facilities led to its being used repeatedly as a military airbase until 1963.

When the Canadian Government began an active program of Eskimo administration, Frobisher Bay was one of the first places at which a field office was set up. Northern Affairs officers were placed there, as in other Canadian Arctic settlements, to look after the interests of the Eskimos. The pull of wage employment during the periodic bursts of military activity at Frobisher brought Eskimos into the settlement. More government staff was required to administer programs for them, and to provide services. Additional government agencies used the settlement and required further facilities, thus causing more construction programs - and attracting more Eskimos. Thus, through a combination of the effects of externally stimulated activities (U.S. military) and internally stimulated ones for the welfare of Eskimos, Frobisher Bay attracted an increasingly large population.

By 1959, it became a formal government administrative centre responsible for a large part of the Canadian Eastern

Arctic. Despite this definition of the settlement's central function, planners continued to try and devise other possible bases for its existence. Authorities seemed unable to accept the possibility that Frobisher Bay could exist merely as an administrative settlement. While time and public funds were being expended on developing unrealistic blueprints for a model community in which normal industrial enterprises could function, the settlement continued to expand. Social problems intensified among the Eskimo population which was confined in a community with too few means of finding wage employment and even less opportunity for living through traditional pursuits. The situation was prevented from deteriorating as rapidly as it might have by the periodic onset of new construction programs which provided seasonal employment for many Eskimos and kept hope alive. It is highly probable, however, that had construction for the Eskimo Low Cost Rental Housing Program not commenced in late 1966 and continued through the next year, the situation might have become extremely serious. If hunting income had remained at its 1965-66 level, and the handicrafts co-operative continued to be plagued by difficulties, and had no other income-producing activities for Eskimos been established, Frobisher Bay Eskimos would have been in serious economic and social difficulties by the end of the 1960's.

Initiation of Frobisher Development Plan II with its associated

construction program provided a reprieve through still one more of the "booms" that have marked Frobisher Bay's history.

In order to avoid repetition of the settlement's "boom and bust" cycle after conclusion of construction for the current development plan, drastic action will be required. The possibilities for "normal" economic development within the settlement or its immediate region are few. Greater imagination and bolder action than have ever before been taken will be required. One such might be the setting up of a working social development centre as proposed in the preceding section. This and any other proposals, particularly those along traditional economic-industrial lines, will require heavy government subsidization. Yet such costs will be found to compare favourably with those currently being incurred through present programs for northern development and Eskimo welfare. They will also in all probability be found to compare favourably with costs of relocating large numbers of Eskimos to southern Canada and to the larger northern centres. Those who make broad sweeping statements concerning the phasing out of the small Arctic settlements and the massive relocation of Eskimos to the south overlook the very high costs which such actions must involve, e.g., the costs of accommodation, social counselling, training and employment, and social welfare.

Whichever policy or combination of approaches is

followed - government subsidy of industry, mass relocation of Eskimos, continuation of present Eskimo programs consisting of "make-work" projects, handicrafts industries and subsidized wage employment - the costs will be high. All aspects of northern development are costly. If development of Canada's North, including social development of northern indigenous residents, is regarded as essential in terms of the country's national purpose, then government, industry and the Canadian public will have to become aware of the costs of programs and of all the implications and alternatives involved in continuation of present northern policies or implementation of new ones. With regard to Frobisher Bay, and other large Canadian Arctic settlements, decisions regarding their future course of development will be required in the immediate future.

There are many problems faced by administrators, planners, economists, sociologists and geographers in predicting the future or directing the growth of Frobisher Bay. To solve the problems of its Eskimo residents, primarily that of finding adequate means of earning a livelihood, the basic requirement is development of an economic base. It may be a "normal" economic base - industrial - or an "artificial" economic base - government administration, social development.

Expanded government wage employment, promotion of small resource harvesting projects, expansion of the co-operative's

activities, development of small local business enterprises, all of these provide permanent sources of income for only a few members of the Eskimo population. The outlook for non-renewable resource development and establishment of industrial enterprises in Frobisher Bay appears bleak in light of present knowledge. Therefore, the remaining alternative is to make the best possible use of Frobisher Bay's role as an administrative centre to concentrate there facilities and programs which will aid the local Eskimo people in adapting to a new way of life. This suggests that Frobisher Bay's existence will be based on a "contrived" economy. The best hope for recovering some return from the investment made there over the past 25 years is through the initiation of programs of direct and constructive benefit to the Eskimo people.

Although its origin differed considerably from those of other Canadian Arctic settlements, the problems faced both in the past and for the future by Frobisher Bay and its people are not unique in the Canadian Arctic. Hopefully, some of Frobisher's problems can and will be solved. Through their solution, knowledge will be gained which will be of use in defining and overcoming similar problems throughout the North.

APPENDIX A

Federal Government Agencies Operating
in Frobisher Bay
1966 - 1969

1 The Department of Indian Affairs and Northern Development^{1/}

That part of the Department concerned with the North was the Northern Administration Branch. It provided government services to the people of the Northwest Territories at the Federal and Territorial in respect of these functions for which the Branch had responsibility, and at the municipal level in settlements in which no form of local government existed. The main areas of responsibility were education, welfare, engineering services and industrial development. Industrial development consisted of handicraft and carving programs, renewable resource harvesting projects and the co-operative development program. Headquarters (Ottawa) organization along functional lines, i.e., education, was duplicated in field offices. Thus, at Frobisher Bay there were officials responsible for administration of the various programs.

When the Department of Northern Affairs first established a field office in Frobisher Bay, it was concerned only

^{1/} Known as the Department of Northern Affairs and National Resources from 1953 to late 1966 when the Indian Affairs Branch of the Department of Citizenship and Immigration was transferred into the re-named, re-organized Department.

with programs for the protection and economic and social advancement of the Eskimo people. In 1959, Frobisher Bay became the Regional Headquarters for the Department of Northern Affairs and National Resources, serving the Arctic Islands of the Canadian Eastern Arctic. Departmental regional staff at Frobisher Bay then had responsibility for administration and services in 12 outlying settlements throughout the Region as well as for the settlement itself. In mid-1966, however, management of the settlement was transferred to the Department from the Department of Transport. Thus, in addition to its responsibilities for education, welfare, housing and development programs for the Eskimos, the Department had a public works function in the settlement, and served as the municipal government body. This situation has prevailed until recently. Beginning in 1970, the Territorial Government will begin taking responsibility for those functions formerly carried out by the Department.

II The Department of National Health and Welfare

Like the Department of Indian Affairs and Northern Development, the Northern Health Service of the Department of National Health and Welfare functions in the North primarily to contribute to the welfare of the Eskimo people, through provision of medical services. At Frobisher Bay the Depart-

ment operates a 28-bed modern hospital, opened in 1964, and a clinic and public health services. There is usually a resident doctor in Frobisher Bay. Each year dentists, child specialists, specialists in other fields and young medical residents come to the Frobisher Bay hospital on a rotational plan designed to ensure the presence of adequate medical service for as much of each year as possible. Since it lacks an aircraft of its own, the Northern Health Service unit in Frobisher Bay has depended on being able to charter privately from charter companies located in the settlement, or on the use of the Royal Canadian Mounted Police Otter aircraft for transportation to outlying settlements in case of emergency.

III The Department of Transport

Since the late 1940's the Department of Transport has been active in Frobisher Bay. Beginning from that time, it assumed increasing responsibility over the years for administration and management of the settlement, i.e., public works and engineering services, allocation of housing, in addition to its responsibilities for airport operations and meteorological reporting. In 1964/65, a government decision resulted in the beginning of the transfer of its settlement management responsibilities to the Department of Northern Affairs, a transfer completed by mid-1966.

The Department of Transport has functioned since that time only as a service organization in Frobisher Bay. Personnel of its Civil Aviation Branch operate and maintain the runway and associated taxistrips, apron areas, hangar, lights and landing systems. The Meteorological Branch staff operate a forecasting office and an upper air station. The Marine Aera-dio Station operated at Frobisher Bay is part of an extensive network in the Eastern Arctic concerned with air and sea traffic and safety in navigation. This station also functions as part of sector control in the national air traffic control system, often handling aircraft passing overhead between the Pacific Coast and Europe. The Marine Branch, represented in strength in the settlement only during open water season, is responsible for sealift operations. Branch officers command the beach at sealift time. This Branch is responsible for all movements of ships in Eastern Arctic waters, especially those moving into Frobisher Bay. The Department of Transport is not concerned with programs connected with Eskimos or with the administration or control of the settlement other than on the airport reserve or around Departmental buildings.

IV The Northern Canada Power Commission

The Northern Canada Power Commission is a Crown Corporation, part of whose charter of operations concerns the

supply of electric power in northern settlements. The Commission first moved into Frobisher Bay in 1959, when it took over operation of a 1,000 kW diesel power plant on behalf of the Department of Transport. In 1964, the Commission completed construction of its own central power plant as part of Frobisher Development Plan I. Additions were made to the plant in 1965 and 1966. The power plant and central heating plant now contain one gas turbine at 1,500 kW, three diesel units with a combined output of 2,500 kW, for a total capacity of 4,000 kW (N.C.P.C., 1968). The Commission operates a water treatment plant and the utilidor system connecting the Federal Building and the Hospital with the power plant.

V The Royal Canadian Mounted Police

The Royal Canadian Mounted Police operate at two levels in Frobisher Bay. One level is the Frobisher Bay Area Detachment Office, located in its own building near the Main Base, and responsible for enforcement of laws and administration of justice within the Frobisher Bay Detachment Area (the area within a 90-mile radius of the settlement). The other level is the Eastern Arctic Sub-Division Headquarters, located in offices in the Federal Building. Eight detachments in the Baffin Island - Melville Peninsula - Arctic Islands region report to the Sub-Division Headquarters. Location of the Sub-

Division Office in Frobisher Bay means that an Otter aircraft with pilots and mechanics is stationed permanently in the settlement.

VI The Post Office Department

Frobisher Bay has had a post office for many years. The settlement is the distribution centre for a large region of the Canadian Eastern Arctic and as such requires the services of a small post office.

VII Canadian National Telecommunications

In addition to the private enterprise-operated telephone system, Canadian National Telecommunications offers a full range of its services in the settlement.

VIII The Canadian Broadcasting Corporation

The Canadian Broadcasting Corporation operates a 40-watt radio broadcasting station in Frobisher Bay, offering taped programs from the national network as well as live programs originating in the settlement. Future plans for Frobisher Bay by the Corporation include the installation of a "Frontier Package" for television programming and an increase in the power of the radio station (Walker, 1966). In the past plans by the Corporation for Frobisher Bay may have been delayed pending a government decision on the future of the settlement

(which was resolved in favour of the continued existence of Frobisher Bay). Television for the settlement, and for the remainder of the Eastern Arctic, may be delayed pending the outcome of plans to launch a Canadian communications satellite.

IX The Department of National Defence

In 1966, this Department had been active in Frobisher Bay for some years through the stationing there of a communications unit of the Royal Canadian Navy. This unit operated a communications centre located in the West 40 part of the settlement. Their activity had no connection with the settlement or its people, being a military function connected with national defence strategy. The unit was removed from Frobisher Bay in 1968.

APPENDIX B

Examples of Job Classifications and Pay Rates for Eskimo Employees of the Department of Indian Affairs and Northern Development Frobisher Bay, Calendar Years 1962, 1965, 1966, 1969

<u>Individual^{1/}</u>	<u>Hourly Rate^{2/}</u> <u>Wage + I.P.A.</u>	<u>Paylist Job</u> <u>Classification</u>	<u>Work Performed</u>
I. <u>1962</u>			
A (Female)	.78 + .99	Kitchen Help	Cook and helper
B (Male)	1.32 + .57	Labourer	Laundry worker
C (Male)	1.32 + .99	Driver	Bus driver
D (Male)	.83 + .57	Labourer	Interpreter - messenger
E (Male)	1.74 + .99	Heavy Equip. Oper.	Power grader driver
F (Male)	.83 + 1.00	Casual labour	Unskilled labour, painting
II. <u>1965</u>			
A (Female)	2.00 + .84	Kitchen Help	Cook
B (Male)	1.85 + 1.00	Labourer	Assistant Manager laundry
C (Male)	1.85 + .71	Driver	Bus driver
D (Male)	1.85 + .86	Labourer	Clerk-interpreter, welfare

Appendix B, cont'd on next page.

Appendix B, Cont'd

<u>Individual^{1/}</u>	<u>Hourly Rate Wage + I.P.A.^{2/}</u>	<u>Paylist Job Classification</u>	<u>Work Performed</u>
E (Male)	2.79 + 1.00	Heavy Equip. Oper.	Power grader driver
F (Male)	.83 + 1.00	Casual Labourer	General labour
III. <u>1966</u>			
A (Female)	.78 + .99	Kitchen Help	Cook
B (Male)	1.32 + .57	Labourer, laundry	Manager - laundry
C (Male)	1.85 + .71	Driver	Bus driver
D (Male)	1.83 + .57	Labourer	Welfare clerk & counsellor
E (Male)	1.74 + .99	Heavy Equip. Oper.	Power grader driver
IV. <u>1969</u>			
A (Female)	2.72 + .83	Labourer	Cook
B (Male)	2.77 + .68	Labourer	Laundry manager
C (Male)	2.98 + .68	Driver	Bus driver
D (Male) ^{3/}	N/A	Labourer	Welfare assistant
E (Male)	2.90 + .83	Heavy Equip. Oper.	Power grader driver
F (Male)	1.80 + .83	Casual labourer	General labour

^{1/} Same individuals used throughout. ^{2/} Isolated Post Allowance. ^{3/} Transferred/
promoted to outlying settlement.

Sources: I.A.N.D. paylists for Frobisher Bay, 1962, 1965, 1966, 1969.

APPENDIX C

Examples of Wage Earnings of Eskimo Employees
of the Department of
Northern Affairs and National Resources
in Frobisher Bay 1965 and 1966

1. <u>1965</u> ^{1/}	<u>Gross Wages</u>	<u>Total Deductions</u> ^{2/}	<u>Net Wages</u>
	\$	\$	\$
A (Female)	6,239	1,550	4,689
B (Male)	4,968	1,353	3,615
C (Male)	4,886	1,936	2,950
D (Male)	8,487	1,767	6,720

11. 1966

A (Female)	8,699	2,691	6,008
B (Male)	6,337	1,154	5,183
C (Male)	7,323	2,300	5,023
D (Male)	8,844	2,317	6,527

1/ Same examples used for both years.

2/ Deductions are made at source for income tax, rent or purchase payments on houses, Canada Pension, government medical insurance, food rations, savings bonds and other payments or dues.

Source: I.A.N.D. paylists, 1965, 1966, Frobisher Bay.

APPENDIX D

Eskimo Population of Frobisher Bay*
by Age Group and Sex, 1957

	<u>Males</u>	<u>Females</u>	<u>Total</u>
0 - 4	50	47	97
5 - 9	32	34	66
10 - 14	30	25	55
15 - 19	28	23	51
20 - 24	24	21	45
25 - 29	24	32	56
30 - 34	17	20	37
35 - 39	25	12	37
40 - 44	4	4	8
45 - 49	12	6	18
50 - 54	6	2	8
55 - 59	7	1	8
60 - 64	1	2	3
65 +	2	3	5
TOTAL	262	232	494

* Population resident in the settlement only.

Source: R.C.M.P., 1957.

APPENDIX E

Eskimo Population of Frobisher Bay
by Age Group and Sex, January, 1963

<u>Age Category</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
0 - 4	84	92	176
5 - 9	75	81	156
10 - 14	44	46	90
15 - 19	52	39	91
20 - 24	37	37	74
25 - 29	39	31	70
30 - 34	32	45	77
35 - 39	27	22	49
40 - 44	29	14	43
45 - 49	15	7	22
50 - 54	13	6	19
55 - 59	10	6	16
60 - 64	5	2	7
65 - 69	2	2	4
70 +	1	3	4
Adult, age unknown	4	3	7
Age unknown	<u>1</u>	<u> </u>	<u>1</u>
TOTAL	470	436	906

Source: Honigmann and Honigmann (1965:251).

APPENDIX F

Eskimo Population of Frobisher Bay
by Age Group and Sex, July, 1966

	<u>Male</u>	<u>Female</u>	<u>Total</u>
0 - 4	100	137	237
5 - 9	109	89	198
10 - 14	56	64	120
15 - 19	56	49	105
20 - 24	32	36	68
25 - 29	28	32	60
30 - 34	36	38	74
35 - 39	26	29	55
40 - 44	28	24	52
45 - 49	22	11	33
50 - 54	9	9	18
55 - 59	18	10	28
60 - 64	6	3	9
65 +	7	7	14
Unknown	4	10	14
TOTAL	537	548	1085

Source: MacBain, 1966.

APPENDIX G

Eskimo Population of Frobisher Bay
by Age Group and Sex, March, 1969

	<u>Male</u>	<u>Female</u>	<u>Total</u>
0 - 4	89	124	213
5 - 9	101	120	221
10 - 14	80	87	167
15 - 19	44	48	92
20 - 24	52	37	89
25 - 29	30	37	67
30 - 34	35	30	65
35 - 39	35	30	65
40 - 44	22	24	46
45 - 49	29	13	42
50 - 54	19	9	28
55 - 59	10	8	18
60 - 64	9	9	18
65 +	13	5	18
Unknown	<u>14</u>	<u>11</u>	<u>25</u>
TOTAL	582	592	1174

Source: R.C.M.P., 1969

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