A Brief History of the National Map Collection at the Public Archives of Canada

by Betty Kidd

As a means of communication, the map predates written language. In preliterate cultures, the map traced in the sand, sketched on birch-bark, or formed of sticks served to direct others to areas where game was plentiful, to navigate dangerous waters, as well as many other purposes. Later, the surveyor and the map maker accompanied the explorers, preceded the settlers, and were actively involved in the development of natural resources. Thus, maps are an integral part of the record of a nation's history, and any national archives should include a rich cartographic collection. In Canada, this is indeed the case, and the Public Archives of Canada, established in 1872, was actively involved in preserving the nation's cartographic heritage even before a separate administrative unit for maps was established in 1907.

THE YEARS PRIOR TO 1907

When Douglas Brymner was appointed in charge of the newly-created Archives Branch of the Department of Agriculture in 1872, his greatest challenge was to find out what records relating to Canada's history existed. This task necessitated visits to Great Britain and to France to ascertain what records should be copied and/or listed for the use of researchers in Canada. Undoubtedly, these records included maps, for in 1873 Brymner referred to the necessity of making tracings of certain maps.¹ The copying programme initiated by Brymner-first, the production of transcripts and later of photocopies-resulted in thousands of maps, the originals of which are in British and French repositories, being available for research in Canada. The frustration of being unable to locate maps referred to in textual records was experienced by the early copyists and archivists. As R.A. Skelton put it, many maps have not survived

the dangerous interval of vulnerability between the moment at which the practical usefulness of a map is exhausted and the moment at which it awakens the interest of historians as a relic or memorial of the past.²

^{1 &}quot;Report of Douglas Brymner on Archives," in Canada, *Report of the Minister of Agriculture*, 1873, pp. 152-3. Until 1912, the annual reports on Canadian Archives are included in or appended to the Report of the Minister of Agriculture; after that date, the annual reports are of the Public Archives of Canada. Hereafter, all annual reports are referred to as PACR.

² R.A. Skelton, Maps: A Historical Survey of their Study and Collecting (Chicago, 1972), p. 28.

The 1881 annual report includes two references to maps being mentioned in textual records—one in a 1667 letter from Louis le Page, Sieur de l'Omesnil to the King, the other in an 1822 letter from Robert Gourlay—but not being included.³ In the latter case, Brymner was able to locate a copy of the printed map in the Parliamentary Library in Canada.

By 1883, there was a collection of 426 maps and plans in the Public Archives of Canada.⁴ Some had been received as gifts, many were transferred from other departments, some were purchased, and others were copies. The 1882 annual report lists four volumes of Joseph Frederick Wallet de Barres's Atlantic Neptune (in total, 184 sheets), the first detailed hydrographic survey of the Atlantic seaboard of North America (Volumes A-D), and Volume E. The American Atlas, 1776 (30 maps).⁵ By the following year, in addition to these volumes, the contents of Volume F, "Nouvelle France and Canada, from 1593 to 1820" (68 maps), Volume G, "Canada, from 1695 to 1786" (30 maps) and Volume H, Bellin's Petit Atlas Maritime (102 maps), are listed.⁶ A note refers to the fact that the other three volumes of Bellin's Petit Atlas Maritime, featuring other parts of the world, were also held. Earlier in the printed 1883 report, Douglas Brymner mentioned that "an opportunity presented itself, of which I took advantage, to make a collection of maps, illustrating the history of Nouvelle France and of British North America. A few are reprints but nearly all are originals."7 These presumably are Volumes F and G. The first purchase of a map by the Public Archives appears to have occurred in 1881 at Messrs. Wild, Charing Cross, London.⁸ In the next twenty-four years, the collection of maps in the department would increase ten-fold from the 426 maps noted in the 1883 report to 4,285 maps in 1907. Donations of maps from individuals, government departments and companies were routinely listed in the annual reports and were often highlighted in the text. Brymner also began the tradition of using facsimiles to illustrate the annual reports. These fine quality facsimiles, or in some cases re-drawn copies, were used extensively from 1886 to 1905, and occasionally thereafter.

1907: THE MAP DIVISION ESTABLISHED

Throughout Brymner's period as Dominion Archivist, all holdings were treated as one collection regardless of their origin or type. However, shortly after Arthur Doughty's appointment to head the Public Archives in 1904 the records from the Archives Branch of the Department of Agriculture and the old papers from the Department of the Secretary of State were moved to the new building constructed for the Public Archives at 330 Sussex Street. With adequate space now available, Dr. Doughty was able to introduce an administrative organization impossible in the previously restricted quarters. In addition, there was more staff available than in earlier years. The man who would guide the newly-created Map Division throughout the next two decades, Hensley Reed Holmden (1852-1928), joined the

³ PACR, 1881: 22 and 27.

⁴ PACR, 1883: 237-247.

⁵ PACR, 1882: 89-93.

⁶ PACR, 1883: 237-247. 7 PACR, 1883: 6.

⁷ PACR, 1883: 6. 8 PACR, 1881: 30.

staff of the Archives on December 1, 1905. At that time, he was fifty-three years of age, a former journalist who during the previous five years had been employed as a member of the Reporting Staff of the Senate. In approximately 1919, H.R. Holmden prepared a document entitled "The Map Room" in which he provided his account of the founding of the Map Division. He wrote:

Up to the time of moving into the present Archives Building on Sussex St. there had been no special attention paid to the matter of collecting maps & charts connected with Canada; consequently at that period, December 1906, the map collection was insignificant, amounting in all to some few hundred maps... At the same time there was quite a large number of valuable & historically interesting maps in various sections of the building.

Early in 1907, however, a change was inaugurated. Some years previously the War Office authorities had given to Canada a large number of drawings, mostly original and all authenticated, connected with the occupation and development of Canada. These plans, some 650 in number besides 55 books containing some 250 more drawings of ordnance property, and which include many treasures, such as McKellar's map of Québec by which Wolfe ruled his actions; the same officer's plan of the battle of Ste. Foie; the Murray survey of the inhabited portion of Canada, made by Capt. Holland (afterwards the Surveyor General) and Lieuts. Montresor, Peach and Fusier in the years, 1759-60, 1, 2 & 3 being the first British survey and census of Canada, had been bandied from pillar to post until at last they had been absolutely lost sight of and no one could or would admit any responsibility.

His Excellency Lord Minto, the new Governor General, took great interest in these maps and was insistent that they should be found and at last they were discovered in 1905, and in April 1907 were duly transferred to the present Archives building, thus becoming the real nucleus of the map collection.⁹

In 1907, the Public Archives was divided into three main sections, one for manuscripts, one for maps and plans and one for printed material.¹⁰ The first report of the newly created Map Division states:

The division contains now 4,285 plans, maps and charts, the larger portion of which are original. During the course of the year 1,884 maps have been restored and mounted on linen. A classification has been commenced, and a general index of seven thousand cards has already been made. The cards give the full title of the map or plan, the date and name of the author. The demand for copies of maps and plans is increasing, which is proof that the public recognizes the value of this division.¹¹

⁹ Public Archives of Canada, National Map Collection file, "History of National Map Collection," manuscript by H.R. Holmden, "The Map Room," ca. 1919.

¹⁰ PACR, 1907: 55.

¹¹ PACR, 1907: 57.

The date 1908 has occasionally been used as the date of establishment of the Map Division. Presumably, there has been confusion with the 1908 recommendations of the Historical Manuscripts Commission, which had been established by order-incouncil in 1907 to assist the Dominion Archivist. This group decided as a first priority to consider the internal administrative organization of the Public Archives. Their 1908 report recommended dividing the department into three divisions, an organization somewhat similar to that already in existence -1) library and maps, 2) manuscripts, 3) publications. However, there is no evidence that indicates that library and cartographic materials were combined as a result of this report.¹²

The administrative changes introduced in 1907 to create distinct administrative units for types of archival holdings were really the beginning of specialization of staff members in particular archival media. The debate about the value of this approach continues, but in this way all archival media have received at least a minimum of attention throughout the history of the Public Archives.

THE HOLMDEN YEARS, 1907-1924

By the time of his death in 1928, H.R. Holmden had become known as the "Chartologist of the Dominion."¹³ In late 1905 however, when he started to work with maps in the Dominion Archives, he seemed ill-equipped for the task at hand. He had had no formal training either in archival science or in cartography. Having decided to make a major career change rather late in life, Holmden tackled with enthusiasm the organization of scattered cartographic holdings. Within a few years he had organized the maps, published a catalogue of the holdings, acquired many additional items, made the cartographic record accessible for research purposes and had himself acquired a thorough knowledge of the maps in his custody.

The map collection continued rapid growth throughout Holmden's period of stewardship. By 1926, there were approximately 30,000 maps and plans in the Public Archives.¹⁴ The Department of Public Works regularly transferred large numbers of plans. Transfers from other areas of the Public Archives were routinely made. For example, in 1908 it was noted that

among the inclosures with the state and land papers were many maps and plans illustrating the subjects dealt with. These have been transferred to the map room so marked on both the maps or plans and on the documents to which they belong as to make easy reference from one to the other. Some of these maps are very old and of much interest.¹⁵

The copying of maps was an essential part of the overall transcription of documents. The name of Henry Percival Biggar (1872-1938) who supervised the copying of documents in Europen repositories on behalf of the Public Archives until his death appears on numerous transcripts of maps in the Public Archives. The most prolific of the map copyists were undoubtedly C. Pettigrew, who worked in

¹² Ian E. Wilson, "Shortt and Doughty: the Cultural Role of the Public Archives of Canada, 1904-1930," Canadian Archivist, Vol. 2 (1973): 13.

^{13 &}quot;Death Occurs H.R. Holmden in 78th Year," Ottawa Journal, 12 January 1928, p. 2.

¹⁴ PACR, 1926: 16.

¹⁵ PACR, 1908: 18.

the British collections, and Ch. Baudouin and Simone Routier, in the French. In 1910, H.P. Biggar wrote to Dr. Doughty:

I shall ask Mr. Beaushesne to have the copying of the maps of Canada in the Dépôt des Fortifications des Colonies continued....It would be very easy for Mr. Holmden to send me a list of those in this Dépôt of which copies are already in the Archives. We shall have copies made first of the maps in Carton I. They include Fort Pentagouet, Fort St. Joseph, Forts Beauséjour, Laurent and Gaspureaux....The sooner I receive his list the better.¹⁶

In 1912, the Catalogue of the Maps, Plans and Charts in the Map Room of the Dominion Archives, "classified and indexed" by H.R. Holmden, was published. Describing some 4,106 items, the catalogue was representative of the collection as it existed at the end of the year 1910. Holmden stated that 1000 maps had been added in the two years since that date, and promised that "in a supplement, which will be published in due course, these will be included, as well as other maps found in the manuscript collection, and in printed books, many of which possess great interest and value."¹⁷ Several years later, the 1914-15 annual report repeated the intention to publish a supplementary catalogue.¹⁸ This catalogue was never published, and it would be another sixty-four years until a general catalogue describing a small percentage of the maps was produced.

As the collection became better known, and as the value of maps as primary sources of evidence in historical research was recognized, the number of persons using the cartographic holdings increased, peaking in 1919-21 with 870 searches.¹⁹ In the same period before the introduction of photographic reproduction in the department, 344 copies of maps were drawn or traced for research or conservation purposes. The Division fielded a wide variety of questions "ranging from inquiries as to the origin of names, or as to original names to questions of boundaries and titles, some of them being of very grave import."²⁰ Holmden's knowledge and thoroughness is well illustrated by a 161-page manuscript written in April 1921 concerning title to the Arctic Islands.²¹ In addition to a detailed analysis of the cartographic evidence, Holmden provided three listings of relevant maps in various repositories.

It is unlikely that any full-time staff members, other than Mr. Holmden, were assigned to the Map Division in the early years. However, by July 1918, an organization chart of the department shows one map mounter reporting to Mr. Holmden.²² Another major, recurring problem was shortage of space. By the early 1920s, according to Norman Fee, the division had no space to grow, for "many of the maps and plans received had to be stored and tied in bundles, and the work of

¹⁶ Public Archives of Canada, Records of the Public Archives of Canada, Record Group 37, Letterbooks, vol. XI, p. 9, H.P. Biggar to A. Doughty, 28 May 1910. Hereafter R.G. 37, etc.

¹⁷ H.R. Holmden, Catalogue of the Maps, Plans and Charts in the Map Room of the Dominion Archives (Ottawa, 1912), p. xii.

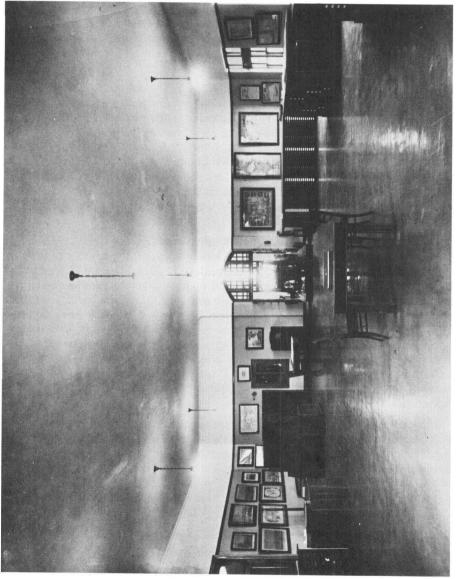
¹⁸ PACR, 1914-15, letter of transmittal from A. Doughty to P. Blondin, Secretary of State, 31 July 1916.

¹⁹ PACR, 1919-21: 10.

²⁰ PACR, 1919-21: 11.

²¹ R.G. 37, vol. 297, file "Arctic Islands", H.R. Holmden, 26 April 1921.

²² R.G. 37, vol. 303, file "History", organization chart of P.A.C., July 1918.



Map Division, c. 1926.

the Map Division was largely confined to the maps and plans in the catalogue of 1912, which contains less than one-fourth of the material now in the trays."²³ In retrospect, the last years of Holmden's period as division chief seem to have been marked by a deceleration of activities, no doubt due to space restrictions and Holmden's worsening health, which forced his retirement in 1924.

YEARS OF CONSOLIDATION 1925-1945

Holmden's successor, Norman Fee (1889-1973), was asked to prepare a report on the organization of the holdings of the Map Division. His report "so well answered the purpose that he was placed in permanent charge as Chief of the Map Division with instructions to re-organize the division."²⁴ Similar to the situation in 1906, the availability of more spacious quarters on the third floor of the newly-opened wing of the Archives building made the re-classification and physical re-organization of the collection possible.

The Map Division experienced steady growth throughout the fifteen years prior to the Second World War. Among the most noteworthy accessions were Lord Amherst's copy of the *Atlantic Neptune;* Antonio Zatta's *Atlante novissimo*, 1775-84; maps from the estate of James White; John Michell's *Map of North America*, 1755; the Karpinski Collection; the Northcliffe Collection; original maps which had belonged to the Hon. Robert Monckton, senior brigadier under Wolfe at the siege of Québec, and Bainbrigge's notebook. With technological changes, photostatic copies replacd transcripts. Photostats were received from the continuing copying programmes in Europe, as well as from a number of American collections.

Holmden's classification had been strictly numerical, suitable for a small collection but increasingly difficult to use as the collection grew. Thus, the classification adopted in the late 1920s was geographical and followed "the plan in use in the Colonial Office, the Library of Congress and elsewhere. As an example the maps of Canada are classified under maps of the different provinces, which in turn are grouped under maps of the different cities and districts within each province."²⁵ By 1930-31, the classification and card index of maps, plans and atlases had been completed. The card index of more than 40,000 typed cards listed maps "under the subject, the district, and the name of the maker."²⁶ In addition, a list of the rare maps in the printed books in the Archives Library had been prepared, and a bibliography of maps and plans relating to Canada in other repositories had been started. Lists had been prepared of maps in the Ontario Archives, in various government departments in Toronto, and in the Department of Railways and Canals in Ottawa.²⁷

The concept of a multifarious filing system for maps, by which maps are grouped by size, was introduced following the move into the new wing, when maps were

²³ R.G. 32, Civil Service Commission Records, c-2, vol. 90, file "Norman Fee," "Memorandum concerning the Division of Maps of the Public Archives", [May 1926].

²⁴ Ibid.

²⁵ PACR, 1926: 16.

²⁶ PACR, 1930: xii.

²⁷ PACR, 1929: 13.

arranged in the trays of four standard sizes of cabinets. This concept is still adhered to in the modern National Map Collection, because it ensures the most advantageous use of storage space and contributes to map conservation. In 1939, the war severely restricted the programmes of the Public Archives. The annual report of 1940 notes a reduction in the archives budget of 17%; that of 1942 a further reduction of the expense budget of 57% and a 24% reduction of personnel between 1939 and 1942. The project hardest hit in the Map Division was the publication of the catalogue which was "postponed indefinitely by the war."²⁸ The decision to re-classify and re-catalogue the holdings in post-war years meant that the catalogue on which work had progressed throughout approximately a twentyyear period would never be published.

The first reference to the Map Division supplying photostat copies to its researchers is in 1925 when "764 photostat copies and tracings" were provided.²⁹ In this period, an average of 400 enquiries, both visits and letters, were answered each year concerning "legal matters, boundary questions, and water powers."30 There are few references to exhibitions of archival holdings, but maps and architectural plans were featured in several. In 1925, a travelling exhibition, "A Special Exhibition of Rare early Books and Manuscripts, early Newspapers, pioneer Maps and Plans, Water Colors, Etchings and Sketches by early artists, illustrative of the history of the Maritime Provinces," was available for viewing in Halifax and in Charlottetown. Gustave Lanctot, who accompanied the exhibition, wrote in a letter to Dr. Doughty dated July 18, 1925 that "Mr. Blanchard who is writing a history of early P.E.I. settlement, spent the whole morning with me looking over our maps."³¹ In 1939, an architectural exhibit to illustrate the evolution of Canadian houses was prepared by the Map Division for the meeting of the Royal Architectural Institute of Canada.³² In 1940, Norman Fee prepared "a selection of excellent material for a historial exhibition held at Dartmouth College, Hanover, New Hampshire."³³ In 1943, a special map exhibition was prepared on the occasion of the visit of the former president of the Republic of Colombia to the Public Archives.³⁴.

Norman Fee remained Chief, later known as Director, of the Map and Chart Division until 1946. From 1939, he was also Assistant to the Dominion Archivist. Mr. Fee's administrative ability had been recognized at various times, but it is difficult to ascertain his exact responsibilities. At times, he was Director of the Library Division and Chief of the Manuscript Division. As Assistant to the Dominion Archivist, he also "co-ordinated the work of the manuscript and map divisions in the classification, calendaring and general work of a recognized technical nature." Certainly during Norman Fee's period as Chief of the Map Division, it was recognized that the division was "patently in a highly organized and orderly condition" and that "he has brought the Map Division to a high state of efficiency."³⁵

33 PACR, 1940: ix.

35 R.G. 32, c-2, vol. 90, file "Norman Fee".

²⁸ PACR, 1940: vii, ix and 1942: vii.

²⁹ PACR, 1926: 10.

³⁰ PACR, 1932: 10.

³¹ R.G. 37, vol. 299, file "Exhibitions (PAC)", G. Lanctot to A. Doughty, 18 July 1925.

³² PACR, 1939: 8.

³⁴ PACR, 1943: vii.

RAPID GROWTH IN POST WAR PERIOD 1946-1973

In the latter part of the 1940s, the combination of a new division chief, Jack Richardson, appointed in 1946, several new eager staff members in the Map Division, including T.E. Layng, and a new Dominion Archivist, W. Kaye Lamb, who commenced his duties in 1949, resulted in a review of the directions in which the Map Division was heading. The 1949 annual report notes that "no catalogue of the map collection has been printed since 1912 and the preparation of a new edition. now long overdue will be a major activity of the Division for some time to come. As the old filing system and classification have also been outgrown in many respects, changes will be made here as well." In this period, a phenomenal growth of the holdings of the Map Division, from 20,400 items in 1945 to approximately 500.000 items in the early 1970s occurred. The explanation for most of the growth is undoubtedly the expansion of the Map Division's mandate to include both Canadian and foreign current maps. From 1949, it was accepted that collecting current maps as they were produced would be the most efficient and economical method of acquisition. At first, only sheets in the federal topographic series and a few thematic maps were acquired. By the mid-1960s, a systematic acquisition programme for series and separately published maps was instituted, and a very high percentage of the current Canadian map production was being collected by the Public Archives. In 1968, the responsibility for preparing the Canadian contribution to the Bibliographie cartographique internationale, a world-wide bibliography of current mapping, was transferred from the Department of Energy, Mines and Resources to the Map Division of the Public Archives. This was a further incentive to collect the complete, current cartographic record of Canada.

The years following the Second World War had witnessed a cartographic explosion in Canada. As a result, it was relatively easy to acquire large numbers of maps with very little expenditure of money. In fact, the acquisition programme for these maps was so successful that by 1972 Ted Layne judged that "only 13 per cent of the total input could be classed as archival."³⁶ In addition, in 1965 the Geographical Branch of the Department of Mines and Technical Surveys transferred to the Public Archives approximately 150,000 foreign maps. The Map Division's goal was "to have for official and public use a suitable topographical map of every part of the earth's surface."³⁷ The material received from this source would subsequently be weeded of duplicates and surplus, and a more useful collection of approximately 115,000 maps would result. Working with the Department of National Defence and the Department of Energy, Mines and Resources, the Map Division soon established exchange agreements with a number of other countries. As a result, only a small percentage of non-Canadian materials had to be purchased.

Growth of the historical part of the Collection was not ignored despite the growth in these areas. To compile the catalogue of sixteenth-century maps, some originals and facsimiles were purchased and photocopies of such maps in repositories around the world were actively sought, resulting in an excellent study collection for the

³⁶ PACR, 1971-72: 58.

³⁷ PACR, 1959-1969: 3.

historian of cartography. For example, the acquisition of several original sixteenthcentury atlases, including Ptolemy, 1511 and 1542, Ortelius 1584, and Waldseemuller 1554, is reported as well as of some major facsimile collections, including Monumenta Cartographica Vaticana by Roberto Almagia, Kamal's Monumenta Cartographica Africae et Aegypti, and Mapas Espânoles de America.³⁸ In 1957 following the fire in the Library of Parliament, the Public Archives acquired numerous maps and atlases including the six-volume Blaeu atlas, the Peter Fidler map of the West measuring approximately five by nine feet, and the Jomard Collection of facsimiles. Canada's centennial celebrations in 1967 focussed the attention of Canadians on their past, resulting not only in increased reference enquiries but also in several noteworthy donations to the National Map Collection. James Cook's manuscript entitled "A plan of the River St. Lawrence from Green Island to Cape Carrouge" was donated by H.R. MacMillan of MacMillan-Bloedel on that occasion; he purchased the chart for £15,000 at an auction to donate to the Public Archives. The British gift to Canada in 1967 including the 1507 and 1520 editions of Ptolemy's Geographica, a manuscript atlas by Jacques Nicolas Bellin dated 1752, and Christopher Saxton's County Atlas of England and Wales, 1574-79. In 1970, the Canadian Government purchased the Manoir Richelieu collection for the Public Archives and National Gallery; some 200 maps were included in this purchase. Numerous individual purchases and donations were made throughout the years. A good sampling of these can be seen in the Public Archives ten-year report, 1959-1969. The copying programme continued actively in France, especially after the appointment of Père René Baudry in 1961 as the departmental representative in Paris.

In 1970, the National Architectural Archives Advisory Committee of the Royal Architectural Institute of Canada and the Public Archives agreed on the establishment and maintenance of a National Architectural Archives programme to be situated within the National Map Collection. In effect, the architectural component within the Public Archives had commenced as early as 1873 when Douglas Brymner negotiated with the War Department for the transfer of the military papers at Halifax. Throughout its history, the National Map Collection had quietly collected varied architectural and engineering plans. Although no resources were allocated for the programme, the early 1970s saw the acquisition of the Massey and Flanders, J.A. Ewart, Walter Allward and W. McLea Walbank collections, as well as the photographs of the Toronto City Hall competition. By contrast, less attention was paid to the acquisition and custodial care of government cartographical and architectural records, even though the Massey Report of 1951 noted that one of the chief categories of records in the Public Archives was "a very large and useful collection of miscellaneous maps and plans, including many properly falling into the category of public records."39

On the custodial side, a new area classification system, developed by Ted Layng, and based on the history, geography and cartography of Canada, was introduced in

³⁸ PACR, 1953-54: 28-29.

³⁹ C.P. Stacey, "Canadian Archives", in Royal Commission Studies: A Selection of essays Prepared for the Royal Commission on National Development in the Arts, Letters and Sciences (Ottawa, 1951), p. 235.

1950. An easily memorized system, it involves combining three numbers, the first to designate a province or group of provinces and the last two to indicate subdivisions of the major area. In 1969, a totally different classification scheme was devised for the maps held by the Foreign Section.⁴⁰

The original plan for the published catalogue of the division's holdings called for a half a dozen volumes. By 1952, it was noted that "the Division's major project continues to be the compilation of two large-scale catalogues, one devoted to sixteenth century maps relating to the area now comprising Canada, and the other to maps of Acadia in the period 1600-1763. Both are well advanced."⁴¹ By 1953-54, the emphasis had definitely shifted to work on the sixteenth-century catalogue, although reference was made to "some further progress in the gathering of material for the projected catalogue of maps of Acadia."42 In 1957 and 1958 English and French editions of Sixteenth Century Maps relating to Canada by T.E. Layng were published. A highly-specialized study of sixteenth-century cartography, the book remains an unsurpassed standard reference work. The foreword states that "this check-list is a by-product of the effort made by the Public Archives in recent years to expand its study collection of reproductions of early maps relating to Canada."⁴³ No reference was made to the possibility of other volumes following. The work on Acadia was never completed, and the project to replace Holmden's catalogue of 1912 lost priority. Several manuscripts were prepared in the division in the 1950s and early 1960s but were never brought to a publishable state. These include a catalogue of the Atlantic Neptune by T.E. Layng, and two listings by Paul Dumas of seventeenth and eighteenth-century maps. The publication in 1970 of County Atlases of Canada: A Descriptive Catalogue was a forerunner to a renewed series of publications by the Map Division in the 1970s, a list of which appears as appendix I to this article.

The cataloguing system introduced in the 1950s utilized 5" x 8" boxed-style main entry cards, and colour-coded cross reference cards for area, subject and author. In 1969, the main entry card was replaced by a card on which the description appeared in paragraph form. By 1976 when the cards were microfilmed and published by G.K. Hall & Company, Boston, some 80,000 entries were included.

In this period, the outreach programme of the National Map Collection became closely tied to the aims of the Association of Canadian Map Libraries. The staff of the National Map Collection have been very active in the executive and committee structure of the Association of Canadian Map Libraries since 1967. Although staff attended conferences of the Canadian Historical Association, and other Learned Societies, most activity in the late 1960s and early 1970s focussed on the Association of Canadian Map Libraries. One of the key reasons for establishing the Association of Canadian Map Libraries in 1967 was recognition by a number of persons, including Ted Layng, that a union catalogue or list of cartographic records was a necessity. In the late 1960s and early 1970s, three projects were undertaken in the National Union Catalogue of Maps programme. Two of these were initiated

⁴⁰ PACR, 1959-69: 59.

⁴¹ PACR, 1952: 22.

⁴² PACR, 1953-54: 28.

^{43 [}T.E. Layng], Sixteenth Century Maps Relating to Canada (Ottawa, 1957).



Three former division chiefs of the National Map Collection. Left to right: A.J.H. Richards, N. Fee and T.E. Layng. Photograph taken in 1972 on the occasion of the centenary of the Public Archives of Canada.

by the National Map Collection, a check-list of maps dating from 1600 and an inventory of foreign series maps in other collections. The third, co-ordinated by the Association of Canadian Map Libraries, required map collections to submit completed catalogue entries for new accessions to the National Union Catalogue. The recognition that cataloguing standards had to be made uniform and that the programme would require automation resulted in all but the inventory of foreign series maps being set aside.

Staff grew in this period in keeping with growth of the Collection. In 1950, the staff consisted of five persons – A.J.H. Richardson, division chief; T.E. Layng, archivist, who had joined the division in 1948; Miss Stratton, who had been with the division more than twenty years; H. Gregory, archivist; and L.B. Earl, who joined the staff as typist in 1950 and remained until his retirement in 1979 as a senior reference officer. The number of staff in 1959 was still five (two archivists, three clerks); in 1966, there were twelve staff-members. By 1973, the staff had increased to twenty-five. It was during this time that more emphasis began to be placed on the educational backgrounds of the persons hired to work in the Map Division. For example, Jack Richardson and Ted Layng, both of whom served as division chiefs in the period of tremendous growth, had university degrees in history, and they hired others with similar backgrounds. The first geographer hired by the Map Division was Karen Edwards (Lochhead) in 1968.

Before 1968, the administrative organization of the Map Division had always been very loose, basically because of the few staff members involved. Although references have been made to the "archival" and "current" sections prior to that date, they did not appear in the formal structure. Functional units had developed, however, with individuals being identified for accessioning, cataloguing and reference in the mid-1960s. Late in 1967, two sections were established, the Canadian Section and the Foreign Section. The Canadian Section was divided into units for Accession and Map Control, Cataloguing and Reference. In 1970, a fourth unit, the Atlas Unit, was added to compile a bibliography of the Collection's early atlases. This organization remained in effect, with some changes in personnel at the unit and section head levels, until 1976.

With growth in the traditional historical area and in current cartography, it was inevitable that the effects of overcrowding would be soon felt. In 1956, the Map Division was so hopelessly overcrowded that parts of the holdings were transferred to the Records Centre at Tunney's Pasture. In 1961, this and other material was transferred to the Loeb Building on Besserer Street. Not until the new building was constructed at 395 Wellington Street was it possible to bring together once again the complete collection. However, it was only several years after the move in 1967 that parts of the Map Division again were forced to move to outlying buildings. By the time Ted Layng retired in December 1973, the National Map Collection was firmly established as one of the leading map collections in the world. A 1973 report noted of the National Map Collection that, "in terms of item control, physical care, and reference service, it is a model for others to emulate."⁴⁴

⁴⁴ Ralph E. Ehrenberg, Cartographic Records in Archives, A guide to their management and preservation: an introductory investigation, Report to the Council of Library Resources, September 1973, p. 5.

THE RECENT PAST, 1974-1981

These years have been active in the National Map Collection, as traditional methods have been re-examined and new methodology introduced. It has also been a period of realization that resources—human, financial, space—are and will continue to be in short supply and that as archivists, we must accept this, cope, but still ensure progress on all fronts.

In recent years, the annual accession rate has somewhat levelled off from the enormous numbers in the 1960s. A more selective acquisition programme has been necessitated by space shortages as well as a cleaer definition of the Collection's mandate. Another contributing factor has been the decrease in cartographic production due to economic restraints. Nevertheless, the annual accession rate has averaged 39,000 maps. For the first time in the division's history and following the administrative re-organization in 1976, there has been a systematic approach to the acquisition of government cartographical and architectural records. Similarly, there has been a concentrated effort to acquire originals of significant early maps, globes, atlases and other cartographic forms. A careful nurturing of contacts with map dealers around the world, and the beginning of advertising for acquisition purposes – a "want ad" in *The Map Collector* – have been two of the methods used. The National Architectural Archives programme, although still not aggressive, has been developing and approximately two significant private architectural and engineering collections a year have been received. The collections represent the works of noted architects such as John and Joseph Power, Colin Drever, H.L. Fetherstonhaugh, E.J. Lennox; of those architects who acted as Dominion Architects, including David Ewart; of engineers, like R. Adams Davy; and of several stained-glass artists, including Frank Ramsdale. The acquisition procedures for current materials put in place in the 1960s, that is, the voluntary deposit programme for current Canadian maps and the exchange programme for current foreign material, continued to function, although they require constant maintenance.

Several of the more significant cartographic acquisitions in the past eight years have been Trevor Lloyd's collection of maps and atlases of northern areas; a large collection of fire insurance plans and atlases, dating from the 1880s to the 1970s, from the Insurers' Advisory Organization; the records of the Inuit Land Use and Occupancy Project; the Coolie Verner collection of 170 Arctic maps, dating from 1502 to 1900; a number of early globes dating from the seventeenth to the nineteenth centuries; a number of significant atlases including Mercator's *Atlas*, 1595, Coronelli's *Libro di Globi*, 1698, and Ortelius's *Theatro del Mondo*, 1612; and a large Samuel Holland manuscript plan of Louisbourg, 1758. The acquisition programme's highlight was undoubtedly the Dr. Alexander E. MacDonald Canadiana Collection, consisting of 700 early maps and atlases as well as 700 related library volumes, acquired in March 1981.

In 1976, G.K. Hall & Company of Boston published the *Catalogue of the National Map Collection, Public Archives of Canada* in sixteen volumes. For several years prior to that date, there had been a concentrated effort to ready the card catalogue for publication. In 1975-76, for example, there was an increase of 200% in the number of maps catalogued compared to the previous year. Although the administrators in the National Map Collection were aware that the catalogue entries included many errors, it was judged that the catalogue, as it was, would nevertheless prove to be a basic reference tool for those interested in Canadian cartography. Only 10% to 15% of the holdings of the Collection are described in the sixteen volumes; for the most part, these are the maps issued in separate sheet form or from atlases or books. This publication was, in effect, the supplement to Holmden's catalogue promised from time to time since 1912. With the establishment of the Government Cartographical and Architectural Records Section in 1976, the group description of records, using general and detailed finding aids, was commenced to bring under control large segments of the Collection's holdings and accessions. For architectural materials and maps of interest to architectural researchers, a subject index by use of building has been introduced in the Collection.

The development of cataloguing standards has been the task of Hugo L.P. Stibbe, now Chief, Documentation Control, since he joined the staff of the National Map Collection as Registrar of Canadian Map Resources in 1973. At that time, a national standard was anticipated, to be compiled in co-operation with the National Union Catalogue of Maps Committee, a standing committee of the Association of Canadian Map Libraries. However, with international developments, in particular the publication of the International Standard of Bibliographic Description (Cartographic Materials), and the second edition of the Anglo-American Cataloguing Rules (AACR 2), the emphasis shifted to ensuring an international standard. In October 1979, an international conference on the interpretation of the rules for cartographic materials in AACR 2 was held at the Public Archives of Canada. As a result of this meeting, an Anglo-American Cataloguing Committee for Cartographic Materials was established, the Secretariat of which was located in the National Map Collection. In addition, an agreement was made to produce a manual. The fruition of the work of this Committee will be seen in 1982 with the publication of Cartographic Materials: A Manual of Interpretation for AACR 2.

In recent years, because of the fluctuating nature of the cataloguing guidelines, the relatively slow development of automation and shortage of manpower in the National Map Collection, little map cataloguing has actually been done. However, sufficient testing has been done to ascertain that multi-level cataloguing techniques for series maps and record groups is possible, that PRECIS (Preserved Context Indexing System) is a suitable subject reference tool, and that AACR 2 will be used for future cataloguing programmes. In 1977, the National Map Collection was established as a separate unit in the automated authorities subsystem of the National Library. In 1977-78, the Public Archives hired a computer systems specialist with responsibility to develop the automation requirements for a National Map Collection intellectual and physical control system. This staff member spent a year seconded to the National Library to evaluate the DOBIS (Dortmund Library System) system, before carrying out a detailed feasibility study in three phases. As a result of this study, divisional management recommended the implementation, in a first stage, of accessioning procedures and the utilization of MINISIS (Integrated Set of Information Systems, to run on mini-computers). Functional specifications are to be prepared late in 1981-82 and a target has been set for implementation of the system in the summer of 1982.

Although a full-time map conservation specialist was finally appointed in the Records Conservation Section late in 1974-75, the National Map Collection recognized that restorative conservation was very time-consuming and that preventative conservation measures needed to be given more emphasis in daily operations. This realization came in part from the divisional input into the Archives Branch conservation study in 1974-75; the statistics on deterioration and loss of holdings without additional conservation facilities were disturbing. Measures introduced included the use of acid-free folders in the trays of horizontal cabinets commencing in 1974-75, the wearing of cotton gloves in handling maps starting in 1975-76, the substitution of microfilm copies of facsimiles for originals, the use of pencils for the note-taking, and the training of staff members. In terms of unsuitable storage equipment, compromises unfortunately were continually made because of shortage of space, lack of financial resources and a growing collection which made the replacement of existing equipment impractical.

In the early 1970s, the National Map Collection had become interested in the 105mm microfilm programme of the United States National Archives and Records Service. After preliminary testing in 1974-75, a 105mm microfilm camera was purchased in 1977. Approximately 20,000 fiche have been produced each year. The microfilm programme was originally envisioned primarily as a conservation measure but its usefulness for research purposes was quickly recognized. When the photostat machine in Reprography Services finally broke down in 1980-81, the microfilm camera had to be utilized to produce negatives of all maps requested by researchers; although the filming of non-scheduled items has been done in non-office hours, the emphasis of the microfilm programme has definitely changed. Although beset by a number of technical problems, the microfilm programme has successfully provided fiche for use by researchers and for photoduplication purposes.

The major innovations in the public service area in the recent past have been those associated with the microfilm programme. These are use of fiche, when available, instead of originals, on large-screen readers and the production of good quality reproductions from the microfilm negatives. A number of specialized projects utilizing maps in recent years, for example, the *Historical Atlas of Canada* and the facsimile historical atlas of Ontario, have resulted in increased usage of cartographic resources. As more people and institutions purchased early maps as works of art or for investment purposes, the National Map Collection began to receive more requests for help in identifying the maps and their significance. The enquiries received continue to concern a wide range of topics such as boundary questions, toponymy, genealogy, local history, architectural restoration, history of cartography, settlement patterns, cartobibliography, utilization of natural resources, native land claims, and so on.

Similarly, activity in the area of exhibitions has intensified in recent years. Map exhibitions have included "Bird's Eve Views of Canadian Cities" in 1976, "Ottawa in Maps", a travelling exhibition of photocopies which opened at Ottawa City Hall in 1975, and a number of small exhibitions for specific occasions. The fourth floor lobby was regularly used for small map displays. The National Map Collection has been involved in a number of multi-media exhibitions including "Arctic Images", 1977, "Keeping the Record", 1978, "Records Management—the Continuous Chain", 1979 and "Dreams of Empire", 1981. The Collection sponsored the loan

exhibition "The Architectural Heritage of the Pontiac" in 1979 and was involved in the launching of a postal stamp commemorating the centennial of the transfer of the ownership of the Arctic Islands to Canada in January 1980.

The redistribution programme which commenced with surplus foreign maps in 1968 was expanded a decade later to include surplus Canadian materials. In the summer of 1977, three students were employed to sort and list such items. The list of 20,000 items which was distributed to map collections across Canada was very useful, but so labour intensive that it was recognized that progress would be agonizingly slow. Thus in 1978, a decision was made to regionalize the programme by using the regional records centres. Contract staff roughly sorted surplus material by region to be shipped to the appropriate centre. In 1979 and 1980, sessions were held in Halifax, Montréal, Toronto and Edmonton; as a result, approximately 50,000 maps were added to the collections of map archives and map libraries across Canada. These sessions, combined with foreign maps redistribution, have enabled many of the smaller map collections in Canada to build up their holdings without large expenditures of time or money, both of which are normally in short supply.

Staff involvement in professional associations and learned societies has intensified and diversified in recent years. The establishment of two new associations, the Association of Canadian Archivists and the Canadian Cartographic Association in the early 1970s, provided two organizations in which archivists in the National Map Collection wished to be actively involved. Several archivists have also become very active in the Association des archivistes du Québec. The Society for the Study of Architecture in Canada, the Society for the History of Cartography, the International Federation of Library Associations and Institutions, and the Ottawa Map Society are amongst the others in which staff members have played active roles in recent years. Of course, activity continued in the Association of Canadian Map Libraries.

In 1978, the National Map Collection hosted the first seminar on cartographic archives which those responsible for maps at provincial and territorial archives were invited to attend. The opportunity to discuss common problems and to plan future programmes was deemed highly successful. A second seminar was held in 1980, and another is being planned; in the interim periods, communication has been continued informally.

With the appointment of a new division chief in 1974, there was a realization that the present organizational structure had to change. Time was required for study of the various alternatives, and in the 1974-76 period there had to be a concentrated effort for the division to ready the card catalogue for the G.K. Hall publication. To ensure the best possible care of all materials in custody and to enable programmes to be undertaken, the old Canadian and Foreign Sections were abolished in 1976 and replaced by five new sections: Early Canadian Cartography, Modern Cartography, Government Cartographical and Architectural Records, External and Internal Services, and Documentation Control. The establishment of the three "collection" sections has ensured that a share of divisional resources are allocated to all types of material. In each section, staff have gained in-depth knowledge of particular areas, such as architectural records, government cartographical records and early maps, and this knowledge has been utilized in acquisition, control and public service functions. Similarly, the existence of two "service" sections has

ensured that certain programmes, including automation, microfilming and redistribution, have been developed.

In December 1979, the report entitled *The Future of the National Library of Canada* again brought to the forefront the arguments of the National Librarian that the National Map Collection should be transferred to the National Library of Canada. This was not the first time that the future of the National Map Collection had been openly debated, and probably will not be the last. In the opinion of those in the National Map Collection, the division is an integral part of the Public Archives which cannot be separated. Any transfer or split of the Collection could only cause confusion, duplication and unnecessary expense for the country.

As to the future, the acquisition role of the National Map Collection will, by necessity, develop in several new directions. With technological advances, an increasing proportion of the cartographical record will be in machine-readable form. Methodology will have to be developed to cope with these records. A systematic survey of cartographical and architectural records in government departments, agencies, and Crown Corporations is required to identify and ensure preservation of these records. Changes in legislation, in particular the proposed Access to Information and Privacy Act, the revision of the government's administrative policy manual, and new archival legislation, will necessitate even more activity in the government area. The development of a national policy concerning older non-Canadian cartographic records will almost certainly occur in the next few years. With the potential of hundreds of thousands of maps to be retained in some format and with the limited resources available in map collections across Canada, there must be careful rationalization to establish methods of sharing the burden and yet ensuring the task is accomplished. If the proposed move of the National Map Collection and several other divisions of the Public Archives to Phase IV, Place du Portage in Hull, Québec, occurs according to the present schedule, the crowded storage and working conditions which now exist may be alleviated within the next two years. In the publication programme, one of the first priorities of the National Map Collection is to produce a general guide to its holdings. A number of thematic finding aids may also be published in the future. The machine-readable system to be introduced in the Collection in 1982 will progress from the accessioning phase to a complete information retrieval system and a national union catalogue of maps. The Collection will also input into the Archives Branch's firstline information system. Undoubtedly there will be many changes in the future, but the basic archival work of acquisition, control and public service will continue. The methods may change but the objective of the National Map Collection will not. The Collection will continue to acquire, preserve and make available for research purposes the cartographic and architectural record of Canada, both historical and current, from both government and private sources, in all formats, as well as a selective collection of non-Canadian cartography.

The seventy-five years since 1907 have witnessed enormous growth and numerous changes in the cartographic holdings of the Public Archives of Canada. H.R. Holmden would probably not recognize his "map room" in the National Map Collection of 1982. Bernard Weilbrenner stated in "The Public Archives of Canada,

⁴⁵ Bernard Weilbrenner, "The Public Archives of Canada, 1871-1958," Journal of the Society of Archivists, 11 (April 1961): 101.

1871-1958" that "the development of the Public Archives of Canada has been characterized by a succession of false starts and gropings, by plans never fully carried out, and generally, by lack of government interest."⁴⁵ The history of this division certainly proves this judgement, but these false starts and unfulfilled plans have been compensated by progressive developments and advances since 1907. The history of the National Map Collection is in many ways a microcosm of the history of archives in Canada. Certainly this Collection did not develop in a vacuum; its history must be placed in the context of the history of the Public Archives of Canada as a whole, the context of the history of the federal public service, and, indeed, in the context of the history of the archival field in general.

APPENDIX I

LIST OF PUBLICATIONS OF THE NATIONAL MAP COLLECTION, PUBLIC ARCHIVES CANADA

Antique Map Calendar: To Celebrate the 75th Anniversary of the National Map Collection...[Ottawa], 1982. Available from Supply and Services Canada. \$6.95.

Arctic Images: The Dawn of Arctic Cartography, Fourth Century to 1822. Ottawa, 1977. 52 pp. Available from the Public Archives Canada, free.

Atlases Published in the Netherlands in the Rare Atlas Collection/compiled and edited by Lou Seboek. Ottawa, 1973. 132 pp. Available from the Public Archives Canada, free.

[Poster] Bird's-Eye Views of Canadian Cities: An Exhibition of Panoramic Maps (1865-1905). Bird's eye view of the City of Ottawa---1876. Herm. Brosius. Ottawa, 1976. Out of print.

Canada in Maps. Ottawa. 1969-1970. 64 pp. Out of print.

Catalogue of Maps, Plans and Charts in the Map Room of the Dominion Archives/classified and indexed by H.R. Holmden. Ottawa, 1912. 685 pp. Reprints of this work are available from the Kraus Reprint Co., \$32.00.

Catalogue of the National Map Collection, Public Archives of Canada. Volumes 1-16. Ottawa, 1976. Available from G.K. Hall & Co., 70 Lincoln Street, Boston, Mass., 02111, U.S.A. \$1,250.00 Canada and U.S.A. (\$1,375.00 elsewhere)

County Atlases of Canada: A Descriptive Catalogue/compiled by Betty May, assisted by Frank McGuire and Heather Maddick. Ottawa, 1970. 206 pp. Out of print.

County Maps: Land Ownership Maps of Canada in the 19th Century/compiled by Heather Maddick, introduction by Joan Winearls. Ottawa, 1976. 100 pp. Out of print.

Fire Insurance Plans in the National Map Collection/by Robert J. Hayward. Ottawa, 1977. 171 pp. Out of print.

French Atlases in the Rare Atlas Collection/compiled and edited by Lou Seboek. Ottawa, 1974. 205 pp. Out of print.

Index to Township Plans of the Canadian West/compiled by Guy Poulin, assisted by Francine Cadieux. Ottawa, 1974. 89 pp. Out of print.

An Inventory of Architectural Records: Description of a Project Carried Out by Heritage Ottawa, 1976. [Ottawa, 1976]. 23 pp. Available from Public Archives Canada, free.

List of Gazetteers in the Foreign Section/compiled by Karen Lochhead, second edition compiled by Vivien Cartmell. Ottawa, 1974. 49 pp. Available from the Public Archives of Canada, free.

List of Maps Series in the Foreign Section/compiled by Vivien M. Cartmell. Volume I: Europe (including the U.S.S.R.); Volume II: Africa; Volume III: Antarctica, Asia, Australia and New Zealand; Volume IV: America, Ocean Islands and the World. Ottawa, 1973-74. Out of print.

Maps of Indian Reserves and Settlements in the National Map Collection/compiled by Linda Camponi, assisted by Diane Tardif-Cote, Guy Poulin. Volume I: British Columbia; Volume II: Alberta, Saskatchewan, Manitoba, Yukon Territory, Northwest Territories. Ottawa, 1980-1981. Available from the Public Archives of Canada.

[Brochure] National Architectural Archives. Ottawa, 1978. 4 pp. Available from Public Archives of Canada, free.

[Brochure] National Map Collection. Ottawa, 1975. 4 pp. Available from the Public Archives Canada, free.

National Map Collection-Annual Report. 1976/1977; 1977/1978; 1978/1979; 1979/1980. Available from National Map Collection, Public Archives Canada, free.

Ottawa in Maps: A Brief Cartographical History of Ottawa, 1825-1973/by Thomas L. Nagy. Ottawa, 1974. 95 pp. Out of print.

The Riel Rebellions: A Cartographic History/compiled by William A. Oppen. Ottawa, 1979. 109 pp. Available from Supply and Services Canada, \$20.00 (\$24.00 U.S.)

Sixteenth-century maps relating to Canada: a check-list and bibliography. Ottawa, 1956. 309 pp. Out of print.

Telecommunications: The Canadian Experience. An annotated list of maps/[by] James W. Knight. Ottawa, 1974. 94 pp. Available from the Public Archives Canada, free.

Winnipeg in Maps/by Alan F.J. Artibise and Edward E. Dahl. Ottawa, 1975. 84 pp. Available from Supply and Services Canada, \$2.50 (\$3.00 U.S.)

Mailing Addresses: Public Archives Canada Information Services 395 Wellington Street Ottawa, Ontario K1A 0N3

Kraus Reprint Co. Route 100 Millwood, New York 10546 U.S.A.

Supply and Services Canada Publishing Centre Mail Order Section 45 Sacre-Coeur Boulevard Room 1430 Hull, Québec K1A 0S9

Résumé

L'auteur fait un récit concis de l'histoire de La Collection nationale de cartes et plans des Archives publiques du Canada pour faire voir le développement de la plus grande collection de cartes historiques du Canada.