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## EARLY HISTORY OF THE GOVERNMENT WIRELESS SERVICE

### ON THE BRITISH COLUMBIA COAST.

A small wooden shack on top of Douglas Hill, Ross Bay, Victoria, did not evoke much interest amongst the nearby Victoria citizens in 1906, although the wooden mast outside the shack, with copper wires suspended from the top of the mast, might have created a feeling of curiosity. However, that little shack does have a certain amount of historical interest as it contained the first radio station to be operated in British Columbia.

The Pacific Wireless Company of Seattle, which later became the United Wireless Company, established it.

The same Company also established stations at Friday Harbour on San Juan Island, Port Townsend and Seattle.

A radio network was set up between Victoria and Seattle, messages being relayed through the Friday Harbour station.

At this time radio was rapidly becoming an important factor as an aid to shipping and the shipping companies were urging that Government Radio Stations be established on the B.C. Coast.

Shortly before this time the United States steamer Valencia was wrecked off the West Coast of Vancouver Island, near Pachena Point, with the loss of many lives. The lack of communications along the West Coast of the Island was a serious handicap in the rendering of assistance to shipwrecked vessels.

This was especially so in the loss of the Valencia and the records indicate that the Valencia shipwreck hastened the Government's decision to establish radio stations on the B.C. Coast.

The necessary Government funds were appropriated and officials from Ottawa arrived on this Coast in 1907 to select suitable sites for the stations.

The most efficient sites were those located on high ground. Gonzales Hill was selected for the Victoria station. The high bluff at Point Grey was selected for the Vancouver station, although at that time it was on the edge of the forests and no road to the site. The high bluff at Cape Lazo was selected as the site for the first station on the East Coast of Vancouver Island. The lighthouse site on the high cliffs at Pachena Point was selected as the first station for the West Coast of Vancouver Island and the Estevan Point Lighthouse site as the second station.

The construction of these stations was commenced in 1907. The Victoria station was the first to be completed, followed by Point Grey and then Cape Lazo.

The Department of Marine was responsible for the construction of the buildings and erection of the masts during the early period.

Walter Howard, who was one of the earliest pioneers in the Wireless Service on this Coast, advised that he met Mr. Morse and Ted Rickenson in Victoria in 1908. They were beginning the installation work at the Victoria station. Walter had had telegraphic and installation experience in the British Post Office and the Royal Engineers and accepted Mr. Morse's offer of employment to assist in the installation work.

The power supply to operate the equipment was obtained from a Fairbanks Morse 3 H.P. gasoline engine, driving a 1 kW AC generator. The transmitter was the Shoemaker type with the open core transformer, tubular glass type condensers, fixed spark gap with the inductance coil helix and the crystal detector receiver.

After completion of the Victoria station, Walter Howard proceeded with Ted Rickenson to Pachena Point on a Department of Marine vessel.

Stormy weather was the cause of much delay in the landing of the equipment at Pachena and also the landing of further supplies later. Mr. Howard still well remembers the running short of food supplies on account of the storms and delays and being reduced to a diet consisting of chiefly of mashed turnip.

After completion of the Pachena station, Messrs. Howard and Rickenson proceeded to Estevan Point, where they were joined by Electrician Eddie Hughes and the installation at that station carried out.

Practically the same equipment was installed at Pachena and Estevan as at Victoria.

The Indian village of Hesquiat is five miles from Estevan Point inside Hesquiat Harbour. Many Indians were living in the village at that time. The Mission Priest was approached to arrange for the employment of some Indians to carry out some work at the new station but after it was explained to the Indians that when the new station was completed it would be able to send messages through the air to ships and to Victoria, the Indians would have no part of it and refused to work.

By this time the Point Grey and Cape Lazo stations had been completed and the Victoria—Point Grey—Cape Lazo network operating in a satisfactory manner.

On account of the lack of road facilities to the Point Grey site, it was necessary to transport the equipment by scow to the foot of the Point Grey bluff and haul it to the top by a winch arrangement.

A tall Douglas fir tree, 175 feet high, was left standing on the Point Grey site for use as a

mast to support an umbrella type aerial and remained in use for several years.

Mr. Howard mentions that shortly after the completion of the Estevan Point station, a sailing schooner was wrecked off the station and all the crew lost. It was impossible to render assistance but he sent a message to Victoria giving particulars of the wreck and believes that this was the first radio report of a ship casualty on the B. C. Coast.

On the completion of the Pachena station, it was not found possible to work direct with the Victoria station. The reasons for the failure were considered to be the mountain formation between the two stations and also the presumed highly mineralized nature of the mountains.

The United States Coast Guard Service had by this time established radio stations at Tatoosh (Cape Flattery) and Bremerton and was having difficulty in communicating direct between the two stations. Tatoosh had no difficulty in working direct with Pachena and Victoria and Victoria worked direct with Bremerton. A mutual arrangement was made whereby Tatoosh would relay all messages between Victoria and Pachena and Victoria would relay traffic between Tatoosh and Bremerton.

With the later improvements in the radio equipment, direct contacts were established between Victoria and Pachena and between Bremerton and Tatoosh but the co-operation between the Canadian and U.S.A. stations continued and at times they worked together almost as one network. This was especially so in the handling of ship distress traffic and also the clearing of traffic between coast stations and ships when communication conditions were difficult.

Mr. E.J. Houghton was appointed as the first radio operator, taking over charge of the Victoria station.

The following information has been obtained from Mr. Houghton's notes covering the first year of operation.

The Victoria station was officially opened for the handling of traffic in September 1908.

Five stations were established as the beginning of the coast station network, as follows - Victoria (Operator E.J. Houghton). Point Grey (Operator Leonard James). Cape Lazo (Operator Charlie Bradbury). Pachena (Operator Buchanan). Estevan Point (Operator C.B. Kennedy).

Radio Technicians - Messrs. Morse and Hughes.

This making a total staff of seven for the first year.

Only five ships on the B.C. Coast had radio equipment during 1908. A fifteen-minute watch was maintained on the coast stations, every two hours, from 8 a.m. to late at night, usually 10 p.m.

Weather reports were exchanged three times daily, consisting of cloud conditions, approximate strength and direction of the wind, barometer and temperature readings, sea conditions.

No charge was made for service to ships during the early months but there was a total revenue of \$500 for the first year, from paid traffic handled by the stations.

Mr. C.P. Edwards, having been appointed as controller for the *Government Radio Service*, arrived on the B.C. Coast from Ottawa in 1909, to inspect the work already done and arrange for the construction of further stations at Digby Island (Prince Rupert), Triangle Island and Ikeda Head on the Queen Charlotte Islands.

With the opening of the *Government* radio station at Victoria, the private station which had been established at Ross Bay in 1906 and later moved to the Willows Exhibition Grounds in Victoria, was closed down.

With the increasing need for additional watch keeping, a second operator was appointed to each station and a watch set up from 8 a.m. to midnight.

In 1910 a local office was established in Victoria and Mr. Haughton was transferred from the Gonzales Hill station of the office, to become the first District Superintendent.

Mr. Howard, who had left the *Service* after the completion of the Estevan Point station, was returned as an operator in 1910 and replaced Mr. Haughton at the Gonzales Hill, Victoria, station.

A rapid expansion in marine radio communications was taking place on the B.C. Coast in 1910. The C.P.R. Empress ships, sailing to the Orient, were now equipped with radio, also the Canadian-Australian passenger vessels, also many B.C. Coastwise vessels, including the C.P.R and the G.T.P passenger ships.

The same expansion was taking place on the U.S.A. coast and radio stations had been established at Seattle, Astoria, San Francisco and Ketchikan.

In 1910, Mr. L.W. Stephenson, a Canadian Marconi radio engineer, arrived on the Coast to equip the C.P.R. Trans Pacific vessel *Monteagle*. On completion of the installation he was offered the position of *Government Radio Engineer* for the Pacific Coast by Mr. Edwards and accepted the post. He thus joined the ranks of the radio pioneers on this coast and continued in charge of *Government* marine radio engineering work in B.C. until his retirement in 1945.

Mr. Morse, who took part in the early installation work and later took charge of the Estevan Point station for a short period, returned to the English Marconi Company in 1910 and later became one of their senior engineers.

Combined operating-dwelling buildings were first constructed at Victoria, Point Grey and Cape Lazo. The operating room was at one end of the building, the engine room at the other end, the living quarters in between and the bedrooms upstairs. Jim Harker, who joined the *Service* in 1909, lived in the combined building at Cape Lazo for several months with O.I.C. Bradbury. He mentions that when proceeding from the operating room to the engine room to start the engine it

was necessary to pass through the kitchen. Friday night was bath night and the large galvanized iron tub was set up in front of the kitchen stove. The O.I.C.'s wife would give warning when she was ready to take her bath so that there would not be any interruptions. Jim was on the evening shift and remembers keeping his fingers crossed in the hopes that no boat would find it necessary to send a distress call during the bath period.

This combined building indicates that the original planners took a very dim view of the future of radio. It outgrew its original purpose in a year and separate operating buildings were constructed in 1910.

The early operators in the Service in 1910 were a mixed and interesting group. Haughton, James, Bradbury, Creer, Buchanan and Kennedy were old time commercial and railroad telegraphers. Whiteside, Hillier and De Winter were ex Canadian Marconi operators. Len Lucas at the Pachena station came from the Bamfield Cable Station. Howard, Harker, Sutherland and Purvis were ex British Post Office telegraphists.

It is not remembered how Dundas and McIntyre started in telegraphy. Jack Macdonald, the youngest operator in the Service at that time, started at the Point Grey station in 1910 at the age of seventeen. He and two other young lads had built up radio amateur stations in Vancouver. There were no regulations governing amateur stations in those days and they would frequently exchange signals with the Point Grey station. This led to visits to the station and employment of Macdonald as second operator.

The expansion continued and in the spring of 1911, it was decided to maintain a continuous 24-hour watch at the stations. This arrangement brought a new batch of operators into the Service, the majority being ex British Post Office telegraphers, who had wandered out to the Pacific Coast during the emigration boom in the 1910-11 period. These operators were experienced in the operation of the International Morse Code that was the code now made compulsory for communication by radio.

The commercial landline operators on the coast at that time could have easily adapted themselves to using the International Morse Code but the jobs in the Government Radio Service offered no attraction to them on account of the low salaries, long hours and the dislike of having to work at outside isolated stations.

The commencing salary at that time was \$2.25 a day during the probation period. If the operator's services were satisfactory, he was appointed as a third operator, on a permanent basis, at a salary of \$65 a month. He was eligible for promotion to a second operator, when vacancies became open, at a salary of \$70 a month. The O.I.C. was classed as a first operator, at a salary of \$75 a month.

There were only three operators attached to each station to maintain a continuous watch and so it called for a working week of not less than sixty hours for each operator.

There were several duties to perform in addition to watch keeping, such as the daily cleaning duties in the operating building, helping the O.I.C. in general maintenance work, filling gas

tanks, etc. etc.

A good number of the operators, who joined the Service in 1911 and 1912, stayed with it and so, in spite of low salaries, long hours and long periods at isolated stations, the work and the life had its attractive and interesting side.

The following are some of the operators who came into the Service during that period and many will be remembered by old timers who came later:- Tommy Raine, Andy and Gifford Gray, Bert and Harold Tee, Crosby, Tozer, Bob Ainslie, Bert Robson, Jack Berry, Lofty Harris, Bill Parkin, Arnold, Sid Jackson, Bill Clarke, Guy Bennett, Hawkeswood, Griffin, Kellard, Echlin, Black, Boyd, Cox, Elmo Meiss, Fred Hollis.

Radio Technicians Herb Dawe and McQueen also joined the Service during that period.

In the early years the providing of adequate living accommodation for the staff was a serious problem and it continued for many years.

We were given to understand that the Department was unable to obtain the necessary appropriations to meet this problem.

Tommy Raine joined the Service in May 1911 and after a short breaking-in period at Gonzales Hill he was transferred to the Point Grey station as third operator. There was only one dwelling which was occupied by the O.I.C. and so no accommodation for Raine, his wife and little girl. In those days there was no habitation near the station where lodgings could be obtained and Raine's \$65 per month salary did not enable him to maintain a separate home in Vancouver for his wife and daughter. So the Raines decided to purchase a tent, old cook stove and sundry pots, pans and dishes and make the best of it. The O.I.C. loaned them a single bed and blankets and as Raine was on a continuous night shift, the sleeping arrangements were not too difficult, his wife sleeping in the single bed at night and he used it in the day. A canvas cot was fixed up for the little girl. Conditions were not too bad during the summer months but it was a severe winter with deep snow and the Raine family remembered the hardships of tent life, in the winter for a long time.

There was little traffic to handle, whilst on watch, in those days. The magnetic detectors were much in use and had a very limited range. The C.P.R. ferry boats, running between Vancouver and Victoria would lose touch with Point Grey when about three quarters of the way to Victoria but in the meantime had established contact with the Victoria station.

During this period, Paddy Whiteside was the O.I.C. at the Victoria station. He commenced telegraphing in the Belfast Post Office and at the end of the Boer War joined the South African Telegraph Services, which had built up a reputation for speed operating. He later joined the Canadian Marconi Company and in 1909 transferred from the C.P.R. Pacific Empress ship to the Canadian Government Service.

In the early days the Victoria station was the clearinghouse for all new operators and Paddy would have to put them through their paces to make certain their operating was up to the required standard. He found it difficult to get over his South African speed work and although

his transmitting was perfect in formation and spacing, it was almost impossible to write fast enough to copy.

At the outbreak of World War One, he was released from the Service to take a commission in the Canadian Armed Forces. He was killed in action shortly after reaching France and the news of his death brought much sadness to all those operators who had been associated with him on the B.C. Coast. He was a gay friendly soul with a keen sense of humour.

The writer of these notes asks the reader to have a little patience with him, in his writing of his own experiences on the stations. The reason for doing so is to try and give a general picture of life on the outside stations, from firsthand experience, in those early days.

After working for the United Wireless Company for four months-two months on an American halibut schooner, fishing in the Alaska waters, and two months on the C.P.R. steamer Tees - I joined the Government Service on May 1, 1911.

The first night watch at Victoria is still remembered. The Tatoosh station advised that the Australian steamer Niagara was calling Victoria with a batch of traffic. The ship was several hundred miles off Flattery and there was no trace of the ship's signals on the Victoria station receiver. The Tatoosh operator then proceeded to relay ten messages from the Niagara to Victoria. This incident is mentioned to again indicate the co-operation between the two services.

After a short period at Victoria, I was transferred to Pachena to make it a three-operator continuous watch station. There was little ship to shore traffic at Pachena in those days, the main operating duties being the handling of the Pachena and Estevan weather reports, three times daily, and Government traffic passing between Victoria and the northern stations. The Government Telegraph Service had a phone circuit from Bamfield to Victoria with a tie-in at both the Pachena and Victoria radio stations. When the Government Telegraph offices closed in the evening, the operators patched the Pachena and Victoria stations into this circuit, which gave Pachena a direct phone link with Victoria at night.

The line passed through very rugged country, along the West Coast and was frequently out of commission.

The Pachena O.I.C., Colin Kennedy, had many fine qualities. He was a youngish chap and excellent telegrapher, having previously worked the busy C.P.R. Vancouver-Montreal circuit. He was also a good machinist and had brought his small lathe to the station.

However, he had been at Pachena over a year and it was the writer's first experience of a person beginning to be bushed. We three operators batched together in the single dwelling. The second operator, Bill Crosby an ex Navy operator, had a rather sharp temper and as Kennedy's nerves had become so much on edge, we often had flare ups in the dwelling, resulting, on one occasion, in a chase around the kitchen table, brandishing table knives.

Kennedy was normally a friendly interesting chap, and I still remember the enjoyable hikes we had together over the Pachena Trail and along the lovely stretches of beach, during the

summer of 1911.

The Pachena Lightkeeper and his wife, Mr. and Mrs. Pillar, were kindly folk and often took pity on we poor batching chaps and invited us to their home for nicely cooked meals.

Mr. Pillar found it difficult to obtain a lighthouse assistant on account of salary limitations and so an arrangement was made whereby we three radio operators shared the lighthouse assistant's duties between us, Mr. Pillar paying each of us \$20 a month. Perhaps from the official angle it was irregular as the night operator on watch would have to leave his post a few minutes, every three hours, to hasten to the lighthouse and wind up the light mechanism and pump up the tank, or, when foggy, go down a short flight of steps to the fog alarm engine room to start the engine and put the fog horn in operation.

The Pachena Life Saving Trail was under construction at the time. This trail extends from Bamfield to Clo-ose, approximately 20 miles and running as close as possible to the sea. Shipwrecked persons, who manage to get ashore, would quickly discover the trail and would then head along the trail for shelter.

Bamfield is 12 miles from Pachena. At that time the C.P.R. steamer Tees called at Bamfield each week with passengers, mail and supplies.

It was easy walking over the trail and we would sometimes walk to Bamfield for the mail and supplies, returning to the station the same day, usually tired out at the end of the walk.

The manager of the Cable Station at Bamfield was a kindly man and would invite us to his home for a cup of tea before we started back. He was very interested in radio and had a crystal receiving set. On one occasion he remarked that he had listened to me operating the previous evening and in a fatherly smiling manner said - "You know it wasn't necessary to use that cuss word, I wouldn't do it again if I were you." I still remember those words sinking in and being more effective than a scolding and I don't think the slip was ever repeated.

Engineer Stephenson carried out some tests to try and improve the signals between Pachena and Victoria. Up to that time the normal working wave had been 600 meters. Longer wavelengths were tried and the Shoemaker glass tubular type condensers were replaced with the Marconi oil dielectric condensers. This resulted in improved signal strength, making it possible to work direct between the two stations, except when conditions were poor.

The general maintenance duties on the station were small. The spark transmitters and crystal detector receivers were very crude but seldom failed. The Fairbanks Morse engines seldom gave trouble, other than requiring an igniter replacement every few weeks and an occasional valve grind.

On account of the exposed location and strong winds, it was necessary to keep a close check on the aerial and rigging.

The engines in the fog alarm building were brutes. They were 15 H.P. horizontal Fairbanks

Morse engines with large flywheels. They were too heavy to crank and as one looks back, the method of starting the engines appears now almost incredible. A large match was inserted in a small metal tube, with the match head exposed, and screwed into the combustion chamber. One then tugged and pulled on the flywheel, using all strength possible, to bring it up against compression and then reaching over with the free hand, strike the metal cap on top of the match holder, to ignite the match inside the combustion chamber. If lucky the engine would start after the third or fourth try and by this time the operator would be quite out of breath and with a sore hand.

Kennedy decided to leave the Government Service in late 1911. He went to California and obtained employment as a technician at one of the Federal Telegraph Company Poulson Arc stations. Later he went into business with one of the station radio engineers in the manufacture of commercial radio equipment, the venture becoming a big success. Factories were established in San Francisco and later in the East. The "Colin B. Kennedy" commercial radio receiver was extensively used in the U.S.A. for many years.

Hillier replaced Kennedy at Pachena late in 1911, and shortly after taking over the station, met with a serious eye accident. He had removed the plug from the cylinder wall of the engine in order to look into the cylinder to see if there was a satisfactory spark when closing and opening the igniter points. No doubt a very risky procedure. An explosive mixture was still in the cylinder that exploded when Hillier flicked the igniter. The easiest outlet for the exploded mixture was through the hole, where the plug had been removed, which caught Hillier in the eye.

Operator Bert Tee realized the injury was serious and it was a matter of getting Hillier to the hospital as quickly as possible. The hardest part of the journey was getting him over the 12-mile trail to Bamfield. It was decided to make use of the lighthouse horse. It was already getting dark. Tee put Hillier on the horse and after a nightmarish trip, with Hillier in much agony; they finally reached Bamfield where a launch was quickly made available to convey Hillier the twenty miles up the Alberni Canal to the Alberni Hospital.

Tee deserved much credit for getting Hillier safely over the trail, on the horse, in the dark and Hillier had heaps of grit to stand up to the pain.

The injury was serious and in order to try and save the sight of the eye, the Department sent Hillier to Germany for special medical treatment, paying all expenses.

Later Hillier decided to leave the Service to get away from isolation. He obtained a job as railroad operator on the C.P.R. and eventually became a station agent. His impaired eyesight though the accident was always a serious handicap.

After a four months stay at Pachena and before Kennedy left the station, I was instructed to proceed to Estevan Point and change places with the third operator at that station.

The chap with whom I changed places—Bert Tee—found it difficult to work with the O.I.C De Winter and the differences were reaching a difficult stage. Tee had fixed up a punching bag contrivance, outside the office window, and exercised on it every morning in full view of the O.I.C.

Request to explain its purpose Tee advised the O.I.C that after a little more practice and exercise, he proposed beating him up, which resulted in the O.I.C demanding the immediate transfer of Tee. All Very silly, as one looks back, but there may have been justification on Tee's part and there was also the suggestion again of the effect of isolation on some people.

Estevan Point is located on the extreme seaward point of the Hesquiat Peninsula, which covers a flat sea level area of about 25 square miles. The lighthouse is located on the beach just above high tide. The radio office at that time was also on the edge of the beach and one could toss a pebble into the sea at high tide, from the office steps.

It was soon found that it was a freak station for long distance working with ships and from that angle it was a more interesting station than Pachena. Traffic to and from the Trans Pacific ships was no increasing and Estevan Point became the logical station for handling such traffic.

The Japanese passenger boats were bringing large numbers of Japanese brides to supply the demand of the Japanese men who had established themselves in B.C. It was a requirement that the brides each send a radio message to the husband-to-be to let him know she was on board and notifying him of the date of her arrival in Vancouver.

It was possible, during night time conditions, for Estevan Point to communicate direct with the Japanese Maru ships when they were 1500 to 2000 miles away, which in those days, with only the crystal detector receivers, was long distance communications. It was quite common for the Japanese ship to send twenty or thirty bride messages to Estevan Point as soon as it had established contact.

Estevan Point also handled all traffic with the C.P.R. Empress ships and the Canadian Australian ships Makura and Niagara. The fixed spark gaps were still in use, the rotary gaps not yet having been provided.

Living conditions were not pleasant at Estevan at that time. There was only the one single dwelling, which was shared by Mr. & Mrs. De Winter and family and the two single operators. The regulations for the West Coast Service made it compulsory for the O.I.C. to board the single operators, unless they could make other arrangements and O.I.C. De Winter made it quite plain that he did not want to board Operator Tozer and myself.

The Light keeper's assistant allowed Tozer and myself to occupy a spare room in his dwelling. He loaned us some pots, an old oil stove and pans. We batched in this manner for several months.

The Government boats only visited the station twice a year with supplies, so we purchased our supplies from the store in Victoria, paid the steamer freight charges to Hesquiat and then had to pay the Indians to transport the supplies by canoe to the station landing, two miles north of the station. We were unable to persuade the O.I.C. that the Department should pay part of the transportation costs. However the Lightkeeper did supply us with oil for use in the stove.

There were many Indians living in the Hesquiat Village in those days. It was a hard six

mile hike along the rocky shore line, climbing over rocks and logs, with only short stretches of beach to walk over and so we seldom made the trip there. Travelling north from the station, after two miles, there were lovely long stretches of sandy beach and pretty country. If one was fond of hunting, the ducks and geese were plentiful during the season. At one time the Indians at Hesquiat had cattle but allowed them to go wild. These wild cattle roamed the Peninsula and one was occasionally killed for meat. A payment of \$5.00, plus the hide, was made to the Roman Catholic Priest at Hesquiat, for each animal killed, although according to reports at the time, this requirement was sometimes overlooked.

The Government steamer landed supplies for the station at Homish, an old Indian Reserve and Lagoon two miles north of the station. The operators at that time were required to assist in the unloading and pack the supplies from the workboat to the stores shed to the station over an old track, using wooden two-by-fours for rails. The truck was hauled by a cranky old horse, which sometimes bolted, upsetting the loaded truck, resulting in a general mess.

A few years later, iron rails were laid on the track and a gas speeder and trailer replaced the horse and truck.

Several years later, when Estevan became an important coast station and a big increase in the annual supplies resulted, the track was abandoned and a planked road was constructed to Hesquiat.

We two single operators got along in a friendly manner with Lightkeeper Jensen and Assistant Lightkeeper Luckovitch but there was constant friction between O.I.C Sam De Winter and the two lightkeepers. On one occasion a fierce argument between De Winter and Jensen ended in a fistfight. If I remember, they were arguing as to who was the biggest liar, in connection with the failure to carry out certain agreements. A fistfight didn't seem necessary and I made an attempt to stop them. I didn't know that Jensen's wife had appeared on the scene until receiving a crack on the head from a piece of two-by-four, and she was swinging wildly. She apparently thought that I was going to join in the fray on De Winter's side against her husband when I stepped in, indicating her very bad judgment. In any case the fighting ceased, I had a sore head and learned the lesson not to interfere in fights.

De Winter had some queer kinks and one was that he seemed to take pleasure in the other operators going to the dwelling and reporting to him that they were unable to start the engine.

There were no spare igniters available in the engine room and the igniter in use was often in such poor condition that it was very difficult to start the engine. Lightkeeper Jensen used similar type igniters in his fog alarm engine and he agreed to lend the other operator and myself one of his good spare igniters to bring on duty with us. This arrangement worked and we had no more engine trouble. If the engine would not start we would install Jensen's igniter, putting the old one back before De Winter took over the morning watch.

Looking back, it seems very silly now, but such was life on the coast stations in the early days.

The shoreline and rivers north of Estevan Point were always fascinating and interesting. In later years I made several trips back to Estevan, including a further period of duty, some annual inspection visits and two holiday trips spent with an old German prospector and trapper, who lived in a cabin fifteen miles north of the station.

In the early days promotion was fairly rapid on account of the steady expansion and operators leaving the Service. In the late summer of 1912 I was instructed to transfer from Estevan to Triangle Island as O.I.C.

Landing at Triangle on a calm sunny day in September, it appeared to contradict the reports of the mean reputation it had gained for bad weather.

Operator Jack Berry, his wife and two little boys also journeyed on the same boat, the SS Leebro. Berry and myself relieved Alex Sutherland and Boyd. Operator Arnold remained on the island with us for a short period, being later relieved by Harold Tee.

Triangle Island is 40 miles northwest of Cape Scott and is at the extreme end of the Scott Island group. It is a cone shaped rock, 680 feet high, and approximately three miles in circumference. There are no trees on the Island, the only growth being stunted crab apple bushes, salal and coarse grass.

The lighthouse and radio station were constructed in 1910. The first radio operators were Joe Creer and Alex Sutherland. James Davies was the first lightkeeper and remained on the Island with his wife and three small daughters from 1910 to 1913.

An eighteen hundred foot tramway was constructed from the landing beach to the lighthouse on top of the Island, for hauling up supplies. The original power supply for the hauling was a donkey type steam engine, which was later replaced with a gas engine.

Many hundreds of sea lions made their home on the rocks on the northwest side of the Island and one became accustomed to their loud bellowing, which continued all through the year.

During the spring and summer thousands of sea parrots or puffin made their home on the steep grassy slopes, where they made their nests. Triangle Island is one of the very few puffing breeding grounds on the Pacific Coast. It was occasionally a stopover point for migratory birds. Bill Parkin mentions that during his stay there, he awakened one morning to the singing of thousands of canaries. The ground was yellow with them and they were a pretty sight. There were welcome visitors but disappeared as suddenly as they had arrived, after about a thirty-six hour stay.

Also later in the season he mentions the brief visit of hundreds of large snow-white owl. They had an eerie appearance with their large saucer like and seemingly stationery eyes. They also disappeared in what seemed a sudden and mysterious manner.

It was anticipated that the loneliness and isolation, the lack of fresh food and the long intervals between the visits of the supply and mail boat, would be the hardest conditions to

contend with during the year's service there, but the constantly recurring severe storms, during the winter months, were the most unpleasant feature. The constant howling of the winds got on one's nerves. Also when the winds did lessen, the top of the Island was shrouded in thick clouds.

The worst storm recorded on the Island commenced on October 22 1912, and lasted about two days. The anemometer instrument, for recording the velocity of the wind, record a velocity of over 100 miles an hour and then the shaft holding the four rotating cups, located on the tip of a fifty foot pole, broke away from its base under the strain. The broken shaft with cups and the chart showing the wind velocity, are probably still at the Meteorological Station at Victoria, where they were retained as curios.

The radio buildings were quite unsuitable in such winds. Chimneys toppled over, the office building moved off its foundations but fortunately lodged against two large water-cooling tanks in the engine room. Some windows in the dwelling blew in, the roof partly collapsed and the building was actually swaying and it was decided to take shelter in the more strongly constructed spare lighthouse dwelling.

It was impossible to walk upright against such winds and so a rope was fastened between the office and dwelling and by crouching low one could haul oneself between the two buildings. Without the rope there was a definite danger of being blown off the Island.

The outside privy building quickly disappeared.

The storm appeared to reach its peak during the last few hours and during that period the halyards, gantlings and aerial carried away putting the station out of commission.

A possible explanation of the excessive velocity of the winds on the top of the Island, during gales, may be on account of the formation of the many deep gullies, which are wide at sea level, tapering off to a narrow width at the top.

Triangle Island is located in the wide-open Pacific Ocean, off the northwest of Vancouver Island, in what is reported to be a natural storm centre.

The storm had its bright side as it did result in an extra supply boat calling at the station in a very short time, bringing a rigger, two carpenters and the required material to repair the damage. Also mail and fresh food supplies.

Later, the Department, in order to make the buildings more secure, wedged heavy 8"x8" shores against the sides of the buildings and steel saddles or cables over the roofs and made fast to cement deadmen in the ground.

Engineer Stephenson mentions that on a later visit to Triangle Island with Rigger Paddy Roche, Paddy was sitting in the living room during a storm, watching the storm windows bending in until almost touching the inner windows and asked in a quiet voice, "how far will glass bend before it busts?"

During a fine day shortly after my arrival, Arnold and myself were exploring the rocks at sea level and noted what was left of a mineralized formation on some rocks below the high tide mark. One rock was studded with small chunks of pure native copper. We extracted some of the pieces, filling our pockets, and discussed what to do with our new found riches on the difficult climb back to the top of the island.

Many years later it was noted in a geological report, that Triangle Island is highly mineralized, carrying silver, copper, gold and iron.

During the few summer months when the weather was clear, we would sometimes wander over to a high point of land near the station, in the evening, and watch the sunset over the ocean. It was very beautiful.

The location of the Triangle Island station was very good from a radio standpoint although it was considered that Estevan Point was the better station for long distance ship communications.

Triangle Island guarded the ship radio communications covering Inside Passage area between Seymour Narrows and Millbank Sound until the opening of the Alert Bay station in 1913; Alert Bay then taking over that stretch of water as part of its area.

After that, Triangle Island acted chiefly as a relay station for the traffic between the north and south and also maintained a standby for deep sea and coastwise ships.

It also handled some of the traffic for the Queen Charlotte Island stations, Ikeda and Dead Tree Point.

In spite of the bad weather and isolation we managed to keep smiling through the winter months.

Mrs. Berry was a good cook and we enjoyed nice meals even if they were limited to the canned food variety.

Lightkeeper Jim Davis and his family were friendly people and there was no friction, which was a pleasant change after the Estevan Point experiences.

The Davis children had reached school age and as there were no Provincial Government School Correspondence Courses in those days we radio operators took it in turns to conduct school classes in the mornings.

One rather funny little incident might be mentioned in connection with the weather reports. It was known afterwards as the day of the big rain at Triangle. Actually there had been very little rain on the day in question and yet at 5 p.m. it was found that the rain gauge was filled to overflowing. After careful enquiries the reason for an apparent record rainfall was traced to certain actions by Operator Berry's two little boys and it was left to the Mother to administer the scolding.

In the early spring operator Berry decided to request a transfer, as the stormy winter

weather had been hard on his family. Lightkeeper Davis also decided to say goodbye to Triangle.

For the ensuing few months Tee, Jackson and myself batched together and we didn't fare too badly. The tinned food available in those days did not offer the best menu for good health and was especially bad for one's teeth.

Triangle Island was only approximately fifty miles off the main coastwise shipping route and we did feel that the Department could have arranged for a supply boat to visit us a little more often than once every three months. The salaries were also woefully inadequate for such a life, even in those days, though, if I remember, we did receive an isolation allowance of five dollars a month whilst serving on Triangle.

During those early days it was being constantly impressed on the staffs that the strictest economy must be exercised. We understood that our chiefs at Ottawa, Controller C.P. Edwards and Assistant Controller W.A. Rush, were very anxious to improve our lot but the strict economy policy was controlled at higher levels.

During the summer Seattle halibut schooners fished in the area extending outside Triangle and, sometimes, members of the crew would visit us. They were welcome visitors, as they would bring along fresh meat, fresh fruit, always a halibut and the later Seattle newspapers. One skipper who called in the early fall in 1912, called again the following summer. He was greatly surprised to find some of the same staff still there, and suggested we should have our heads examined!

However, one of the rewards for serving on Triangle Island was the pleasure one experienced when saying goodbye to the old spot and when that day duly arrived.

Tribute should be paid to the memory of Operator Johnny Arnold. In his young days he was an apprentice on a deep-sea sailing ship. He later became interested in radiotelegraphy and joined the Government Service in 1910.

He was at Triangle Island in 1911-12 and there still remains a memory of him at the top of the 200-foot mast, in a stiff breeze. He crawled along the cross arm and released an aerial halyard that had become jammed in the block.

He was at the isolated Ikeda station when World War One broke out. The isolation was too much for him, with the Country at war. Leaving the other operator to take care of the station he set out in a small open launch, crossed the wide Queen Charlotte Sound, reached Vancouver and proceeded to England.

He enlisted in the Air Services Branch of the Royal Navy, became a Pilot Officer, won the D.S.O. for bravery in the air, in the East African War Sphere, and was later killed in action.

Johnny Arnold had abundance of what we sometimes call guts and we remember him with much pride.

The Digby Island station at Prince Rupert was established early in 1910. The first operator there was an old time commercial landline operator named Cameron. He did not last long and was relieved by Jim Harker. Later, Reg Harris, who had come out from the Old Country as a radio operator on the G.T.P steamer Prince George, joined the Government Service and was assigned to Digby Island as second operator under Harker.

Digby Island is on the opposite side of the harbour from Prince Rupert, the radio station being five miles by water from Prince Rupert. Three miles would be considered sheltered water but the sea condition in the remaining two miles would be very rough in a storm, even to the extent of making it a dangerous crossing in a small boat.

In those days Prince Rupert, which had become the Pacific terminus of the Grand Trunk Railway, was a wild and woolly frontier community. There was no sign of a town site in 1907. City lots were not put on the market until 1909.

According to write-ups of Prince Rupert in those early days, the attempts to rush forward power facilities, water supplies, telephone services, sewerage, roads, sidewalks, etc were primitive.

Harold Tee was assigned to Digby Island in the summer of 1911, making it a three-operator continuous watch station. Conditions were generally crude on the station and very little furniture supplied.

The operators batched in the single dwelling. There were only limited arrangements for sending supplies to the station, the operators depending for transportation on the supply boat of the contractor, who was building the Marine Depot and dock, across a small bay, a mile from the station.

Operator Reg Harris decided he didn't like the life at the Digby Island station and resigned, returning to the G.T.P. steamers. He later built up a successful insurance business in Seattle.

There was difficulty in obtaining a replacement for Harris and Jim Harker mentions that he and Harold Tee had to double up. They maintained the continuous watch, twelve hours on twelve hours off, for three months, their pay averaging 28 cents an hour.

The traffic handled was chiefly inter-station with Ketchikan, Dead Tree Point and Ikeda and traffic to and from the south through Triangle. There was very little ship traffic in those days.

The equipment was Marconi with the fixed spark. The magnetic detector and crystal were in use, the preference being for the crystal.

The power supply was obtained from two 6 H.P. vertical Fairbanks Morse engines.

The Ikeda station in the Queen Charlotte Islands was completed in 1910, Paddy Whiteside and Dundas being the first operators.

The station was located on a high point of land at Ikeda Head on the extreme southerly part of the Queen Charlotte Islands.

The main purpose of the station, at the beginning, was to serve as a relay point between Digby Island and Triangle Island but in a short time, with improvement in equipment, it was possible to maintain fairly consistent contact direct between Digby Island and Triangle Island.

Ikeda carried out limited ship communications and also handled telegraph traffic for the Ikeda Copper Mine, located about four miles from the station, a telephone line connecting the station with the mine.

The mine was owned and operated by a Japanese named Ikeda, who was held in high regard by the station operators and he did everything possible to be of assistance to them.

The equipment at the Ikeda station was similar to that at Digby Island.

There was a rough four-mile trail between the station and the Ikeda wharf. It was steep in places and at one spot it was necessary to negotiate a ladder, made fast to a bluff.

Jim Harker, who served a term of duty at Ikeda with his wife and family, in those early years, looks back on it as one of the most unpleasant of his duty assignments. The Government steamer only landed supplies at the station two or three times a year. Any other supplies were obtained from Prince Rupert and landed by the G.T.P. steamer on the Ikeda dock. Jim had to pack the supplies on his back from the dock, over the trail, to the station.

The Dead Tree Point station, on the Queen Charlotte Islands, was opened in 1910. The Government Telegraph Service had established a telephone circuit on the Islands and Dead Tree Point acted as a relay point, for handling telegraph traffic between the Islands and the mainland, relaying its traffic through Digby Island and Triangle Island.

McIntyre, who carried out the installation work at Dead Tree Point, remained there as an operator for a few months and then left the Service.

The first call letters allotted to the station were CAD. These call letters seemed a rather unfortunate choice at the time but it was misunderstandings between the District Superintendent and McIntyre and the allotment of CAD indicated the esteem of one for the other. The call letters were later changed.

Walter Howard who served for a short time at Dead Tree, relieved McIntyre, mentions that included in his duties was the maintenance of the twelve miles of phone line between Dead Tree and Queen Charlotte City. Some of the ranchers, on the phone line route, had phone connection established in their homes. They paid a small nominal monthly rental and also 10 cents for each call they made. The collection of these tolls from the ranchers was also included in Mr. Howard's duties.

During the ensuing years Dead Tree Point became a popular station, especially for married

operators who did not mind a certain degree of isolation. It has a lovely location on a flat point of land by the sea. The climate is favourable and much less rainfall and more sunshine than at Prince Rupert, fifty miles away on the mainland. The ground around the station is fertile and excellent for gardening.

In the early days there was a fair wagon road from the station south to Queen Charlotte City and north to Lawnhill. This road was improved later, sufficient for car travel. There was no steady watch keeping, a schedule being maintained with Digby Island and Triangle.

The operator also received a special allowance of \$20 a month from the Government Telegraph Service for keeping their daily accounts.

Jack Berry, who was a restless soul, settled down happily there with his family for a long stay. Charlie Moses also stayed there with his family for several years. Herbie Holt, as a single operator, enjoyed being at the station for a good stay. He was blessed with a keen sense of humour and during an inspection visit to the station by the writer, Herbie advised that he wished to apply for a transfer. With a twinkle in his eye he said that he had found that with each year there that the Indian maids at Skidegate and Queen Charlotte City were becoming whiter and whiter and that it was time for him to leave. And so he transferred to Point Grey.

Alert Bay station was opened in the spring of 1913. There were many dead spots along the Inside Passage, where ships found it difficult to establish contact with a coast station. The Alert Bay station helped to eliminate many of the dead spots.

Alert Bay was also becoming a thriving community with its cannery, sawmill and fish boats. The Government Telegraph Line between Alert Bay and Vancouver was often out of commission and the establishment of a radio station there assured the community of continuous communications with the south.

The early operators at the station were Dundas, Jack Berry, Hawkeswood, Jim Harker.

Radio Electrician Herb Dawe was in charge of the construction and installation of the station under direction of Engineer Stephenson. Herb was always a colourful character and one could expect exciting happenings when he was on a job. Many stories were told in connection with his stay at Alert Bay. The Cannery Manager was the most influential person in Alert Bay. Herb had many differences of opinion with him in connection with the use of the Cannery dock facilities and supplies for the radio station. One story relates the Cannery Manager being seen racing for his life across the dock for the safety and protection of his store, with Herb, close on his heels, wielding a double bitted axe!

Operators considered themselves fortunate if they obtained an assignment at the Alert Bay station, especially after spells of duty at such outside stations as Triangle, Ikeda, Estevan and Pachena.

A modern double dwelling had been constructed on the station site with inside plumbing, which was a welcome improvement. There was a frequent mail service, two stores in the village

and much social activity.

The latest Canadian Marconi equipment was installed at Alert Bay including the rotary spark gaps, which were now being installed at all, stations.

Improvements were being made in the aerials. A later type of receivers was being supplied which were more selective in tuning but the reception range still limited to the degree of sensitivity of the crystal detector.

Changes were taking place in the engineering section and efforts being made to keep up to the demands to meet the increasing expansion.

When Engineer Stephenson joined the Service in 1910 there were no workshop facilities and Mr. Edwards instructed him to acquire suitable premises.

An empty store shed in the Navy Yard was the only place available at the time and was fitted up as a temporary workshop. Later a large substantial brick building, on the Navy Yard property, became available and made a very satisfactory workshop, which served for many years.

Two radio electricians, a machinist, rigger, carpenter and janitor were employed and the workshop and staff established.

Much work needed attention at all stations.

Additional masts were required. These wooden masts were of the three piece type, usually 200 feet high and required experienced workmanship in their erection.

Mr. Stephenson pays high tribute to Radio Electrician Herb Dawe and Rigger Paddy Roche for the splendid work they did in those early years. They worked together on various construction jobs at the outside stations. They worked long hours under the roughest conditions without a grumble and were always ready and willing to tackle the roughest jobs.

It was a sad loss for our Service when Paddy Roche, after only a few years as rigger, was stricken down with pneumonia and passed away.

A serious problem from the beginning and still existing at some stations has been the obtaining of a satisfactory water supply for the dwellings.

Cement tanks were originally constructed in the dwelling basements and the rainwater piped from the roof gutters into the tanks. Hand pumps were installed in the kitchens to pump the water up from the tanks. The methods of construction of the tanks was not satisfactory and the cleaning of the tanks a problem. Good wells were obtained at Alert Bay and Dead Tree Point and later at Estevan Point. Use was made of a seepage in the rocks at Pachena to obtain a satisfactory water supply. Digby Island has a heavy annual rainfall but well drilling there was unsuccessful. In addition to the basement tanks, a catch basin was constructed on the station site to catch and store the rainwater.

Engineer Stephenson mentions a problem he had at the Cape Lazo station. Members of the staff were suffering from boils and it was traced to a foul water supply. Dead rats and mice were found in the tank. It had not been possible to obtain a satisfactory well. A well driller was consulted and after inspecting the site and make checks with a water divining will rod, he agreed to drill a well for \$850.00 and if no results, then no charge.

The station is located on a high sand cliff. The driller made several attempts but after a certain depth, the drill would not function in the hard sand. The driller finally gave up after losing a drill. The Department kindly granted him a compassionate payment sufficient to cover his expenses. Stevie, as a last resort, tried digging in the most unlikely spot, at the foot of the bluff, just above high tide. A good supply of water was struck at a depth of fifteen feet. An electric pump was installed at the well, a 1000-gallon storage tank on top of the bluff and the Cape Lazo Water supply problem eliminated.

The Canadian Marconi Company established an office and workshop in Vancouver in 1911 to meet the demands from the steamship companies for radio equipment for their ships.

From 1911 onwards, for many years, almost all of the radio equipment on the Canadian ships on this Coast was Canadian Marconi, also the equipment on our Coast stations. The Government Service and the Canadian Marconi Company worked in close cooperation and many Canadian Marconi operators transferred to the Government Service in order to obtain employment ashore. Monthly accounting was carried out between the two Services in connection with paid messages exchanged between the Coast and Ship stations.

The writer, after leaving Triangle Island, was assigned to the Alert Bay station. It was a very nice change to be at an inside station and the few months at Alert Bay passed very pleasantly.

It was not a busy station although a close stand-by for ships was maintained.

There was a fair amount of local traffic when the Government Telegraph lines were out of order, which was frequent on account of the rugged country over which the lines passed.

Dundas was the O.I.C.

It is a pity that the prospects in the Service at that time were not more encouraging. Dundas was a good worker and one of the early pioneers and it would have been to the advantage of the Department to retain that type of person.

He was later transferred to Pachena, left there to join the Inland Water Transport Service and at the end of World War One decided to seek a living in California.

He was in the San Francisco Telephone Services for many years but was stricken with paralysis before reaching retirement age and has since passed away.

After a few months at Alert Bay, the writer was transferred to Digby Island, relieving

O.I.C. De Winter who had transferred from Estevan Point to Digby Island and resigned from Digby Island to rejoin the Canadian Marconi Company.

The Digby Island station was still in a very rough state in early 1914, the station site uncleared and the office and dwelling surrounded by high stumps.

The radio equipment was the Canadian Marconi 2 kW transmitters with non-synchronous rotary spark gaps and the crystal detector multiple tuner receiver.

Lofty Harris and Douglas Ward were the operators there, and we batched together in the sparsely furnished single dwelling for many weeks. Lofty was a tireless young worker in those days.

Those old time operators, who worked with Lofty in those early years, will remember his occasional outburst of wild temper.

On one occasion he stubbed his toe badly against the plank sidewalk between office and dwelling. With a yell of cusswords he seized an axe and proceeded to chop up the sidewalk until we called to him to stop. His outbursts were quickly over. He remained in the Service, later transferring to the Avrad Section. If it were possible to rate those early pioneer operators for their degree of useful service to the Department, through the years, especially at the outside stations, then Lofty's rating would be very high.

Douglas Ward was the mystery man. He had a good educational background, had wandered much over the world and mentioned casually having spent several years in Tibet and Northern India but avoided giving any details of himself or what work he had done.

He was a good operator and willing worker, tolerant, kindly, and had a keen sense of humour which made him a very suitable type for an isolated station. His weakness was a liking for liquor but the lapses were infrequent. A later story, told of him, was that during World War 1, he was on holidays in Victoria wearing his Radio Operator Warrant Officer Naval uniform, he had been celebrating and was tipsy and walking up the steps of the Empress Hotel he encountered the Admiral. In his effort to stand smartly to attention and salute, he lost his balance and fell down the steps. The story relates that the Admiral's remarks were most unkind! Ward wandered to California after the war and nothing further was heard of him.

In the early summer of 1914 Harris and Ward were transferred from Digby Island and replaced by Operators Jackson and Hollis.

Jackson was a married man with a family and did not wish to board Hollis and myself as his wife was in poor health. There were no other living quarters available in the vicinity at that time and so it was necessary that we share the single dwelling.

A timetable was arranged for the use of the kitchen, for preparing meals. It was a most ridiculous situation and called for much tact and patience.

After much urging that more satisfactory living quarters be provided, authority was granted for the construction of a double dwelling.

The first passenger train from Eastern Canada arrived in Prince Rupert on April 8, 1914. We watched the gaily decorated train passing along the tracks on the other side of the Straits from the station.

The commercial traffic at the Digby Island station continued to increase. The service over the Government Telegraphs circuit was very poor on account of frequent line failures. Some of the larger business firms in Prince Rupert sent their messages direct to the station over the phone to avoid delays. We were anxious to get their traffic to increase our revenue, but looking back, consider now that it was a mistake. The traffic became heavier than anticipated and we were not able to give the desired attention to ship communications.

An official bank account was opened in Prince Rupert and we were remitting between \$400.00 and \$500.00 a month to Victoria office covering traffic payments made direct to the station.

General conditions on the station were far from satisfactory. The Department would only pay for one launch trip a month to transport our food and other supplies from Prince Rupert to Digby Island. This was quite inadequate and Jackson and myself purchased a small launch.

The Department only allowed us \$5.00 a month for fuel for heating the office. This was on the same basis as allowed to Lighthouse Keepers. The providing of fuel for the dwelling was our problem.

The hours of work were excessive as the three of us had to maintain the continuous watch, seven days a week.

The District Superintendent in Victoria, who fully understood these conditions, was either unwilling or unable to improve them.

However things came to a dead stop on August 4, 1914 with the outbreak of World War 1. That date could be considered as the closing date of Chapter One of our West Coast Wireless Service as the war brought many changes to our Service and to all our lives.

Instructions were immediately issued from Ottawa, ordering the closing down of all radio stations on this Coast. It comprised all coast and ship stations, the few private commercial stations that had been established, and all amateur radio stations.

The U.S.A. coast and ship stations were, of course, still operating.

German cruisers, which were in the Pacific at the time, commenced making raids. The cruisers were the Leipzig, Scharnhorst, Gneisnau, Koenigsberg and Dresden—the spelling may not be quite right.

The Government may have had reasons for thinking some of the cruisers were heading for Northern B.C. as indicated by the action of the Prince Rupert Banks in shipping currency and securities to B.C. interior points.

On August 21, 1914, telegraphic instructions were received direct from the Controller of Radio at Ottawa to immediately dismantle the Digby Island station, remove and secrete the cylinder heads of the engines, armatures of all dynamos, all receiving apparatus and aerial wire. No time was lost in carrying out these instructions.

After a few days instructions were received to replace the equipment and we did wish we hadn't made such a good job of ditching the aerial in such an inaccessible spot in the bush.

With the passing of a few weeks, the coast stations were being put back on a limited and restricted operating basis. Much code traffic was then handled between Naval Headquarters and the Canadian, British and Japanese warships.

Military guards had been established at Point Grey, Victoria,, Pachena, Cape Lazo and Digby Island stations. In most cases the guards were either elderly or very young and were rather raw material from a military angle. According to later reports from some of the stations, some of the young chaps were inclined to be a little trigger-happy.

One humorous incident is remembered at the Digby Island station. The sergeant found the guard asleep on the office steps in the early morning and obtained possession of his rifle and bayonet before waking him.

Official censors were appointed to some stations, these duties being later transferred to the O.I.C.s

The coast stations which up to this time had been under the jurisdiction of the Department of Marine and Fisheries were now transferred to the Naval Service. We operators welcomed the change as it resulted in a small pay increase.

With the easing of the war situation in the Pacific, the restrictions were gradually lifted and the coast and ship stations permitted to resume normal operations.

Engineer Stephenson mentions that the Wireless Workshop, which had been established in the Navy Yard before the war, rendered much valuable service to the Naval vessels, as the Naval Service had not established a wireless workshop ashore at that time.

Radio maintenance work was carried out for the war vessels Rainbow, Shearwater, the two submarines CC1 and CC2 and smaller naval craft. Also United Kingdom warships.

The Navy furnished considerable radio spares and equipment to the Workshop and also loaned a Naval Technician rating, C.P.O. Smallwood, to the Workshop for the duration of the war.

The Fisheries Service patrol vessels Galiano and Malaspina went into commission in 1913, the

first radio operators being Tommy Raine on the *Galiano* and Harold Tee on the *Malaspina*.

Harold still remembers the Sunday morning church service on the quarterdeck of the *Malaspina*. Captain Newcombe would usually end the service in a hurried manner, all in one breath—"Preserve us from the perils of the deep for Christ's sake heave up the anchor Mr. Ford".

If the German cruisers were sighted then the information would be immediately wirelessly to Victoria.

If permissible to be mentioned in these notes then, supposedly, the Canadian warship *Rainbow*, the British cruisers *Newcastle*, *Kent* and converted cruiser *Otranto* and the Jap battleship *Idzuma* were anchored in Barkley Sound ready to trap the German cruisers after they entered the Straits of Juan de Fuca.

The German cruisers did not show up.

A further story is told of the *Malaspina* by Harold Tee as follows:- Admiral Kingsmill was aboard making an inspection of coastal points. A ship drill was being conducted at Port Hardy and part of the drill included the order to abandon ship. Second Officer Harry Adlam was in charge of one boat and the Admiral called down from the *Malaspina* - "What water are you in?" Adlam became a little rattled and replied - "Salt water, Sir", which drew the comment from the Admiral - "I didn't think you were in Lake Erie".

One of the saddest incidents to be recorded in these notes was the loss of the *Galiano*, with all aboard, in the winter of 1918.

The ship had called at Triangle Island to leave some Naval documents and to take off one passenger, Miss Pridham. She was the first person to act as housekeeper at the isolated Triangle Island station. She was elderly and had planned to make a much-desired trip East with the money she had saved during her year on Triangle. After leaving Triangle in the early evening the *Galiano* headed for the Queen Charlottes to make a call at the Ikeda Head station. A strong south-easterly gale sprang up and the vessel foundered in the heavy seas off Cape St. James. Neary, who was the operator of the *Galiano* and had been in the Service several years, managed to send out the distress call, his call letters and the words - We are foundering - and then silence and that was the end of the *Galiano*.

Later it was reported by Captain Billington, of the Whaling Tender *S.S. Gray*, that whilst he was hove to in the bad gale, off Cape St. James, a steamer with riding lights, passed them at 11 P.M. No doubt it was the *Galiano* they had sighted.

The only wreckage found was one of the *Galiano*'s smashed lifeboats.

During the same winter there was the tragic loss of the C.P.R. *S.S. Princess Sophia* in Alaska waters, a great number of the crew and passengers losing their lives.

The good people at Estevan Point experienced a severe earthquake jolt one early morning in

the Fall of 1918.

The buildings shook. The light in the lighthouse went out of operation when the mercury spilled out of the bath in which the light revolved and the lighthouse structure cracked from top to bottom. Harold Tee mentions losing many pieces of a fine collection of china that fell off the shelves in the dwelling.

Even the chickens strongly objected to such happenings as they cackled loudly and angrily after apparently tumbling off their perch in the chicken house.

The operating duties were not as interesting as at Digby Island but conditions generally were much more pleasant, especially the weather.

Cape Lazo has always been considered as one of the most favoured of our West Coast stations and is a lovely spot.

The duties were chiefly ship communications and weather reporting. Operators Walter Lambert and Percy James were there, J.C. Stephen later replacing Lambert.

Much credit is due to many of the old time operators at the various stations for the work they did in clearing up the land around the dwellings and operating buildings, making gardens and doing so much to improve the appearance of the stations. In the very early days conditions were very rough and crude, as nothing had been done to remove the stumps form around the buildings.

Mention should be made in this respect of the work done by Bill Clarke and Guy Bennett at Pachena and later by Eric Harlock at the same station, who turned the station site into a veritable fairyland.

In the early spring of 1918, after several requests for a transfer to more active war duties, the writer was granted a transfer to Eastern Canada.

The ensuing two and half years, away from the West Coast, included duties in the Ottawa Workshop; construction and operating duties on Bird Rocks, in the Gulf of St. Lawrence, where the Department established a lookout station to watch for German submarines; a period at Montreal assisting Alex Sutherland on ship inspection duties; eight months as radio operator on the British H.M.T. Oceana; several months at the Department's Radio Station at Barrington Passage and three months at the Canadian Air Force Station at Morely, Alberta, where our Department supplied the radio operators.

These details have no bearing on the early history of the West Coast Service but are mentioned to indicate that a Department radio operator's life, during World War One, had many and varied interests.

Happy memories remain of the fine chaps I worked with in Eastern Canada, especially at Barrington Passage.

Amongst the other members of our West Coast Service who went back to Eastern Canada for duty assignments during the World War One period were Alex Sutherland, Herb McQueen, J.D. Taylor, Guy Bennett and Bill Parkin.

Sutherland and Bennett remained in Eastern Canada after the war.

Bill Parkin mentions his rather hectic return to civilization from the Port Nelson station after the freeze up in 1918. He and eight other staff members walked back over the Hudson Bay Railway grade. They slept in caches alongside the railway grade and the journey took many days. The rails had been lifted and shipped to France for war purposes.

Returning to the West Coast Service in October 1920 I reported to the Point Grey station. Improvements had been made in the receiving equipment. The commercial traffic had increased, partly due to the many new private commercial stations which had been established. The spark transmitters were still in use.

Bill Parkin had been assigned to the accounting duties on the station, including the abstracting of all messages and also the handling of landline traffic. A slight deafness and developed he found it difficult to receive weak signals.

He was a married man with a family and agreed to share the official dwelling with me and we got along fine together. It also saved him the twelve mile bike ride each day, which was unpleasant during winter months.

The transportation facilities to and from the station were poor. The walking distance to the nearest bus service was four to five miles and so the operators had to acquire cars, motor bikes or bikes.

There was frequently a staff shortage but we were reminded that we were still on a 56 hours per week duty basis.

We had the main city power at the station and so no engines to maintain, except the 6 H.P. Fairbanks Morse unit, which was our emergency source if the main power failed.

The operators who were assigned to Point Grey during the 1920-23 period included Lofty Harris, Daniels, Charlie Acton, Turner, Burford, Kelk, Durkee, Corriveau, Gold, Samuels, Edmunds.

In 1919 the Department decided to close the Triangle Island Lighthouse and Wireless Station. It was an extremely isolated and desolate spot off the main shipping routes and it was found that the lighthouse was no longer essential. The lighthouse was closed forthwith but it was not possible to close the wireless station until a replacement had been established.

J.D. Taylor, at one time an English Marconi Engineer, later in the Canadian Marconi Company, and during the early days of the 1<sup>st</sup> World War served as a Government Intelligence Officer, was appointed to the Wireless Workshop as an Assistant Engineer in 1916.

George Gilbert, who served in the Royal Navy as a radio technician, joined our Service in 1919.

Taylor and Gilbert proceeded north in 1919 to locate a suitable site for a station to replace Triangle. Using a 10" spark coil and a crystal detector receiver they carried out tests in the Port Hardy-Shushartie-Bull Harbour areas and finally chose Bull Harbour as the most suitable location.

The Ikeda station no longer served any useful purpose and so was dismantled and the equipment moved to Bull Harbour.

The Bull Harbour station was opened in September 1921. It is located on Hope Island, a few miles north of Vancouver Island. In those days the Union S.S. Co. made a weekly call at Shushartie and a weekly launch service was established between Shushartie and Bull Harbour for carrying mail and supplies.

Bob Ainslie, who had assisted in the radio installation, became the first Bull Harbour O.I.C. with Operators Charlie Acton and Neil McTavish.

Mention should be made of Ainslie's previous wireless experience, as he was probably the earliest radio pioneer joining our Service. He joined the Service after receiving his discharge from the Navy in April 1912. He mentions receiving his first radio message on a coherer, over a distance of half a mile, whilst serving on a battleship, during the Coronation Naval Review at Spithead, in the English Channel in 1902.

During 1903 and 1904 he was stationed at Gibraltar and signals were still being received on the coherer although the distance had been increased to thirty miles. No stand-by watch was maintained. A warning bell would ring when the incoming signal actuated the coherer. It was then switched to inker and the message recorded on a tape. In 1905 a magnetic detector was received, together with instructions for tuning the transmitting and receiving circuits. Night tests were carried out and contact established with the Home Fleet at Portland, England, at the unbelievable distance of 750 miles which, he mentions, was the first worthwhile radio communication between distant Fleets in the British Navy.

Another old-timer who served at Bull Harbour was Fred Cornish. His early experiences went back to the days when he worked as an assistant to Lee de Forest, with whom he maintained a letter writing friendship to the end of his days. Poor Fred couldn't lick the drink weakness and it was hopeless for him to be in the city with money in his pocket. One Christmas Eve at Bull Harbour he walked into the office, all dressed up and carrying his suitcase, and in a very tight condition, and announced that he wouldn't be taking the night watch as he was on the way to Vancouver. It was a stormy night and no possible way for him to leave the island.

During a visit to Vancouver later he contracted pneumonia and passed away in St. Paul's Hospital.

Bull Harbour was a busy station for relay and ship traffic. It was also the controlling station for many private commercial stations.

It was decidedly isolated and yet many operators who went there stayed much longer than they were required to do. Carl Ward remained there many years as O.I.C. and Gordon Gilliland remained there seven years as O.I.C. and then it required pressure to persuade him to leave the place and transfer to the Point Grey station.

The harbour is a large expanse of water, almost land locked and resembling a large lake and ideal for boating.

During the fishing season, when the harbour was crowded with fishing craft, sometimes over a hundred, it was an added interest to the peoples at the station. Fresh fish were usually available.

Large numbers of deer roamed the island.

The station is located on a narrow neck of land separating the harbour from the wide-open Pacific Ocean. Hikes along the beaches on the exposed side of the island were always interesting and during severe winter storms, the sight of the high waves smashing in on the beach was awesome and at times almost terrifying.

To the old timers, who were at Bull Harbour, the mention of the following old time residents at Shushartie, will bring back pleasant and interesting memories—Scholberg, Higgins, Godkin, Skinner and his daughter Eileen.

It might be hard to convince those who haven't lived in isolation that at our outside stations in those days, there was much of interest, pleasure and contentment in our every day lives and always many things to do.

One unpleasant feature in the assignment to isolated stations, especially for married operators with families, was the journeying to and from the stations.

The stretch of open water between Shushartie and Bull Harbour was often a mean launch crossing and during stormy weather was not advisable. It was also often necessary to remain a night at Shushartie, both on the incoming and outgoing journeys.

There was no dock at Shushartie, the steamer picking up or landing the passengers on a float in the middle of the Bay.

Similar conditions existed at the Pachena and Estevan stations.

The C.P.R. steamer landed or picked up the Estevan Point passengers in Hesquiat Harbour. It was shallow water and the steamer anchored at a buoy, some distance from the shore, exposed to bad weather. During the winter months the Captain frequently refused to make the stop on account of the rough seas.

Many of the old timers, especially the women folk, will remember the thrill of leaving or

arriving at Hesquiat. Going out to the steamer in an Indian canoe and if the ship was rolling in the swells, then deciding the right moment to jump from the canoe to the rope ladder hanging over the side of the steamer. It was often night time when the steamer arrived. The fates were kindly to us in our good fortune in not running into more serious mishaps.

At Pachena, if sea conditions were not too bad, the staff took the chance of going out in the lighthouse rowboat to meet the steamer rather than tackle the twelve-mile hike over the Pachena Trail to Bamfield.

Landing on the rocks in the gap at Pachena, even in fair weather, was often a problem, on account of the heavy ground swell usually pounding in. On one occasion Mrs. Ainslie was thrown into the water when the boat capsized, whilst trying to land on the rocks. She was swept under the boat. Lightkeeper Clarke was also thrown in the water and managed to grab Mrs. Ainslie and cling to the upturned boat. A rope was thrown from the rocks, which he caught and they were safely pulled in, but it was a narrow escape.

During the 1918-20 period there was little work to do at the Pachena Point station as Estevan Point was now able to guard the shipping along the southwest coast of Vancouver Island.

There was also a shortage of operators in the Service at that time.

Pachena Point was at first reduced to a one-operator station and later, in 1920, was completely closed down but not dismantled.

With the development of radio direction finding, demands were increasing for the establishment of Direction Finding stations to furnish bearings to radio equipped ships. The U.S.A. Government had established D.F. stations on the Washington Coast and a station on the southwest coast of Vancouver Island was urgently required to tie in with the U.S.A. stations and to furnish- bearings to ships entering the Straits of Juan de Fuca.

It was decided to reopen Pachena Point as a D.F. station.

George Gilbert and J.D. Taylor carried out the installation and calibration under the direction of Engineer Stephenson and the station went into commission in 1922.

George vouches for the accuracy of his statement that the Department was only allowed an appropriation of \$2000 to complete the job and out of this amount \$1200 was spent to purchase the Canadian Marconi D.F. receiver. There was also lumber to purchase, to construct a small building on the site. Trees were cut in the nearby bush for masts for the D.F. aerials.

The station quickly proved successful. Bearings furnished to ships during the first year averaged 300 a month.

Wallace Kelk was the first O.I.C. Later O.I.C.s included Hector Corriveau, Syd Jones and Martin King.

Included in the operators who were assigned to Pachena during its period as a D.F. station were Smokey Harris, Ken Durkee, Syd Woods, Aitken, Gold, Eric and Shirley Harlock, Jamesson and Jack Macdonald.

There was a tendency at first, on the part of the ship captains, to be prejudiced and not place too much reliance on their ship bearings obtained via radio. However the prejudice quickly diminished after a continuation of receiving accurate bearings.

It was an acknowledged fact that the Pachena station was operating more efficiently than the U.S.A. D.F. stations.

Pachena was using the Bellini-Tosi system with fixed loops and goniometer. The U.S.A. stations were using the rotating loops.

U.S.A. Government Radio Engineers visited the Pachena station and carried out a careful inspection, over several days, as they wished to ascertain the reasons for the superiority of the Pachena station.

A copy of their report was submitted to the Department. The report pointed out that as a site for a D.F. station, Pachena Point was unsuitable in almost every respect. The station was almost hemmed in with high trees. The D.F. aerials were located near the lighthouse which contained much grounded metal including the dome. Also there was much hardware on the station site including lighthouse derricks and the aerial tramway extending down to the rocks. Also the terrain was very rocky.

The exact wording of the report is not remembered but it indicated that the success of the station was largely due to the efficient and conscientious operating staff, also the equipment and the correct calibration.

The station calibration was checked each day with stations NPD and VAE and also re-calibrated each year.

In later years D.F. receiving equipment was developed for use on ships which enable ship captains to obtain their own bearings on known land radio stations and the use of land D.F. stations was no longer in demand.

So after over twenty years of splendid success as a D.F. station Pachena Point ceased giving bearings and was demoted to a humble small power radio beacon station.

In the early post war years, after World War 1, prevailing rates of pay for general employment had greatly improved. Unfortunately it was not so in our Service. We had now been transferred back from the Naval Service to the Department of Marine.

Conditions at the outside stations were also still unsatisfactory.

If sufficient operators were available, then a 48 hours per week duty was maintained. If

there was an operator shortage, which was frequent, then we were called upon to work 56 hours a week without any overtime credit. The isolation allowance was only nominal. If I remember, the isolation allowance granted to the operators at Estevan and Pachena was \$2.50 a month.

Unrest amongst the operators was increasing.

Parkin, Hollis and myself, at the Point Grey station, decided to try and organize and protest as a body, against our conditions. The three of us as labour agitators would have been complete flops but we realized that the only hope of obtaining an improvement was as an organization.

The operators we approached quickly lined up with us and so we started our organization with Bill Parkin as Secretary.

A round robin was submitted to the Department through the District Superintendent, outlining our grievances, but without results.

We realized the District Superintendent was hostile to the idea of the operators becoming organized.

It was decided that we should try and raise funds and send Parkin to Ottawa to put our grievances directly before the Controller. Parkin and Daniels interviewed several Union officials in the C.P.R. and C.N.R. Telegraphs in Vancouver and they agreed to arrange for their experienced official at Toronto, Tom Taylor, to accompany Parkin to Ottawa.

Advance notice was not given the Department of the visit as it was considered it would most likely be blocked. This may be the reason for Bill Parkin receiving a cold reception on his arrival at Ottawa. However, Mr. Edwards finally agreed to give him a fair hearing and he remained there several days.

Mr. Rush was sympathetic and understanding throughout all the meetings and Mr. Edwards finally agreed that our grievances were justified and considerable improvements desirable.

Arrangements were also made for Messrs. Parkin and Taylor to have interviews with the Minister and Deputy Minister, Mr. Gideon Robertson, Minister of Labour and Mr. Foran, Secretary of the Civil Service Commission.

The Department agreed to establish a 48 hour per week duty instead of the 56 hours. Also an additional week of annual leave to compensate for the operators having to work on statutory holidays. . Also a nominal cleaning allowance for each station and a promise to improve furnishings and living conditions on the outside stations. Also that an upward revision in our salaries would be given consideration forthwith.

Bill Parkin mentions that the final meeting with the Deputy Minister and Mr. Edwards was harmonious and that he and Mr. Taylor were thanked for outlining our grievances in a clear and sincere manner.

Bill's visit to Ottawa and the expenses incurred were therefore considered to be justified.

The organization quickly grew, the majority of the operators becoming members. Later, Burford, who was also at the Point Grey station, finally took over the secretary duties. He was more of the professional type of Union officer and eventually resigned from the Service to become secretary of a large labour organization in Eastern Canada.

Operators were now remaining longer at the outside stations but the cost of travel, when taking annual leave, was a hardship, especially for the married operators. We approached the C.P.R. S.S. Co., Union S.S. Co. and the C.N.R. for reduced fares. The response was gratifying and generous as all three companies willingly agreed to grant considerable fare reductions when the applied solely to the taking of annual leave.

An upward revision in our salaries was finally approved and the salary increase backdated many months, on account of the lapse of time in granting the revision.

This resulted in another shock for we old timers as it was discovered that our permanent appointments many years before had been made by Warrant only, from the Minister, and not by an Order-in-Council and was irregular and void.

We were appointed forthwith by Order-in-Council and our permanent appointments and seniority becoming effective only from that date.

We were then notified that it would not be possible to grant us the back pay as we had only just received our permanent appointments.

Parking, Daniel and myself interviewed Minister Lapointe and Deputy Minister Alec Johnston, during their visit to Vancouver, in order to protest the refusal to grant us back pay.

Mr. Johnston explained to Mr. Lapointe that it was similar to the case of poor old Tibbits at Ottawa and it was very unfortunate but nothing could be done about it.

Mr. Neil, the Independent M.P. for the Alberni-Comox District, took the matter up at Ottawa for us. He refused to give up after being repeatedly told that although unfortunate nothing could be done. After over a year he finally succeeded and the Department took whatever legal steps were necessary to back date our Order-in-Council permanent appointments and we duly received our back pay, and our seniority restored.

Even after forty years, we still remember Mr. Johnston's reference to poor old Tibbits and wonder if the poor old chap also succeeded in having his Order-in-Council appointment date corrected.

Bill Parkin resigned from the Service in 1924 to accept the radio operator position with the Powell River Company. Later he became Chief Accountant in the Company's Store Branch.

He was appointed Magistrate at Powell River in 1928 and later we had no qualms in

conducting license prosecutions at Powell River with Bill as Magistrate.

During the 1923-1924 period two 2 kW. Poulsen Arc transmitters were sent to our West Coast Service from Ottawa for test purposes.

They were installed at the Point Grey and Alert Bay stations and tests carried out over a period of many months.

The results were satisfactory and direct communication between the two stations established whenever desired.

Receiving tests were also made at the Digby Island station of the arc transmissions from Point Grey and Alert Bay with fairly good results.

However, the arc transmitters were somewhat complicated and the valve transmitters, which were now coming into general use, were more efficient and more simple in operation.

It was decided not to make further use of the arc sets and they were dismantled.

In 1922 changes were taking place at the Estevan Point station and its power much increased to make it more suitable for Trans-Pacific ship communications.

These changes including a new powerhouse, large capacity storage battery, 50 H.P. Semi Diesel Fairbanks Morse engine and a Navy 15 K.W. spark transmitter.

A letter from Mr. C.P. Edwards to the District Superintendent pointed out that in view of the costs of these changes at Estevan Point, he was putting all his eggs in one basket.

Radio Electrician Herb Dawe took an active part in the construction and installation work at Estevan Point and remained at the station as O.I.C.

During the ensuing months he was unfortunately stricken with T.B., resulting in a general breakdown in health compelling him to go on extended sick leave, and finally retirement.

In 1923 I was instructed to transfer to Estevan Point and left the Point Grey station with much regret. The station had a lovely location, right out on Point Grey, overlooking the sea, the work had been interesting, a good staff, and my stay there had been a happy period.

Ken Durkee transferred with me to the Estevan Point station, the other operators there, at that time, being Elmo Meiss, Hector Corriveau and Bud Wolfe. Ray Spouse was the Power House operator.

Meiss shortly afterwards transferred to Victoria, Jim Daniel relieving him.

During the ensuing year Operators Corriveau, Durkee and Wolfe put Estevan Point on the map as an outstanding coast station.

During the night watch they would contact ships in all parts of the Pacific, obtaining their positions. The daily morning report to Victoria of ship contacts became more and more lengthy. Also contacts with ships were maintained at distances which, in view of spark transmission still being in use, were very surprising.

In November 1924 night contact was maintained with the S.S. Tahiti during its entire run from San Francisco to New Zealand, the final contact being at a distance of 5500 miles, just before the vessel docked at Auckland.

A similar nightly contact was maintained with the S.S. Makura in January 1925, until the vessel reached Sydney, Australia, the last position given by the ship's operator being 6057 miles from Vancouver.

Also in January 1925 contact was made with the "Empress of Australia" just before the vessel reached Hong Kong, 6100 miles from Victoria.

Many similar contacts were made.

Durkee was the most enthusiastic operator in these long distance contacts would often remain on the night shift until the ships he was nightly contacting had reached their destination.

The ships would transmit on the ship's wavelength in use at that time, 450 meters, although Durkee admitted later that, by arrangement, the operators on the Tahiti and Makura would slight increase their wavelength, when sending their position report. This would get away from the interference from other ships in the Pacific, transmitting on 450 meters. Also by arrangement with the ship operators the Estevan station would sometimes transmit on 1100 meters, which was used for transmitting the nightly news report.

Some of the Estevan Point receiving equipment was rather crude as before going there we had purchased a collection of honeycomb coils in Vancouver, which were found very effective. There was also a Workshop Type tuner. These were used in conjunction with the Marconi Model L six stages of untuned R.F. amplification and detector unit, using the V 24 and Q tubes.

Some old news cuttings are attached to bear out these long distance communications.

As previously mentioned, the Estevan Point station appears to be a freak location for long distance communications.

It was almost as easy contacting the ships at great distances, with the use of the 1 K.W. and 5 K.W. spark transmitters as with the use of the more powerful Type I transmitter.

A year or so later, whilst on ship inspection duties in Vancouver there was an opportunity to chat with an operator on one of the Australian passenger boats. He had been very interested in the long distance contacts of Estevan Point with the ships Tahiti and Makura. He mentioned that it had received much publicity in the Australian newspapers and he believed it was partly

responsible for the Australian Government's decision to authorize the establishment of a direct radio link between Australia and Canada.

Ken Durkee left our Service in 1925 to obtain an engineering degree at the Washington University. The Department arranged for him to act as relief operator at Pachena Point during the summer vacation periods whilst attending University. Later he was with the General Electric for many years and is now a T.V. engineer in California.

Later, during ship inspecting duties, there was often the opportunity to discuss with the operators of the various ships visiting Vancouver, the service they received from our coast stations. Many operators, especially the British, stressed that they considered our B.C. Coast stations gave the best service to ships of any radio networks they had worked, in any part of the world.

This is not just a silly boast of our coast station service but also a simple statement of fact.

It applied to our outside stations Bull Harbour and Estevan Point, also to Victoria and Vancouver and especially to the Pachena D.F. station.

There was a keen pride amongst the majority of our operators to render the best service possible.

The coastwise steamers sometimes complained that it was difficult at times to raise our inside stations on account of the inter-station traffic and so two listening periods, each hour, on 600 meters, were arranged for the stations concerned and the ships notified.

Point Grey was the busiest station handling commercial traffic and so a separate coast station was established in the Merchants Exchange Building, Vancouver, purely for ship communications, which left Point Grey free to handle inter-station traffic.

Many radio changes were taking place on the B.C. coast in 1925. Valve transmitters were replacing spark transmitters on all coast stations. The use of radiophone was rapidly expanding, both for ship and coast station use. Several broadcast stations had been established in Vancouver and one in Victoria.

Walter Howard had been appointed as Radio Inspector at the Victoria office in 1921.

Two further Radio Inspector positions were created in 1925. Andrew Gray was appointed to the Radio Inspector position in Victoria and the writer received the appointment for Vancouver, which ended my coast station duties.

1925 is the closing of Chapter 2 of this story of the early years of the West Coast Radio Service as it practically brought to an end the spark transmitter era and brings to the end the writing of these notes.

Looking back, 1907-1925 could be considered as the pioneering years.

The twenty years following 1925 held much more interest and romance in the expanding of radio communications on the B.C. coast and there are many old timers, retired or reaching retirement, who could write an interesting history of our West Coast Service covering that period.

The same would also apply to the first twenty years pioneering period of the Radio Inspector. So much of interest and humour, especially the early problems of the S.I.I. and license prosecuting duties.

The writing of these notes had brought the sad realization of the very large number of our old radio colleagues and friends, both in Ottawa and on this West Coast, who have passed away. They contributed so much to the building up of our Government Radio Service.

So in closing may we bow our heads in respect and also with cherished memories of those fine old radio friends who have passed on.

(W.J. Bowerman)

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