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“William Harold Hunt, U.E., E.D., B.Sc., C.E.: Surveyor and Civil Engineer”

Compiled by William G. McKay

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Abstract

This paper has been compiled from autobiographical and biographical material written by, and about, William Harold Hunt (1884-1976), together with extracts from a two-part memoir written by him but only recently published. The auto- and biographical material, parts of which have never been published, covers the essentials of Hunt's career, and the memoir recounts his experience as a member of a location team on a survey for the route of the Hudson Bay Railway to Fort Churchill in northern Manitoba almost a century ago.

This paper itself is in two parts, one dealing with Hunt's career and the other with his memoir.

About the Working Paper Series

In June 1995 the Council of the Engineering Institute of Canada agreed that Working Papers on topics related to its history and development, to the history and development of other institutions serving the engineering profession in Canada, and to engineering generally, should be published from time to time.

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The editors of this present Working Paper were Peter R. Hart and Andrew H. Wilson

About the Compiler

William Gordon McKay was born in Regina, Saskatchewan, in 1917, attended high school in Portage La Prairie, Manitoba, began his post-secondary education at the University of Manitoba, and completed it at Queen's University, graduating in civil engineering in 1940. During his final year, he took courses leading to certification as a 1st Lieutenant in the Royal Canadian Engineers, but did not serve in the Canadian Army. When his master's degree course at Queen's was ended prematurely in 1941, Bill joined the engineering staff of the public health engineering division of the federal Department of Pensions and National Health, serving in its St. Catharines and Edmonton offices. In 1945, he joined the consulting partnership of Underwood & McLellan (U&M), first in Edmonton and later in Saskatoon, continuing his involvement with public health engineering. When the U&M

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partnership was dissolved in 1952, Bill became one of the five principal shareholders of Underwood McLellan & Associates (UMA), headquartered in Saskatoon and later in Winnipeg. In 1955 he was appointed manager of the company. In 1962 he became president and general manager and, four years later, president and chairman of the board. Following a serious illness, he stepped down from these positions in 1970 and assumed the role of secretary of the various operating companies associated with UMA, although he did not fully retire until 1982.

Bill McKay joined the Engineering Institute of Canada in 1944, was active in the divisions and branches in Saskatchewan and Manitoba, and was elected vice-president for the Manitoba-Saskatchewan Region in 1966. He served as president of the Institute in 1969-70. He has also been president of the Association of Professional Engineers of Saskatchewan, the Western Canada Water & Sewage Conference, the Association of Consulting Engineers of Manitoba, and the Association of the Scientific, Engineering and Technological Community (SCITEC). In the late 1980s, he became a member of the executive of the EIC Life Members' Organization, subsequently occupying the chair. He also served as secretary of the LMO (now the Canadian Society for Senior Engineers) and, since 2000, has been its representative on the EIC History & Archives Committee. Bill was awarded EIC's John B. Stirling Medal in 1994 in recognition of his distinguished service to the Institute over many years. He has already made two contributions to the Working Paper series: WP 11/2002 *Memoir* (May 2002); and WP 18/2004 *Consulting Civil Engineering Firms in the Prairie Provinces* (January 2004).



Introduction

The purpose of this paper is to provide some background to the life of a Canadian surveyor and civil engineer that began in the late 19th century and ended over 90 years later. It emphasises the years when he was growing up and preparing for his professional life.

The paper is in two parts. The first contains a biography of William Harold Hunt based on his own autobiographical notes and on recollections of him by his daughter, Margaret (Mrs. J. R. Carter), and a former colleague, Clarence J. Broughton, both of Winnipeg.

The longer second part, reprints - with the permission of the Manitoba Historical Society - extracts from the two-part article "The Hudson Bay Railway Survey, 1910-1911: A Memoir by W. H. Hunt" which appeared in the Spring/Summer 1999 and Autumn/Winter 1999-2000 issues of the Society's magazine *Manitoba History*. The article was edited for its original publication by Hunt's son, John David Hunt, of White Rock, British Columbia. The photographs that appeared in the magazine, as well as those appearing on pages 3 and 26 of this paper, were supplied by Margaret Carter, who kindly provided the autobiographical notes used in the first part of the paper. Maps have been added to amplify the text.

As a boy, Hunt was called Harold rather than William, which was his father's given name. Later in life, he was known to his friends and colleagues as "Buck" or "the Major," although the first of these sobriquets does not appear in the text.

In their original forms, the materials on - and by - W. H. Hunt included much that was personal - about his family, the people he met or with whom he worked. The emphasis in this Working Paper is more on the engineering aspects of his career and the journey that Hunt and his colleagues took in 1910 and 1911, how the survey was made, and how the crews lived.

Part 1: William Harold Hunt

Harold Hunt, the eldest of the three sons of William Francis Hunt and his wife, Catherine Maria Ives, was born on 24th November, 1884, on a farm near Lennoxville in the Eastern Townships of Québec. His grandfather, Francis Hunt, was an Irish-born Methodist minister. His great, great grandfather, Daniel Scott, was a United Empire Loyalist. Harold received his early education at Lennoxville Academy.

As a boy, his interests lay more in hunting, fishing, swimming and boating than in games such as hockey, football or baseball. Every summer he went with his family to camp on property owned by an uncle on the east side of Lake Memphremagog, where his enthusiasm for the outdoors kept him and his brothers fully occupied and out of mischief. He was not a serious student and, in 1901, at the age of 17, failed the matriculation examination for McGill University. In the fall of that year, Harold, his two younger brothers and much younger sister moved with their parents to Souris, Manitoba,

where they lived briefly before going to Winnipeg.

Harold's early working life was a series of low-paying, short-term jobs. He found work driving a stook train in the harvest fields near Souris, but his inability to harness a team of horses and indiscretely talking back to his employer resulted in his being fired on his first day. He then found work stoking the engine boiler of a threshing machine. This, he wrote, was his first real labour and, although his hours were from 4 am to 9 pm, the food was not always the best and the alkali water disagreed with his stomach, he stayed with this job for two months, until freeze-up, when he returned home to study for a teacher's certificate.

His standing allowed him to study for a second-class certificate. But around the first of June 1902, just before examination time, he felt he should be earning money to help his family, and started work as an apprentice in Charles McEachern's machine shop. After a month at this, the family moved to Winnipeg. Having had experience around threshing machines, he applied for work at the J. I. Case engine plant. He lasted only a day and a half. He had told his manager he did not think he was suited for the heavy work he was being called upon to do - unloading threshing machines from flat cars to a warehouse platform. Case paid him a total of 35 cents for the work he had actually done.

Harold next worked as a clerk in a dry goods store on Main Street. One of his jobs was washing windows, something that did not suit him either, so he began looking for job more to his liking. He applied for, and got one, as an apprentice machinist in a small shop called the Standard Machine Works, on Higgins Avenue East. The firm's partners were Mr. Coulter, the foreman, and Mr. Lyall, the bookkeeper. Some time later, Mr. Deacon joined the partnership and the firm became the Manitoba Bridge and Iron Works. Times were hard when Harold worked for them. His wages were 75 cents a day which, he wrote, was "...for breaking drills and helping boilermakers, machinists and blacksmiths...but he was both paid and happy."

One of the employees at this plant, Arthur McTaggart, left to work for a newly established firm, the Northern Iron Works on Sutherland Avenue in Winnipeg. McTaggart liked young Hunt and used his influence to have him hired at the new plant. It was larger and seemed to offer better opportunities to learn machine shop work Harold began work there, at 75 cents a day. About a year later, McTaggart moved to the Stuart Machinery Company, and was followed by the younger man who, by this time, could operate a lathe and was earning \$1.50 a day. But in May 1904, again influenced by McTaggart, he returned to the Northern Iron Works, which appeared to hold more promise, as it had just received a large order for cast iron columns that had to be turned on a lathe, for the Eaton Building on Portage Avenue. Although it paid \$1.50 a day, the job included more chores than Harold cared to do, so he stayed for only a few months before finding work at the Vulcan Iron Works. He stayed there until February 1905 when his father received a promotion to the head office of his insurance company and the family returned to Québec, this time to Montréal.

With his experience, he was soon hired by the Linotype Machine Company at \$2 a day, but left after only two months to work for the American Locomotive and Machine Company. It was, as Harold



William Harold Hunt

In Northern Manitoba

c.. 1910



Beside the cairn
commemorating the completion
of part of the
Trans-Canada Highway
in 1932, at the Manitoba-Ontario
border

c. 1958

(see page 9)

wrote, "a real job." The plant was new and efficiency was demanded. After he had been tried out on various machines, he was assigned to a huge machine to bore out steam cylinders for locomotives. This, he found "very interesting work and not at all laborious." After three months, his wages were increased by 50 cents a day. More significantly, however, he had developed an ambition - to become an engineer.

For several years, Harold had been taking a correspondence course in mechanical engineering from the Armour Institute of Technology and was now determined to matriculate at McGill. With this in mind, he took lectures at Shortell's Night School on Ste. Catherine's Street. He was doing well there when the news came that his father had died of typhoid fever while on a business trip in Manitoba. Harold had taken rooms nearer his work, with a view to learning to speak French, but was out of touch with his family. In the circumstances, his mother was anxious for the family to return to the west.

As the result of befriending an old gentleman as his train for the west left Montréal, Harold was able to find employment in the CPR's Weston Shops two days after arriving in Winnipeg. The pay was 35 cents per hour, rising later to 42 cents. The days were long since he had to travel to and from the Shops. He found the job interesting and was able to broaden his experience of machines. It also gave him the opportunity to contribute to the family's expenses and to save for his college education. However, his brother Ernest had to give up his schooling and find employment while his youngest brother Frank and sister Marjorie remained in school. His father's life insurance enabled the family to make a cash payment for the house at 128 Colony Street in the spring of 1906. Harold continued studying and took lectures at the YMCA night school, although he found the long workday made night studies difficult.

By the fall of 1907, he felt he had saved enough money for college. During the winter of 1907-1908, he studied for, and easily passed, the Part II matriculation exam required for entrance to the engineering course at the University of Manitoba, then given at the old Broadway campus. To supplement his savings, he found temporary employment on Saturdays and during the Christmas holidays at the Eaton store, selling such things as capes, boots and handbags. Employment was hard to find in the spring of 1908. Through Charles McEachern, he was put in touch with a wealthy lady who wanted a student to operate the gasoline-driven launch at her summer camp at the Lake of the Woods and to do a variety of handyman jobs at her summer cottage. While it had its drawbacks, this job lasted until the beginning of August when the camp was closed for the year. Harold returned to Winnipeg. He was offered similar employment for the summer of 1909 but did not accept.

In the two-month hiatus before university lectures began in the fall and as a means for earning additional income, Harold was put in touch - again by Charles McEachern - with a threshing machine contractor at Boissevain and was hired to operate the machine. For a variety of reasons to do with the way the owner wanted the machine to operate, he found the work unsatisfactory and quit. He found another job driving a water tank team and helping to fire a steam tractor owned by another contractor, whose threshing gang was "a colourful, rough and tough lot!"

This job lasted until school started in mid-October. Harold enrolled in the civil engineering course at the University of Manitoba, since mechanical engineering was not then available. Professor Brydone-Jack, who had established this course in 1907, lectured in the engineering subjects. Professors Cochrane and McLean taught mathematics, and Professors Buller, Allen and Parker taught botany, physics and chemistry respectively. There were around three dozen men in the freshman class of 1908, including several who became life-long friends, among them John Taunton, later a chief engineer of the city of Winnipeg, and C. N. "Mike" Mitchell, who won the Victoria Cross in World War I. Most were hard-working, were putting themselves through school, and had little time for anything outside their studies. There was some hockey, but Harold's favourite diversion was skating at the old Auditorium Rink at St. Mary Avenue and Fort Street.

The following spring nearly all the students passed and, thanks to Professor Brydone-Jack, almost all got summer jobs with survey parties. Harold and Mike Mitchell worked on the location of the Grand Trunk Pacific lines in Saskatchewan, from Biggar to Battleford and from Young to Prince Albert. They gained good experience and, being paid \$35 a month, earned enough to put themselves through another year of university.

Life during the winter of 1909-1910 was similar to the previous year except that, at the skating rink, Harold was introduced by a mutual friend to a young lady from Richmond, Québec - Minnie Pearl Taylor - to whom he became "greatly attached."

Harold, now 25 years old, spent the spring of 1910 as well as the following summer, fall and winter in northern Manitoba as a rodman and a member of a Hudson Bay Railway survey party under location engineer F.P. Moffatt. As explained in Part 2 of this paper, he extended the job into the winter of 1911 so that he could earn enough to finance the third year of his university studies. He continued working during the spring and early summer of 1911 as a rodman on the double tracking of the Canadian Pacific Railway east of Moose Jaw and on the location of the line from Moose Jaw to Expanse, under assistant engineer C. D. McIntosh. After this work was finished, he continued as a rodman for the CPR until the beginning of August. His salary was \$45 a month. Harold finished that summer working for the Bridge Department of the Canadian Northern Railway, first as an instrument man on the laying out of the proposed new subway at the east end of Saskatoon and, subsequently, as an inspector on the construction of a new concrete arch bridge that replaced an old trestle one at Rowan, 30 miles west of Port Arthur. These jobs paid him \$75 a month. In his spare time, he also did some prospecting - a life-long interest that began during the HBR survey..

With his replenished "stake," Harold returned to the University of Manitoba in mid-October 1911 and resumed his studies with a new class. This was a hard year as there had been a change in the engineering curriculum in his absence. Three subjects that had previously been taught in the third year had been transferred to the second. But Harold had not taken them, so that he had to write exams in them along with the required ones at the end of his third year. He succeeded in all of these subjects except hydraulics and calculus, which he carried as supplementals.

The Canadian Northern Railway Bridge Department employed him during the summer of 1912., this

time as an engineer at a salary of \$125 a month. He worked on a new bridge over the Seine River in St. Boniface, a new freight viaduct over Winnipeg's Main Street South, a bridge over the Assiniboine River, a bridge over the Swan River in the town of the same name, and a bridge over the Woody River near Bowsman. He wrote and passed the supplemental in hydraulics during the summer but did not pass the calculus exam until Christmas. He was successful in his final exams and graduated in civil engineering in May 1913.

Meanwhile, Miss Taylor had promised to marry him. Conventional wisdom had it that no engineer whose specialty was railway location and construction should have a wife because of the many changes of site likely to be involved. Harold's post-graduate job applications, therefore, went to the heads of the (more static) municipal engineering departments in the west. The city engineer of Moose Jaw accepted one of them and he went to work there as an assistant engineer. Unfortunately, he took a great dislike to his supervisor but, as he was going to be married, did his job and "saved his pennies." On April 22nd 1914 Harold Hunt and Pearl Taylor were married in Moose Jaw and settled into their first home there.

In August, World War I began and Harold's salary was cut. The couple moved into an apartment. During the winter of 1914-1915, he was laid off, but was fortunate to be hired by the city mechanical department at Moose Jaw, at a salary of \$90 a month. When spring came, with some increase in the work available, he was re-hired by the city engineer. On a visit to Winnipeg he tried to obtain employment there, unsuccessfully. All he could get, apparently, was work as a machinist on the production of artillery shells. Instead, he returned to Moose Jaw and got a job with the Saskatchewan Bridge and Iron Company as a machinist...making shells on shift work for use by the Canadian army! He did this until April 1915. His decisions at this time were apparently influenced by the fact that his wife had been orphaned for eight years before their marriage, had lived during this time without a satisfactory home and needed his support through the early years of their marriage. He could not join the army without her permission.

The Hunts moved to Winnipeg. At first, Harold worked on maintenance for Canadian Northern and then, after a series of unforeseen events, joined the Manitoba Department of Public Works as an assistant engineer. By the spring of 1917 he was earning \$270 a month. In September of that year a daughter, Katherine Taylor, was born. Promoted to district engineer, Harold's job at this time was principally the construction of new roads in the province. He and Pearl rented a home in Winnipeg. In June 1920, their son, Douglas William, was born. In the fall of that year, the family moved to Selkirk, nearer the road-building projects. They lived there for several years, where their daughter Margaret Aileen - later Mrs. Carter - was born. In August 1927, the family moved back to Winnipeg when Harold's territorial responsibilities as a district engineer in the Highways Department were changed. In February 1929, John David de Vere Hunt was born. Then came the Depression. Government salaries were cut and various allowances cancelled, affecting Harold Hunt among many others.

At this point the autobiographical material becomes less detailed. But from another source - the first of the *Manitoba History* articles - we learn that Hunt remained a district engineer until 1940 and

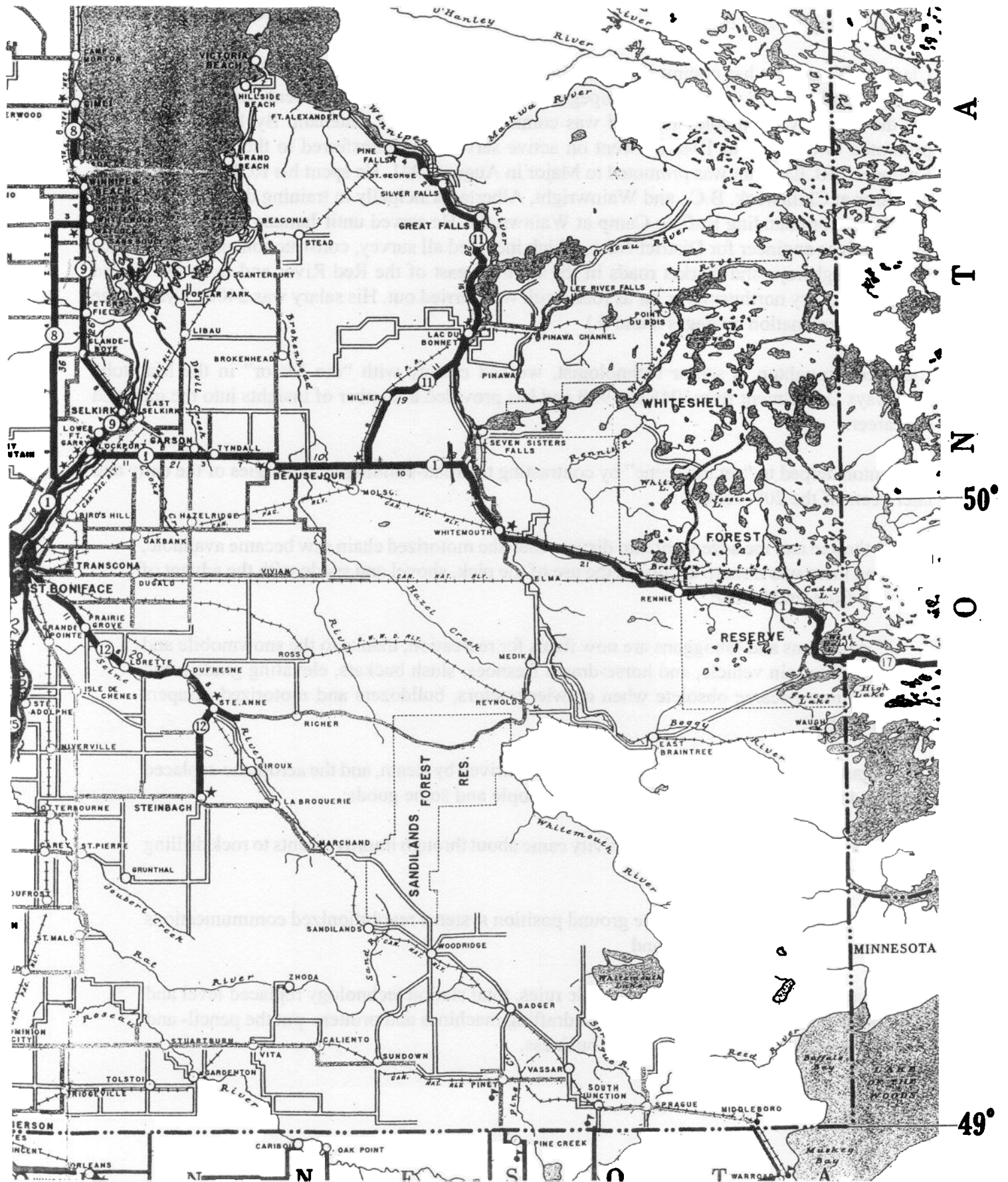
helped locate, design and build No. 1 Highway between Winnipeg and the Ontario border. Then his active military service began.

Clarence Broughton has commented that Harold Hunt's initial connection with the military was in 1929, when he joined the Royal Winnipeg Rifles (RWR), a reserve regiment, known colloquially as "the Saturday night soldiers," and was commissioned as a Lieutenant. By 1935 he had been promoted to Captain. In 1940 he went on active service and transferred to the Royal Canadian Engineers (RCE). Hunt was promoted to Major in August 1941. He spent his RCE service years at the bases at Chilliwack, B.C., and Wainwright, Alberta, principally in training duties. He was also the officer commanding Buffalo Camp at Wainwright. He served until January 1945, returning to his old job as engineer for District No.1, which included all survey, construction and maintenance work for highways and market roads in the territory east of the Red River and from the United States' boundary northwards as far as road work was carried out. His salary was \$4000 a year. (See map and explanation on pages 8 and 9.)

Clarence Broughton, a senior technologist, worked closely with "the Major" in the Manitoba Highways Department from 1946 to 1950 and has provided a number of insights into the man and his career.

Broughton helped to "set the scene" by contrasting the road-building technologies of the early and later years of the 20th century:

- * the axe and the adze went into disuse when the motorized chain saw became available, and there was a sharp decline in the use of the pick, shovel and spade with the advent of the front-end loader;
- * dog teams and toboggans are now items for recreation, thanks to the snowmobile and the all-terrain vehicle, and horse-drawn fresnoes, slush buckets, elevating graders and draglines became obsolete when crawler tractors, bulldozers and motorized scrapers appeared;
- * gasoline and diesel engines replaced those driven by steam, and the aeroplane replaced the train for the transportation of some people and some goods;
- * significant increases in productivity came about through improvements to rock drilling equipment;
- * two-way radios and satellite ground position systems revolutionized communications and terrestrial navigation; and
- * hand-held computers replaced slide rules, total station technology replaced level and transit books, and computer-assisted drafting machines and printers put the pencil- and pen-wielding draughtsman out of business.



The map on the previous page was published in 1946. It shows, essentially, the boundaries of Harold Hunt's No. 1 District: from the Red River and Winnipeg in the west to the Ontario border in the east, south to the Minnesota border and the United States, and north to the southern end of Lake Winnipeg.

Halfway up the right-hand side of the map, at the provincial boundary, Manitoba's Highway No.1 joins Ontario's Highway No.17. Tucked into the bend in Highway No.1 and just visible is White Hawk Lake. Not visible to the south of it is a very much smaller lake - Hunt Lake - named for Harold Hunt in recognition of the part he played in this highway's construction. Also invisible to the west is Star Lake, where the Major purchased a fair sized homestead, which is mentioned on page 11.

The cairn at which Harold Hunt is standing in the lower photograph on page 3 was also at the junction of Highways 1 and 17.

The town of Selkirk is also shown, halfway up the left-hand side of the map. This was, effectively, the jumping off point for the south end of Lake Winnipeg and the boat trip north to Warren's Landing and Norway House for the railway location survey described in Part 2 of this paper.

For much of the century, adequate retirement pensions were not available. And at least one thing remained constant for engineers: the tyranny that their allowed budgets created.

Clarence Broughton has also noted that, from his early days, Harold Hunt developed an abiding love for forests and streams and for the animals that lived in them. In his Manitoba years, this was transferred to areas such as Manigotagan on the east side of Lake Winnipeg - not unlike the terrain of his youth. He also developed a strong sense of independence, self-worth, responsibility and concern for members of his family. He went to work where he could find it, when the money was needed. Nor was he lacking in eccentricities. For example, when testing the slopes beside highways, he would suddenly swerve his car, drive at highway speed into the ditch on one side of the roadway, proceed up the backslope, go back over the grade and into the ditch on the opposite side. Broughton concluded that the Major was, himself, constructed of india rubber and wire rope, with spring loading and a hair trigger. He was also the nearest thing to human perpetual motion imaginable!

When the Major came back from the war, the older senior personnel in the Highways Department were gradually being replaced. Automobile production for non-military uses was beginning again, but those purchased by the Department still came from the War Assets Disposal Corporation, with standard transmissions, 6-volt electrical systems, vulcanized tires and coil springs. Power steering and air conditioning were not available. Trained and untrained staff were in short supply, as were the dollars in the budgets. The construction of the Alaska Highway affected the availability of equipment. Rural electrification within Manitoba was increasing, opening up new parts for settlement and the need for more and better roads. Harold Hunt shared an office with two other district engineers - and a single telephone. Since, in his view, waiting time was wasted time, he used the instrument more than one-third of the time.

In comparison with a half-century later, the condition of the roads in Manitoba were what Broughton called "primitive" in 1946. In Hunt's district, for example, the paved ones included the Manitoba section of the new Trans-Canada Highway from Lockport to the Ontario border, the Henderson Highway between Winnipeg and Lockport, a few roads in St Boniface and a link to Transcona, plus 47 miles of Provincial Trunk Highway No. 11 from Seddon's Corners north to Lac du Bonnet and Pine Falls, and 47 miles of PTH No. 12 between Winnipeg and Richter. Most paved and gravel roads in the province were established on the basis of a 99 foot road allowance and 22-24 foot wide travel surfaces. Motor vehicles shared the roads with farm tractors, the horse-drawn carts and hay racks, which deposited nails and bolts, many of which were picked up by wartime tube tires. These and the sharp curves to bypass sink holes, correction lines and other obstacles contributed to the length - and danger - of motor vehicle journeys. Local buses and local and transcontinental trains, with more frequent trips and stops, still enjoyed good business.

Broughton went on to say that, in 1946, Hunt's No. 1 District had an area of approximately 11,700 square miles in area - 80 miles east-west, and 146 miles north-south. In approximately 2400 square miles, very little road-related work was being done, except for route exploration and some winter road construction and maintenance. The frustrations for the engineer with a limited budget included muskeg, peat bogs, boulders, solid rock, soil types, predictable and unpredictable washouts, general

floods and beavers. Minimum vertical and horizontal standards, even on the paved parts of the Trans-Canada Highway, were difficult to achieve, especially in areas where white mud and other super-saturated materials were encountered. On the other hand, wartime stop-gap/band-aid methods of repair were being abandoned in favour of more permanent ones.

There were also political influences to be taken into account when setting priorities, and especially in ridings held by members of the provincial Cabinet. Lobbying was vigorous and the natural resource, mining and energy industries, which were numerous in Hunt's district, were especially active. The corresponding departments of government were also active. In the Manigotagan area, for example, there was no direct access road from southern Manitoba. Lake Winnipeg provided boat and barge access during the summer, as did road tractor-trains in winter - both of which added expense to the transportation of goods and people. Float- or ski-equipped planes were, however, available for emergencies. Broughton summed up the Major's workload as "extremely exhausting and frustrating!"

In May 1950, six months after his 65th birthday, Harold Hunt was appointed the federal government's supervisory engineer for the construction of over 400 miles of the new Trans-Canada Highway through Saskatchewan, with headquarters in Regina, a task completed at the end of March 1954. He then set himself up in private practice. Among his assignments was work for the engineer's office of the Saskatchewan Department of Highways, where he remained until March 1955. In May, he began a two-year construction project for the Manitoba Department of Mines and Natural Resources, on the Falcon Beach development. In June 1958 he worked for Andrew Taylor & Associates on the Clear Lake water supply project, finishing in August 1959. He then went on to an active retirement. He died in Winnipeg in January 1976 in his 92nd year.

Margaret Carter has added these insights into the man who was her father:

"He was a generous, chivalrous and sensitive man who covered it with a tough, gruff, quick tempered exterior. He was a man of integrity, who would not ask any other to do what he himself would not. He was honest, trustworthy and extremely hard-working. He had inherited from his Irish Methodist grandfather a strong Christian faith and was proud indeed of his United Empire Loyalist ancestry. His interests and accomplishments have set an example few can follow. He took an active interest in the family's genealogy. He loved my mother dearly, but their wills clashed fairly regularly for most of their 72 years of marriage.

"He was an accomplished horseman and rode regularly until his early eighties. He was at home in both woods and in a canoe, a skilled woodsman and an exceptional pistol shot and rifleman. He could make his own bullets. As a man in his eighties, he could go through the bush at a speed that none of his teen-age grandchildren could match. He bred horses and dogs, homesteaded at Star Lake, where he taught me how to go through the bush and how to blast rock, and would also prospect from there. He bought a section of land at Manigotagan where he planted gardens, fir and fruit trees. He studied French

into his senior years. He was left-handed and forced to write with his right hand, but managed to cope with resilience experienced by few. He lived by the courage of his convictions and accomplished much of lasting value.”

Harold Hunt left behind an extensive collection of archival material, including books, reports, manuals, handbooks, technical magazines and brochures. It also included his University course notebooks, reports on specific projects, maps and plans, Manitoba government specifications and regulations, correspondence, photographs, diaries and field books, certificates and a good deal of army material. Discussions are presently underway to have some or all of this material stored permanently at the University and at other institutions in Manitoba.

William Harold Hunt joined the Canadian Society of Civil Engineers as a student in 1911 and transferred to the junior grade in 1917. He was elected an associate member of the Engineering Institute of Canada in 1919 and a full member in 1945. He became a life member in 1964. He was also a founding member, in 1920, of the Association of Professional Engineers of Manitoba and a member of the provincial Land Surveyors' Association. He was associated with the Canadian Good Roads Association for many years. He was a member of the Winnipeg Branch of the United Empire Loyalists' Association of Canada, the Manitoba Historical and Archeological Societies, the Royal Canadian Legion, Prince Rupert Masonic Lodge No. 1, and Riverview United Church.

Part 2: Memoir of the Hudson Bay Railway Survey, 1910-1911

Let me make two comments before proceeding with extracts from Harold Hunt's memoir. First, in a March 2002 publication in this EIC History & Archives series, *Letters Home...* (WP 10/2002), Robert S. Sproule describes his experiences as an engineering student employed on summer work in northern Manitoba in 1935. There were, however, some significant differences between Hunt's experience and Sproule's. For example, in 1910 there were no railways, highways or bush aircraft in this part of the country; and Hunt worked through a winter, Sproule did not. Second, to assist the reader, a map - published by the federal Department of Mines and Technical Surveys around 1975 as part of its topographical mapping series - has been included on page 14. It shows some of the places visited by the 1910-11 survey party, from the north end of Lake Winnipeg to The Pas.

The first half of Hunt's memoir appeared in the Spring/Summer 1999 issue of *Manitoba History*, published by the Manitoba Historical Society. These are extracts from it:

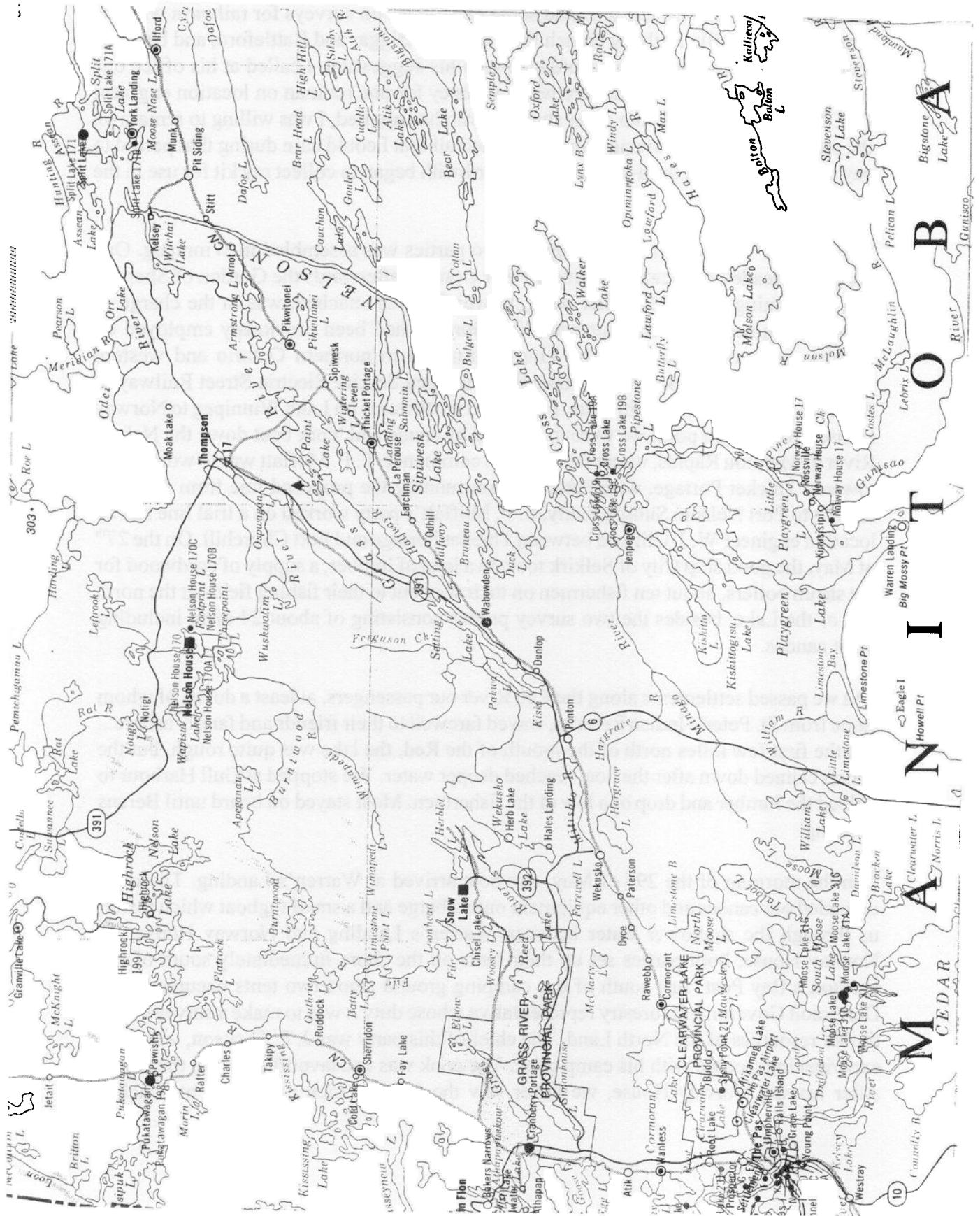
“A rumour circulating in the engineering students' drafting room on the top floor of the old University of Manitoba building on Broadway Avenue in the city of Winnipeg, late in April of 1910, prompted me to call on John Armstrong, chief engineer of the Hudson Bay Railway. His office at that time was in the basement of Fort Garry Court, at the corner of Broadway and Main Street.

“Mr. Armstrong seemed favourably inclined towards employing engineering students, particularly one like myself who had some experience on surveys for railways with the Grand Trunk Pacific Railway branch lines between Biggar and Battleford, and between Young and Prince Albert. In accordance with his suggestion, I called at his office one week later and was informed there was a vacancy for one rodman on location engineer F. P. Moffatt’s party. Unlike other students who had applied, I was willing to remain on the party during the following winter. I needed all that I could earn during that period to pay my expenses as a third-year student. I forthwith began to collect my kit for use in the months ahead.

“On May 21st, personnel to make up the two parties was assembled in Winnipeg. One party was headed by location engineer Peter Gordon, afterwards the Gordon of Sherritt-Gordon mining fame. The other party, to which I was attached, was in the charge of location engineer F. P. Moffatt who, like Gordon, had been previously employed on location and construction on the Transcontinental in northern Ontario and western Québec. Our instructions were to take the Winnipeg Selkirk Electric Street Railway to the town of Selkirk and, from there, to proceed northwards on Lake Winnipeg to Norway House, from which point we were to proceed by canoe and York boat down the Nelson River to Manitou Rapids, where work was to commence. F. P. Moffatt was to work south towards Thicket Portage, with Peter Gordon running the proposed line from Manitou Rapids to Port Nelson. Subsequently, F. P. Moffatt’s party worked on a trial line run by location engineer W. J. Clifford between Thicket Portage and Fort Churchill. On the 27th of May, the good ship City of Selkirk took on a load of lumber, a supply of cordwood for the steam boilers, about ten fishermen on their way out to their fishing fields at the north end of the Lake, besides the two survey parties consisting of about 24 men, including eight canoes.

“As we passed settlements along the Red River our passengers, at least a dozen of whom came from St. Peter’s Indian Reserve, waved farewell to their friends and family ashore... For the first few miles north of the mouth of the Red, the lake was quite rough, but the waves calmed down after the boat reached deeper water. We stopped at Gull Harbour to unload the lumber and drop off a few of the fishermen. Most stayed on board until Berens Landing.

“On the morning of the 29th of May, our boat arrived at Warren’s Landing. There we unloaded our canoes and other equipment onto a barge and a small tugboat which towed us through the shallower water between Warren’s Landing and Norway House. At Norway House, both parties set up their tents on the shore immediately south of the Hudson’s Bay Post. Just south of our camping ground stood two tents occupied by a Dominion Government forestry representative whose duty it was to make a survey of the timber resources of the North Land. The chief of this party was J. P. Dickson, who was experiencing trouble with his camp cook. The cook was endeavouring to run the party. After leaving Norway House, we never saw the forestry men again, but at Thicket



Portage, later in the fall, we did see stumps of trees sawn off by this outfit to enable the men to count the yearly growth rings.

“On the day following our arrival at Norway House, a Sunday, four of us attended divine service at the Methodist mission house at Rossville, about one mile north of the Hudson’s Bay company store... The service was conducted in Cree..., so the boys from the survey party had difficulty following the service...

“On Monday morning, the York boats were loaded and began their journey, each manned by six oarsmen and a helmsman. They were provided with a sail, for use when the winds were favourable. The engineers of the party travelled in canoes. Paddling across Little Playgreen Lake, they moved on downstream, passing Sea River Falls where there is a drop of five feet in 50 yards, thence on through a cluster of islands passing High Rock and Sukan Falls. That night we camped on the river bank with several falls and rapids still between us and Whiskey Jack Portage, where the Nelson drops 19 feet into the south end of Cross Lake. With the time taken in the morning to get organized and for the paddlers to become inured to our new task of paddling a canoe hour after hour, we made only 25 miles on the first day out of Norway House.

“The canoes and York boats did not always follow the same route, yet the flotilla always seemed to meet at points where there was a long portage to be made. Then every man-jack was called upon to help carry the York boats overland and to pack the supplies which made up their cargo. The Hudson’s Bay Company York boat men set us an example which those of us who were young surveyor lads did our best to emulate. When approaching a rapid they knew to be too swift to run with the boats, they pulled ashore near the upper end of the rapid and seemed to vie with each other to see who could carry the heaviest load on their tump lines (of Algonquin origin - straps passing across the forehead or chest to support back packs).

“After the cargo had all been carried across the portage, everybody joined in to push the empty York boats across. As a boat was forced forward, the poles left behind were picked up and placed ahead of the boat again. It was surprising to note how the concentrated feverish efforts of the boatmen resulted in a quick passage of equipment overland. As a rule, engineers were too busy getting their own canoes and supplies and dunnage over the portage to have time to help the York boatmen. But all efforts were combined on the long portages.

“Our fleet consisted of two York boats, eight freight canoes, and two small prospectors’ canoes. The four freight canoes allotted to each of the survey parties, in addition to the dunnage of the occupants, carried four men... The small canoes, which were privately owned, were operated and occupied by the two party chiefs, F. P. Moffatt and Peter Gordon. In addition to dunnage, they carried two senior members of the chief’s staff. So there were 16 men in the two York boats, six men in the small canoes, and 32 men in the

eight freight canoes.

“The rate of travel varied with the wind. With favourable breezes, the York boats put up their sails and travelled at a good rate. With adverse winds, the heavy oars came into action and progress was less rapid. We made about 30 miles per day. The trip from Norway House to Manitou Rapids occupied six days.

“For those in the parties who had not had previous paddling experience, the all-day grind of swinging the flatstick made soft muscles stiff and sore.

“In choosing our campsite for a night’s bivouac we always looked for a spot where plenty of spruce boughs were handy for use under our blankets. Before we reached our first survey campsite at Manitou Rapids, the mosquitoes appeared in swarms, so that it was imperative to make use of the mosquito bars (bug houses) we had brought along...

“On our journey downstream, the Hudson’s Bay Company’s men provided their own food, which seemed to be mostly pemmican and bannock... Those boys also packed along a hunk of ‘sowbelly’ - mostly fat pork. To me, this form of meat was always more or less unpalatable. In real cold weather, when no other meat was available, we ate the stuff, but not from choice.

“The only thing to mar our happiness in the journey down the Nelson was a slight accident that occurred in the shallower water just below Bladder Rapids. We were in water only eight or nine inches deep when we struck a sharp rock, puncturing the bottom of our canoe. Spence, our guide, felt pretty bad about it. We went ashore, unloaded our canoe, and filled the hole with a gob of good old Bluenose Butter. The butter was manufactured in the Maritimes and supplied to us in cans that closely resembled the cans still used by the Hudson’s Bay Company for half-pound containers of their Imperial Mixture Tobacco. This form of packaging was convenient and sanitary, particularly in hot weather when butter supplies had to be moved in pack sacks and tump lines.

“About noon of the sixth day of our trip down the Nelson, we arrived at our destination about half a mile south of Manitou Rapids. We camped on a little meadow on the west bank, a short distance south of the site of the bridge that would eventually be built over the rapids, between the stations of Stitt and Arnot.

“On the morning following, (our) party under F. P. Moffatt started work at a point on the west riverbank at the proposed bridge site...

“While Moffatt’s men were starting to run their trial lines southward, Peter Gordon’s party sorted out and transferred their supplies from the temporary camp above Manitou to the site of their first survey camp, below the rapids. From there, they began the location of their line from the north side of the Nelson northwards towards Port Nelson.

"After most of Gordon's equipment and supplies had been taken safely through Manitou Rapids, a well-loaded freight canoe manned by John Flett, Alex Seamore and B. Snider - when almost through the treacherous current - was caught in an eddy, which caused it to up-end. Seamore, who was in the bow end of the craft, was drawn downwards (and drowned), while the other two men were able to swim to shore...

"From that time on, no contact was maintained between the two parties. Gordon completed his line to Nelson House that year...

"From our first camp on the Nelson River, we moved to Camp 2, on the north side of what is now called Armstrong River... From this camp, the line was extended southward about six miles to a point where it was not far from the north shore of a lake named Edna. Chief Moffatt, having no map to guide him, was of the opinion that the end of the cut line could be reached from a camp set up on a creek which ran into the Nelson about seven miles upstream from Armstrong River. Accordingly, on the 30th June, camp was dismantled and set up about four miles west of the Nelson, on the creek...

"On the next day, July 1st, transitman Charles Bruce led the party northward into the bush hoping to find Lake Edna and the end of the cut line. No signs of it were discovered. On return to the camp, after a day travelling in wide circles, it was decided that the topographer, Billy Gillespie, should take a shotgun and some shells and go with Jack Babelle back to the end line and fire off his gun at about noon of the following day. The rest of the party started out on another wild goose chase, all the time listening for gun shots. We yelled and yahoed at half hour intervals all day - and it was a very hot 2nd of July - and listened intently, but heard nothing. After three days of this bush thrashing, the Chief decided we should return to our old campsite and move southward in a small creek which emptied into Lake Edna. By cutting willows that overhung, and by removing debris from the creek bed, we were able to reach a spot in burned timber where we could set up camp.

"After working from this camp for a few days, we were able - with a portage down our cut line - to reach the shore of Armstrong Lake. Packing all our equipment, including our freight canoes, over this old cut line in the scorching July weather was about as tough a job as I have ever experienced. Flies were bad, water was scarce, and the canoes seemed awfully heavy. I can clearly remember how much I appreciated the intestinal fortitude shown by Russell Lesley. Though quite a few years younger than I was, Russell grimly bore up under the back end of the canoe which he and I had to carry on our shoulders over the stump-strewn, burned-over, freshly-cut survey line. I can well remember lying on my belly on the moss with my arms around a small waterhole which we found beside the line. That water was about the sweetest thing I have ever tasted.

"However, we made Armstrong Lake and camped on one of its islands so that if a bush fire which was raging behind and south of us reached those parts, our camp would be

safe. We stayed on the island for a few days, then moved camp to the south end of Armstrong Lake. As the country through which the line from Armstrong Lake southwards lay in an area which was well away from the then-known water routes, our main camp was moved only once between Armstrong Lake and Thicket Portage, to a point where our line crossed the Pikwitonei Creek.

“At the main camp, our tents were left standing. The office tent which housed the draughtsman and Chief, when he was in camp, and the cook tent, were the only ones used there. The transit party and level party made use of shunt camps, to which the packers packed in bread and supplies from the main camp. When operating from main camps, the party often walked six or seven miles back at night. When working from shunt camps, moves were made about every five miles so the men did not have to spend too much time walking to and from work...

“During the months of July and August, bush fires were burning on the west side of the Nelson and another was started by our own men between Edna and Armstrong Lakes. No one who has never witnessed a forest fire can appreciate its terrible work. Incredible as it may seem, the fire which our men started began with a small mosquito smudge made in the moss close by the instrument used by the transitman, who made a practice of making a smudge beside him that could be seen by the leveler’s rodman...

“Well, on this hot July day, the axeman whose duty it was to make a fire for boiling the tea pot shouted ‘dinner’ when the tea was boiled, a hundred yards or so ahead of the forward end of the cut line. The transitman’s smudge was so tiny on this day that the leveler’s rodman and the leveler failed to notice it, and hurried to the boiled tea for lunch and a noon rest. About one half hour later we heard a roar behind us. By this time the flames were jumping from treetop to treetop. Fortunately the wind was in a direction which blew the flames north and east of our cut line, towards Edna Lake where, on account of the lake, and an area of brules, and a subsequent rain, it burned itself out. However, it might have been much worse, and it taught us all to be doubly careful about lighting smudges. We used more fly dope and fat pork rind to ward off the flies instead of making smudges.

“With shunt camps, we ran transit, level and topography parties, cutting about 50 stations per day (survey addresses or reference points occurring horizontally every 100 ft.), and slept in a different spot each night. The boys carried their blankets and bedrolls with them. Four packers were kept busy bringing grub, two packers bringing food in daily, and the other two making their way back to the main camp for another load. With shunt camps, we ran 12 miles of line from the south end of Armstrong Lake to Pikwitonei...

“During the week following, the packers brought the cook, camp and all equipment to Pikwitonei, so we had comfort for a few days after that, until we resumed the shunt camp business about August 1st. Working from Pikwitonei to Thicket Portage was the longest

shunt camp stretch we experienced - 36 miles all-told. We reached Thicket Portage about the middle of September and it started to rain. I had purchased a buckskin jacket. When it was cold, I used to wear it. It was very comfortable.

“After our supplies began to get low due to the long hikes the packers had to make, Tom Christianna and I set out to blaze a line for the packers’ guidance when bringing supplies from the Portage. On that day it rained like the very dickens and my moosehide jacket flapped around me like a wet blanket, cold and clammy. However, late in the afternoon we arrived at Thicket Portage and finally found the cook camp and office tents. From that time on we fared better.

“At Thicket Portage we tied into W. J. Clifford’s (earlier) trial line to Fort Churchill and the whole party celebrated with copious supplies brought from the cache at Landing Lake, which had been set up by a Mr. Campbell and a Mr. Barber, who had accompanied us to Norway House in May.

“We set out for Armstrong Lake, 45 miles away... The wind was from the south and it blew very hard. Jack Labelle and I travelled together that day by using a blanket stuck on a poplar pole mast, with another green poplar pole for a boom. We sailed away so fast we lost sight of the rest of the party. In the afternoon, after sitting on a point on Natawanan Lake for three hours, we began to worry about the others. Eventually they hove into sight. They had found the lake so rough that they had laid up on shore until the wind subsided.

“On the following day, we set up our camp at Standing Stone Falls and Rapid, at the west end of the portage between Natawanan and Armstrong Lakes. At that point we again tied into Clifford’s trial line to Churchill, and made observations on Polaris. We then proceeded to work northward on the Churchill route, paralleling the east side of the Grassy River. On this line, we were able to make full use of our canoes for toting supplies and for travelling back and forth between our work and camp.

“For the most part, the weather was clear and cool. The flies had disappeared. We could cut about seven miles of line from each camp without having to walk more than three or four miles to work. Usually our line was less than a mile inland from the Grassy River and the east shore of Witchai Lake. We made good progress, with three camp moves. We set up headquarters at Mink Falls at the north end of Witchai Lake. At this camp, things started to go wrong.

“We made a practice of moving camp every odd Saturday and, after we had made our sleeping quarters comfortable, rested on the Sabbath Day. By this time we were in the month of October and water rolled off the ends of our paddles in globules. Thin ice began to form along the shore, which we had to break to land - suggestive of what we might expect soon.”

The second half of Harold Hunt's memoir appeared in the Autumn/Winter 1999-2000 issue of *Manitoba History*, published by the Manitoba Historical Society. These are extracts from it:

"At the camp on Witchai Lake, we lost two of our good men... Joe and Isaac had supplied the camp with music on Sundays. Joe played the accordion and Isaac the mouth organ. Unfortunately, our Chief hated accordion music and, one day when in a bad mood, threw the instrument into the Grassy River... so they both quit.

"On Friday afternoon of the week we moved to the high bank immediately north of Mink Falls...all our axemen, expecting to return to line cutting after the camp move was accomplished on Saturday, left their axes stuck in a tree at the end of the cut line. I, being a superstitious Irish person, suggested to them that it was unlucky to leave an axe stuck in a tree overnight. They laughed at me and left the axes stuck in the tree. On the following Monday, we started out for the end of the line. The ice along the shore was quite thick, so we had to break our way in to shore, and did our canoes no good by doing so. The packers, who still had supplies to tote from our last camp took all the canoes, promising to leave them on the shores of Witchai Lake so the party could paddle home. The packers carried out instructions, but overlooked the fact that a fair-sized river flowed into the lake between the end of our line and camp. They also expected that we would finish line-cutting further north than we actually did. They left the canoes as promised, but not at a place where the survey gang could get at them or even find them.

"That same Monday morning when we disembarked, we followed our transitman Charlie Bruce, who struck east for the end of the line. Unfortunately, Bruce kept too far to his left and took the whole gang miles east of the axes stuck in the tree. We wandered back south and west, expecting to hit the line somewhere. Before we hit it, we were back at our old campsite.

"We hit north again to the line's end, and the axes. By the time we started work again, it was three-thirty. As we had not stopped for lunch, we had it then... At four o'clock, as it was already beginning to get darker, Tom (Christianna) and I set off to find the canoes. We followed the shore line after we reached it but, as we rounded bay after bay, no signs of any canoes were found. The country through which we travelled had been burned over and was covered with deadfalls, so we had to jump from one dry pole to another to make any progress. Finally, it got dark, so we went out on a point and built a fire, hoping the packers, who were actually back in camp, would see our signals and pick us up. We needed the fire, too, for there was a cold wind. Tom and I froze on one side and roasted on the other all night.

"When grim daylight came, we started hiking. After going around two or three more bays, we looked back and saw Charlie Bruce and his party rounding a point behind us. They caught up to us, looking just like we felt, pale, wan and very hungry. About that time we reached the river mouth which, being partly frozen, could not be crossed by raft,

yet the ice would not bear a man's weight. So we wandered upstream until a place was found where George Williams, the only man with a good axe on him, was able to fell a tree on which we all crossed. Fortunately, by this time we could hear the roar of Mink Falls in the distance, so we kept going. I stopped trying to keep up with anybody. My feet refused to be lifted high enough to go over a log eight inches off the ground. My belly was empty, so I ate some of the blueberries that grow in that country. They look like the ordinary berry, except they are pear-shaped. Eventually I reached the shore opposite camp, and hollered. One of the boys ferried me across in a canoe, and I crawled into the cook shack, where Neil McKenzie had lots of oatmeal porridge...

"The end of the line in a few days reached our new camp. After we had cut another three miles northward, the Chief decided to move the camp to the north side of the Odei River, but not before misfortune hit us..."

A canoe accident at the Snake Rapids - used as a portaging place for work north of Mink Falls, but dangerous to shoot at any time of the year - claimed the life of Gilbert Smith.

"Shortly after the accident, our camp was moved to the Odei River..."

"From this camp...we worked for another fortnight, by which time the ice on Lake Assean was strong enough to bear our weight. As we at that time had no dog team or toboggans, we made sleds from poplar poles, with which we were able to move our kit all the way on Lake Assean. The ice was glare, so that after pulling our sleighs with their loads all day, our hip muscles were very sore and stiff, and they remained so for several days after the move.

"The next camp was also accomplished with our hand sleighs. After that, we had dogs and toboggans with which to do our toting. When the dogs arrived, we also received snowshoes and our winter kits, which had meanwhile been stored at the Landing Lake cache. At this time, also, came rubber boots and lumbermen's socks to replace the leather ones we had worn all season. My own boots were so badly worn that my big toes stuck out of both of them. This was not comfortable in the snow and ice.

"In making the camp moves between Assean Lake and Omatuwi (Crying) Lake, we were following the old Churchill Trail which Franklin used on his last trip north... The country in this area seemed more rugged than that through which we had previously passed. It looked like a land where suitable ballasts for roadbed construction might be found. Signs of game were much more in evidence than they had been further south. We never saw any game because of the noise of the axemen, but in this northern part we saw plenty of moose and lynx tracks..."

"Throughout the job, we never suffered from an uncomfortable bed. When we worked from shunt camps, where no tents were available, most of us packed a canvas ground

sheet about eight feet square along with our bedroll... On arriving at a new campsite, we cut branches from spruce trees, arranging them on the ground in a bed seven feet long, four feet wide, and about 12 inches thick, free from limbs and sticks. In dry weather, we just spread a ground sheet over the spruce mattress, put down the bedroll and were ready for a night's rest.

"In inclement weather, we laid the ground sheet over a pole resting on two upright forked sticks and pegged down its sides. By making a wall of spruce limbs and branches at the end of the bed, which was headed away from the fire, we eliminated any draughts of wind. Of course, in the months of June, July and August we had to make use of our mosquito bars. Regardless of the weather, the general practice was to place a log at right angles to the axis of the bed, for a foot log. This provided something to sit on, and kept the ground in front of it clean of debris. When sleeping in tents that were 10 by 12 feet in space, with four foot walls, there is ample room for four men to sleep side by side, with heads away from the tent door, leaving space for the stove and wood pile between the foot log and the front of the tent.

"After winter weather set in and frost got into the ground, the first operation in setting up camp was to scrape away, with snowshoes as shovels, as much snow as was possible. The kicking log laid and spruce bough mattress constructed, a hunt started for good dry wood. It usually took all day Sunday, with good fires in the stove, to drive the worst part of the cold out of the spruce boughs, and about three nights of occupation before cold stopped coming up through the spruce mattress from the frozen earth. Having taken all these precautions, one was sure of a good night's rest, providing no sleigh dogs were about to make the night hideous with their music. I doubt if any man has been so fatigued that he could completely ignore the nightly chorus of these animals.

"... On a cold night, when the poplar trees crack and bang with frost, one lone dog would howl just when we were about to fall asleep. When he stopped, two more would start a chorus. They would stop for two minutes, then three or four would take up the cry. In seven or eight minutes the whole dog population would be whooping it up. Suddenly, the noise would cease, but not for long, for some one of the flock would feel he must give vent to his feelings - and the performance would be repeated. In the fall, before our dogs arrived, we often were kept awake by the nasty howl of the timber wolves, shouting to their mates...

"While making our last camp move before we hit Clifford's line at Omatuwi Lake, Tom and I were travelling in the lead team on a short portage between two lakes. As we reached the high ground south of the north lake shore, a wonderful sight greeted us. Out there on the ice not more than 300 yards away stood about 100 caribou, or coast deer, as the natives called them. At first they paid no attention to us, but in about five minutes they began to move and disappeared into the bush. While the rest of the party were setting up camp that afternoon, Johnny Harper and Andrew Pruden took our .303 Savage

rifle, trailed the flock, and brought back four carcasses. The meat was delicious. It was fine-grained and juicy. It made an acceptable change from sowbelly and kookoosh.

“One of the few factors that cheered our labours was the music which reached our ears when we were in the vicinity of the office tent. Chief Moffatt had a gramophone which was brought out of storage from Landing Lake cache when the dogs arrived. It was provided with a large sound horn and could be heard for some distance in the bush. It was said to have cost 200 dollars, and was eventually given by Moffatt to Mrs. Fox, the wife of the missionary at Split Lake. The three favourite tunes were ‘By the Light of the Silvery Moon,’ ‘Down Where the Big Bananas Grow’ and ‘It’s Summer All the Time.’

“In December, the daylight was short. We got out on line right after seven o’clock. After reaching the end of the line, the axeman cut quite a few stations before there was sufficient light for the transitman to see by; therefore the leveller party never had to hurry in the morning because we could easily catch up to the transitman. In this part, the country was fairly level, so we could take good long sights, and were able to quit ahead of the transit party. As a consequence, Tom Christianna and I very often broke trail for ourselves and for the rest of the party in making short cuts from the end of the line to camp...

“So in due course we tied into location engineer W. J. Clifford’s trial line to Churchill at a point in the vicinity of Omatuwi Lake. On the day following, we loaded everything on to toboggans and headed for Split Lake on a trail which appeared to be well-travelled....

“At Split Lake we did not set up our tents. Chief Moffatt stayed with the Rev. G. H. Fox, who acted as our cache keeper at that place. The rest of the party was billeted in Hudson’s Bay buildings, which Chief Factor McLeod was kind enough to permit us to use. We stayed at the Post for one week, during which time we enjoyed seeing new faces and having new experiences.

“On Christmas Day after breakfast, George Williams who had won the camp’s entire supply...of smoking and chewing tobacco, said, “Help yourselves, boys. This is my Christmas present!”

“On Christmas afternoon we had a football game, Natives vs. Engineers. The natives had no idea of any rules or regulations and just milled around in circles. The snow was deep, so we got lots of exercise.

“After Christmas, word came to the Chief from Winnipeg instructing him to take the party to Thicket Portage in order to run the final location from that point southward. As the weather was not moderating and my right knee had bothered me on the trip from Omatuwi Lake, I was a bit worried about the prospect of a 125-mile hike in January

weather. My knee, injured in a hockey game in 1909, had received another blow on the same spot from a freight canoe hidden in grass at Manitou Rapids. However, as we were hired for tough guys, we all had to play the part. So I went to the Post and bought two bottles of Perry Davis' painkiller and a couple of sticks of black Irish twist tobacco. If the pain got unbearable, I could deaden my senses with the mixture.

"On the morning of January 1st, the caravan set off for Thicket Portage. There were, as I remember, eight dog teams, including our own and several Split Lake teams for toting supplies, and about 30 men. No sooner had we got away from shelter, out on the ice of Split Lake, than a bitter west wind cut our faces like a knife. To make matters worse, most of us had allowed our mustaches to grow during the past months. Instead of being a protection, the hair on our faces - some of us had whiskers - caught the moisture and covered the whole face with a coat of ice. Fortunately I had a round, heavy Yaeger wool balaclava cap with a flap I could pull over my face, leaving only a small opening for my nose and for my eyes. This helped some. We found out afterwards that the thermometer stood at 50-below that day.

"After we had made about eight miles, we hit a spot where water was pushing up through a crack in the ice, flooding the surface. The thin top ice was not strong enough to bear our weight, so most of us got wet moccasins. About noon we passed a couple of native cabins on the west shore. We hiked up to them, got warmed up, dried our wet moccasins a little, and with a pair of scissors, cut off our whiskers and mustaches. As it was New Year's Day, in keeping with northern customs, we kissed the women who had befriended us, and hit out again.

"That night most of the men were able to squeeze into a fish cache shack in which there was a stove...After taking a little nourishment and coffee served by our cook...for breakfast...we bundled up and resumed our journey, long before daylight. As our only lights were candles, it was difficult to see anything in the shack clearly. By the time the dog handlers got out of the way, I discovered that the mitten for my right hand was missing. Well, as I could not travel barehanded, I pulled a sock from my kit and covered the hand. It broke some of the wind, but I had to keep rubbing it to keep it from freezing.

"On that morning it was 52-below and the same wind was blowing on the shelterless lake. At noon hour, we reached Grand Rapids...from where... we proceeded on our way up the mouth of the Grassy River...

"On the afternoon of that day, I was able to borrow a mitten from Billie Gillespie. It helped a lot. It was still 25-below but the weather seemed quite a bit warmer. Besides, we were then in sheltered country protected by bush. On reaching our old campsite below Mink Falls, we removed the cover of tents from our toboggans, set them up, and put a good fire in them. In that way we got a good night's rest and were raring to go after breakfast next morning.

“During the night, however, the hoodoo that had haunted us at this campsite in October returned. When we started to load up again in the morning, we found that during the night the waterfall had for some reason flooded the ice on which we left our toboggans. The ropes and canvas coverings were covered with frozen water. We had to chop down about three inches to get them loose... Eventually we got going again and, after three more nights in the bush, where we made temporary bivouacs and good fires, we finally arrived at Thicket Portage...

“The distance between Split Lake and Thicket Portage by winter trails is about 125 miles. We made the trip in five days...

“...My nose at Thicket Portage became one sore lump. For a few days I wondered if the thing would drop off. In a fortnight's time it healed up but was sensitive and peeled for a long time. After that trip, my fingers and thumb nails all turned blue. With proper mitts this would have been avoided...

“The thing that impressed me most about that north country was the relentless persistence of Nature. Travelling behind a dog team in 45-below weather on a clear, starry night, when the poplar trees cracked with frost and the ice on the lakes boomed and the Aurora Borealis lights hovered overhead, knowing that one must just keep going on and on, or paddling a canoe for mile after mile in swift and turbulent waters or travelling alone in a strange bush country, either in extreme heat without water or breaking trail in 20-below weather, knowing that a wrong turn or a sit-down for rest might mean disaster, gives one a great respect and reverence for God's Universe...

“In our work from Thicket Portage south, normally we were in country in which more survey work had been carried out and of which some sort of maps were available. At no time were we very far from the preliminary lines run previously by other parties. We moved camp regularly every other Saturday and rested on Sundays...

“The months of January and February passed quickly. Exclusive of minor afflictions, like boils from which some of the party suffered, everyone was healthy and happy. The boils, caused no doubt by a diet of sowbelly, were in two cases cleared up by an application of a mixture of soap and sugar.

“Our last camp was located on the shore of Setting Lake. Eventually, our supplies ran low. The Chief daily expected to receive word from The Pas as to our future operations. As a matter of fact, a dog team with a messenger...was sent from The Pas to advise the Chief the party must remain in the field and that a new cache had been established at Cormorant Lake, from which we were supposed to obtain fresh supplies. Unfortunately, the runner with his team of dogs never did reach us. So we ran out of grub. Moffatt had no alternative but to hit out for The Pas.

“We abandoned the camp, leaving tents and stoves standing. With an old trapper, Jack Still, as a guide, we pulled out, following for the first day the old cut line. It was full of stumps that hindered progress and breaking trail. Further south we were able to follow trappers’ trails along the Mitisto River and Dyce Lake...

“By the time we hit Mististo River, the grub we had been able to obtain before leaving Setting Lake got low. All we had to start with was one slab of biscuits twelve by fourteen by three inches thick, a half-gallon can of molasses, half full, one quarter sack of flour and about a quarter of a pound of tea wrapped in a handkerchief.

Photograph below: W.H. Hunt, a colleague and a dog team, after reaching The Pas from Setting Lake - a distance of 225 miles (375 km), which they covered in seven days



“Finally we got away from the River out onto Dyce Lake where the trail was well packed and where we could walk without snowshoes. By this time the bannock supplied by the cook on the morning we abandoned camp was all eaten up. We still had tea left, but the part tin of molasses was devoured, so we decided to get up a bit early to make bannock with our few pounds of flour. Using my canvas ground sheet for a mixing bowl, we mixed water and flour together and roasted the batter in front of our fire. It contained no baking powder or salt but the batter filled the void in our stomachs.

“We thought our next meal might be the fourth dog which, after our first day, refused to be harnessed as he had done before... As luck would have it, we discovered a trapper’s cache containing half a ham. We sliced off a couple of slices each and put the remainder back...”

After a further disappointment, then some much better luck, and at least two good meals, Harold Hunt and his fellow travellers in the Moffatt party reached The Pas, about 225 miles from Setting Lake. They stayed overnight at The Pas Hotel and, the following day, took the train for Winnipeg. Hunt ended the narrative part of his ten-month survey odyssey in the north country with this paragraph:

“I will never forget the funny look on my good mother’s face when she opened the door at 128 Colony Street, our home. She failed to recognize the tanned and red mustached face of her oldest son Harold, with his bleary, watery eyes. It was not until I had a good soaking bath, a change of clothes, a haircut and a shave, that any of my friends recognized me.”

According to his daughter, Mrs. Carter, Harold’s eyes continued to bother him in bright sunlight for the rest of his life.
