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CAMPBELL RIVER : WILLOWS HOTEL

BRITISH COLUMBIA HISTORICAL NEWS

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Executive 1973-1974

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The cover series for Volume 7, drawn by Robert Genn, will be focused on the newest affiliates of our Association. This issue will salute Campbell River with a picture of the Old Willows Hotel, burnt down in January 1963.

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EDITORIAL

There's an energy crisis - What a difference a few months can make! And all the time the thought has always been uppermost that in spite of man's impetuosity, social changes come slowly. Within living memory, the pace of life has surely but steadily increased, until it reached break-neck speed in the past few years. Now, all of a sudden, the brakes are being applied and the impending results suggest complete disaster or a whole new way of life for the present generation. To cope with the situation every panic-button has been pressed: speed limits are being dropped to what must seem like a snail's paee for highway travel in the world's most automat ed nation. Nation after nation is instituting a ban on Sunday pleasure driving and asking for voluntary savings while preparations are being made for controlled rationing.

It seems strange that this situation was not the result of a head-on collision between two of the great world military powers, but by two very minor power blocks. The most terrible war in the history of mankind, that was global in scope, did not slow down the pace, but did in fact accelerate it.

No single event before in history ever created such a crisis (that did not include a great loss of life) as did the decision by the Arab nations to withhold a strategic energy resource - OIL. In a matter of hours this decision created a threat to Mankind that could well lead to a whole new set of values being placed upon our basic social order. We are all faced with a new terror weapon - international blackmail.

A year or so ago historic and nostalgic journeys were being made on railway lines destined to be abandoned for reasons that this kind of travel was far too slow for passenger carrying and fit only for large heavy freight transportation. How those abandoned rights of way could be pressed into service in this present crisis throughout the western world! Runs that were being subsidized just to keep the lines operative have rebounded to full bookings, taking notice of Artrak's recent announcement of the situation on the Seattle to Vancouver, B.C. run.

It not only seems that the brakes have been applied but that we may all be taking a step back into history. Just think what a thrill it would be to go back to the horse and buggy era. On second thoughts it hardly bears thinking about, considering the pollution problem from thousands of horses on our main streets. Of course the mechanical sweeper and power flusher could keep the streets clean. But wait a minute! Isn't there an energy crisis? Can we wait to educate a generation of broom "mechanics"?

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MINUTES

A meeting of the Council of the British Columbia Historical Association was held at the home of the President, Col. G.S. Andrews, 4325 Blenkinsop Road, Victoria, on 18th November 1973.

Present were: Col. G.S. Andrews (Pres.); Mr P.A. Yandle (Sec. & Editor); Miss Jill Rowlands (Treas.); Mr R.D. Watt (Recording Sec., Vancouver); Mrs Anne Yandle (Co-Editor); Mr R. Brammall (Past Pres.); Mr F. Street(V.Pres. Burnaby); Mr D. New (Gulf Islands); Mr J. Roff (V.Pres.Vancouver); Mrs C. McAllister (Exec.Member); Mr H.B. Nash (Exec. Member); Mr G. German (Victoria); Mr A. Hunter (E. Kootenay); Mr L. Nichols (Nanaimo); Mr A. Slocomb (Victoria); Mr Kent Haworth (Prov.Archives); Mrs H. Ford (Alberni); Mrs M. Jordon (E. Kootenay); Mrs F. Street (Visitor).

The meeting was called to order by the President at 1.55 p.m.

The Secretary moved adoption of the minutes of the previous meeting as circulated. So declared by the President.

The President opened a discussion of plans for next year's convention and the Secretary called upon the hosts from the East Kootenay Society to request whatever assistance they required. Mr Hunter then reported on the results of a meeting recently held by their group regarding the convention.

Discussion followed concerning a guest speaker for the Convention. The President asked Mr Hunter, Mrs Jordon and the Secretary to prepare a final report on this matter for the next Council meeting.

Additional discussion followed regarding locat ion of the Convention proceedings, transportation, a proposed trip to Libby Dam and registration fees and associated financing.

Mr Brammall reported on changes to the Constitution concerning voting at the Annual General Meeting. The President thanked Mr Brammall for his work and opened the discussion. He stated that he would pass some points he had, after reviewing the Constitution, to Mr Brammall. Further discussion followed and the President then proposed that the same committee stand and report back at the next meeting of Council.

The Secretary reported that Mrs Anne Stevenson of Williams Lake had been chosen as the Association's representative on the Provincial Historic Sites Advisory Board and recommended that member societies send relevant requests for the Board to her through the agency of the Council. Mrs Yandle then reported that Mrs Stevenson had given her an unofficial report for Council that the Board was still in the first stages of organizing and defining its work. The President asked for a report from Mrs Stevenson regarding liaison with the Federal Historic Sites Board.

The President brought up the subject of plans for a convention at Nootka Sound in 1978 to celebrate the Cook Bicentenary. Discussion followed. The Secretary recommended that Mr Leeming be advised of the drift of the discussions.

Mr Haworth reported on the retirement of Mr Ireland from the Provincial Archives and Library, and also on some staff changes at the Provincial Archives. The President then reviewed the scope of the Association's submission to the Provincial Secretary, sent in the spring, and assessed the progress to date on various points raised in the brief. Discussion followed. Mr Brammall moved and Mr Yandle seconded, that the same committee act again, following up the brief with a letter urging separation of the two positions and appointment of the two best qualified men to the posts. Discussion followed during which the President requested that he receive a copy of the draft letter. Question was put and the motion agreed to.

The President opened discussion on the possibility of the Association applying for a provincial government grant to assist the Association in its work, and in particular with the publication of the News. Discussion followed and there being no formal motion of action the President announced his intention of forming a committee to report on this subject at the next meeting.

The Secreta ry reviewed the correspondence of the Association, and followed with a preview of the Robert Genn painting which will be awarded to the winner of the identification contest recently concluded in the News. It was agreed that the President would write and thank the artist for his very fine gift.

Discussion followed on the location and timing of the next meeting, which will be held in Vancouver on February 10th, 1974.

Mr German moved adjournment at 4.05 p.m. Seconded by Mr Watt. Motion carried.

R. Watt

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SOCIETY NOTES & COMMENTS

ALBERNI DISTRICT MUSEUM & HISTORICAL SOCIETY New members of the Executive for 1973-74 are President: Mrs Helen Ford; Vice Pres. Mr Gerald Jamieson; Secretary: Mrs Caroline Raikes; Treasurer: Mr Armour Ford.

A group from Alberni joined the Nanaimo Historical Society in September for their 20th anniversary. At their own September meeting, the Alberni Society shared the enjoyment of two summer holidays spent in the Telegraph Creek area. Slides were shown by Mr & Mrs E. Ruttan and Mr & Mrs A. West.

ATLIN HISTORICAL SOCIETY A grant of $15,000 has been made by the Department of Recreation and Conservation to the Society. It is expected that most of the money will be used for the acquisition of the old courthouse.

GULF ISLANDS BRANCH Despite a heavy snowstorm and consequent power cut, Nov. 4, Gulf Islands members assembled in the kitchen of the Saturna Island Hall. Mrs Mary Backlund gave an account of the first lightkeeper on Mayne Island - "Scotty" (Henry) Georgeson, her great-great-grandfather. This pioneer jumped ship in Victoria, during the goldrush of 1858 and his British Columbia descendants have now reached a sixth generation. Although he joined others with gold fever, in the rush up-country, he returned to the

coast, and married an Indian girl. They settled on Galiano Island, where he operated a trading schooner, facilitating an exchange of commodities between the islands. On June 10, 1885 he was installed as the first lighthouse keeper at Georgina Point on Mayne Island. Seagoing has persisted in many of Georgeson's descendants, the speaker herself having been born in her father's boat. The audience reminded her of "Uncle Henry who stood on the whale", who is portrayed in Gulf Islands Patchwork. In thanking the speaker, the President, Mr Donald New added his reminiscence: a long ago Mayne Islander suffered the death of a cow, without sufficient energy to dig a hole to bury it. Several times he towed it out to sea, only to have the tides return it. Fed up with these labours, he installed some dynamite in the carcass, towed it out into Active Pass, and retired, after lighting a long fuse. A tug, entering the Pass and seeing fire in a strange floating object, went closer to reconnoitre, unfortunately just at the moment when the dynamite and the fuse got to work effectively.

BURNABY HISTORICAL SOCIETY The Burnaby Historical Society, along with their guests from the Vancouver Historical Society, held their 1973 field trip to Yale. Assembling at the old Anglican Church, built in 1860, the group took part in the 11.00 a.m. service. For one member of the group, Mrs Harold Godwin, the trip was a special pilgrimage, since her parents were married there. It was in 1895 that the young woman who was later to become Mrs Godwin's mother arrived in Yale on the train and immediately after alighting walked the few steps from the station to the church where she joined her fiance, Frederick John Hart, at the altar for the occasion of their marriage.

After the morning service the Society had a picnic on the church grounds, during which a talk was given by Judge Berry whose grandfather took part in and bore arrow wounds from skirmishes with Indians in the Yale area. Members later toured the church and other historic sites in the area, including a private museum.

NANAIMO HISTORICAL SOCIETY On the Annual Field Day members met at Nanoose Bay for a tour to Qualicum District No. 69. (Unfortunately because of lack of space in the News we can list only the highlights of this most interesting account.) Stops were made at Upper Bridge, Englishman's River, St. Anne's Church, Qualicum Beach, the Columbia Beach Development at the mouth of French Creek, Eaglecrest Lodge, the Five Acre Development and Qualicum Village. At each stop the history of the particular area was recounted.

At its Sep tember meeting the Society celebrated its 20th anniversary along with guests from Victoria, Port Alberni, Gulf Islands, Chemainus and Courtenay Historical Societies. Life memberships were presented to Mrs A. Yates and Miss P.M. Johnson, founding members. Col. Andrews, President of the B.C. Historical Association, gave an illustrated talk "Retracing the Yukon Telegraph". He outlined the early attempts to set up a telegraph system in B.C. in the 1860's and related how the final link was made with the Yukon at the turn of the century following the gold rush there.

Mr David Russell, a descendant of one of Nanaimo's original settlers who came on the Princess Royal in 1854, spoke at the October meeting on the perpetual calendar, giving out samples of his calendar and table.

The Nanaimo Society has a number of projects planned or under way for celebrating the City's Centennial year. These include tracing the history and development of Commercial Street in the downtown area,

Newcastle Island's part in mining and quarrying industries, and the recording of sites and buildings of historical interest. The Society has also applied to the City for a grant from any Centennial Fund to enable it to have the historic tape recordings made by Mr W.Barraclough transcribed for permanent record.

HISTORICAL ASSOCIATION OF THE EAST KOOTENAY The Association, armed with a $400 grant from the Regional District of East Kootenay, aims "to keep the past living" by cleaning up and maintaining the area's cemeteries of long ago. This summer Fort Steele and Wildhorse received the attention. At Fort Steele the Department of Highways built a road in to the old cemetery and the museum staff loaned a crew to help remount stones and generally clean up graves. The R.C.M.P. put in a pole fence at the old N.W.M.P. cemetery there. A parking lot will be ready by next year. At Wildhorse the fence was rebuilt and a signpost erected for the public. Fall plans included straightening and grouting gravestones at Moyie, brushing out and replacing the fence, and cleaning up and restoring the fence at Old Town on Perry Creek.

VANCOUVER HISTORICAL SOCIETY In June the Society's Field Trip took them to Port Moody, Port Coquitlam and Coquitlam. At Port Moody Alderman Bert Flinn, President of the Port Moody Historical Society, dressed in C.P.R. costume, conducted a tour to the old Port Moody Station and to the new Port Moody Museum.

The Society is pleased to note that Christ Church Cathedral was saved from demolition, after a long controversy.

At the September meeting, Jacqueline Gresko, Vice-President, dressed in Victorian costume, read some of the letters of Mary Susanna Moody from New Westminster, 1858 to 1863 to her relatives in England. Mrs Moody was wife of Col. R.C. Moody, commander of the Royal Engineers in B.C. and Chief Commissioner of Lands and Works.

At the October meeting Sam Roddan, son of Rev. Andrew Roddan, minister of First United Church, reminisced about life in Vancouver during the Depression. Several members of the First United Congregation, including some of the ladies who had run the soup kitchen, attended the meeting to hear a first hand account of Andrew Roddan's life, tapes of hymns, sermon excerpts and slides.

The Executive took the opportunity offered by Heritage Canada, to obtain a free membership in Heritage Canada for the Society from Sept. 1973 to Sept. 1974.

The Society noted with regret the deaths of two Vancouver Life Members: Philip Timms, 98, pioneer photographer of Vancouver, and E.A. Alm, Swedish Canadian pioneer and real estate agent.

VICTORIA BRANCH In keeping with the Centennial of the Royal Canadian Mounted Police celebrations, Inspector W.C. Shaw spoke to the members of the Victoria Section at their June meeting, on the history of the force, well illustrated by slides.

It required two buses to transport 94 members on their annual field trip in July. The first stop was the Maltwood Museum, in Saanich, where a tour was arranged. From there, members went to St. Stephen's Church and the old Thompson farm on Mount Newton Cross Road. Taking along picnic lunches the facilities of the Church hall were used, followed by a tour of the Church and Churchyard where the Rev. Footer gave a history of the Church, the oldest continuing church in B.C. From there the Thompson farm house was visited, where Mr J.K. Nesbitt told about the Thompson family.

Mr Wm Barraclough, the Society's Life Member from Nanaimo, spoke at the September meeting on "Formative Days of Nanaimo and Sketches of Some of their Pioneers".

At the October meeting, our former Vice-President, George Newell, presented an illustrated talk on the old Chilcoot Trail, where he had spent some time travelling during the summer.

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JOTTINGS

During the summer months a collection of items from the Vancouver Sun has accumulated...

.... June 16th -"B.C. Gives Okay to Goldrush Park. British Columbia has agreed to donate about 80 square miles of rocky country for an international park.... In principle (it) involves B.C.'s part of the Chilkoot Trail..... The U.S. Government has already designated its portion of the Chilkoot Trail from the B.C. border through the Alaska panhandle to Dyea. ...The B.C. section stretches from the Chilkoot summit to Lake Bennett near the Yukon border."

.... June 16th - "Yellowknife, N.W.T. The Federal Government has given approval for a salvage operation in the Arctic waters of Hudson Bay to raise a 101-year old American whaling vessel, the Ansel Gibbs, which sailed from New Bedford, Mass. and met with disaster in 1872. The salvage operation is expected to cost between $1 and $2 million, all of which funds were raised in the U.S. Under the terms of the agreement Canada will be able to recover an unnamed historical item from the U.S. in return for the whaling ship." (I wonder what it will be. Ed.)

.... Aug. 25th"Okanagan Lake gets new Provincial Park. A new 25,500 acre Class A provincial park on the east side of Lake Okanagan, just north of Penticton, was announced.... Squally Point,... home of the legendary Nhasitk monster is a highlight of the new park. Known today as Ogopogo, Nhasitk lived in a cave near the point." (Members attending the Convention in Penticton in 1969 will remember the plea made for this park by Mr Victor Wilson, one of our guest speakers. Ed.)

.... Aug. 28th In a letter to the Editor of the Sun, W.T. Murphy of Langley took exception to a 'filler' indicating that Taber, Alberta was named after Senator Taber of Colorado. He goes on to say "According to Place Names of Alberta, published by the Geographic Board of Canada in 1928, the name "Taber" is the first part of the word 'Tabernacle', named out of consideration for Mormon settlers in the vicinity (1904); the next station is Elcan - the last five letters of 'Tabernacle' spelled backwards."

.... Sept. 15th "Under the auspices of the Historic Sites and Monuments Board of Canada, a ceremony at the Great Divide Pond, named Committees' Punch Bowl, officially commemorated the Athabasca Pass..... The 6.000 foot Athabasca Pass was the Trans-Canada Highway of men like David Thompson, who in 1811 became the first white man to travel it."

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From Vancouver member, Angela Thacker. The following clipping from the Eastern Daily Press (England) Aug. 8th. "Statue of Vancouver Stolen at Lynn. A small statue of Captain George Vancouver... has been stolen from the Town Hall at Lynn. It is thought that the bronze figure was taken from its position under Vancouver's portrait at lunchtime yesterday.... The statue was presented in 1957 by the City of Vancouver ... to commemorate

the bi-centenary of the captain's birth." At this time there has been no information regarding its recovery.

A further letter to the same paper on August 11th deplored the theft, but wanted to start a controversy by stating the captain was born at Long Sutton and not at Lynn.

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From Government of Manitoba Information Services Branch. "In one of the world's major archival transfers, the archives of the 300-year old Hudson's Bay Co., some 50 tons of historic documents, will be deposited in the Manitoba Government's modernized Provincial Library and Archives building next year. The illuminated transfer agreement was signed by George T. Richardson, Governor of the Hudson's Bay Company, and Premier Ed Schreyer at a ceremony in the Legislative Building. Involved in the transfer are some 4,293 linear feet of documents covering the entire period from the founding of the company in 1670 right up to those currently required for operational use..... The actual transfer is expected to take place during the late summer of 1974, Winnipeg's centennial year.

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From Alex Johnston, Chairman, North-West Mounted Police Conference. This conference will be held at the University of Lethbridge May 12-16, 1974. "We are anxious to get preliminary notification to residents of B.C. A release now will give interested persons time to decide." An interesting programme is being prepared and further details will be provided in the next issue of the News.

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Harley Hatfield, 687 Vancouver Ave., Penticton, writes "We are still fighting for the extension to Manning Park to fully protect the Brigade Trail of 1849-60..... Am wondering if one or more of the B.C. Historical Association members would be interested in going over the Trail next summer? A seventy two year old made it this year, but I admit that he is a man in good physical shape. If anyone is interested I could keep him informed of any trips being organized." (Thanks, Harley, for the invitation - now where are all the hikers? - Ed.)

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From Federation of British Columbia Naturalists' Newsletter: "A generous donation by Geoff and Olga Haszard gives us a 36 acre park on Christina Lake. It will be named Ole Johnson Park after Mrs Haszard's father, a pioneer there.

"A 29 acre Class A historic park at Harrison Mills for day use. It is centred on the old Acton Kilby General Store Museum."

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Clare McAllister, Gulf Islands Branch sent a clipping from the Victoria Times, 16th August. "History Repeated - at $2.61 an Hour." The Provincial Government is paying students from Mount Douglas Secondary School $2.61 an hour for their research on Victoria's history, during a six-week period, which is one of hundreds of special student employment projects sponsored across B.C. After doing their research at the Provincial and City Archives, various libraries and private collections, the students are preparing 21 teaching kits on aspects of Victoria's history. The Mount Douglas project, employing 15 students, will cost the Provincial Government $42,326, plus 10% payroll costs.

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COVER COMPETITION The News is pleased to announce the winner of the competition to identify the places on the four covers of Volume 6. - One "Where was it?" and three "Where is it?" pictures. The letter from the winner Mrs D.M. Imredy, a Vancouver member, shows the kind of interest we hoped the competition would generate.

". . . . . These are my answers to the NEWS contest:

1. Where was it, November 1972. The old Court House that used to stand where Victory Square is today.
2. Where is it, February 1973. St. Anne's Church on the O'Keefe Ranch near Vernon.
3. Where is it, April 1973. Grizzly-bear-of-the-water at Kitseguecla near Hazelton.
4. Where is it, June 1973. Fisgard Lighthouse, west entrance Esquimault Harbour.

The research for the answers has given me a lot of pleasure. At first, I wasn't interested - it was nothing I could recognize and also none of my friends. Regardless I kept the magazine on the table to look at onee in a while (I'm the curious type). After Christmas when I had time for library books - voila! there it was!

About the same time the second one came and I recognized it right away. We visited there last September.

The third one seemed to take forever in coming, when it did!!!! I found a picture of it in Beautiful British Columbia (I have all the issues) but the place was not pinpointed. Off and on I was searching, looking through books, magazines, even wrote my niece in Smithers and sent her off to the villages and she was in the process of doing one each time they went camping. But today I found it pinpointed in an old Beaver magazine I own (I have back copies of those, too). Don't know why I didn't look at them before!!!

Several days ago the fourth picture came and I found that in a ten minute search.

Now I'll have to get on with my own research, no more excuses!!!"

The presentation of the prize - an original oil painting by Robert Genn, of Holy Trinity Church, Patricia Bay, Saanich Peninsula - will be presented at the meeting of the Vancouver Historical Society on November 28th. The painting, beautifully framed, is a gift from Robert Genn that is very much appreciated.

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BOOK REVIEWS

Pioneer Days of Port Renfrew, by Josephine Godman, edited by T.W. Paterson. Victoria, Solitaire Publications. 64 pp. illus. $2.75.

This 64-page, paper-covered volume (unrelated to any centenary!) joins a legion of histories of local areas of B.C., such as "Errington"; "Kelowna, Tales of Bygone Days"; "Water Over the Wheel" (Chemainus Valley); "History of Alert Bay". Their format and approach to content are somewhat similar: the rather wan reproductions of such old photographs as have been made available from still extant family albums; subject matter drawn from surviving pioneers, from the oldest Indian, from dusty letters and diaries, and from newspapers.

This little history is not provided with an index. The one "map" pasted inside the front cover shows (superimposed on a very pale reprint of southern Vancouver Island) Port Renfrew . . . presumably the district is intended . . . blacked in larger than Saanich, Victoria and Esquimalt region. It offers no indication of old Indian and pioneer trails and roads through to the Eastern coast of Vancouver Island, via Cowichan. No Eastern stranger or puzzled British Columbian is offered help to know where were and are Otter Point, Sooke, Shirley, Metchosin and other way spots getting frequent mention in the text. Shipping lanes are traced only in the text. This is unfortunate, for the time expended by pioneers, and the perils they suffered when travelling, make up a good part of the recollections of this pioneer settlement.

Many of such histories, prepared in affectionate recollection of time past in one local area, are found to be meticulous in their searching and setting down of names, dates, and first efforts at farming or the promotion of enterprise. Such precision may give the feeling expressed by a long gone professor, "facts are not the truth". Another effort at expressing the same reaction is that, when one cuts up and sorts out the rabbit, while well understood and delineated, it no longer kicks. This book has a proper scrupulosity in its recording. Happily it has been able also to incorporate and retain a sense of life, the feel for people mostly long gone, the texture of life past. Its respect for minutiae does not obscure, but illuminates the truth.

Mrs Godman has a knack of setting down briefly the sort of amusing anecdotes that might be exchanged at a reunion of pioneer settlers. Perhaps reading these is one way for those of sociological inclination to understand the folkways of a culture that has passed; what was preserved? ... like honey in the honeycomb, to laugh at again and again? Appreciation of the foibles of the very various sorts of people that made up the community comes but in every tale. So does their marvellous ability at improvisation. Sometimes "make do" failed its purpose, but the doers managed to survive, as when a boat in trouble led to the heaving overboard of a brand new cookstove, to serve as anchor. Although the boat was broken up on the shore, the men survived. Some bachelors lived in a state of household disorder which did not please the good folks of early days. The writer tells of her father visiting a man whose cabin was of the sort "where, if you are cold, you put on another dog at night". One contributor took pride in telling the author how, at nine years old, she cooked dinner for a passing timber cruising party. Frustrated because she found the potato pot too heavy for her to control while straining, she took it, as it was, across the water, by canoe.

Apart from such tales, the book offers sections on such topics as: Railways, Logging Operations and Mines; a Hazardous Coast; Victoria-Cape Beale Telegraph; Botanical Beach; Tragedy; and Random Recollections.

After "The End" appears in firm capitals, three-quarters of the way up page 63 . . . we come to the luxury of the heading "An Agitation of Life" on page 64. But, if you want to read its anecdotes about "medical care" and "one of the most dedicated drunks in the province", you must get the book yourself. It's worth having!

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SUGGESTION: Annual presentation of such volumes to school libraries would not make much drain on the slender funds of local associations. It could well make the dotted and dated past, of more formal histories, spring to life for our schoolchildren today.

Clare McAllister. Galiano.

The Charlottes: A Journal of the Queen Charlotte Islands, Vol. II, 1973. The Q ueen Charlotte Islands Museum Society, $2.50.

No part of British Columbia is richer in history than the Queen Charlotte Islands. In 1774 when Juan Perez sighted its shores the Islands became the first part of British Columbia to be discovered by white explorers. Today the "misty isles", their mineral and agricultural resources minor and little developed, their fisheries badly depleted, depend financially almost entirely upon the employment offered by three big logging companies and the federal government. The population, white and Haida, is sparse indeed. Yet the Islanders rejoice in their isolation, loathe the very thought of a provincial ferry to the mainland, and live a good life in their strange empty land of grey skies, long beaches fringed with Sitka spruce, intricate inlets, and precipitous mountains.

The love of the islanders for their "Charlottes" resulted several years ago in the founding of the Queen Charlotte Islands Museum Society, whose members may be few but whose devotion to Q.C.I. history is strong indeed. In this second issue of the Society's journal, we learn that E.L. Bullen and his wife Beverly, whose enthusiasm launched the Q.C.I.M.S., are leaving the islands. One must devoutly hope that the venture will survive their departure.

Pride of place in this issue is given to H.B. Phillips' "A Photo Voyage Around the Charlottes". Snapshots of places visited by the ketch Homeward Bound during her circumnavigation are accompanied by a commentary on the places visited. Dr Bristol Foster, who was on the trip, has contributed a brief ornithological note; "Seabirds on the Charlottes: Thumps and Grunts in the Night".

The editors have had the happy thought to reprint, from a Report of the Provincial Museum, "The Story of Ninstints" by Wilson Duff and Michael Kew. In this definitive article on the people of Anthony Island will be found the epic story of their chief Koyah, who four times launched attacks on the white man's trading ships and twice succeeded in capturing them. A very distinguished contributor is Dr Erna Gunther, of the University of Washington, who has supplied a brief article on "The Haida: An Outline of Early Contacts with Europeans". This is accompanied by a fascinating photograph of argillite carvings of Yankee seamen, preserved in Copenhagen.

Of rather questionable value are the excerpts printed from the account of the Charlottes published in 1789 by "C.L." - as the editor notes, the material was cribbed from the Beresford letters published the same year by Captain Dixon. R. Levine's highly technical "Notes on a Haida Text: 1" is clearly intended for professional linguists, but contains some interesting information about the Haida language for the rest of us. More to the taste of the average reader are the lively recollections of Wesley S. Singer: "Early Years in Masset, 1909-1915". An anonymous contributor has supplied a very thoroughly researched article on the Hudson's Bay Company's post founded at Masset in 1869, though one must regret that the numerous quotations are unfootnoted.

A highly interesting and agreeably written piece of local history is Agnes Mather's "The Sandspit Saga 1900-1915". Here will be found the story of a settler who, putting his wife in their rowboat, failed to

reach the nearest midwife in time, and so her child was born on the beach by a very large log. Known to the children as "Biddy's Log" since Mr Cole said he "found" the baby there, it set the local children looking for other babies presumably spawned by logs. "The One Room School of Yesteryear" (anonymous) is based on excerpts culled from the minute books of those little school boards which were once British Columbia's best examples of grass-roots democracy. Sybil de Bucy's "A Few Adventurous Years" deals chiefly with life in the 1920s.

The most dramatic piece in the book is "The Last Trip of the Gas Boat 'Mabel'" in which Charles and Corbett Smith tell of their terrifying experiences when their disabled little boat was first swept into the open ocean during a storm and subsequently wrecked on a rocky cliff. After this anything would be anti-climax and we only have some verses, "Memories of Queen Charlotte Islands", written in the Robert Service tradition by a missionary, B.C. Freeman, around the beginning of the century, followed by a report on the leasing of a museum site from the Skidegate Indians.

Everything considered, this is a very nicely diversified issue, attractively produced and reasonably priced. Orders for copies may be sent to the editor of The Charlottes, Sam L. Simpson, Box 155, Masset, B.C.

G.P.V. Akrigg

Dr Akrigg is a member of the Vancouver Historical Society.

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The Great Kicking Horse Blunder, by Edmund E. Pugsley. Printed by Evergreen Press Ltd., Vancouver, B.C., 1973. 95 pp. plus 32 pages of photographs. $8.40, including tax.

Do you enjoy railroading tales? If you do then there's a wealth of them in this book. Mr Pugsley has followed the theme of his title throughout his story, but it is richly interspersed with anecdotes that are both informative and entertaining.

The thesis of the book is that the C.P.R. would have been better located in the Yellowhead Pass than through the canyons of the Kicking Horse and Rogers Passes. Mr Pugsley substantiates this with a history of buulding the line, the many accidents with the resultant loss of life, as well as the still present dangers in travelling through the region in winter time. However, his most forceful comment is on the manner in which the original decision was made, and the fact that the operational cost for this section of the C.P.R. line has been so high in the past and will of necessity remain high in the future.

Mr Pugsley maintains that George Stephen, (then President of the C.P.R.) despite the recommendations made in the surveys of Sanford Fleming, decided arbitrarily to use the route suggested by Moberly solely because it shortened the track length one hundred miles. It seems that no thought was given to the steep grades, or the dangers generated by a severe climate and heavy snowfall. The obvious thought was that if it was shorter, it must be cheaper, and because of the acute scarcity of funds it seems Stephens gave no other consideration to the selection of route.

As the book points out, these considerations should have included the

factors that made it become necessary to build the spiral tunnels to alleviate the steep climb over the Divide at Field; likewise the constructing of the Connaught tunnel in the Rogers Pass to try and give some protection from the devastating avalanches; and lastly the annual cost of maintaining the line through such rugged and inhospitable country. These omissions are all part of the "Blunder".

Among several other minor themes which are commented upon in the book are: the need in the early days for stronger unions to improve the conditions of work; the lack of good safety devices and their development; and the several incidents of "man-failure" which are given as the reason behind some of the distressing accidents which are cited.

The Great Kicking Horse Blunder is a railroader's comment on a decision made almost a century ago. It isn't going to change anything now, but it is a very valid and thoughtful comment, and makes interesting reading.

Hedley C. Graham

Mr Graham is a member of the Golden & District Historical Society

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Winnipeg 1919: The strikers' own history of the Winnipeg General Strike, edited and with an introduction by Norman Penner. Toronto, James Lewis and Samuel, 1973. xxiii pp + 294, illus. $2.95.

Until the last decade few historians have addressed themselves to serious study of the Canadian labour movement. Those who did were either ideologically committed (as indeed is the editor of the present work) or less than imaginative in seeking out sources, drawing their evidence from official reports or papers readily available in the Public Archives. Such an approach is scarcely surprising. Trade unionists themselves have been largely responsible for the treatment - or lack of it - which their movement has been accorded in Canadian histories. Union archives have not always been complete or systematically organized, and until recently they have tended to be in the jurisdiction of men and women suspicious of all but those researchers whose sympathies were known to accord with theirs.

Norman Penner's edition of documents published by workers before, during, and after the Winnipeg General Strike goes far in righting the imbalance that has hitherto characterized accounts of that dramatic episode in the Dominion's labour history. The bulk of the book - 228 of its 294 pages - consists of an account drawn up by the Defense Committee, a group of unionists from various Winnipeg labour organizations. The remainder is made up of disclosures in the House of Commons by Peter Heenan, Liberal Member for Kenora-Rainy River, on 11 May 1926, and excerpts from an address to the jury by one of the strike leaders, W.A. Pritchard, deliver ed over two days, 23-24 March 1920.

Not unexpectedly the writings are suffused with a sense of immediacy reflected by the choice of language, the amount of space devoted to details which have since subsided into more accurate perspective, and by lavish use of heavy black print to emphasize points then considered important, for communications despatched and received, and to draw the strikers' attention to instructions issued by their leaders. The presentation as a period

piece is alone noteworthy. More important, the selections provide an invaluable insight into the ethos which prevailed in Canada at the end of the First World War. The affair, which began innocently enough on 1st May 1919 over grievances in the metal and building trades, escalated into a direct confrontation between the strikers, the Royal Northwest Mounted Police, and supplementary specials on 21st June. Preceded by the arrest and detention of strike leaders, that encounter, which resulted in one death and 30 known injured, marked the culmination of general unrest which swept across the Dominion during the last days of the war. Sparked by resentment over blatant profiteering, exacerbated by Sir Robert Borden's decision to commit Canada to the Allied Intervention in Russia, and by the Union government's ban of 14 organizations, the majority of them foreign language socialist groups, Canadian labour, supported by disillusioned veterans unable to find employment, became increasingly militant. Infected by an unrealistic appraisal of the Russian Revolution, labour's beligerency manifested itself in the use of Bolshevik terms and slogans at the formation of the One Big Union in Calgary in March 1919. The authorities, federal as well as local, over-reacted, and Sir Thomas White, the acting Prime Minister during Borden's absence at the Paris Peace Conference, despatched cable after cable to Sir Robert seeking advice, assistance, and reassurance. Borden, in turn, attempted to dispel White's fears, calmly dismissing absurd suggestions such as the call for a British cruiser from the China station to counter the spread of Bolshevism in Western Canada.

The strikers' arguments, slogans, and words speak for themselves, and are a measure of the times. Norman Penner's introduction, however, is less satisfactory. In attempting to put the Winnipeg strike into its context he assesses it in purely Marxist terms, seeing it solely as a manifestation of the class struggle. Nor is he always accurate or fair in his appraisal of contributory factors, betraying a lack of acquaintance with the Borden, Rowell, White, Meighen, and other papers now lodged in the Public Archives. On 7th February 1919, well before the strike began, Borden insisted that Canadian troops in Russia be withdrawn as soon as ice conditions and transportatiom permitted. The first contingent left Vladivostok in April 1919; the last embarked on 5th June.

For one who has devoted the greater part of his life to the ultra-left in Canada Penner says surprisingly little about the part played by various socialist groups in Winnipeg. Nor does he mention the role, real or alleged, of "Bolshevik" agitators, one of whom was his father, Jacob Penner, a pioneer adherent and a lifelong member of the Communist Party of Canada. The editing too, is less than satisfactory. Corporal F.W. Zaneth of the Mounted Police, for example, is not properly identified, and it would have been more reassuring if ellipsis had been used in presenting Pritchard's address to the jury. Despite these and other minor shortcomings this is, nevertheless, a very useful book. The photographs which supplement the text, largely drawn from the Manitoba and the Public Archives of Canada, are excellent.

William Rodney

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BRITISH COLUMBIA'S AIR SURVEY STORY

by G. Smedley Andrews

(Being the basis for the President's Address to the British Columbia Historical Association Annual Convention, University of B.C., Vancouver, 25 May 1973. This text is subject to revision, for which copyright is reserved by the author.)

PART I. (Part II will follow in the next issue of the News in February.)

British Columbia's Air Survey Story is certainly history. Except fragmentarily, pertinent to other themes, it has not been told before. It is an important story. Air Survey has played a primary role in British Columbia's geographic, economic and cultural development. Considering the subject as history, it comes as a surprise, and a shock to your speaker that he probably knows this story better than anyone living today, because of intimate involvement in his own time and by his good fortune to have known those pioneers, now departed, who initiated it. The opportunity, as the story unfolds, to pay them due tribute, is a duty and a privilege. They left an inspiring legacy to us who received the torch from their hands.

This story relates how, among all provinces of Canada and indeed among many sovereign nations of comparable size or economic status, British Columbia won and maintained a leading position in the Air Survey field, resulting in the superb maps and knowledge of our environment.

INTRODUCTION

The term "Air Survey" is an example of British genius in coining simple language for things not so simple. It was used for a standing committee of experts set up in the Geographical Section, General Staff, (GSGS), at the War Office, London, in 1919 to study the use of air photographs for military mapping and intelligence, which they named "The Air Survey Committee". Its reports and "Professional Papers" in following years became classics in air survey literature. A term used internationally is "Aerial Photogrammetry", which means briefly, quantitative and qualitative interpretation of air photos, primarily for mapping, but many other applications are included. Quantitative interpretation concerns measurement, direct or indirect, for: how far? how much? how wide? how high? what direction? etc. Qualitative interpretation concerns identity: what is it?- a goat or a pig; a swamp or a field; a high rise or an outhouse; a trail, a road or a railway? - - and so forth.

An air photo, at the instant of exposure, high above the Earth, constitutes an optical pyramid whose apex is the camera lens, and base is the quadrangle of ground below included within the edges of the photo. This pyramid comprises innumerable rays from countless objects on the ground, converging in space at the camera lens, and intercepting the photo in their images thereon, in true perspective fidelity, because the light ray from each element of ground detail travels in a straight line through the lens to its image on the photo. A familiar application of this phenomenon is projecting colour slides on a screen in our home, to obtain a faithful and gratifying display of scenes snapped in a split second, days or weeks before, and sometimes far away.

Before the evolution of practical aviation in World War I, photographs taken on the ground had been used widely for mapping and other similar applications. The technique was called photo-mapping or phototopography, and more generally terrestrial photogrammetry. In essence, the camera at the moment of exposure captured the true angular relationships of countless points in the visible environment from the camera station. These directions, combined with like photo information of the same scene from other camera stations, by graphic intersection, established the true relative horizontal and vertical positions of all common features identified in the photos, to be shown with remarkable detail and precision on maps thereby produced. The survey photograph, be it taken on ground or in the air, in a sense, is an angle-book of directions to a multiplicity of points in the environment, visible from the camera station.

The governing mathematics of photogrammetry may be termed "perspective geometry", the principles and application of which had been known to scholars and artists for a long time. Leonardo da Vinci (1452-1519) made use of the "camera obscura", simply a darkened room with a small hole in one wall, through which light rays from the scene outside, brightly illuminated by the Mediterranean sun, projected on the opposite wall, inside, a true inverted image of it, and in colour! True, the image was faint, but perceptible. Da Vinci knew, of course, that by enlarging the hole in the wall, to pass more light, a brighter image could be obtained, but at the price of more fuzziness, because the rays from sharp points outside spread over larger circles on the opposite wall. The impunity from this price was not to come till after Galileo (1564-1642) had perfected lenses for his telescope in 1609. Also in Leonardo's time there was no way to preserve the image. With failing light, it disappeared. Retention of the photo-image had to wait more than 300 years till Niepce, Daguerre and others made their discoveries in photographic chemistry, early in the 19th Century.

Albrecht Dürer (1471-1528), the celebrated artist of Nürnberg, also applied perspective principles to his art by contriving a peep-sight, fixed in relation to an open gridded frame, behind which he placed his subject, often an important personage. With his eye at the peep-sight (the perspective centre), he traced out a faithful likeness of his subject on paper likewise gridded. He published a learned thesis on perspective geometry shortly before his death.[1] He too was denied the benefits of Galileo's lenses and photo-chemistry for recording and preserving the image.

When photography became practicable after the middle of the 19th Century, topographers in Europe began to exploit it for mapping, especially in accidented country like the Alps. Outstanding, and acknowledged as "the father of Photogrammetry" was Captain Aime Laussedat, of the French Army. His "metro-photographie" was recognized by the French Academie of Science in 1859.[2]

French leadership in this field was to inspire application in Canada through talents of Eduard Gaston Deville (1849-1924), who at the age of 25

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1. Dürer, A. "Underwezung der Messung mit Zirkel und Richtscheyt, usw." Nürnberg, 1525.
2. McCaw, R.D. "Phototopographical Surveying", Proc. 23rd Annual General Meeting, Corporation of B.C. Land Surveyors, Victoria, B.C. Jan.1928, p.54.

emigrated to Canada, having already served overseas with the French Navy as hydrographer. After a short sojourn in Quebec, he joined the Survey Branch of the federal Department of the Interior in Ottawa, and in 1885 became Surveyor General of Dominion Lands. The completion of the C.P.R. at this time presented a formidable task in mapping the mountains along its route in the far west. Deville saw the advantages of photo-topographic mapping in that difficult terrain, and in 1886, initiated the method with cameras of his own design. In following years some outstanding Canadian surveyors were to be schooled in "photo-mapping" by Deville, so that he, in turn, became known as "the father of photogrammetry in Canada". Thanks to Deville's leadership, the skill and prowess of his surveyors, and the tremendous scope and need for its application, Canada soon led the world in photo-mapping with cameras on the ground.

Until World War I, photo-topography as related here, was confined to terra firma, from triangulated mountain-top camera stations. The rougher the terrain the better the results, because in such country vertical detail is best displayed to the camera. The method was less effective in flatter country where desired detail was often obscured by ridges and forest growth. For this the "bird's eye" view from above was needed, to reveal the detail hidden from earthbound viewpoints.

Evolution of practical aviation in World War I provided the necessary airborne platform for taking air photographs, including "obliques" which usually included the horizon and a wide sector of terrain, and "verticals" aimed straight downward, showing more detail but covering less ground. In British Columbia, vertical photos were preferred, especially for detail mapping, because the far sides of mountains are hidden in the oblique views. In wartime air photography became extensively used for military mapping and intelligence. Incipient in 1915, by mid summer the next year ". . . it had become our chief source of information as to enemy activity and works . . ."[3] The new method was used both in western Europe and in the Middle East (Palestine). ". . .True, the cameras were crude, the photos sometimes poor, and the cover haphazard, but for a number of surveyors, ... who survived to return to the undiminished challenge of B.C.'s still enormous survey and mapping problem, it was sufficient to convert them into enthusiastic missionaries for air photo surveys in B.C. . . ."

After the armistice in 1918, the leading nations were quick to exploit the new tool of air photography for long delayed domestic mapping and rehabilitation surveys. Service personnel were eager and impatient to apply its benefits in peace. In 1919, the Canadian government created the "Dominion Air Board" to study and expedite peacetime aviation, including air photography. Surplus aircraft and related equipment were made available at bargain prices, or "for free", to stimulate the new potentialities.

The foregoing, though lengthy, is thought desirable to set in fitting perspective, British Columbia's Air Survey Story, which now follows;

CONCEPTION - 1919-1930 (approx.)

One of the first to preach the Air Survey gospel in British Columbia was the late Richard Charles ("Dick") Farrow, B.C.L.S. (1893-1950), who

3. Farrow, R.C. "Phototopography from the Air", Proc. 14th Annual General Meeting, Corporation of B.C. Land Surveyors, Victoria, B.C. Jan. 1919, p.11.

when Captain, R.F.C., overseas, prepared a paper based on his war experience with air photography in France, entitled "Phototopography from the Air", which he sent home to be read by a brother surveyor at the B.C. Land Surveyors' 14th Annual Meeting in Victoria, 14 January 1919.[3] Farrow's paper described aircraft, cameras, techniques and results of war operations, and made enthusiastic suggestions, based on these and his pre-war surveying experience, for peacetime application in B.C. In later years, after again serving overseas in World War II, Dick Farrow was a staunch and influential supporter of Air Survey, until his untimely death in 1950, at which time he was Comptroller of Water Rights for the Province.

Another World War I veteran and Air Survey evangelist was Arthur S.G. Musgrave, B.C.L.S., (1890-1967), who, after recovery from wounds on the western front with the Canadian Engineers, served in Palestine as Staff Captain under General Allenby. In that campaign he was responsible for mapping and intelligence with air photos, of which, in his own words, he "handled some 35,000"[4] Musgrave merits undisputed credit for the first air survey in British Columbia, modest though it was, in 1919. It was done in cooperation with the Aerial League of Canada, Victoria Branch, and the Surveyor General of B.C. (then J.E. Umbach, D.L.S.). The area on the resultant plan was a square tract of about 100 acres, at the intersection of East Saanich and Martindale Roads, in the vicinity (today) of Mow's Market, 6635 Patricia Bay Highway. The Plan, drawn by Musgrave and dated 10 February 1920, scale 200 feet per inch, bears the annotation "First Air Photo Map in B.C.". It includes part of Regina Street, the old C.N.P.R.[5] right-of-way, outlines of six buildings, seven fenced fields, and distinguishes cultivated from other land.[6]

Apparently Musgrave's plan was traced from vertical photos, controlled for scale and orientation by six targeted ground points surveyed by him, at no charge. Flying was gratis, from 5000 feet by the Aerial League, with an old "RE8", piloted by Lieut. W.H. Brown, Secretary of the League. The Surveyor General paid $35 for sundries, including a field assistant, Alex Cook, at $7 per diem, car rental, and photo plates. His Branch also handled processing photos and prints to the required scale. Due to camera troubles, three flights were required to get 15 photos, which were underexposed due to the late hour of the day, and the late season, November. Replying (4 February 1920) to a query from the Hon. John Oliver, Premier, a propos a request from the Aerial League for a $1000 grant, the Surveyor General supplied details of the project, and included his comment:

> ". . . while the above experiment was doubtless justified to get information as to the possibilities of equipment available here, it is the opinion of the writer that any serious work with a view to developing aerial photographic methods for practical mapping of unmapped territory is quite beyond the scope of the Provincial Government. In the first place it would be too costly and secondly it would be duplicating work being carried on elsewhere, under more favourable conditions, both in England and the United States. Possibly the

4. Musgrave, A.S.G. to Green, F.C. 5 Oct. 1944, File 016222, Survey Branch, Dept.of Lands, Victoria, B.C.
5. Canadian Northern Pacific Railway.
6. Item No. 17, File 016222, Survey Branch, Dept. of Lands, Victoria, B.C.

Canadian Air Board are contemplating experiments along this line also, but no definite information would appear to be available on this point at present . . . "[7]

This opinion is typical of senior officials at the time, i.e. that larger agencies should lead the way and that practical and economic mapping of extensive unsurveyed country in B.C., at a scale of 1/50,000 with 100-foot contours, was yet to be demonstrated with air photos. However Musgrave was persistent in arguing that air photography, even then, could provide most useful and economic information for coastline mapping and stream detail, even if contouring was not yet feasible.

A voucher dated 26 May 1920 covers payment of $75 to Musgrave for professional services connected with an air photo mosaic of the "Songhees Indian Reserve" (Victoria), and a copy of the mosaic was sent by the Surveyor General to Dr Deville in Ottawa, under date 2 July 1920. Neither the mosaic nor further details have come to light, as yet.

By 1921 the Air Board (Ottawa) had established an operational Air Station at Jericho Beach, Vancouver, under command of Major C. MacLaurin. That year, in connection with the normal (terrestrial) phototopographic mapping in the Douglas-Pennask Lakes area of the upper Nicola watershed, under Messrs R.D. McCaw, B.C.L.S. and G.J. Jackson, B.C.L.S., a single strip of experimental vertical air photos was obtained across the area through cooperation of the Jericho Beach station, using a "seaplane". Only brief mention of this is made in the Surveyor General's Annual Report for 1921, but facing page H102 thereof is a half tone plate showing comparative ground and air photos, of good quality, of the same tract.[8]

In reply to a request from the Surveyor General dated 20 July 1922, for air photos in the vicinity of Rivers Inlet, where Mr Musgrave was surveying for the government, Major MacLaurin replied that current operations were confined from Thurston Bay on patrols for the Forest Branch. However he quoted $35.50 per flying hour for an "HS2L" Flying boat, 4-seater, maximum load 1,800 pounds including fuel, plus film at $50 per roll (100 exposures).[9] The ceiling, quoted at 7,500 feet would confine operations to shoreline and low valley elevations. It was decided the expenditure was not justified, but evidently Musgrave's ideas were having some effect.

About this time, MacLaurin supplied copy of an air photo mosaic covering "Fraser River and Part of Nicomen Island", scale 1/8,000, photographed at low water, 19 April 1922. It had been made for the federal Public Works Department. It appears to have comprised about 50 photos, and the quality is good. An enquiry for oblique photo cover of grazing lands between Dog Creek and 100-Mile House brought no response (on record). In the Forest Branch Annual Report for 1922, (page 51) it states that aircraft were used primarily on forest fire detection and supression, in cooperation with the Jericho Beach Station. A significant quote from this report follows:

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7. Item No. 20, File 016222 (as above).
8. Annual Report of the Minister of Lands for the Year ended 31 Dec. 1921, Victoria, B.C.
9. Item No. 47, File 016222, (as above.)

> The mention of air-craft in this district must be coupled with an appreciation of the wonderful personality and work of Major C. McLaurin, who was in charge of the Air Station at Jericho Beach, and who gave his life towards the end of the season in the cause of flying. To Major McLaurin's personal efforts can be attributed a great measure of the success which was obtained. He personally did a great deal of the flying for fire-protection work, and his experience and wonderful sense of direction was called on many times to overcome difficulties which few others would have faced. He was on the job twenty-four hours in the day, and on more than one occasion he got out of his machine and helped fight fires of his own free will, to make things a success. In spite of the handicap of obsolete types of machines and of flying operations many miles from his base, he rendered a service to the cause of forest-protection in this district that will not be forgotten.

The author is privileged to revive this tribute to the memory of Major C. MacLaurin, a pioneer hero in British Columbia's Air Survey Story.

An exercise in frustration began in March 1926, when the Surveyor General tried to obtain air photo cover of the "North Shore", Vancouver harbour, from Roche Point to White Cliff, a strip roughly 20x2 miles. Quotes were requested from Sqn Ldr J.H. Tudhope, commanding No. 1 Sqn, R.C.A.F., based at Jericho Beach, and from Major D.R. MacLaren, Manager, Pacific Airways, Ltd, Vancouver. The Air Force quote was about half the commercial bid; however there was apparent reluctance at high official level (in Ottawa) to compete with private enterprise. Finally, due to urgency, and with a reduced quote from the company, it was agreed that the job be done by whichever outfit could get on with it first. Subsequent trouble with equipment caused Pacific Airways to withdraw, and the R.C.A.F., after delays from bad weather, attempted the job late in May. Finally, more than a month later, after repeated requests for photo delivery, the Surveyor General advised Tudhope that the photos were useless, due to deficient overlaps and serious gaps in the cover. Offers to repeat the job were declined, as it was then too late for the purpose. This affair involved voluminous correspondence, mostly with the R.C.A.F. at Jericho Beach, but also with various people in Ottawa, which among other things specified the "proper chain of command" for air photo demands was to be through the Topographical Survey office there.[10] An evident lesson from this abortive skirmish, probably not fully appreciated at the time, is the penalty of depending on outside agencies for urgent air photo requirements.

The R.C.A.F., operating mainly from Jericho Beach, continued to do sporadic air photography, presumably programmed from Ottawa, and with some emphasis on national defence. Its photos taken in 1926, 1928, 1930 and 1931 in the Victoria-Esquimalt area were used to good purpose later by the author, for experimental measurement of tree heights from air photographs.[11] Copies of an air photo mosaic of downtown Victoria made from 1928 photos, were on display in the City Hall and one or two Victoria business offices, in the early 1930's. In 1972 a restoration of this same mosaic was made as an archival exhibit by the B.C. Surveys and Mapping Branch.

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10. Items No. 123-154, File 016222 (as above)
11. Andrews, G.S. "Tree Heights from Air Photographs", Forestry Chronicle, June 1936. Reprinted and purged of errors as "Graduate's Thesis" for Assoc. Professional Engineers of B.C. 1936.

At this point it may be explained that the old "Survey File 016222", Dept. of Lands, Victoria, spanning the years 1919-1944, from which much of the foregoi ng information was derived, contains other pertinent material of interest, mostly communications between the Surveyor General and correspondents, near and far, among which are identities prominent in B.C., Canada and beyond. Someone (unknown) has marked each "page" of this file, roughly but legibly in pencil, with a numbered sequence, which is useful for reference. Sufficient to say here that our provincial authorities, especially during these earlier years, were not unaware of air survey developments of considerable promise in the world at large, but the attitude was always cautious, with reluctance to commit limited funds to ends considered beyond their scope and not sufficiently proven for local application. Nevertheless, the "kettle" was simmering.

The first sizeable air survey operation under provincial auspices came rather suddenly in 1929. It was a "crash" programme to map the "Peace River Aid Block" in connection with the so-called P.G.E. Resources Survey". The "Block" covered about 10,000 square miles north of Prince George, spanning the Rocky Mountains, including the Parsnip River drainage and the main stem of the Peace River, above Hudson Hope. A narrow appendage extended east to the 120th Meridian, south of Pouce Coupe. Financing was shared by the C.N.R., the C.P.R. and the Province. Someone did a good sales job to convince the authorities that only by air survey could the required mapping and other information be obtained in the detail and in the time specified. Under the direction of C.R. Crysdale, P.Eng, Chief Engineer, Norman C. Stewart, B.C.L.S., loaned from the provincial service, was in charge of surveys and mapping. The previous winter, 1928-29, MR Stewart had been sent to Ottawa by the Minister of Lands, the Hon. F.P. Burden, B.C.L.S., (in anticipation?) to study the latest graphic methods for plotting vertical air photos, which featured "radial plots" (in Britain, the "Arundel" method).

Photo flying was done by the R.C.A.F. with two Fairchild 71 aircraft,and Western Canada Airways Ltd., Vancouver, with a Junkers, all on floats. A large field staff was deployed on control surveys, under supervision of most of the B.C. Land Surveyors then available. Unfortunately, the air photos, which would have greatly facilitated field work, were not forthcoming till almost the end of the season, when a long awaited spell of clear weather came just in time to "save the day" for the whole project. All-out air operations then yielded an avalanche of photos, some 15,000 from the R.C.A.F., and 6,000 from the commercial operator.

Office work in the ensuing months, 1929-30, was necessarily on a mass production basis - adjustment and coordination of the data from many survey parties, and correlation and plotting the air photos. After a start in Prince George the work was moved to Victoria for the winter, where a large technical staff was mobilized and trained in the methods of air photo plotting. Night shifts utilized many competent people from daytime employment in government and other offices no doubt glad of the extra pay. While the quality of the air photos was generally good, there were many gaps between photo strips, due to primitive navigation aids, and no doubt a modicum of inexperience. Some blanks due to weather interference were also inevitable. However, a net of some 8,000 square miles was completed. The mapping was crude, by modern standards, but evidently met requirements. The job was a convincing demonstration of capabilities of air survey for the authorities, and it familiarized many local people with the new method by practical experience. All this was to bear fruit in government policy and application in the years to follow. Certainly credit is due to those concerned with policy, direction and execution of the survey.[12]

12. Stewart, N.C. "Mapping from Aerial Photographs", Proc. 25th Annual Gen. Meeting Corp. B.C. Land Surveyors, Vancouver, B.C. Jan. 1930, p.56-72.

In his Annual Report for 1930, the Surveyor General (F.C. Green, B.C.L.S., who had succeeded J. Umbach, deceased), wrote as follows:

> Throughout the 1930 flying season the Dominion Government kept a detachment of the Royal Canadian Air Force with two fully equipped seaplanes at work on photography in this Province. We have had the most hearty co-operation from them and preference has been given by them to areas designated by us as of the most immediate importance, and at this date we have on file 42,445 properly indexed aerial photographs covering an area of 16,600 square miles, and several thousand additional photographs are expected soon. An examination of these photographs under the stereoscope reveals a wealth of detail as to forest-cover, feasible transportation routes, watersheds, and geology which could not be otherwise secured without prohibitive expense. The use of these planes has cost the British Columbia Government nothing and the photographs we require are supplied at cost of printing, but in order to retain this service we are asked to furnish the ground survey control necessary for the full utilization of these photographs. If funds can be provided by the Province for this control, the Dominion authorities seem disposed, in furtherance of their National Topographic Map programme, to meet us more than half-way. In my opinion this offers too good an opportunity for getting extremely valuable information and maps at low cost to the Province, to be neglected. There being so many variables affecting the scale of aerial photographs, such, for example, as height of plane, differences between the distances from the camera of the tops of mountains and their bases, etc., it becomes necessary to fix, by ground survey, the geographical positions and altitudes of some points identifiable on the photographs in order to determine the varying scales. Owing to its high relief, British Columbia requires more than the average ground control before the full value for mapping can be got from aerial photographs.

GESTATION - 1930-1940 (approx.)

In the 1930-1940 decade, federal-provincial cooperation as outlined by Mr Green continued, in spite of restrictions from slashed budgets during the "Depression" years. Concurrently, the B.C. Forest Branch entered the air survey arena, not only by using available R.C.A.F. photography, but also by developing its own facility for photo-flying over areas not yet covered, - for which there was ample scope. By the end of this decade, British Columbia's "air survey baby" was a viable infant, promising healthy growth following the interruption of World War II.

In 1930 N.C. Stewart established field control for a block of 1928 R.C.A.F. photo-cover south of Stuart Lake (Map Sheet 93-K-SE), some 1,400 square miles. He reported that the R.C.A.F. were back that summer to refly gaps in the original photography, a typical chore in those years.

Mr A.J. Campbell, B.C.L.S., reporting in his 1931 operation wrote:

> The work this year promised, and proved to be, extremely interesting. We were, for the first time, to work in an area covered by vertical aerial pictures. This was somewhat of an experiment, the idea being that ground control for plotting the aerial pictures in position could be obtained from photographs taken from ground stations. This idea

> has been unquestionably substantiated, and it is safe to say that any degree of such control could be obtained, depending on the density of the photographic stations. This applies only to rough areas where points of sufficient elevation to overlook the surrounding country are available. It is not possible to give in any detail the system which will be used in mapping, as we are still in the throes of searching for a satisfactory method, but we have progressed sufficiently to feel assured of complete success in the method.[13]

As Mr Campbell anticipated, an original and effective procedure for combining ground and air photos for topographic mapping at 1 mile per inch scale, with 100-foot contours, was developed by the provincial Phototopographic Division. Other prominent participants in this development, in addition to Messrs Campbell and Stewart, were R.D. McCaw, B.C.L.S. and G.J. Jackson, B.C.L.S. In programming the work, emphasis was placed on Vancouver Island, for timber and minerals, and the Barkerville area for mining. For the year 1933, when the Surveyor General's budget was cut to an all-time "low", Mr Green made the following significant statement in his Annual Report:

> We had the extraordinary experience of having surveyors of the topographic staff, for whom no salaries had been voted, insisting on their desire to carry on certain field work without pay, their object being to demonstrate the success of some experiments in lowering the cost of control surveys. I am glad to say that payment for the plotting of the 500 square miles covered by them in the Barkerville area was provided by special warrant in December, 1933 .... [14]

At the B.C. Land Surveyors' Annual Meeting in Victoria, January 1935, plotting technique was sufficiently developed for Mr A.J. Campbell to present an epic paper entitled "Phototopographic Control of Aerial Photographs".[15] The method was based on fixing a sufficiently dense array of photo-control points with the ground photos, exposed from known positions on mountain tops, which could be identified in the air views, for controlling the wealth of detail in the latter, both horizontally and vertically. While laborious and less accurate than modern methods, it required inexpensive (mostly home-made) equipment, and produced maps of unprecedented accuracy and detail.

Meanwhile, the Canadian Hydrographic Service, which was charting B.C.'s intricate coastal features, so vital to all forms of navigation, was exploiting the remarkable detail portrayed in air photos. Its early projects appear to have been associated with new R.C.A.F. photo-cover, as it accrued, as follows: 1931, Quatsino; 1932, Jervis Inlet, Smith and Queen Sounds; 1933, the Queen Charlotte Islands, particularly Moresby Island and the west coast of Graham Island; 1937 Prince Rupert and the southwest coast of Vancouver Island; and 1938, Queen Charlotte and Johnstone Straits.

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13. Campbell, A.J. "Phototopographical Survey, Northerly Vancouver Island", Annual Report, Land and Survey Branches, Dept. Lands, for the year ended 31 Dec. 1931, Victoria, B.C., p.Z26.
14. Green, F.C. "Report of the Surveyor General", Annual Report, Land and Survey Branches, Dept. Lands for the Year ended 31 Dec. 1933, Victoria, B.C.
15. Campbell, A.J. "Phototopographical Control for Vertical Aerial Photographs, as used by British Columbia Topographical Surveys", Proc. 30th Annual General Meeting, Corp. B.C. Land Surveyors, Victoria, B.C., Jan 1935, p.38-49.

Other federal agencies which used R.C.A.F. photography in B.C., as opportune, were the Geological Survey of Canada, the Topographical Survey, and the Army. The last mentioned innovated large scale mapping at 1/25,000 scale with 25-foot contours, in the vicinities of Victoria, Prince Rupert and Prince George.

To properly discharge its ubiquitous responsibilities, the B.C. Forest Branch required adequate knowledge of the nature and distribution of forest cover over the vast and varied domain of British Columbia. To meet this need, a Forest Surveys Division was set up in the 1920's. Like the Phototopographic Division of the Surveys Branch, its task was enormous and its power to cope was, by necessity, pitifully modest. The programme was twofold, First was broad reconnaissance by selected officers who sketched by ocular appraisal, on whatever maps available, the broad forest types; mature, immature, burned, logged, non-forest, etc., with rough estimates of volumes, species, age, access and so on. Legendary in this work for many years was the late Arthur E. Collins, esteemed not only by the service and industry, but also by many backwoodsmen in remote parts of the province. The other phase was more intensive systematic forest survey of important forest areas, with a view to "sustained yield" management, as Provincial Forests. The usual procedure was called a "1¼% cruise",[16] covering the area by a grid of examination strips on the ground spaced a mile apart. Direction was by compass, distance by rough chaining, and elevation carried by abney level.[17] The strips were tied directly or indirectly to existing survey control such as district lot corners, traverse and triangulation stations. Tallies of mature timber were made in a band one chain (66 feet)wide, and a narrower strip in young timber, for volumes, species, density and age-height measurements at intervals. Between and beyond the strips, topography and cover were sketched, and the 100-foot contours were mapped in as crossed. The result was a realistic if approximate topographic map, with forest cover types. It was a rare luxury to work an area already mapped by the topographic surveyors, for even in 1950 not more than 10% of the province had been covered with "standard" mapping.

16. The term"1¼% cruise" is derived from timber tallies along strips of one chain width (66 feet), spaced at one mile intervals through the forest, hence 1/80th or 1¼% of the total area covered.
17. A light simple hand-held level for reading the slope (angle) of inclined ground.

(to be Continued)

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THE NEWS TAKES THIS OPPORTUNITY TO WISH ITS READERS A HAPPY

CHRISTMAS AND A PROSPEROUS NEW YEAR

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