2. AN EARLY HISTORY OF THE

WEST COAST RADIO SERVICE

by

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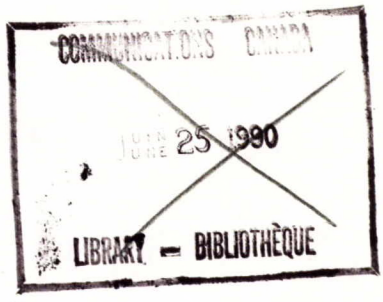

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Written for the 20th Anniversary of the
Department of Communications

The views and opinions expressed herein are those of the author and do not necessarily represent those of the Department of Communications.

Mr. Reid voluntarily recalled his early days with the West Coast Radio Service in celebration of the 20th Anniversary of the Department of Communications.

N.B. Any reader who has additional information, old documents or photos relating to the early days of the West Coast Radio Service is invited to forward them to the Vancouver Regional Office, Public Affairs Branch. They will be held in trust until an historian accepts the challenge to document the complete history of these very first steps of our radio service past.

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AN EARLY HISTORY OF THE WEST COAST RADIO SERVICE

Wireless came early to Canada when, in 1901, the government issued a contract for two Marconi stations to be built on the Straits of Belle Isle. Later that same year, Marconi made his famous first trans-Atlantic test transmissions between Poldhu, Cornwall and St. John's, Newfoundland. In December the following year the Governor General, the Earl of Minto, opened the new Marconi trans-Atlantic wireless station on Cape Breton by sending its first message to King Edward VII.

In August 1903, an Act to incorporate the Marconi Wireless Telegraph Co. was given assent. This was followed in 1904 by issuance of a contract to the new Marconi Co. of Canada to build a chain of 23 wireless stations from Port Arthur east to the Atlantic coast. This chain was later expanded to 27 stations and an additional contract was issued for them to operate the chain for a period of 20 years. The latter contract was extended several times until 1957 when it was taken over by the Department of Transport.

In 1905, the first Wireless Telegraph Act was given assent. That same year an Act to incorporate the Fessenden Wireless Telegraph Company was given assent. Also this year, Cecil Doutre, the Dominion Superintendent of Wireless Stations for the Department of Marine and Fisheries, obtained approval to establish a similar chain of stations between Vancouver and Prince Rupert on the Pacific coast. It is a matter of some speculation why this second chain of stations had not been contracted out, however, for some reason it was made a Departmental project and Mr. E. Hughes was appointed as project engineer at a salary of $100 per month plus a living allowance of $40 per month.

At that time a wireless station, call sign "PW", had already been established in Victoria sometime between 1902 and 1904 by the United Wireless Co. of America and was part of a chain of stations extending south to San Diego. It is believed this station was located on present day University of Victoria property just off Cedar Hill Cross Road. The 1909 call book also listed United Wireless stations at Victoria North and at North Vancouver, however, no evidence has been found that they were ever built.

In 1906, Doutre and Hughes, accompanied by Capt. Gaudin, the Departmental Agent for the west coast who would be responsible for this new chain of stations, made a site selection tour of the west coast aboard the CGS Quadra. Sites were selected at Point Grey (near Vancouver), Gonzales Hill (Victoria), Pachena Point (Vancouver Island entrance to Juan de Fuca), Estevan Point (half-way up the coast of Vancouver Island), Triangle Island (25 miles NW of the northern tip of Vancouver Island), Ikeda Head (near the south end of the Queen Charlotte Islands), Digby Island (Prince Rupert) and Cape Lazo (Comox) at the northern end of the Gulf of Georgia. That year the Telegraph Act was amended to include wireless by adding a Part IV.

Shortly after this tour, Hughes established his construction headquarters in the Department's marine yard located in Esquimalt Harbour. This yard was later moved to the Victoria inner harbour near the west end of the Johnston St. bridge. Late in 1906, the first station was opened for service at Gonzales Hill, call sign VSD, with E.J. Haughton as operator-in-charge at a salary of $70 per month plus free accommodation.

One of the first things Haughton had to do was to learn the American Morse telegraph code in addition to the Continental code in order to deal with the telegraph line tie-in to the station. As other stations were connected to local telegraph systems, their operators also had to learn this second code. In later years, it became a requirement for all the operators in the service to be proficient in both codes.

One of the labourers who helped in the building of the Gonzales station was Walter Howard. Howard had been a telegraph operator in Britain in the early 1890's but apparently found the life too tame, so he joined the Royal Engineers. Around 1900 he was sent out to work on improving the defences of the Royal Naval base at Esquimalt. When the Esquimalt project was completed, he returned to Britain and shortly after took his discharge from the army. In 1906 he returned to Victoria where he met Hughes who hired him to help on the Gonzales project, but Howard turned down an offer of permanent employment as an operator and instead went north to the Yukon to make his fortune. He struck out there and after a couple of years working as a fireman on a river boat out of Dawson, he returned to Victoria, joined the Wireless Service in late 1909 and got married in 1910.

In an effort to get the chain of stations operational as soon as possible, the first consideration was construction of the operational building, installation of the equipment and erection of the masts and aerials. Dwellings could follow later. These early station buildings comprised an operating room, a transmitter room (they called it the high voltage room), an engine room and a room to accommodate the operator. The latter contained a single cot with mattress, linen and blankets, a table and chairs, a kitchen cook stove and a supply of basic cooking utensils.

The usual outhouse was out back and a well supplied the water. Later they added a windmill driving a pump to supply water to the station. On sites such as Triangle Island, where wells were out of the question, rain water was collected from the building roofs and fed to cisterns. Incidentally, the wall between the operating and transmitting rooms contained a small window so the operator could observe the transmitter spark gap.

The equipment at that time comprised a one kilowatt Marconi spark transmitter, a Marconi 10 inch induction coil as an emergency spark transmitter, a Marconi magnetic detector for a receiver and a 5 horsepower Fairbanks Morse horizontal single cylinder gas engine driving a generator with a wide flat leather belt. The emergency transmitter was powered by a bank of 24 volt wet batteries which were charged by the generator.

Wavelengths used were around 600 meters, which they called "short wave", and around 1500 meters, which they called "long wave". The designation of frequency by kilohertz and megahertz did not come into use until much later. Frequency control was very imprecise as they could only tune the aerial with fairly high "Q" inductances and large capacitors. The latter were made of sheets of copper plate with sheets of plate glass as a dielectric. These were later replaced with oil-filled capacitors. When the operator had to change frequency he had to go into the transmitter and change taps on the aerial inductance.

Initially, Gonzales was the only station supplied by a hydro system so its gas engine was used only as an emergency back-up. Also, it was the only station to have electric lights - the others used coal oil lamps. The other stations were connected to hydro systems as and when it became available.

The gas engines were only run when charging batteries or when actually using the main transmitter. Thus, when the operator received a call, he had to go into the engine room and start the engine before he could transmit his reply, and starting these early engines could often take some time. Fortunately, most ship operators knew the problem and waited patiently for the acknowledgment of their call.

Electric starters had yet to be invented so the start up procedure was a bit involved. The operator had to rotate the flywheel to a point just before the igniter would spark, prime the engine with raw gas via a small brass priming cup, check that the oil lubricator drip cups were full of oil and adjust the rate of drip, switch on the ignition by closing a small knife switch, turn on the fuel line to the carburetor and then spin the flywheel; hopefully, the engine would start.

These early engines used a "make and break" ignition system supplied from a 6 volt dry battery (Eveready Hot Shot) which was connected to an iron core inductance and an igniter whose contacts, controlled by a timing cam, would open and close inside the cylinder creating a spark. It was crude but usually effective. In 1910 a program was initiated to replace this make and break ignition system with a more efficient ignition system using magnetos and spark plugs.

The dwellings on the outside stations were initially lit by coal oil lamps but in the 20's, 32 volt battery lighting systems were installed. Later, some of the stations were wired for both 110 volt and 32 volt lighting systems. A diesel plant would usually supply the 110 volts from 8 AM to 10 PM when the plant would be shut down, then everyone would switch on the battery lighting system. During the night, the duty operator would only start up a smaller plant when needed to answer calls. At Bull Harbour (on Hope Island, the northern entrance of the Queen Charlotte Straits), this unique system continued until the early 50's, when new Caterpillar diesels were installed and continuous power became available.

Aerial masts were made from tall trees felled locally and, after peeling the bark, they were shaped by hand using a large drawknife. Two or three such trees would then be lashed together with iron bands to form a mast 150 to 200 feet high. Erecting these masts was quite a feat considering the lack of power equipment. They relied on the use of Gin poles, blocks and tackle and a small hand operated windless.

Initially these were one man stations open from 8 AM to 6 PM, seven days a week, 365 days per year. If the operator wanted a vacation, he had to hire his own relief. By 1909, it became common practice to hire two operators and provision was made for vacation relief. New operating hours on two-man stations were 8 AM to 1.30 AM the following morning. With the increase in staff, additional accommodation had to be provided. In the case of Cape Lazo, temporary accommodation was provided in the form of a lean-to-installed on the side of the station building.

In 1909, a contract was let to a New Westminster firm to build duplex houses at the stations at Estevan and Pachena Points. Unfortunately, Ottawa was short of funds so the contract did not provide for plumbing. Capt. Gaudin did, however, find sufficient material in his stocks to meet this deficiency except for bathtubs which were added the following year.

To assist Hughes in his construction program, two experienced operators were hired. Messrs. Morse and McIntyre acted as overseers during construction and then installed the wireless equipment and trained the incoming operator. At the time the bulk of the operators were recruited from the British Telegraph Services and, while proficient in the continental telegraph code, generally had no experience in wireless. Morse and McIntyre were paid $90 per month with $40 a month living allowance. The casual labourers were paid $3.50 per day and their foremen $5.00 per day.

In 1907, some land was purchased from a cattle ranch at Cape Lazo, near Comox, at a cost of $2,000 per acre. This property and that for the Deadtree station which was built later, were the only sites purchased. The remainder were built on crown land.

Late in 1907, the station at Point Grey was made operational with Mr. Morse running it until February 1908 when J.H. Field was hired as its operator-in-charge. At that time, this station was pretty isolated with the nearest civilization being the village of Point Grey, about 5 miles away through dense forest. (The village was located in the area of present day 10th Avenue and Sasamat Street.) Supplies were brought out to the station from Vancouver by launch. Late in 1908, the CPR blazed a trail through the forest and connected the station to its telegraph service and Field now had to learn the American Morse telegraph code. The station did not get connected to the B.C. Telephone Co. until 1910 and the road connection was made in 1911.

One of the early assistant operators boarded in the village and used to ride to work on horseback over the telegraph trail. The story is told that he was once attacked by a cougar which he shot with a pistol he carried.

In February 1908, the Pachena Pt. station became operational with L.H. Bradbury as operator-in-charge. His brother, Charles Bradbury, took charge of the Cape Lazo station when it opened later in the year. Shortly after, the Estevan Pt. station was opened by Mr. Morse as operator-in-charge but he resigned not too long afterwards. With the shortage of operators at the time and, as Estevan was considered the more important station, Bradbury was moved up from Pachena. Pachena was temporarily closed and not reopened until 1910.

In early 1908, signal flags and union jack flags were issued to the stations, the latter to be flown during daylight hours. Signal flags were hoisted to warn non wireless equipped vessels of impending storms. In March, the Department had to pay $25 to replace a steer that had wandered onto the station property at Cape Lazo and fell to its death over the cliff. Evidently the Department had failed to comply with a clause in the Agreement of Sale requiring the fencing of the property. Needless to say they were not long in meeting the fencing requirement.

In a letter dated July 13, 1908, Haughton was promoted to Superintendent under Capt. Gaudin, with a salary increase of $100 per month. He was also to continue as operator-in-charge at Gonzales. Later, in a letter of August 12th, the Acting Deputy Minister expressed gratitude for the good work of the wireless stations (actually it was Haughton at Gonzales) for picking up a wireless dispatch from the S.S. Victoria 703 miles west of Cape Flattery. Evidently the much nearer US Naval station at Tatoosh with its rather insensitive carborundum detector receiver couldn't hear the vessel, but Haughton, with his magnetic detector, could.

In December 1908, Cecil Doutre was promoted to Departmental Agent for Purchasing and Contracts and was replaced by C.P. Edwards, whose background is unknown. Edwards was, however, known to be proficient in both telegraph codes and had a good knowledge of wireless operations.

Jim Harker, a former telegraph operator in the British Postal Service, immigrated to Victoria in 1909 and took temporary employment in a biscuit factory. The story he told his son was that one Sunday, while he was out for a walk in the Uplands area of Victoria, he heard code coming from a wireless building (the early spark transmitters made quite a noise). Harker went in to investigate and the operator was surprised to learn that Harker could read 25 words per minute with ease. This must have been the United Wireless station call "PW" mentioned earlier. The upshot was, the operator put Harker in touch with Haughton at Gonzales who arranged to hire him and initiated his training in wireless. Thus began his long career in the service. Harker was assigned to Cape Lazo as assistant in 1910 and later became a Radio Inspector.

Late in 1909, the station at Triangle Island, call sign TLD, was opened with J.D. Greer as operator-in-charge. This island, 700 feet high and about 5 miles in circumference, sticks up like a mountain rising from the ocean and is located at the end of a chain of islets, rocks and reefs known as the Scott group which projects some 25 miles northwest from Cape Scott on the northern tip of Vancouver Island. Wind velocities on the island are incredible with 100 mph being common and up to and in excess of 150 mph being occasionally experienced. The island is treeless and covered by a kind of tundra grass which is the nesting ground for thousands of sea birds while the rocks below are home to countless sea lions. Back then, the buildings were specially braced and anchored to bed rocks with steel cables and all walkways between buildings had hand rails. Even so, in 1912, the operating building was torn off its foundation and lodged against the engine house. Only its full water tanks saved it from going over the cliff to follow the aerial masts that had already disappeared to sea. On another occasion, the roof of the bachelor quarters was torn off, most windows shattered and the doors ripped off. Out through the openings went the three operators' bedding along with most of their clothing and personal effects, much of which was never recovered.

In a letter of January 28th, 1910, the Deputy Minister advised that E.J. Haughton would in future have complete charge of the B.C. Wireless Service and that his salary would be increased to $110 per month, but he was also to continue running Gonzales. Hughes was to become District Engineer also with a salary of $110 per month but his $40 living allowance was discontinued and he would be thereafter on a straight expense account.

In February 1910, A. Buchan reopened the Pachena Point station, KPD, and reported that the station was in very poor condition after its period of closure. Evidently the roof had been leaking and had caused considerable damage. He also complained about having to hike the ten miles over the Life Saving Trail from Bamfield through a foot of mud and snow while carrying two suitcases and a new "tuner". This trail today is known as the West Coast Trail and is part of the Pacific Rim National Park.

In a letter dated June 29th, 1910, Ottawa advised that a parliamentary committee headed by the Right Honourable Sir Wilfred Laurier would be touring the west coast and was to be given free wireless service.

In mid 1910, the station at Ikeda opened, call sign AKD, with A.F. Whiteside as operator-in-charge. This new station soon found a source of telegraphic revenue when the first telephone service in the Queen Charlotte Islands was opened between the station and Ikeda mine, over the ridge to the Jedway Harbour Hotel and on to several other mines in the area. Ikeda was noted for having, at that time, the tallest wireless aerial mast on the west coast with a height of 225 feet.

Earlier in the year in a letter dated January 11th, Haughton had urged extra pay for the more isolated stations, particularly at Triangle Island. This appeared to bear fruit as later in the year some increases were made. In this same letter he went on to comment on some staff transfers and discussed the "not yet enforced" rule against placing none other than married men in charge of stations. He suggested that the property of the government and the service would greatly benefit if this rule were strictly adhered to. Shortly after, C.P. Edwards instructed the enforcement of this rule saying that where a station was already in the hands of a single man or, where a single man was about to be appointed to a station, he would be expected to give a commitment that he would get married within one year.

In mid year, Haughton's wife died leaving him with a young daughter to raise. He never remarried. C.P. Edwards sent a handwritten letter of condolence using stationery from the Grand Trunk Hotel, Prince Rupert, where he was staying while inspecting the construction progress on the northern stations.

During that year, most of the stations were equipped with new 2 kilowatt rotary spark transmitters. Also, most stations were staffed with two operators and Gonzales with three.

Due to the death of King Edward VII, all correspondence coming out of Ottawa was edged in black from the mid to the end of the year.

In a letter dated August 24, 1910, the Assistant Deputy Minister of Marine and Fisheries advised Capt. Gaudin that all wireless stations would in the future come under the jurisdiction of the newly created Department of the Naval Service. Gaudin was advised to turn over all books, files and papers to E.J. Haughton who would be the Superintendent in charge.

In a report to Ottawa in August 1910, Haughton reported that he had inspected four amateur stations in Vancouver owned by Messrs. R.N. Lockner, C. Roddis, R. Buch and R. Kelly. Kelly appeared to be the only one who was able to copy code and who had copies of private correspondence between Pt. Grey and Gonzales. With the exception of Mr. Roddis, none of the men had a definite objective in view but were merely using their sets as a "pastime". Mr. Roddis claimed to be experimenting in the transmission of power. Haughton went on to state that the men had been causing interference to ships entering Vancouver Harbour. In one instance, when the CGS Quadra was towing a disabled vessel in a gale, the captain could not raise Point Grey to request some assistance because of this interference. Haughton requested some restriction be put on the indiscriminate use of wireless as the "fad" was spreading.

On December 3rd, 1910, at 2.30 AM, after the Government stations were closed for the night, the SS Northwestern which was bound for Nome, Alaska, from Seattle, went ashore at Pile Point on San Juan Island, about 16 miles northeast of Victoria. The vessel sent out a wireless distress call which, fortunately, was picked up by the operator on the S.S. Tees, tied up in Victoria. The operator on the Tees had stayed up to do some repairs prior to sailing the next morning. He alerted the ship's master and the Tees set sail and rescued all on board the SS Northwestern.

This report must have given C.P. Edwards the ammunition he needed because on December 19, he advised he had received authority to employ additional staff to provide 24-hour service at Gonzales, Point Grey, Cape Lazo, Triangle Island, Pachena Point, Estevan Point and Digby Island. He went on in his letter to say that once 24-hour operation was established, he would close down the United Wireless station in Victoria.

In an undated hand-written letter in late 1910, C.P. Edwards advised Haughton that a Christmas box had been authorized for the staff at the U.S. station at Tatoosh. Haughton was instructed to send the receipts directly to Edwards since he had arranged for payment out of the Deputy Minister's personal expense account. He went on to suggest that the box should include a box of good cigars and a case of champagne, but that the total cost was not to exceed $40.

On his appointment as District Superintendent in mid year, C.P. Edwards instructed Haughton to install a partition across the living room of the dwelling at Gonzales and to set up his office on one side. He even included a list of suggested furniture.

Haughton appeared to go along with this idea but in December 1910, the Deputy Minister discovered that Haughton had, without authority, set an office in the Post Office building on Government Street in downtown Victoria (site of the present District office). The letter didn't seem to faze Haughton since he just ignored it and continued to occupy the office until his retirement in the late 30's. At the end of the year, he even applied for authority to hire janitorial service at a cost of $15 per month.

The Deadtree station, located a few miles north of Skidegate Mission on North Island of the Queen Charlotte Island chain, was opened in 1911 with Walter Howard as operator-in-charge. This station had not been included in the original chain of stations envisaged by Doutre and Hughes in their survey of 1906, but was the result of a political decision brought about by a strong lobby made by the citizens living on North Island who wanted some form of communication with the mainland and saw wireless as the answer. With the establishment of the Deadtree station, the Government Telephone and Telegraph Co. established a service to connect the station with Queen Charlotte City, Skidegate Mission, Tlell, Port Clements and Massett. This made the station a popular assignment as the operator received not only his salary of $85 per month, but additionally a stipend for managing the telephone and telegraph service.

On January 26, 1911, the S.S. Cottage City was wrecked off Quadra Island. Her distress call was picked up by the Cape Lazo station who implemented rescue operations and all on board were rescued.

Between 1911 and 1914, an extensive recruitment campaign for telegraph operators in the United Kingdom resulted in most stations becoming staffed with four operators. Among these were some of the more prominent pioneers of that time: Jack Bowerman, Tommy Raine, the Gray brothers, Sid Elliot, the Neary brothers, Sid Jackson, Harold Tee and Jim Daniel.

In 1912, an additional station was established at Alert Bay to provide improved coverage of the inside passage.

After three previous conventions where little had been accomplished, the major nations of the International Radio Telegraph Convention, London 1912, finally agreed to some far reaching International Regulations: to drop the name "wireless" and replace it with "radio"; adopt the European Continental Telegraph code as the International Radio Telegraph Code; establish basic standards for radio operator certification; set up a table of message tariffs and adopt the French Franc as the medium of exchange; to adopt the signal SOS as the international signal of distress which would receive priority over all other communications; and to set up a committee to sort out the call sign mess and to assign blocks of call letters to the various nations.

Within a few months of the Convention, the new distress call was used by the Titanic when she collided with an iceberg in the North Atlantic and sank, incurring a huge loss of life.

Shortly after the Convention of 1912, the Postmaster General of Great Britain issued a "Handbook for Wireless Telegraph Operators" which was adopted throughout the Empire and by most of the Dominions. Haughton made frequent reference to it in his circular letters to the stations.

A new Canadian Radio Act was given Royal assent on June 6, 1913, which cancelled Part IV of the Telegraph Act of 1906.

With the outbreak of WWI in August 1914, the male members of the West Coast Radio Service were put in naval uniform. The radio operators became Warrant Officers, Haughton became a Lieutenant and C.P. Edwards a Lt. Commander. They all continued to receive their civilian rate of pay. The engineering staff under Hughes were busy installing radio equipment on the obsolete cruiser HMCS Rainbow, on the two recently acquired submarines and on other smaller naval vessels.

The acquisition of the two submarines occurred when the Government of Columbia (South America) reneged on payment for their construction to a shipyard in Seattle. When the German Government showed an interest in the purchase of these submarines, the Premier of British Columbia rushed an emergency bill through the legislature and bought them. Thus for a few days B.C. had its own navy until the Dominion Government took them over.

Once war was declared, army infantry detachments were stationed at the Pachena Point, Estevan Point and Triangle Island stations to guard against possible raids by German landing parties. The fear of German raiding parties landing on the coast was well founded since, as soon as war broke out, the German East Asia Naval Squadron based at Tsing-Tau, under German command, sailed into the Pacific Ocean under the command of Admiral the Count Von Spee (the WWII pocket battleship Graf Spee was named after him). His squadron comprised two modern heavy battle cruisers, three light cruisers and four armed merchantmen. He detached one of the latter, the Emden, to raid in the Indian Ocean and her operations created a legend of daring exploits and of great humanity in the care and treatment of captured prisoners.

In September 1914, one of the German light cruisers, the Nurnberg, flying a French flag, put a landing party ashore on Fanning Island and destroyed the cable station and severed the Trans-Pacific cable.

British Columbians living along the coast expected to see Von Spee appear on the horizon at any moment, brush aside the Canadian Navy and mount an attack. Fortunately, Von Spee had greater worries, namely the Japanese who, with their powerful navy, joined the side of the allies and dispatched a heavy squadron to search out and destroy Von Spee. The Japanese took over the protection of our coast and even kept a heavy cruiser based at Bamfield until the crisis passed.

On November 1, 1914, Von Spee defeated a British Naval Squadron under the command of Admiral Craddock, at the battle of Coronel off the coast of Chile. Craddock and most of his squadron were sent to the bottom of the sea while only minor damage was done to the German ships. One badly damaged British cruiser managed to break away into the South Atlantic and made her way to the Falkland Islands.

Needless to say, this action caused a lot of concern throughout the British colonies in the Pacific and in Australia and New Zealand. These two Dominions refused to let ships carrying their troops to Europe sail until Von Spee was brought to heel. Fortunately, Von Spee feared that the powerful Japanese Squadron would descend on him, obtained supplies and coal from neutral ports and then headed off. He planned on occupying the Falkland Islands and using them for a base for raiding in the South Atlantic. This was his mistake. Unknown to him, a powerful British squadron had gathered there to meet him. The battle started just after noon on December 8th and after three running engagements, Von Spee and most of his squadron were sent to the bottom of the sea with few survivors.

In 1915, new call signs were issued to the stations to conform with the block of call letters assigned to Canada as a result of the International Radio Telegraph Convention of 1912.

The need for better coverage of the North Pacific by the Estevan Point station was soon obvious, so a 7.5 kilowatt transmitter was installed with a huge single cylinder diesel engine and generator to power it. This engine was started by compressed air and was the latest thing at that time. With this increase in power plus an outstanding location which had exceptionally high ground conductivity, the station put out a tremendous signal. Few believed the relatively low power it actually used. It was low compared to the many U.S. stations using 250 to 500 kilowatts and to the one million watts used by NAA on the east coast.

WEST COAST RADIO STATIONS

First Call Sign	Location	Call Sign After 1915
VSD	Gonzales Hill, Victoria	VAK
KPD	Pachena Point	VAD
USD	Estevan Point	VAE
TLD	Triangle Island	VAG
AKD	Ikeda Head	VAB*
PGD	Pt. Grey, Victoria	VAI
DTD	Deadtree Pt., Q.C.I.	VAH
SKD	Cape Lazo	VAC
unknown	Alert Bay (added in 1912)	VAF

* This call sign was re-assigned to the station established in downtown Vancouver in 1923 at 815 West Hastings Street.

It is unknown just when radio licensing started in Canada after the passing of the Radio Act of 1913, but they were certainly slow at getting off the ground with radio operator certification. The U.S. had created their Department of Communications in 1912 (later replaced by the F.C.C. in the 30's) and by 1913 had established Radio Inspectors in most major ports, conducting exams and issuing certificates. At that time, since the U.S. had no restriction as the nationality of persons being certified, many Canadians went south and obtained their operator's certificate.

In 1915, Great Britain passed legislation requiring all vessels over 3000 tons to be radio equipped. This legislation was soon copied by most nations and created a great demand for certified operators. Shortly after, Sprott Shaw Schools in both Vancouver and Victoria started radio operator training courses with Bruce Arundel as instructor in Vancouver and Chris Brown in Victoria.

This turn of events was unexpected by the Department. They had no Radio Inspectors and here were schools turning out people demanding examination for certification. Initially, Haughton had to give the code part of the examinations and then send the written papers to Ottawa for marking. Finally, in 1917, he found his answer in a naval rating, Bruce Restall.

Bruce Restall had served an apprenticeship as a machinist in Britain and then immigrated to Victoria where he found employment as a machinist in an electrical shop. He soon qualified as an electrician as well. In later years, he mentioned he had become an amateur before WWI broke out and when it did, he immediately joined the navy and was assigned to a submarine as a wireless operator. He showed me a certificate issued by the Minister of the Naval Service appointing him as a wireless operator first class and that this was his warrant. He was later moved into Esquimalt as an instructor training wireless operators and before long he was moonlighting by teaching wireless at Sprott Shaw's night school. This must have caught Haughton's attention as he arranged for Restall to be transferred under his command and had him take over examinations and ship inspections. When he was not employed on ship inspections or examinations, he worked as a Radio Electrician for Hughes.

In 1917, the CGS Quadra collided in fog with a CPR steamer at the entrance to Nanaimo Harbour and had to be run aground to avoid sinking. She sat there for several months where at high tide only her funnel was above water. Finally she was sold, re-floated and patched up to haul ore from Britannia Mines to the smelter in Tacoma. In the 20's, she was re-sold and used in the rum running trade. She was finally caught by the U.S. Coast Guard, towed into San Francisco and sold at public auction for $1,625, then scrapped. An ignominious end for a vessel that had been a friend to the men of the radio service over many years.

Due to the isolation of Triangle Island, the ruling of hiring only married men relaxed. In late 1916, the bachelor operators at the Island jointly hired a rather plumpish Miss Brunton, a woman in her late 30's, as their housekeeper. To their chagrin, she soon had them organized. They had to dress for dinner with clean shirts, ties and jackets and they had to clean their shoes. As compensation, she was an excellent cook and their dwelling was kept spotless. In November 1918, the fisheries vessel Galiano, doing double duty as a lighthouse tender after the loss of the CGS Quadra, called in to deliver supplies and to pick up two passengers, Miss Brunton and Sid Elliott. At the last moment a message arrived cancelling Elliott's transfer and he woefully climbed back up the 1000 steps to the station.

Suddenly a storm struck, the seamen dumped the rest of the supplies on the beach, pushed Miss Brunton into the workboat and headed out to the waiting Galiano. They were quickly hoisted on board and set sail for Ikeda station on the Queen Charlotte Islands. That was the last anyone ever saw of the Galiano. She apparently foundered and sank with her crew of 26 - and Miss Brunton. The only thing heard was an incomplete message "We are sinking ....." sent out by the operator Michael Neary and picked up at Triangle by his brother, Jack Neary.

In 1920, it was decided that the Ikeda station would close and that the Triangle station would relocate to a more sheltered site at Bull Harbour. Due to the improvement in equipment, the need for a repeater station between Triangle and Digby Island was no longer necessary. Also, Ikeda's revenue for handling telegrams from the nearby mines was substantially reduced since the mines were closing. On its closure, the station building and its equipment were moved by barge and set up at Bull Harbour and then Triangle's operation was moved to the new site. The lighthouse on Triangle was also dismantled since it proved to be too high above the ocean and mariners complained it was in the clouds most of the time. It was replaced by automatic acetylene lights mounted at lower levels. Only the equipment was removed and within a few years the buildings had blown down and disappeared.

In February of the same year, a 79 page consolidation of the Radio Telegraph Act of 1913 together with its various updated Radio Regulations was published by the Department of the Naval Service (available at a cost of 10 cents per copy). Of particular interest was the various classes of operator certificates:

(1) Extra First Class
(2) First Class
(3) Second Class
(4) Third Class
(5) Emergency
(6) Experimental
(7) Amateur Experimental

In 1920, Sid Jones, a WWI veteran with two years in the trenches in Flanders, graduated from the Sprott Shaw School in Vancouver and was examined by Bruce Restall. He passed the examination but was advised it would take three months before Ottawa issued his certificate. Jones and a couple of other new graduates then went down to Seattle for a bit of a celebration and while there dropped into the Department of Communications office in the L.C. building and met Inspector Wolfe. Upon inquiry about writing for a U.S. certificate, they were advised there was no problem and they sat down and started writing. Two days later, they not only had their certificates but Wolfe had lined up jobs for them on U.S. vessels.

Jones made an initial trip on the San Francisco run and then switched to the Alaska run as purser/operator, and to his surprise, was paid overtime (unheard of in Canada). Apparently he had lots of overtime since he had to check the cargo when it was loaded on board and again when it was off-loaded. The result was that when he returned to Canada three months later, he was able to bank $600 American, a large sum of money at that time. He got his Canadian certificate and signed up with the Marconi Company and was assigned to a ship on the Orient run.

In 1923, Jones was about to get married so he swallowed the anchor and joined the West Coast Radio Service (he had a first class certificate by this time). After a few days at Point Grey where Jack Bowerman was the Officer-in-Charge, he was assigned to Alert Bay under Tommy Raine. Three months later, he received a telephone call from Haughton instructing him to proceed to Digby Island to relieve its Officer-in-Charge, Sid Jackson, who was going on vacation.

Many of the department's early operators had never bothered writing their certificates and, in an effort to force them to obtain their certificates, an edict had been issued that certified operators would go ahead of uncertified operators on the seniority list. So Jones arrived at Digby Island to find himself in charge of uncertified operators with 10 - 12 years service. This action created a furor but it did force some to apply themselves to obtain their certificates. Some, however, never did write for their certificates, secure in the knowledge that as permanent civil servants, they had a sinecure for life and could not be fired. These operators never received promotions, and some of them were still operators in 1946.

When Jones took over at Digby Island, he found the station typewriter a mess so he requisitioned a new typewriter brush. Haughton wrote back suggesting he use an old toothbrush. Jones, always a humorist, then requisitioned a used toothbrush but Haughton had the last laugh - he supplied one!

In 1920, Walter Howard was appointed as the first Radio Inspector west of the Great Lakes and was located in Victoria, with Haughton. In 1924, he transferred to Ottawa but soon regretted his move and tried desperately to get back to Victoria. In 1925, Jack Bowerman was appointed as the first Radio Inspector in Vancouver and set up his new office in the Dominion Bank building on Hastings Street. A.L. (Andy) Gray and his brother Gifford Gray were also appointed Radio Inspectors with Andy replacing Howard in Victoria and Gifford going on to open the first office in Winnipeg.

In 1927, Harold Tee opened a new office in Edmonton, Sid Jones became assistant under Gifford Gray in Winnipeg and Jim Harker was named assistant to Bowerman in Vancouver. In 1928, Walter Howard finally got his transfer back to Victoria but payed the price by dropping in seniority behind those appointed in 1925 and 1927. He became assistant to Andy Gray, a position probably kept open for him by Haughton.

F.C. (Charlie) Aitken went to Ottawa to replace Howard. In WWII he was seconded to the RCAF, with the temporary rank of Squadron Leader, to help set up the Commonwealth Training Program for radio operators. He remained in the airforce after the war and ended up as its Director of Telecommunications.

About this time, the Department developed an internal examination, called the "Barrier Exam", which was a requirement for promotion to Senior Operator. It consisted of copying the international radio telegraph code at 25 wpm on a typewriter, similarly copying the American Morse telegraph code at 20 wpm, an extensive examination in message tolls and departmental accounting procedures and finally, an oral exam on the maintenance and operation of typical departmental equipment and power plants.

It is not possible to ascertain just when E. Hughes left the service but, by 1920, R.L. Stephenson was the Divisional Engineer. Stephenson had been an apprentice engineer assisting Marconi in some of his early work, had graduated from the Marconi School for Wireless Engineers at Frinton-on-Sea in Britain, and had worked as an engineer on the building of the chain of stations in eastern Canada.

In 1922, the Radio Service was transferred back to the Department of Marine and Fisheries. At that time there were 740 broadcast stations in Canada with an annual licence fee of $50 and 740 radio amateurs whose annual licence fee was $1.00. In the 1923 callbook, only 6 broadcast stations are listed in B.C. with 5 in Vancouver and one in Nelson. Surprisingly, none are listed in Victoria.

In the early 20's, the old spark equipment was phased out and replaced with the more efficient tube equipment. Later in the decade, a chain of automatic radiobeacon stations was established as an aid to marine navigation.

In his circular No. 286 dated May 19, 1922, Haughton announced an allowance of 50 cents per week had been granted for the cleaning of the station building.

In 1923, Pachena Point was no longer needed as a relay point between Victoria and Estevan Point and nearly suffered the same fate as the station at Ikeda. Fortunately, at the last minute, it was decided to make it a Direction Finding (D.F.) station to assist mariners navigating the Straits of Juan de Fuca.

In his circular letter No. 365 dated January 29, 1924, Haughton advised that in view of the fact that certain D.F. operators on the east coast had made avoidable errors recently in giving bearings by making mistakes in simple division, addition and subtraction, the Deputy Minister had approved the following penalties, to become effective February 1, 1924: 1st offence - Operator to lose 3 months seniority; 2nd offence - Operator to lose 1 year seniority; and for a 3rd offence - Operator's service to be dispensed with.

About this time, broadcast receiver licensing was implemented at an annual fee of $2.50 per radio. These licences could be obtained from any departmental office, post office, store selling radios or door to door vendors. It was a great relief to all when this form of licensing was discontinued in 1952, particularly to the Radio Inspectors who had to enforce this most unpopular form of licensing.

In the early 20's, a new source of revenue developed when private commercial stations began to be established at such places as Logan Inlet, Anyox, port Alice, Ocean Falls, Klemtu, etc. These stations had their own radio operators who also often served as bookkeepers, storekeepers, timekeepers, etc., and provided a radio telegraphy service on low frequency to the nearest coast station. In the 30's, this private commercial service was greatly expanded with the availability of lower priced radiotelephone equipment which could be operated by anyone and soon developed into the major source of revenue for the West Coast Radio Service. By the late 40's, the stations at Bull Harbour, Alert Bay, Digby Island, Estevan Point and Cape Lazo each had dozens of such stations under their control. The Department had assigned the frequency of 2292 kHz to accommodate this service. By the late 50's, this service began to disappear with the development of a viable VHF service along the coast by the B.C. Telephone Co.

An additional service provided by the Digby Island station (VAJ), at Prince Rupert was the opening of a radio telegraph link to station WXH at Ketchikan, Alaska. This circuit handled all the telegraph traffic between Prince Rupert and Alaska. Also, whenever the CN telegraph lines were disrupted by the frequent slides along the Skeena River, all telegraphic traffic in and out of Prince Rupert would be handled by Digby Island where things could get quite hectic.

The list of broadcasting stations for 1923 list the following stations as located in British Columbia.

Call Sign	Owner	Location	Wavelength
CFYC*	Victor W. Odlum	Vancouver	360 meters
CHCA*	R.C.A.	Vancouver	360 meters
CHOC*	Westinghouse	Vancouver	360 meters
CJCE	Vancouver Sun	Vancouver	420 meters
CKCD	Vancouver Province	Vancouver	410 meters
CJCB	Janes G. Bennet	Nelson	400 meters

* Authorized to broadcast market and weather reports only and were each assigned specific periods when they could make their broadcasts. The other stations could broadcast music, interviews, news reports, etc.

By the mid 20's the Union Steamship Co., whose vessels traversed the coast making calls wherever a passenger or a bit of freight could be picked up or delivered, started to make daily broadcasts on 1630 kHz announcing the next day's points of call. People used to tune their broadcast receivers to the top end of the dial so they would know when to meet the ship to pick up their mail and/or supplies, or to see the Purser to place an order for some item they wanted brought up from Vancouver.

Later, fishermen and tow boat operators started making use of this frequency and by the late 30's it had become the standard marine radio-telephone frequency on this coast. It became so well established that, when 2182 kHz became the international distress frequency, it was a tough regulatory problem getting them to use the new frequency. It was finally phased-in during the late 50's.

With the changeover to tube type transmitters, the radio operators had to make better use of semi-automatic keys (called bugs) such as had been used for decades by their counterparts on the landline telegraph circuits. The high currents used in keying the old spark transmitters generally made the use of this type of key impractical. In some instances, operators would install a special high speed keying relay but these were not always very reliable. Haughton insisted that operators must demonstrate their proficiency to the Officer-in-Charge. These keys were a very personal thing and each carefully adjusted to meet its owner's particular needs. You would never touch another person's bug without his consent and if you altered its setting you were bound for eternal damnation.

In 1923, an additional station was established in downtown Vancouver using the call sign VAB (formerly used by Ikeda) and was located in the Merchants Exchange Building at 815 West Hastings Street. Jim Harker was the Officer-in-Charge with Len Crowe as his assistant. The service provided by this station could just as well have been handled by the nearby station at Point Grey. However, shipping agents and tow boat owners who wanted their own station to contact their vessels in Vancouver Harbour and in the Gulf of Georgia were prepared to foot the bill. The station was later moved to the Marine Building and then closed during WWII.

Another World War I veteran was E.T. Redford who lost an arm in France. After obtaining his operator's certificate in 1919, he applied for a position with the Radio Service but was turned down by Haughton who did not believe a one-armed man could do the job. He was then hired by Marine and Fisheries as an operator on a Fisheries patrol vessel.

In 1922, when the Radio Service was transferred back to the Department of Marine and Fisheries, Haughton inherited Redford. It is to be noted that his one arm never held him back. He was a proficient operator and an outstanding Officer-in-Charge.

In 1926, the Vancouver School Board established a radio operator training course in Room 19 of the old King Edward High School located on the corner of Oak Street and 10th Avenue, with Walter Lambert as instructor. This was later moved downtown when the Vancouver Vocational School was established.

Walter Lambert was a real character and a strong disciplinarian. A strong esprit-de-corps developed among the Room 19 graduates which continues to this day. A few years ago they held a reunion attended by several hundred Room 19-ers who came from all over the world. Another reunion is being planned for 1989 or 1990.

In the early 20's, radio interference from powerlines and street-cars was becoming an increasing problem for broadcast listeners. Initially, the Department turned a blind eye to complaints of this problem, they had neither the manpower nor the expertise to deal with it. Fortunately, the B.C. Electric Company was concerned with its public image and assigned two journeyman electricians, one in Vancouver and the other in Victoria, to investigate and resolve these complaints. It is understood these gentlemen were sent south to Seattle where the Puget Sound Light and Power Company had already developed some expertise in the field and agreed to assist in the training of their colleagues from B.C. These gentlemen continued in this work until their retirement in the 60's. Our inspectors found them most knowledgeable and helpful. With their retirement, B.C. Hydro discontinued this service and turned over all complaints to the Department.

In the mid 20's, the Department decided it could no longer ignore the pressure of interference complaints and H.O. Merriman was appointed to head up an interference investigation service. He made a thorough study of the problems, authored several papers and books, and in the late 20's toured the inspection offices across the country to give some on-the-job training to the inspectors. He soon realized, however, some full time interference specialists were needed in the field. Accordingly, he recruited a number of radio technicians from across Canada, gave them some intensive training in Ottawa and assigned them to field offices. They were also supplied with a specially fitted interference vehicle.

Basil Irvine was assigned to Vancouver and arrived in late 1929 or early 1930, with his fully-equipped inspection van. Irvine was originally from Vancouver and had served on the submarines with Bruce Restall in WWI. His arrival in Vancouver initially caused a bit of a stir since he was higher in grade than the working level inspectors.

As a teenager in the mid 30's, a chum and I had set up some old model "T" Ford spark coils and were busy learning the code on the air, oblivious to the interference we were causing broadcast receivers in the area. One day, Irvine appeared at the door, gave the two of us a "good talking to" and then introduced us to the world of amateur radio. Who at that time would have guessed that I would take over his job when he retired...

Incidentally, when Irvine first arrived, it was considered too dangerous for him to operate the equipment while he was driving, so a chauffeur, George Smith, was hired to do his driving. Under Irvine's tutoring, Smith soon became a good interference investigator. A few years later, when it was realized a chauffeur was really gilding the lily, Irvine managed to get Smith reclassified as a Radio Electrician and Smith became his assistant. Smith continued in this position until his retirement about 1958.

In the early 30's, a remote transmitter site was established on Williams Road, Lulu Island, for the Point Grey (VAI) and the Vancouver (VAB) transmitters. This new site was given the call sign VAL and had a staff of four operators to take care of equipment maintenance and breakdowns. Just before the outbreak of WWII, it was relocated to a new site on Garden City Road where there was more room for antenna arrays.

In 1930, The Fisheries part of the department was separated to form the new Department of Fisheries. The Department of Marine Radio Service continued to supply the radio operators on the fishing patrol vessels and to maintain their radio equipment.

After the successful voyage of the RCMP vessel St. Roche through the North West Passage, it was deemed time to establish a marine coast station on the Arctic Ocean. As everything west of Port Arthur at that time came under Haughton, he was instructed to put the wheels in motion and establish a station at Coppermine, N.W.T. To this end, Fred Sealey was sent north to build the station and to be its first Officer-in-Charge. When he returned to Victoria two years later, he was promoted to Radio Inspector. Later Fred transferred to the aeradio service when it was first established and ended his career as Radio Technician at Pat Bay Airport. The station at Coppermine continued to be manned from Victoria until 1956.

In the early 30's, Walter Howard was on an interference investigation at Comox when a tube failed in his radio, so he borrowed one from the Officer-in-Charge at the nearby station of Cape Lazo. On his return to Victoria he must have mentioned the incident to Haughton because the Officer-in-Charge received a letter of reprimand for giving away government property and was told the cost of its replacement would be deducted from his salary.

In the late 20's or early 30's, George Gilbert a senior radio electrician in the workshop, read the first paper in the Proceedings of the I.R.E. about the piezo electric effect of quartz crystals and the crystals' value in frequency control. Gilbert, always an experimenter, rounded up some quartz, built a diamond saw and sliced up some crystal blanks and then proceeded to teach himself to grind crystals. Once he mastered the art, he then went around converting the station transmitters. It is claimed the transmitters were the first in Canada to have crystal control.

As Haughton grew older he became cantankerous and was disliked by his staff. In the mid 30's, he went home with an attack of influenza and the story is told that some wit in the office phoned a funeral home, reported Haughton's death and instructed them to pick up his body. Imagine Haughton's rage when he answered the doorbell to find a funeral director complete with hearse there to pick him up. He never found out who the culprit was.

In 1937, the West Coast Radio Service was transferred to the newly created Department of Transport and C.P. Edwards became its first Deputy Minister. Within this new department were two radio branches, Marine Radio and Aeradio which were to remain separate entities until the mid 50's.

Haughton, and after him Bowerman, built up a pool of operators to provide vacation relief on the stations and government vessels. When these operators were not engaged in providing vacation relief, they were frequently used as acting radio inspectors - without the extra pay.

Radio Technicians who frequently travelled the coast, often to out of the way places, were occasionally called upon to undertake special inspections, resolve complex interference problems, give operator "barrier" exams and even get involved in the occasional prosecution. To this end, some of them carried letters of authority issued by the Superintendent. This practice continued up to 1956 when Radio Regulations became a separate division and was divorced from the operations group.

In 1938, Sid Jackson opened a new office in Kamloops, B.C. and on his retirement two years later was replaced by Len Crowe. In late 1941, with increased demands by the war, the Kamloops office was closed and Crowe returned to Vancouver. Sid Jackson's son, John, later became a Radio Inspector in Victoria.

In 1939, Sid Jones finally got his transfer back to the coast but, like Walter Howard, he had to pay a penalty by dropping levels to senior operator. However, he went to Pachena Point as Officer-in-Charge shortly after, then to Digby Island and finally to Point Grey, where he was its last Officer-in-Charge.

At the outbreak of WWII, it was necessary to move the Point Grey station inland to Westbrooke Crescent. Heavy gun emplacements were being constructed on the station site to form part of a fort for the defence of Vancouver.

With the outbreak of WWII, all lighthouses on the coast were instructed to monitor the 10 AM daily broadcast of the CBC. A special broadcast was made with either the code word "A FOR APPLE" or "B FOR BUTTER". The "A FOR APPLE" indicated the lights would be illuminated that night but if "B FOR BUTTER" were broadcast, they were to keep the lights switched off.

On June 20, 1942, at approximately 9:45 PM, a Japanese submarine surfaced off Estevan Point and started shelling the station. The shelling continued for about 40 minutes with the first shells landing on the beach about 100 yards in front of the lighthouse. Mr. Lally, the lighthouse keeper, immediately extinguished the light and the submarine raised its sights as successive shells went overhead into the woods.

Approximately 25 shells were fired and, except for a few shell fragments hitting the buildings, no damage was caused. The duty operator sent a message to Pacific Command, shut down the station, and the staff and families went into the woods for safekeeping. E.T. Redford was Officer-in-Charge at the time. Among his staff were Brian S. Harrison (who later headed up the Regional Authorization group in Vancouver) and Bob Glass (who later was Chief of the air navigation aids flight checking section in Vancouver and took early retirement to be ordained into the ministry).

Several months after the shelling, a Japanese submarine was sunk off the coast of New Zealand. Its crew were rescued and told their captors they had shelled a lighthouse off the Canadian west coast.

After Japan's entry into the war, the military requested assistance in the interception of Japanese radio broadcasts. To this end, they funded the operation and supplied the necessary equipment, mostly National HRO receivers and typewriters. This new service was set up on the second floor of the Point Grey station and Andy Gray came over from Victoria as Officer-in-Charge. The position was reclassified to Radio Technician 3. Some time was taken up in recruiting additional operators and in training them in the more complex Japanese KANA code. At its peak, 28 operators in three shifts were employed in this service, among them a number of female operators including Olive Carrol, Elizabeth King and Agnes Lake. Carrol and King sailed as operators on freighters for several years after the war. Harry Lathwell, later Regional Head of Authorization in this region, and Eric Shea, later Regional Superintendent of Radio Regulation in Winnipeg, were also interception operators.

With the end of the European war in 1945, the large interception staff used on the east coast to monitor the German submarine service were transferred to Vancouver. To accommodate this influx, a second interception station was established at the old Williams Road transmitter site on Lulu Island. After being trained in the Japanese code, 68 more operators were engaged in this service. However, they had hardly reached their peak in proficiency when the Japanese surrendered and the service was disbanded. One of these operators who returned to the east was Bill Ryal, later Director of Radio Regulations in Ottawa. Brian Harrison, who had been at Estevan Point when it was shelled, was a shift supervisor at Williams Road. Another of the shift supervisors was Art Healey, later Officer-in-Charge at Pachena Point and Alert Bay stations.

In recognition of the invaluable contribution made by the Interception Program of the West Coast Radio Service, its superintendent, Jack Bowerman, was awarded the Order of the British Empire.

JAPANESE CODE

A	--.--	CHI	..-.	ME	-...-
I	.-	TSU	.--.	MO	-..-.
U	..-	TE	.-.--	YA	.--
E	-.---	TO	..-..	(Y)I	.-
O	.-...	NA	.-.	YU	-..--
N	.-.-.	NI	-.-.	(Y)E	-.---
KA	.-..	NU	....	YO	--
KI	-.-..	NE	--.-	RA	...
KU	...-	NO	..--	RI	--.
KE	-.--	HA	-...	RU	-.--.
KO	----	HI	--..-	RE	---
SA	-.-.-	FU	--..	RO	.-.-
SHI	--.-.	HE	.	WA	-.-
SU	---.-	HO	-..	(W)I	.-..-
SE	.---.	MA	-..-	(W)U	..-
SO	---.	MI	..-.-	(W)E	.--..
TA	-.	MU	-	(W)O	.---

Interception operators wrote down the code characters in English letters as indicated above and this went to translators who joined the groups of letters to make up Japanese words and then translated them into English.

Transmission of numbers from 0 to 9 inclusive are the same as in the international radiotelegraphy code.

At war's end, when I returned to Vancouver after 5 years overseas with the army, I wrote my 2nd class certificate with Jim Kitchin as my examiner, with whom I was to work in later years. I immediately went job hunting but found that, with the cut-backs, radio operators were a glut on the market. I nearly took a job on the SS Amier which was being fitted out as a China coaster. They were more interested in my army experience in small arms training and wanted me to train the deck officers in the use of a Thompson sub-marine gun to fight off pirates. Caution prevailed and I turned down the job. As it turned out, on her way to Asia, she broke down in the north Pacific and had to be towed back to Vancouver. She was eventually scrapped.

Finally, with my veteran's preference plus a war wound pension, my application with the civil service got top priority. Len Crowe hired me as a relief operator and sent me north to Digby Island with orders to report for assignment to its Officer-in-Charge, Stave Mellor.

Mellor initially assigned me as relief operator on the CGS Alberni, a lighthouse tender and a pitiful excuse for a ship. She had originally been a coal tender on the Great Lakes, had been purchased during the war by the Department and sent around through the Panama Canal to Prince Rupert. En route, the crew jumped ship at New York. At Panama they put guards aboard while going through the canal to prevent a repeat performance. After one trip on her I appreciated what they must have experienced since she was the worst sailing vessel I have ever been on.

I was shocked with the radio equipment - it belonged in a museum. After years in the military, using the latest state of the art equipment, I had some initial concern that it would even work, but I prevailed. However, another concern arose. The radio shack was directly over the boilers which made it a real sweat box. I used to sit out on the open deck with the speaker turned up and, when a call was heard, I would dash in, pick up the message and then get back out on deck. I was not the least sorry to leave the vessel a couple of weeks later.

Shortly after, I was assigned to the one man radiobeacon/weather station on Langara Island located on the Alaska border at the north end of the Queen Charlotte Islands. Again the equipment belonged in a museum, but it had been updated by George Gilbert's modification for crystal control. This was a drastic change in lifestyle for my wife Joan, a war bride brought up in London and used to the modern conveniences of life. She suddenly found herself on an island with only one other family, no electric power and a hand pump for water. Fortunately, she took to it like a duck to water and even became an expert on the end of a crosscut saw when we cut firewood.

When I left the island after a year, I met Bruce Restall and R.A. (Bob) Cole on board the ship. Restall was giving Cole a tour of the stations along the coast. Cole had just been appointed Divisional Engineer following the retirement of L.W. Stephenson.

Cole was a graduate of the University of New Brunswick and had served as a junior officer in the navy on a corvette in the North Atlantic. After the war he worked at odd jobs and was employed as a clam digger in the Queen Charlottes when his father, a Commissioner in the Civil Service Commission, arranged this appointment for him. This was one of his father's last acts before retiring to Victoria. I remember a few years later going to see Cole at his parents' home and finding the Prime Minister, Louis St. Laurent there.

My next assignment in 1947 was to Victoria at the Gordonhead station, VAK, under Jim Daniel. The staff members were Frank Arnaud, Jack Shaw and Charlie Blacklock. I replaced Don Mitchell who had been promoted to a Radio Inspector position in Victoria. Jim Daniel, finding out I did not know the American Morse code, put me on graveyard shift until I learned it.

While on shift at about 01:30 AM on August 13, 1947, a distress call was broadcast by the SS Diamond Knot who had been rammed by the Fenn Victory off Race Rocks in fog. The Fenn Victory suffered very little damage. Being the closest coast station, I took control of the distress and alerted the standby salvage vessel Sudbury who set sail immediately for Race Rocks. When the Sudbury arrived at the scene, the Captain of the stricken vessel refused assistance saying that the vessel's owners had dispatched a tug from Seattle and wanted her towed there. Despite a warning from the skipper of the Sudbury that she would never make it, her Captain stuck to his orders. Finally, at about 09:30 AM, the Seattle tug took her in tow but, as predicted, she had barely reached U.S. waters off Port Angeles when she sank.

It was an unfortunate decision made by the ship's owners. The Sudbury, at that time, was the largest and most powerful salvage tug on the west coast of North America, and with her powerful water pumps could undoubtedly have kept the vessel afloat and towed her to the nearby Esquimalt Dockyard.

The Diamond Knot had been carrying 150,000 cases of tinned salmon, making it the largest insurance claim at that time. The claim was finally settled when 200,000 tins were salvaged by sucking them up with a vacuum hose.

I soon became proficient in the Morse telegraph code and went on the regular swing shift. Soon after, I passed my "Barrier Exam" which was given by Don Mitchell and later successfully passed my examination for a first class certificate. My examiner this time was Eric Turner who later opened the Kelowna office in 1950.

In 1948, the service took over the Spring Island Loran station that had been established by the US Coast Guard during WWII. This required hiring additional operators, among them Ernie Coe who later became a Radio Inspector in Kelowna. R.H.M. Lobb was the technician in charge of this station.

At about the same time, a new radiobeacon station was built at Amphitrite Point, near Ucluelet, with Barclay Stuart in charge. This site later became a major Canadian Coast Guard station.

In 1947 or 1948, Reg Woodman, a radio operator at Digby Island and an epileptic, was drowned in nearby Dodds Cove when he suffered an attack and fell face down in a few feet of water.

In 1949 I was reassigned to Digby Island and moved into one half of the duplex dwelling. Stave Mellor was officer-in-charge but shortly after was moved to Alert Bay. Herbert Holt took over temporarily from Mellor until Brian Harrison came north a few months later. Other staff members were Armour Pyke, who had given me my amateur exam pre-war; Jack Leeming, who later became a radio inspector in Victoria; Bill Johnston, who later held a series of radio inspector appointments, culminating as District Manager, Victoria; and Les Tickner.

In the late 40's, a lighthouse radiotelephone service was established on 1792 kHz. For the first time many of these stations, which had formerly only had contact with the outside world via their quarterly supply vessel, now had daily communication with the nearest coast station. Later, in the 60's, this service was replaced by the B.C. Telephone Co. which contracted to provide a VHF radio telephone service to all west coast lighthouses.

In 1950, the first monitoring installation was made in a back room at the Pt. Grey station. State of the art General Radio precision measurement equipment together with an RCA AR88LF receiver were supplied from Ottawa. An Ottawa technician made the installation with assistance from Sid Woods from our Radio Workshop. Initially, monitoring was restricted to below 30 MHz, but VHF capability was added later. Vern Read was appointed as the monitoring operator and this service was only open weekdays, except when special assignments were required.

In 1950, the radiobeacon station at Cape St. James, VAM, located on the extreme southern end of the Queen Charlotte Islands, suddenly became a vital link in the Korean war airlift. I was sent out as officer-in-charge to establish a continuous radiobeacon and an hourly weather reporting service. The staff was increased to four operators and accommodation provided for two married families and two bachelors. The $50 a month isolation pay was a strong incentive since that was good money at the time.

In 1959, Jim Condon, one of the bachelor operators, fell and hit his forehead on the edge of a 45 gallon steel drum, fracturing his skull. After getting medical advice via radiophone from Dr. Derby of the Bella Bella Mission Hospital, I sent a message to the Superintendent, Andy Gray, who arranged for an R.C.A.F. rescue plane to pick up Condon the next morning. Unfortunately, due to the sea conditions at the time, the Cansoe aircraft could only land in the nearest sheltered cove 6 or 8 miles away. Mr. Diggens, the lighthouse keeper, and I had to take Condon in the station's 14-foot open boat to meet the plane. We had to buck fairly heavy seas and tide all the way and, while the journey probably only took 3 to 4 hours, it seemed more like 12. It was fortunate that we took lots of gas because we had to refill the outboard motor several times. We finally got Condon aboard the plane which took off immediately for Vancouver, and we headed back. The return trip was even worse since the tide had changed and the wind was increasing in intensity. I do not know how long it took but it seemed to take forever - we were soaked to the bone. On arrival, I jumped ashore and slipped on some seaweed. Before I could regain my feet, a wave dragged me back into the cold north Pacific. Fortunately, Mr. Diggens had sense enough not to come to my rescue or I might have been crushed between the boat and the rocks. He instead pulled out clear and let me swim to him. When I finally made it ashore the ladies met us with hot coffee well laced with rum. I soon got into a hot tub for a good soak but shivered for days afterwards.

Condon arrived in Vancouver and was immediately rushed to hospital for an emergency operation. It was successful but he was off his feet for a period. I ran into him in 1987 and he still bears the scar. Currently he is an operator at the Canadian Coast Guard station, VAK, located at Sooke.

Cape St. James is much like Triangle Island: wide open to the same stormy Queen Charlotte Sound and experiencing the same wild winds. Like Triangle, it is rocky with a cover of tundra grass. The buildings were heavily braced with cables over the roofs anchoring them to the bedrock. When we arrived, the island was plagued with rats. Fortunately, our Labrador dog, Suzy, became a superb rat catcher and every morning we would find a dozen or so rats laid out on our doorstep. By the time we left the station two years later, rats were very scarce.

When I left Cape St. James I was appointed back to Gordonhead, VAK, but on arrival in Victoria my orders were changed. I became a radio technician in the Radio Workshop with Bruce Restall as my new boss. Staff in the workshop at that time included Bruce Restall as officer-in-charge, Sid Woods, Dick Lobb, Neil McTavish and myself as Radio Technicians, Ted Whitehead as Construction Foreman and Bill Fleming as the Rigger.

Later on, Neil McTavish left to become officer-in-charge at Bull Harbour and a year later replaced Eric Turner as Radio Inspector at Kelowna. When Neil left the radio workshop, he was replaced by Frank Arnaud who later left to become officer-in-charge at Digby Island and was replaced by "Bim" Bayliss.

In 1951, the Department acquired three WWII frigates. Two of them, the Stonetown and the St. Catherines, were converted into weatherships for assignment to ocean station POPPA. This required recruiting additional radio operators to supply each vessel with 16 operators and one operator-in-charge. This same year Jack Bowerman retired and was replaced by Andy Gray. One of Gray's first acts was to move his divisional headquarters from Victoria to Vancouver. Sid Jones replaced Gray as officer-in-charge at Point Grey.

In the late 40's, the National Research Council had installed a radar on the 1st Narrows Bridge in Vancouver as an aid to marine navigation in this narrow congested waterway. The Council had also installed a low power single channel radiophone on 1630 kHz to communicate with passing vessels. By 1953, the need for a better radiophone with 1630, 2182, 2318 and 2366 kHz capability became urgent. At that time, Basil Irvine in Vancouver looked after the equipment on the bridge. He brought the matter to the attention of Jim Kitchin who, in the absence of Andy Gray, arranged for Roy Powell to install one of his Norpack units. A week or so later I arrived in town to install some equipment on the CGS Alexander McKenzie. I was summoned into

Andy Gray's office where I was instructed to investigate complaints by the signal staff about this new piece of equipment. I was horrified with what I found. I had heard rumours about Norpack equipment but could hardly believe what I found. With authority from Gray, I stopped payment and instructed Powell to get his equipment off the bridge. I then went to the local Marconi office where I met Duncan Black for the first time and bought a suitable replacement set which Black then installed after making some minor modifications.

Shortly after this, Andy Gray retired and Bob Cole became the new Divisional Superintendent.

In 1954, the world's first microwave controlled fog alarm was developed by the National Research Council. It was installed on Holland Rock and controlled from the Barret Rock lighthouse at the entrance of Prince Rupert Harbour. The following year a similar installation was made on Lookout Island at the entrance of Kyuquot Harbour and was controlled from the Spring Island Loran station. During the latter installation, and while ashore, a storm came up and we were stranded there for about 36 hours without food or blankets.

The microwave equipment performed exceptionally well but the mechanical controllers which operated the gas engines, the air compressors and the fog alarm itself were fraught with problems. The systems were finally abandoned after a few years of costly troublesome service.

In 1953, a new radiobeacon station was built on McInnis Island at the entrance to Millbank Sound which was to serve as a navigation aid for the bauxite ore ships going into Kitimat. Dave McLeod was the station operator who assisted with the equipment installation. McLeod had graduated from Sprott Shaw School in Vancouver in the depression years. At the time, he was unable to find employment, so he went to Britain and signed up with the British Marconi Co. and sailed on various British merchant ships as a radio operator. During WWII he was twice on ships that were torpedoed. The last time he spent a couple of weeks in a lifeboat before being picked up and taken to Halifax. While recuperating there in hospital, he fell in love with and married his Acadian French nurse, Adeline. He then swallowed the anchor and returned to Vancouver with his bride and became an instructor at Sprott Shaw. When the school closed in the 50's, he joined the Department and was sent out to Langara Island. A year later he was assigned to McInnis Island. In the early 60's, he became a Radio Inspector in Vancouver. In the early 70's, he had to take early retirement on medical grounds and died shortly after of a massive heart attack.

In 1954, a site selection tour was conducted for a new monitoring station location. After a tour of Vancouver Island and the Lower Mainland, it was determined that the best site would be in the agricultural area near Ladner which had extremely good ground conductivity and a very low noise level. The station was finally built in this area in 1957 on land rented from the Canadian Overseas Telecommunications Corporation. It was staffed with Vern Read as officer-in-charge and four monitoring operators.

In, or around 1955, Duncan Black was hired as the new Divisional Engineer. Black had originally taught school in Saskatchewan and in WWII had become an engineer with the Marconi Co. in Montreal on its wartime production program. At war's end, he transferred to their Vancouver office as a sales engineer.

In 1956, the saga of the West Coast Radio Service came to an end when, on a Canada wide basis, the marine radio and the aviation services were amalgamated into the Telecommunications Branch which had two divisions, Telecommunications Operations and Radio Regulations. In this region the Operations Division was headed up by O.H. Quealey and Radio Regulations by Bob Cole.

One final item in the story of this service. In 1956, Miss Marjory V. Haynes retired after 35 years service. She had joined the service in 1921 as a young clerk typist under E.J. Haughton and had spent her entire career in the Victoria office. Shortly after her retirement, she and Jack Bowerman were married after a courtship which had lasted many years.

The wheel made a full circle from marine to combination with air service and back to marine under the Coast Guard. In the 70's, the old marine stations were separated from the air service to become a part of the newly created Coast Guard.

APPENDIX 1

LACK OF INTERNATIONAL REGULATIONS

In the early days of wireless there were few rules and almost anything went. Some American stations and ships used the American Morse code as used by the telegraph systems of North America, while others used the Continental Telegraph code as used by the European telegraph systems and by the worlds cable systems. Thus, they often had difficulty in communicating with each other.

Many stations wouldn't accept traffic from stations belonging to another company. There was an instance where a Marconi station refused to accept messages the German Kaiser had sent from his yacht.

Some countries assigned call letters but others left it up to the individual companies to originate their own. At one time in the U.S.A. 30 different stations were using the same call letters.

They couldn't even get together on an international distress signal. The first recorded wireless distress was on March 3rd, 1899, when the SS R.F. Matthews struck the East Goodwin Sands lightship in fog. Fortunately the lightship had been fitted with a new Marconi wireless installation earlier in January that same year and sent out the message "HELP, need assistance immediately". This message was picked up by a nearby lighthouse and the lifeboat service swung into action and all on board were removed.

Again, on December 1905, the Nantucket Shoals lightship Relief #58 was struck by a passing ship in a gale and its operator William E. Snyder broadcast, in both codes, "HELP need assistance from anywhere, in distress and sinking". This call brought assistance from the nearby lighthouse tender Azela who removed all on board before the vessel sank.

The need for an international distress signal was recognized at the Safety of Life as Sea Convention, Berlin 1903 but no agreement was reached. They did, however, insert in the final protocol that "wireless telegraph stations must, unless there is a material impossibility, give priority to calls for help".

In 1904, the Marconi Company took it upon itself to fill the need for a distress call by instructing its operators, on and after February 1st, 1904, to use the signal "CQD" when any ship is in distress or in need of aid. It was further ordered that the signal must be only used with the approval of the ships captain and "any misuse of this call will result in the instant dismissal of the person improperly employing it".

The signal CQD was adopted because most of the Marconi operators came from the United Kingdoms telegraph services and brought with them their continental telegraph code plus many of their telegraph abbreviations. One of which was the general call "CQ" used to attract the attention of all operators along the wire and which preceded time signals and notices of general importance. CQ went to sea as a general call to all ships and the Marconi Company added the letter "D" to make it a "general call, DISTRESS".

At the next international convention in Berlin in 1906, the subject of a general distress signal came up again. The Italians suggested the signal "SSSDDD", the Germans "SAE", the British "CQD" and the Americans suggested the letters "MC" which was and still is the international flag signal for distress. No agreement was reached at this or at the next convention in 1909.

Finally, at the Convention in London in 1912, a breakthrough was made, not only adopting "SOS" as the international signal of distress but some basic rules and regulations were established; the continental telegraph code was adopted as the "International Radiotelegraph Code"; basic standards were set forth as to the certification of radio operators; the name wireless was dropped and "radio" adopted in its stead (Britain, however continued to use wireless for many years after); standards were set for the exchange of traffic between stations of different companies and even between stations of different countries and a system of tariffs was set up with the French Franc as the medium of exchange and, finally, a committee was set up to sort out the call sign mess and to assign blocks of call letters to all nations.

A few months after this convention, the Titanic struck an iceberg and sank with the loss of over 1,500 lives. Her Chief Operator, John G. Phillips used both SOS and CQD in his distress call which was credited with the saving of over 700 lives. Phillips remained at his post and went down with the ship but his assistant Harold Bride survived.

APPENDIX II

THE COMING OF TELEGRAPH TO BRITISH COLUMBIA

In 1864, Dr. W.F. Tolmie informed A.N. Birch, the Colonial Secretary of the colony of British Columbia, that his employer, the Hudson's Bay company, intended to lay a telegraph line between New Westminster and the Rockies and there to connect up with a line being carried westward from Fort Garry. But the HBC was slow off the mark and an American company brought telegraphic service to New Westminster in 1865. The California State Telegraph Company having run a line north to Seattle, extended their service north to New Westminster. On March 1st, Governor Seymour in person, with his yacht Leviathan, got the cable across the Fraser River, working under the direction of Mr. Gamble of the California Company. On April 18th, the line became operational and one of its first messages announced the assassination of Abraham Lincoln.

The opening of this first telegraph line was soon eclipsed by the coming of the Collins Overland Telegraph. Perry M. Collins, banker, lawyer and entrepreneur, was an American with vision, imagination and boundless energy. In 1857, he made a journey across Russia to the mouth of the Amur River and thought it might prove a useful avenue for American commerce.

Back in California in 1858, he found wide attention given to the recent failure of the Trans-Atlantic cable, which had gone dead within three months of its laying and most people believed the width of the Atlantic was too great and would defeat further attempts to lay another cable.

With the problem of linking North America with Europe still to be solved, Collins came up with an answer: since the Russians were extending their telegraph system into Siberia, why not build a line through British Columbia, across Alaska, by short submarine cable to Siberia and link up with the Russian telegraph system.

Working closely with the US State Department, Collins secured the necessary rights from the Russian, British and American governments. Then in 1864, he sold his rights to the Western Union Telegraph Company. Western Union appointed Colonel Charles S. Bulkley of the U.S. Army's telegraph system as its Engineer-in-Charge and Major Franklin L. Pope was appointed Chief of Exploration in British North America and Captain Edmund Conway was named Chief of Construction. Some time was taken to purchase and charter ships and to accumulate the vast supplies of wire, insulators and other material. On June 17, 1865, the steamer Milton Badger arrived in New Westminster with the supplies and Conway started work at once.

By August 17th, he had a line into Hope where the welcome news was received that a new attempt to lay another Trans-Atlantic cable had failed. Stringing wire along the Cariboo Road at a terrific speed, Quesnel was reached by September 14th.

Christmas day saw the advance survey crew at Takla Lake where its men joined with those of the nearby Hudson's Bay Company post to celebrate Christmas . With the onset of winter all work was discontinued until May 14, 1866.

By October 2, 1866, the line had reached a point 25 miles up the Kispiox River when work was suspended for the season. In his report for work completed that year, Conway advised:

"We constructed the telegraph road and line to latitude 55.42 N and longitude 128.15 W. The distance from Quesnel by wire is computed at 378 miles. There are 15 stations built, a log house with chimney, door and windows, 25 miles apart. Bridges were built over small streams that were not fordable, corduroyed swamps. All hillsides too steep for animals were graded from 3 to 5 feet wide. The average clearing for the wire in standing timber was 20 feet and in fallen timber, 12 feet. All underbrush and small timber was cleared from the ground thus making the road fit for horses. Travelling at the rate of 30 to 50 miles per day. Double wires spanned all large rivers. A total of 9246 poles were put up and boats were built for crossing the Bulkley and Westroad Rivers."

This amazing feat was accomplished by Conway with 150 men and 160 pack animals.

After October 1866, no further construction was undertaken as the steamer Great Eastern had successfully laid a new trans-Atlantic cable from Ireland to Newfoundland. By 1867 it was clear the new cable was successful so Western Union abandoned the overland telegraph project. It was deemed too expensive to retrieve the stores cached at various points along the uncompleted line and great dumps of insulators and wire were abandoned in the wilderness. The Indians, helping themselves to the wire, used it to build, among other things, a ramshackle suspension bridge across the Bulkley River at Haswilget Canyon.

The layout that had gone into Collins' scheme was not all lost. The section from New Westminster to Quesnel was kept in operation and in 1868 was extended east to Barkerville with the colony taking over the line on permanent lease in 1871.

In the mid 1870's, another American Company laid a submarine cable from Bellingham to San Juan Island and then a second cable to Victoria thus linking Vancouver Island to the rest of the telegraph world.

In the late 70's, New Westminster was finally connected to Canada by telegraph and, in 1885, by railroad.

In the 1890's, a telephone/telegraph line was run up the west coast of Vancouver island to Sooke, Jordon River, Port Renfrew, Clo-oose and following the Life Saving Trail to the Cape Beale lighthouse at the entrance to Barclay Sound. Later it was extended to Bamfield and up the Alberni Canal to Port Alberni, across the island to Parksville and then down the east coast back to Victoria. It is claimed that in the stretch of coast from Jordon River to Cape Beale there had been one shipwreck for every mile of coastline and that many shipwrecked sailors who managed to make it ashore died of privation in the wilderness. Hence the life saving trail, now called the West Coast Trail, was established. It had rescue huts at regular intervals stocked with blankets, medical kits and emergency food. Each hut also had a magneto telephone with instructions in several languages on how to call for assistance. The line was patrolled regularly by linemen who repaired breaks caused by windfalls and who went to the assistance of shipwrecked sailors. The heroic deeds of some of these linesmen is a story in itself.

A similar telephone/telegraph service was established on the north side of Barclay Sound between Ucluelet and Tofino about the same time as the southern line and was later extended north up the coast to Nootka and also east to Port Alberni.

The line along the Alberni Canal was strung on trees along the shoreline and frequently sagged so that at high tide it was under water. Thus a practice developed of checking the tide table before making a telephone call to the outside world via Port Alberni.

Another line ran up the east coast of the island to from Parksville to Port McNeil and Port Hardy with a submarine cable across to Alert Bay.

This telephone/telegraph service was established by the Government Telephone/Telegraph Co., a Federal Crown Corporation whose purpose was to establish communications with isolated communities where it was not profitable for commercial concerns to go.

As mentioned earlier, they provided a similar service on North Island of the Queen Charlotte Island which was tied into the Deadtree Government wireless station Another circuit of their's was from Hazelton to Telegraph Creek and on up the Dease Lake in northern B.C. This system had a tie-in to the CN telegraphs at Hazelton and in later years had high frequency radio back up. Occasionally, when the CN telegraph system was cut by slides, the Hazelton Government station would relay their traffic via radio to our station at Digby island.

In the late 50's, the B.C. Telephone Co. took over these old lines and soon upgraded them with state-of-the-art equipment with a resultant vast improvement in service. However, the Government Telephone and Telegraph Service deserves a lot of credit for its pioneering work in providing service where no others were prepared to go in the early days.

APPENDIX 3

Early Legislation, Wireless Act of 1905
Part IV of the Telegraphs Act of 1906
Radio Act of 1913
Rules for Broadcast Stations, 1925

The Wireless Telegraphy, 1905

4-5 EDWARD VII.

CHAP. 49.

An Act to provide for the regulation of Wireless Telegraphy in Canada.

[*Assented to 20th July*, 1905.]

HIS Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows :—

Short title.

1. This Act may be cited as *The Wireless Telegraphy Act*, 1905.

"Minister" defined.

2. In this Act the expression "Minister" means the Minister of Marine and Fisheries.

Licenses for wireless telegraphy.

3. No person shall establish any wireless telegraph station, or install or work any apparatus for wireless telegraphy, in any place or on board any ship registered in Canada except under and in accordance with a license granted in that behalf by the Minister with the consent of the Governor in Council.

Form and conditions of licenses.

2. Every such license shall be in such form and for such period as the Minister determines, and shall contain the terms, conditions and restrictions on and subject to which the license is granted; and any such license may include two or more stations, places or ships.

Application for license.

3. The Minister may make regulations for prescribing the form and manner in which applications for such licenses are to be made, and, with the consent of the Governor in Council, the fees payable on the grant of any such license.

Fees.

Penalty for working without license.

4. Every one who establishes a wireless telegraph station without a license in that behalf, or installs or works any apparatus for wireless telegraphy without a license in that behalf, shall be guilty of an offence and be liable, on summary conviction, to a penalty not exceeding fifty dollars, and on conviction on indictment to a fine not exceeding five hundred dollars or to imprisonment for a term not exceeding twelve months, and in either case shall be liable to forfeit any apparatus for wireless

Prosecution.

telegraphy installed or worked without a license; but no proceedings shall be taken against any person under this Act except by order of the Minister.

Search warrant.

5. If a justice of the peace is satisfied by information on oath that there is reasonable ground for supposing that a wireless telegraph station has been established without license in that behalf, or that any apparatus for wireless telegraphy has been installed or worked in any place or on board any ship within his jurisdiction without a license in that behalf, he may grant a search warrant to any police officer or any officer appointed in that behalf by the Minister and named in the warrant; and a warrant so granted shall authorize the officer named therein to enter and inspect the station, place or ship and to seize any apparatus which appears to him to be used or intended to be used for wireless telegraphy therein.

Licenses for experimental purposes.

6. Where the applicant for a license proves to the satisfaction of the Minister that the sole object of obtaining the license is to enable him to conduct experiments in wireless telegraphy, a license for that purpose shall be granted, subject to such special terms, conditions, and restrictions as the Minister thinks proper.

OTTAWA: Printed by SAMUEL EDWARD DAWSON, Law Printer to the King's most Excellent Majesty.

The Telegraphs Act, R.S., 1906

See: Part IV

CHAPTER 126.

An Act respecting Telegraphs.

SHORT TITLE.

1. This Act may be cited as the Telegraphs Act. Short title.

PART I.

SECRECY.

2. The Minister of Public Works or such officer or person as he appoints for that purpose, may determine and decide that any employee in connection with any telegraph line wholly or partly under the control of the Government of Canada, shall not be required to make the declaration as to secrecy provided for in this Part. R.S., c. 134, s. 1. Exemption of certain persons from declaration as to secrecy

3. Subject to the foregoing provision, every person who is employed in connection with any telegraph line wholly or partly under the control of the Government of Canada as an operator or in any other capacity in which he has opportunities of becoming acquainted with information connected with matters of state or with any other information, shall before entering upon the duties of such employment, take and subscribe a declaration in the form set forth in the schedule to this Act before a justice of the peace or before a person appointed by the Governor in Council to take declarations under this Part. R.S., c. 134, s. 1. Certain telegraph operators to make a declaration of secrecy.

4. All declarations taken under this Part shall be forwarded to the Department of Public Works, and shall there be kept on file; and a register thereof shall be kept in the said Department. R.S., c. 134, s. 2. Registration of declarations.

5. Every person who has made the declaration hereinbefore mentioned, and who, either directly or indirectly, divulges to any person, except when lawfully authorized or directed so to do, any information which he acquires by virtue of his employment, is guilty of an offence against this Part, and shall, on summary conviction before a justice of the peace, be liable Punishment of operator declaring and divulging information.

liable to a penalty not exceeding one hundred dollars and not less than fifty dollars, or to imprisonment for a term not exceeding six months, or to both penalty and imprisonment. R.S., c. 134, s. 3.

Punishment of operators divulging contents of telegram.

6. Every telegraph operator or other person in the employ of a telegraph company, who divulges the contents of any telegram, except when lawfully authorized or directed so to do, is guilty of an offence against this Part, and shall, on summary conviction before a justice of the peace, be liable to a penalty not exceeding one hundred dollars and not less than fifty dollars, or to imprisonment for a term not exceeding six months, or to both penalty and imprisonment. R.S., c. 134, s. 4.

PART II.

ELECTRIC TELEGRAPH COMPANIES.

Interpretation.

'Company.'

7. In this Part, unless the context otherwise requires, 'the company' means a company incorporated by letters patent under the Companies Act for the purpose of constructing a line or lines of electric telegraph in Canada. R.S., c. 132, s. 2.

Construction of Lines.

Powers for the construction of the line.

8. Every company may construct the lines of telegraph, authorized by its charter, along and upon any of the public roads and highways, or across or under any of the navigable waters within Canada, by the erection of the necessary fixtures, including posts, piers or abutments for sustaining or protecting the wires or cables of such lines; but the same shall be so constructed as not to incommode the public use of such roads or highways, or to impede free access to any house or other building erected in the vicinity of the same, or injuriously to interrupt the navigation of such waters. R.S., c. 132, s. 3.

No bridge over navigable river.

9. Nothing herein contained shall confer on the company the right of building a bridge over any navigable water. R.S., c. 132, s. 4.

Transmission of Messages.

Order of transmission of despatches.

10. The company shall transmit all despatches in the order in which they are received: Provided that every message in relation to the administration of justice, the arrest of criminals, the discovery or prevention of crime, and Government messages or despatches, shall always be transmitted in preference to any other message or despatch, if so required by any person connected with the administration of justice, or any person thereunto authorized by the Secretary of State of Canada. R.S., c. 132, ss. 5 and 6.

Expropriation.

Government may assume the line and works temporarily.

11. His Majesty may, at any time, assume, and for any length of time retain, possession of any such telegraph line and of all things necessary to the sufficient working thereof, and may, for the same time, require the exclusive service of the operators and other persons employed in working such line; and the company shall give up possession thereof, and the operators and other persons so employed shall, during the time of such possession, diligently and faithfully obey such orders, and transmit and receive such despatches as they are required to receive and transmit by any duly authorized officer of the Government of Canada. R.S., c. 132, s. 7.

His Majesty may assume the property of the line.

12. His Majesty may, at any time after the commencement of the operation of a telegraph line under this Part, and after two months' notice to the company, assume the possession and property thereof, and upon such assumption, such line and all the property, real or personal, essential to the working thereof, and all the rights and privileges of the company, as regards such line, shall be vested in the Crown. R.S., c. 132, s. 8.

Arbitration.

Mode of settling the compensation, in case of difference of opinion.

13. If any differences arise between the company and those who act for the Crown, as to the compensation which ought to be paid to the company, for any telegraph line and appurtenances taken possession of or temporarily and exclusively used by the Crown under this Part, such difference shall be referred to three arbitrators, one to be appointed on the part of the Crown, another by the company, and the third by the two arbitrators so appointed; and the award of any two of the said arbitrators shall be final; and if the company refuses or neglects to appoint an arbitrator on its behalf, or if the two arbitrators cannot agree upon a third arbitrator, then such arbitrator or third arbitrator shall be appointed by any two judges of the Supreme Court of Canada, on application on the part of the Crown. R.S., c. 132, s. 9.

Penalties.

Not sending despatches in the order received.

14. Every company which violates the provisions of this Part in reference to the order in which messages received by it are to be transmitted, shall incur a penalty not exceeding one hundred dollars and not less than twenty dollars, which shall be recoverable on summary conviction with costs by the person

person whose despatch has been postponed out of its order. R.S., c. 132, s. 5.

Refusal of company to give up and transfer possession of any telegraph line, when so requested by His Majesty.

15. Every company which shall on request duly made in that behalf refuse or neglect to give up and transfer possession of any telegraph line and of all things necessary to the sufficient working thereof, or, having so given up and transferred possession, shall neglect or refuse to allow His Majesty to continue in such possession for any length of time required in that behalf, or shall refuse or neglect on request duly made in that behalf to give and hand over to His Majesty the exclusive service of the operators and other persons employed in working such line, and every operator and other person in the employ of the said company who shall not after such possession taken and during the whole period of such possession, diligently and faithfully obey such orders and transmit or receive such despatches as they are required to transmit and receive by any duly authorized officer of the Government of Canada, shall incur a penalty not exceeding one hundred dollars for every such refusal or neglect, which shall be recoverable by the Crown for the public uses of Canada with costs in any way in which debts of like amount are recoverable by the Crown. R.S., c. 132, s. 7.

PART III.

MARINE ELECTRIC TELEGRAPH COMPANIES.

Interpretation.

Definitions.

16. In this Part, unless the context otherwise requires,—

(a) 'company' means any company or association of persons to which this Part applies;

(b) 'Minister' means the Minister of Marine and Fisheries. R.S., c. 133, s. 1.

Application.

Application to certain companies.

17. This Part applies to every company,—

(a) hereafter authorized by any special or general Act of the Parliament of Canada, or under the provisions of this Part to construct or maintain telegraphic wires or cables, in, upon, under or across any gulf, bay or branch of any sea or any tidal water within the jurisdiction of Canada, or the shore or bed thereof respectively, so as to connect any province with any other province of Canada, or to extend beyond the limits of any province;

And to certain others.

(b) authorized to construct or maintain such telegraphic wires or cables before the eighth day of April, one thousand eight hundred and seventy-five, by any such special or general Act of the Parliament of Canada, or by any other special Act or charter of any of the provinces constituting the Dominion, and at the said date in *force* in Canada. R.S., c. 133, s. 2.

Rights of a certain company under Acts of P. E. Island saved.

18. This Act shall not affect any franchise, right or privilege which the New York, Newfoundland and London Telegraph Company or any other company, or person lawfully entitled thereto, actually acquired and exercised or operated in Prince Edward Island before and up to the first day of July, eighteen hundred and seventy-three, under and subject to the provisions of any act of the legislature of Prince Edward Island made and passed before the said first day of July, one thousand eight hundred and seventy-three. R.S., c. 133, s. 19.

Powers.

Extent of Crown lands to be taken.

19. The company may, with the consent of the Governor in Council, take and appropriate for the use of the company, for its stations, offices and works, but shall not alienate, so much of the land held by the Crown for the purposes of Canada, and the shore or bed adjacent to or covered by any gulf, bay or branch of the sea, or by any tidal water, as is necessary for constructing, completing and using the telegraph and works of the company. R.S., c. 133, s. 8.

Provincial lands may be acquired.

20. The company may also acquire from any province of Canada any land or other property necessary for the construction, maintenance, accommodation and use of the telegraph and works of the company, and may also alienate, sell and dispose of the same when no longer required for the purposes of the company. R.S., c. 133, s. 9.

Company may acquire other lands and take by compulsory process under Railway Act.

21. The company may also acquire any land necessary for the construction, maintenance and use of the telegraphic cable and works of the company, adjacent to or near the shore end or place of landing of the telegraph; and, if the company and the person from whom the land is to be acquired fail to agree as to the possession or price of such land, the company may enter upon and take such land, not exceeding five acres in extent, under the powers, authorities and provisions of the Railway Act, the sections of which, in respect to compulsory powers for the acquisition of lands, shall apply to every company to which this Part applies; and the powers and authorities contained in the said sections of the Railway Act shall be vested in and may be exercised by every such company for the purpose aforesaid. R.S., c. 133, s. 10.

Company not to pre-

22. Until the company has submitted to the Governor in Council, a plan and survey of the proposed site and location of

ceed until plans, etc., are submitted to and approved by Governor in Council.

of such telegraph and its approaches at the shore, and of its stations, offices and accommodations on land and of all the intended works thereto appertaining, and until such plan, site and location have been approved by the Governor in Council, and until such conditions as he thinks fit for the public good to impose touching the said telegraph and works, have been complied with, the company shall not exercise any of the powers by this Part conferred. R.S., c. 133, s. 11.

Construction.

Limitation of powers of company.

23. The company shall not place any telegraphic wire, cable or work connected therewith in, under, upon, over, along or across any gulf, bay or branch of the sea, or any tidal water, or the shore or bed thereof respectively, except with the consent of all persons having any right of property or other right, or any power, jurisdiction or authority in, over or relating to the same, which may be affected or be liable to be affected by the exercise of the powers of the company. R.S., c. 133, s. 3.

Plans to be deposited before commencing work.

24. Before commencing the construction of any such telegraph or work as last aforesaid, or of any buoy or sea-mark connected therewith, the company shall deposit, at the Department of Marine, a plan thereof, for the approval of the Minister.

Or in cases of emergency afterwards.

2. In cases of emergency, for repairs to any work previously constructed or laid, the plan thereof shall be so deposited as speedily as may be after the commencement of the work. R.S., c. 133, s. 4.

Work to be constructed accordingly.

25. The work shall not be constructed otherwise than in accordance with the plan as approved by the Minister; and, if any work is constructed otherwise or without compliance with the provisions of the last preceding section, the Minister may, at the expense of the company, abate and remove it, or any part of it, and restore the site thereof to its former condition. R.S., c. 133, s. 4.

Use of lights and signals.

26. The company may, in or about the construction, maintenance or repairs of any such work, use on board ship or elsewhere any light or signal allowed by any regulation made in that behalf by the Minister. R.S., c. 133, s. 5.

Abandoned or decayed work may be removed by Minister.

27. If any such work, buoy or sea-mark is abandoned or allowed to fall into decay, the Minister may, if and as he thinks fit, at the expense of the company, abate and remove it, and restore the site thereof to its former condition; and the Minister may, at any time, at the expense of the company, cause to be made a survey and examination of any such work, buoy or sea-mark, or of the site thereof. R.S., c. 133, s. 6.

Recovery by Minister from company of expenses.

28. Whenever the Minister, under the authority of this Act, does, in relation to any such work, any act or thing which he is, by this Part, authorized to do at the expense of the company, the amount of such expense shall be a debt due by the company to the Crown, and shall be recoverable as such with costs, or as a penalty on summary conviction. R.S., c. 133, s. 7.

Only companies subject to this Part may extend beyond the limits of a province.

Proviso as to existing companies.

29. No company other than a company to which this Part applies shall construct, maintain or use any telegraphic wire or cable connecting two or more provinces of Canada, or extending beyond the limits of any province, in, upon, under or across any gulf, bay or branch of any sea or any tidal water within the jurisdiction of Canada, or the shore or bed thereof respectively: Provided that any existing telegraph company may continue to receive and transmit messages over its line of marine telegraph, until such time as another company, under the authority and within the provisions of this Part, constructs and is operating a line or lines of marine telegraph, which has been determined by the Governor in Council to afford reasonable facilities for the transmission of marine telegraphic messages, in lieu of the line or lines of such existing telegraph company, or to be a line or lines for doing business over a route of a competitive nature, and until the order in council declaring such determination has been published for three months in the *Canada Gazette*. R.S., c. 133, s. 12.

Transmission of Messages.

Transmission of messages.

30. The company shall transmit all messages in the order in which they are received, and at equal and corresponding tariff rates; and every company violating any of the provisions of this section shall incur a penalty not exceeding two hundred dollars, and not less than fifty dollars, which penalty shall be recoverable on summary conviction with costs, by the person aggrieved. R.S., c. 133, s. 13.

Payment for messages.

31. The company may charge for the transmission of messages, and may demand and collect in advance such rates of payment therefor as are fixed by by-law of the company as its tariff rates. R.S., c. 133, s. 14.

Arrangements as to newspapers.

32. Notwithstanding anything contained herein arrangements may be made by any such company with the proprietors or publishers of newspapers for the transmission, for the purpose of publication, of intelligence of general and public interest, out of its regular order and at less rates of charge than its regular tariff rates. R.S., c. 133, s. 15.

Preferential messages.

33. Every message in relation to the administration of justice, the arrest of criminals, the discovery or prevention of crime, and Government messages or despatches, shall always be

be transmitted in preference to any other message or despatch, if required by any person officially charged with the administration of justice, or any person thereunto authorized by the Secretary of State of Canada, or by the Secretary of State for the Colonies on behalf of the Government of the United Kingdom. R.S., c. 133, s. 16.

Incorporation of British Companies.

Companies incorporated by Imperial Parliament may receive charter from Governor in Council.

34. If any company is now or hereafter authorized by any special Act of the Parliament of the United Kingdom, or is incorporated under the Statutes of the Parliament of the United Kingdom relating to joint stock companies, or any other general Act of the Parliament of the United Kingdom or by Royal charter, for establishing or maintaining telegraphic communication, in, upon, under or across any gulf, bay or branch of any sea or tidal water within the jurisdiction of Canada, the Governor in Council may, by letters patent under the Great Seal of Canada, and upon the terms and conditions contained therein, grant a charter to the persons forming such company, upon the company petitioning therefor.

Name and powers.

2. Such persons and others who become shareholders in the company shall be constituted a body corporate and politic, by the same name, and with the same power and constitution in Canada, for the said purpose and object of establishing and maintaining their said telegraph and works within the jurisdiction of Canada.

Subject to this Part.

3. Any such grant shall be expressly subject to this Part, and conditional upon the company observing and performing the several provisions hereof. R.S., c. 133, s. 17.

Effect of letters-patent.

35. Such letters patent, when published in the *Canada Gazette* with any orders in council relating thereto, shall have the like force and effect, as if the company had been incorporated by special Act of Parliament. R.S., c. 133, s. 17.

Reciprocity in favour of companies in Canada.

36. No such letters patent or grant of corporate powers to be exercised within the jurisdiction of Canada shall be made to or conferred upon any company which possesses any exclusive privilege of landing wire or cable and establishing a marine telegraph in or upon the coast of any state, province or country in America, Europe or elsewhere, unless an equal or reciprocal right or privilege of landing wire or cable, and establishing a marine telegraph upon the same coast is conceded to any and each of the companies to which this Part applies. R.S., c. 133, s. 17.

Charters may be revoked for non-user and in certain other cases.

37. Every such letters patent or grant of corporate powers made to or conferred upon any such company may be declared forfeited and revoked by any Act of the Parliament of Canada,—

(a) for non-user for three consecutive years; or,

(b) in case the company does not go into actual operation within three years after the issue of the letters patent granting such powers; or,

(c) if the company at any time possesses or acquires any exclusive right or privilege of landing wire or cable and establishing a marine telegraph in or upon the coast of any state, province or country in America, Europe or elsewhere, and an equal or reciprocal right or privilege of landing wire or cable and establishing a marine telegraph on the same coast is not conceded to every company to which this Part applies. R.S., c. 133, s. 17.

Reciprocal Agreement.

Companies prohibited from entering into certain agreements.

38. No company to which this Part applies shall enter into any agreement for the transmission or interchange of messages, or for participation in profits, or for the union or consolidation of capital stock, with any company which at any time possesses or acquires any such exclusive privilege of landing wire or cable and establishing a marine telegraph, in Newfoundland or the Danish possessions, unless such equal or reciprocal right is conceded; and every agreement contrary to the provisions of this section shall be illegal and void. R.S., c. 133, s. 18.

PART IV.

WIRELESS TELEGRAPHY.

'Minister' defined.

39. In this Part 'Minister' means the Minister of Marine and Fisheries. 4-5 E. VII., c. 49, s. 2.

Licenses for wireless telegraphy.

40. No person shall establish any wireless telegraph station, or instal or work any apparatus for wireless telegraphy, in any place or on board any ship registered in Canada except under and in accordance with a license granted in that behalf by the Minister with the consent of the Governor in Council. 4-5 E. VII., c. 49, s. 3.

Form and conditions of license.

41. Every such license shall be in such form and for such period as the Minister determines, and shall contain the terms, conditions and restrictions on and subject to which the license is granted.

May include several.

2. Any such license may include two or more stations, places or ships. 4-5 E. VII., c. 49, s. 3.

Licenses for experimental purposes.

42. Where the applicant for a license proves to the satisfaction of the Minister that the sole object of obtaining the

license is to enable him to conduct experiments in wireless telegraphy, a license for that purpose shall be granted, subject to such special terms, conditions and restrictions as the Minister thinks proper. 4-5 E. VII., c. 49, s. 6.

Applications for licenses. Fees.

43. The Minister may make regulations for prescribing the form and manner in which applications for licenses under this Part are to be made, and, with the consent of the Governor in Council, may prescribe the fees payable on the grant of any such license. 4-5 E. VII., c. 49, s. 3.

Search warrant.

44. If a justice of the peace is satisfied by information on oath that there is reasonable ground for supposing that a wireless telegraph station has been established without license in that behalf, or that any apparatus for wireless telegraphy has been installed or worked in any place or on board any ship within his jurisdiction without a license in that behalf, he may grant a search warrant to any police officer or any officer appointed in that behalf by the Minister and named in the warrant.

Powers of officer under.

2. A warrant so granted shall authorize the officer named therein to enter and inspect the station, place or ship and to seize any apparatus which appears to him to be used or intended to be used for wireless telegraphy therein. 4-5 E. VII., c. 49, s. 5.

54

Prosecution.

45. No proceedings shall be taken against any person under this Part, except by order of the Minister. 4-5 E. VII., c. 49, s. 4.

Penalty for working without license.

46. Every one who establishes a wireless telegraph station, or installs or works any apparatus for wireless telegraphy, without a license in that behalf, shall be guilty of an offence punishable on summary conviction or on indictment and be liable, on summary conviction, to a penalty not exceeding fifty dollars, and on conviction on indictment to a fine not exceeding five hundred dollars or to imprisonment for a term not exceeding twelve months, and in either case shall be liable to forfeit any apparatus for wireless telegraphy installed or worked without a license. 4-5 E. VII., c. 49, s. 4.

SCHEDULE.

'I, A. B., solemnly and sincerely promise and declare that I will faithfully and honestly fulfil the duties which devolve upon me as operator *(or in other capacity, as the case may be)* upon *(state the line of telegraph)*, and that I will not, either directly

directly or indirectly, divulge to any person, except when lawfully authorized or directed so to do, any information which I acquire by virtue of my employment as such operator *(or in other capacity, as the case may be)*.

(Signature)
'A. B.

'Declared before me,
'etc., etc.'

R.S., c. 134, sch.

OTTAWA: Printed by SAMUEL EDWARD DAWSON, Law Printer to the King's most Excellent Majesty.

Radiotelegraph Act, 1913, c. 43

3-4 GEORGE V.

CHAP. 43

An Act respecting Radiotelegraphy.

[*Assented to 6th June, 1913.*]

HIS Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

Short title.

1. This Act may be cited as *The Radiotelegraph Act.*

Definitions.

2. In this Act, unless the context otherwise requires,—

"Minister."

(*a*) "Minister" means the Minister of the Naval Service;

"Radiotelegraph."

(*b*) "radiotelegraph" includes any wireless system for conveying electric signals or messages including radiotelephones;

"Coast station."

(*c*) "coast station" means any radiotelegraph station which is established on land or on board a ship permanently moored and which is used for the exchange of messages and electric signals with ships at sea;

"Land station."

(*d*) "land station" means any radiotelegraph station or installation of radiotelegraphic apparatus which is not a coast station or a ship station;

"Ship station."

(*e*) "ship station" means any radiotelegraph station established on board a ship which is not permanently moored.

Radiotelegraph stations and apparatus to be licensed.

3. No person shall establish any radiotelegraph station or install or work any radiotelegraph apparatus in any place in Canada or on board any ship registered in Canada except under and in accordance with a license granted in that behalf by the Minister.

Certain passenger steamers to be equipped with apparatus.

4. From and after the first day of January, nineteen hundred and fourteen, no passenger steamer, whether registered in Canada or not,—

(*a*)

(a) licensed to carry fifty or more persons, including passengers and crew, and going on any voyage which is or which includes a voyage of more than two hundred nautical miles from one port or place to another port or place; or,

(b) licensed to carry two hundred and fifty or more persons, including passengers and crew, and going on any voyage which is or which includes a voyage of more than ninety nautical miles from one port or place to another port or place; or,

(c) licensed to carry five hundred or more persons, including passengers and crew, and going on any voyage which is or which includes a voyage of more than twenty nautical miles from one port or place to another port or place

shall leave or attempt to leave any Canadian port unless such steamer is equipped with an efficient radiotelegraph apparatus, in good working order, capable of transmitting and receiving messages over a distance of at least one hundred nautical miles by night and by day, and in charge of a person fully qualified to take charge of and operate such apparatus.

Penalty. 2. The owner, master or other person in charge of any passenger steamer which leaves or attempts to leave any Canadian port contrary to the provisions of this section shall, on summary conviction, be liable to a fine not exceeding one thousand dollars and costs, and such fine and costs shall constitute a lien upon such passenger steamer.

Exception. 3. This section shall not apply to passenger steamers plying on the rivers of Canada, including the River St. Lawrence as far seaward as a line drawn from Father Point to Point Orient, or on the Northumberland Straits, or on the Georgian Bay, or on the lakes of Canada other than Lakes Ontario, Erie, Huron and Superior, and the provisions of paragraph (c) of subsection 1 of this section shall not apply to steamers making voyages on Lakes Ontario, Erie, Huron and Superior, the regular route for which is not at any point more than seven miles from the shore.

Exception. 4. This section shall not apply to steamers calling at Canadian ports solely for the purpose of obtaining bunker coal or provisions for the use of such steamer, or through stress of weather, or for repairs.

Rules for transmission of messages. **5.** All persons operating land or cable telegraph lines shall transmit all messages destined to or coming from ship stations via coast stations under such rules as may be made by the Board of Railway Commissioners for Canada.

6. No one shall be employed as a radiotelegraph operator at any coast or land station unless he is a British subject, and all radiotelegraph operators at shore or land stations, or on ship stations on board any vessel registered in Canada, shall take and subscribe a Declaration of Secrecy in the form set forth in the Schedule to this Act, before a judge of any court, a notary public, a justice of the peace or a commissioner for taking affidavits, having authority or jurisdiction within the place where the oath is administered.

Operators to be British subjects.

Declaration of secrecy.

2. Every person who has made the Declaration of Secrecy and who, either directly or indirectly, divulges to any person, except when lawfully authorized or directed so to do, any information which he acquired by virtue of his employment, is guilty of an offence and shall be liable on summary conviction to a penalty not exceeding one hundred dollars and to imprisonment for a term not exceeding six months.

Penalty for divulging information.

7. Any person who sends or transmits or causes to be sent or transmitted any false or fraudulent distress signal, message, call or radiogram of any kind, or who without lawful excuse interferes with or obstructs any radio-communication, shall be guilty of an offence and shall be liable on summary conviction to a penalty not exceeding five hundred dollars and costs or six months' imprisonment.

Penalty for sending false messages and for obstructing communication.

8. If a justice of the peace is satisfied by information on oath that there is reasonable ground for supposing that a radiotelegraph station has been established without license in that behalf, or that any apparatus for radiotelegraphy has been installed or worked in any place or on board any ship registered in Canada within his jurisdiction without a license in that behalf, he may grant a search warrant to any police officer or any officer appointed in that behalf by the Minister and named in the warrant.

Search for stations and apparatus illegally established.

2. A warrant so granted shall authorize the officer named therein to enter and inspect the station, place or ship and to seize any radiotelegraph apparatus which appears to him to be there used or intended to be there used for radiotelegraphy.

Warrant to enter and seize.

9. Every one who establishes a radiotelegraph station or installs or works any radiotelegraph apparatus in violation of the provisions of this Act, or of any regulation made hereunder, shall be liable on summary conviction to a penalty not exceeding fifty dollars, and on conviction on indictment to a fine not exceeding five hundred dollars and to imprisonment for a term not exceeding twelve months, and in either case shall be liable to forfeit to His Majesty,

Penalty for establishing stations and apparatus illegally.

 any

any radiotelegraph apparatus installed or worked without a license.

Proceedings. 2. No proceedings shall be taken against any person under this section, except by order of the Minister.

Powers of Governor in Council.

10. The Governor in Council may—

(*a*) prescribe the tariff of fees to be paid for licenses and for examination for certificates of proficiency held and issued under the provisions of this Act;

(*b*) accede to any international convention in connection with radiotelegraphy, and make such regulations as may be necessary to carry out and make effective the terms of such convention and prescribe penalties recoverable on summary conviction for the violation of such regulations; provided that such penalties shall not exceed five hundred dollars and costs;

(*c*) make regulations for the censorship and controlling of radiotelegraph signals and messages in case of actual or apprehended war, rebellion, riot or other emergency.

Regulations made by Minister.

11. The Minister may make regulations—

(*a*) prescribing the form and manner in which applications for licenses under this Act are to be made;

(*b*) classifying ship, coast and land stations and prescribing the type and range of the regular equipment and the emergency equipment to be installed in the several classes of stations;

(*c*) defining the different kinds of licenses that may be issued, their respective forms and the several periods for which they shall continue in force;

(*d*) prescribing the conditions and restrictions to which the several licenses shall respectively be subject;

(*e*) prescribing the different classes of certificate of proficiency and the class of certificate necessary to qualify persons as operators for the several classes of ship, coast and land stations;

(*f*) for the examination of persons desiring to obtain certificates of proficiency as radiotelegraph operators and to determine the qualifications in respect of age, term of service, skill, character and otherwise to be required for such certificates;

(*g*) prescribing the watches to be kept by operators and the number of operators to be maintained and kept at the different classes of ship, coast and land stations;

(*h*) for the inspection of radiotelegraph stations;

(*i*) to provide how radiotelegraph apparatus installed upon any foreign or British ship (whether such British ship is registered in Canada or elsewhere) shall be operated while such ship is within the territorial waters of Canada;

(*j*) to compel all radiotelegraph stations to receive, accept, exchange and transmit signals and messages with such other radiotelegraph stations and in such manner as he may prescribe;

(*k*) for the effective carrying out of the provisions of this Act.

Penalty for violation. 2. The Minister may, by regulation, authorize the imposition of a penalty not exceeding fifty dollars and costs or three months' imprisonment for the violation of any regulation made under this section, and any such penalty may be recovered upon summary conviction.

Publication of regulations. To be laid before Parliament. **12.** All regulations made under the provisions of the two sections immediately preceding shall be published in *The Canada Gazette*, and shall be laid before both Houses of Parliament within ten days after the publication thereof if Parliament is then sitting, and if Parliament is not then sitting, then within ten days after the next meeting thereof.

Government may take temporary possession of stations, apparatus and operators. **13.** His Majesty may, at any time, assume, and for any length of time retain, possession of any radiograph station and of all things necessary to the sufficient working thereof, and may, for the same time, require the exclusive service of the operators and other persons employed in working the same; and the person owning or controlling the station shall give up possession thereof, and the operators and other persons so employed shall, during the time of such possession, diligently and faithfully obey such orders, and transmit and receive such signals, calls and radiograms as they are required to receive and transmit by any duly authorized officer of the Government of Canada.

Compensation therefor. 2. If the Minister and the person owning or controlling any radiotelegraph station taken possession of by the Crown under the provisions of this section cannot agree as to the compensation to be paid by the Crown for such taking possession, the Minister shall refer the matter to the Exchequer Court of Canada for adjudication.

R.S., c. 126, Part IV. repealed. **14.** Part IV. of *The Telegraphs Act* is repealed.

SCHEDULE.

DECLARATION OF SECRECY.

I, A. B. solemnly and sincerely promise and declare that I will faithfully and honestly fulfil the duties which devolve upon me as radiotelegraphic operator, and that I will not, either directly or indirectly, divulge to any person,

except when lawfully authorized or directed so to do, any information which I acquire by virtue of my employment as such operator, or which may come to my knowledge through the operation of any radiotelegraphic installation.

Declared before me at ————, this—— day of ————, 19—. } [*Signature of declarant.*]

OTTAWA: Printed by CHARLES HENRY PARMELEE, Law Printer to the King's most Excellent Majesty.

Rules for Broadcast Stations, 1925

RADIO BRANCH

Department of Marine and Fisheries

Dominion of Canada

Special rules to be observed in the operation of Private Commercial Broadcasting Stations in Canada.

Fiscal year April 1st, 1925 - March 31st, 1926.

APPARATUS

(1) The transmitting apparatus is to be so constructed as to provide for:

(a) The adjustment and operation on any wavelength within the band of 250 to 540 metres. (1200 to 555 kilocycles.)

(b) The instantaneous variation in frequency of at least 15 kilocycles on either side of the allotted frequency, whilst the set is in operation.

(2) The frequency allotted to the station is to be absolutely adhered to, the operator must check the same prior to the commencement of each transmission and at least hourly thereafter during the continuance of the same. Unauthorized variation from the allotted frequency may result in suspension of license.

(3) The station is to be equipped with an accurate wavemeter of approved type capable of covering the entire band of wavelengths 250 to 540 metres.

(4) The operating room of the station is to be connected by wire telephone with the local exchange affording local and long distance telephonic communication so as to provide means for the proper control of the station in case of S.O.S. etc. Such telephone connection is intended primarily for the use of the Department and it is preferred that the number be not posted in the telephone directory and that the telephone be not available to the general public. The local Departmental Inspector and the controlling Coast Station for the area are to be kept advised of this telephone number.

(5) No apparatus shall be established, installed or worked except that specified in the license schedule and no alterations shall be made to the licensed apparatus without the consent of the Department.

(6) The apparatus is to be so controlled during operation as to maintain the decrement equivalent within the prescribed limit of 0.08.

OPERATION

(7) (a) The licensee of the station is to file with the Department of Marine and Fisheries, particulars of the nature of the programmes to be broadcast showing the exact hours to be occupied each day; all periods selected for broadcasting are subject to the approval of the Department.

(b) The station is to be kept in operation during the hours reserved for it, otherwise the reservations will become subject to cancellation.

(c) Stations in the same centre using the same frequency may exchange allotted hours of broadcasting by mutual agreement.

(8) Simultaneous broadcasting in the same centre by two or more stations is prohibited except where specifically authorized in writing by the Department.

(9) Mechanically operated musical instruments may not be used for broadcast between the hours of 7:30 p.m. and midnight (local time), except with the approval of the Department.

(10) (a) No Direct Advertising is to be undertaken by any Private Commercial Broadcasting Station between the hours of 6:30 p.m. and 11 p.m. local time.

(b) Indirect Advertising may be undertaken during any of the periods in which the station is licensed to operate.

(11) The apparatus is to be used solely for broadcasting and may not be used for any other class of service except by permission in writing from the Department or under a special license granted therefor.

(12) A proces verbal of all programmes or tests transmitted giving date, time and general nature of such programmes or tests shall be kept by the station. The operator responsible for the apparatus during each transmission shall sign the Proces Verbal covering the period of such transmission.

(13) All operators engaged on the station shall file with the Department such documents or other papers as are necessary to establish to the Department's satisfaction that they are British Subjects. Such operators must be the holders of such Certificates or other qualifications as are specified in the schedule of the station license.

(14) The secrecy of messages shall be maintained as required by the RAdio Act and Regulations and a copy of form No. W.40 shall be posted in the operating room of the station.

(15) (a) Testing of transmitters on the air is prohibited between 6 p.m. and Midnight (Local Time).

(b) Tests may be undertaken between Midnight and 6 p.m. (Local Time) provided no local Broadcasting Station is transmitting a programme at the time and that such testing does not interfere with the reception of scheduled programmes from outside broadcasting stations by licensed local receiving sets.

Radio Branch,
Ottawa, 10th June, 1925.

APPENDIX 4

COPIES OF SOME EARLY LETTERS

REFER TO No. 28,459

Ottawa Oct. 7, 1907.

Sir,

I beg to acknowledge receipt of your favours (2) of the 1st inst. I note your remarks regarding the two thousand dollars paid to Mr. Pemberton, which are satisfactory. If you intend having the piece of ground, which you intend purchasing for this Department, on Ballenas Island, surveyed, the surveyor which does this work can, at the same time, survey the piece of ground which I purchased from Mr. Bourne, and if you will kindly have this done, I will consider it a favour.

Regarding funds which you may require for the payment of wages, etc., for work done on account of the wireless stations, if you will kindly let me know what you require, from time to time, I will be pleased to see that same is forwarded to you. If you are in urgent need, at the present time, wire me on receipt of this letter and I will forward you what you require.

I am, Sir,

Your obedient servant,

Sup't Gov't Wireless Stations.

Capt. J. Gaudin,

Agent Marine & Fisheries,

Victoria, B. C.

Wireless 2392 D25

MARINE & FISHERIES CANADA

AGENCY OF MARINE AND FISHERIES B.C. OCT 25 1907

REFER TO No. 28,459

Ottawa, Oct. 23, 1907.

Sir,

I beg to acknowledge receipt of your favour of the 14th inst., enclosing a letter received from Mr. Courtney, regarding registration of title of our site on Shotbolt's Hill. I presume that this shall be done in due course. I wish you would kindly pay Messrs. Morse, Hughes and McIntyre their salaries for the month of October, at the rate of one hundred dollars to Morse and Hughes, and sixty dollars to McIntyre. I am making this request on the assumption that you have ample funds at your disposal for this purpose.

I have to-day written to Mr. Morse, requesting him to hand in his personal expense accounts in order that same may pass through your books, as I desire all accounts, irrespective of their nature, to pass through your hands. While I have no desire to do anything which will, in any way, increase work in your office, knowing how much work you actually have to, I think you will agree with me when I state that all accounts for work done in your district should pass through your office. I wish to take this opportunity to thank you for your many kind acts in assisting Messrs. Morse and Hughes in their work.

I am, Sir,

Your obedient servant,

Sup't Gov't Wireless Stations

Capt. J. Gaudin,
Agent Marine & Fisheries,
Victoria, B. C.

6D 25
Wireless 2368

REFER TO No. 27,448 "A"

Ottawa, Feb. 8, 1908.

Sir,

I beg to acknowledge receipt of your favour of the 1st inst., regarding the appointment of operators and, in this connection, I would state that it will be necessary for you to provide for the payment of these operators. All the operators in charge of stations are to be paid at the rate of seventy-five dollars per month.

Mr. Chas. Bradbury is to be paid from Feb. 1st; Mr. L. H. Bradbury, who has been appointed to Pachena, is to be paid from Feb. 15th; Mr. C. M. McIntyre is to be paid from March 1st, at the rate of sixty dollars per month, with no living allowance; Mr. Morse will be paid his present salary, i.e., one hundred dollars a month, with forty dollars living allowance, until he takes charge of the Estevan Point station, as the operator who will be appointed in charge of Point Grey will, undoubtedly, not be a wireless man, I have instructed Mr. Morse to remain at Point Grey until the party who is to be placed in charge is thoroughly familiar with the operation of the apparatus. As soon as he takes charge of Estevan station, he is to be paid at the rate of seventy-five dollars per month, with no living allowance. Mr. Hughes, of course, will be paid his present salary and living allowance.

Capt. J. Gaudin,
Agent Marine & Fisheries,
Victoria, B. C.

2570 25

G.

MARINE & FISHERIES CANADA

AGENCY OF MARINE AND FISHERIES FEB 15 1906 Ottawa

REFER TO No. Capt. J. G.

I note your remarks regarding the kitchen utensils at Cape Lazo. It will be necessary for Mr. Bradbury to buy the necessary utensils; these he can obtain at Comox. I am writing him to do so and telling him to forward his bill to you after it has been properly certified to for payment.

I am, Sir,

Your obedient servant,

Sup't Gov't Wireless Stations.

A.G.T.

MARINE & FISHERIES CANADA.

MARINE AND FISHERIES APR 8 1908 VICTORIA B.C.

REFER TO No. 27,448 A. Ottawa, April 6th., 1908.

Sir,

I beg to acknowledge your favour of the 30th ultimo and note that the Union Jacks and signal flags have arrived. When writing you I intended stating that one Union Jack was to be sent to each station.

Yours very respectfully,

Sup't. Gov't. Wireless Stations.

Jas. Gaudin, Esq.,
Agent, Dept. Marine & Fisheries,
Victoria, B.C.

2650 825

A.G.T.

REFER TO No. 27,015.

Ottawa Apr. 22nd., 1908.

Dear Captain,

I am in receipt of a letter from Mr E.J.Houghton with reference to the water supply at Gonzales Hill. Apparently the water pressure during the day time is so low that it will not raise the water high enough to give him a sufficient water supply. Unfortunately, we have very little money at our disposal for work of this kind this year as everything has been cut down to the very lowest point. I have asked Mr. Houghton to confer with you in order that some means may be devised to obtain sufficient water for his needs. I understand that during the night hours the pressure is good. Would it not be possible to place a tank, say containing 20 to 30 barrels, on the hill behind the house so that it could be filled during the night hours with a faucet in the supply pipe which could be cut off during the day time in order to prevent its running back into the mains. Will you use your best judgment as to what is required and give me some idea of the approximate cost?

Yours very respectfully,

Sup't. Gov't. Wireless Stations.

Capt. Jas. Gaudin,
Agent, Dept. Marine & Fisheries,
Victoria, B.C.

2712
925

AGT

Dic. CFD

MARINE & FISHERIES CANADA

ADDRESS REPLY TO DEPUTY MINISTER OF MARINE AND FISHERIES, OTTAWA

REFER TO NO. A-27,448

MARINE AND FISHERIES AUG 18 1908 B.C.

Ottawa Aug. 18th., 1908.

Sir,

I beg to acknowledge your favour of the 50th ultimo enclosing a letter from the Alaska Steamship Co of Seattle Washington, thanking the Canadian Government for the transmission of a wireless despatch from the S/S "Victoria" which was picked up 703 miles west of Cape Flattery by our operators.

It is certainly gratifying to note that the wireless stations which have been installed in the West are doing such good work. It speaks very well for the manner in which these stations are being operated.

I am, Sir,

Your obedient Servant,

G. J. Desbarats

Acting Deputy Minister Marine & Fisheries.

The Agent,

Dept. Marine & Fisheries,

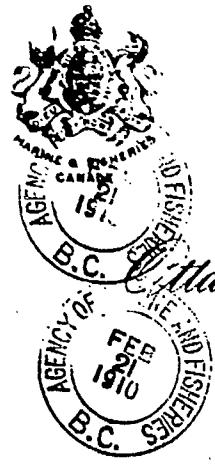
Victoria, B.C.

9 25
2975

AGT - CFD

ADDRESS REPLY TO
DEPUTY MINISTER
OF MARINE AND FISHERIES,
OTTAWA.

REFER TO No. 29,271
28,759



Ottawa Feb. 11th., 1910.

Sir,

I beg to advise you that Mr. W. Howard has been appointed Assistant Operator at Pachena Point at a salary of $65.00 per month, same to date from January 4th, 1910, provided Mr. Howard entered upon his duties upon that date.

Mr. Edwards in his report to the Department states that Mr. Howard's salary is to increased to $70.00 per month to date from the month of March if his services are satisfactory, and I am to request you to see that Mr. Howard's salary is not increased to this figure until it has been authorized by the Department.

I am, Sir,

Your obedient Servant,

C. Simpson

Assistant Deputy Minister.

The Agent,

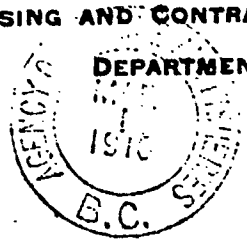
Dept. Marine & Fisheries,

Victoria, B.C.

6989
10.25
Wireless

PLEASE REFER TO NO. 28762.

PURCHASING AND CONTRACT AGENT'S OFFICE,
DEPARTMENT OF MARINE AND FISHERIES,
OTTAWA, CANADA.



MDK--AR.

21st February, 1910.

Sent bills to Mr James for Correction

Sir:-

I return herewith an account from the Palace Livery, Sale & Boarding Stables, Limited, amounting to $45.00, and in this connection I have to call your attention to my letter of the 28th December, 1908, advising you that the Department would allow two trips per month owing to the difficulty of getting supplies to this station. I am not aware that these instructions have been changed or that it was afterwards decided to allow Mr. James expenses of three trips per month and I am returning the account in order that a correct invoice may be obtained and forwarded to the Department for payment.

Yours respectfully,

C Gauthier

Purchasing & Contract Agent.

7006
D. 20

The Agent,
Department of Marine & Fisheries,
Victoria, B.C.

Enc.

PLEASE REFER TO NO. 28,762

PURCHASING AND CONTRACT AGENT'S OFFICE,
DEPARTMENT OF MARINE AND FISHERIES,
OTTAWA, CANADA.

AGT - CFD

AGENCY OF MARINE AND FISHERIES B.C. MAR 14 1910

MAR 12 1910

Mar. 3rd., 1910.

Sir,

I am in receipt of a letter today from Leonard James, operator in charge of the Point Grey Wireless Station, in connection with the extra trips he was obliged to make to town in order to obtain supplies. In view of the fact that these trips were made in the summer months when it was impossible to keep meat supplies for a period of two weeks, I have allowed Mr. James the extra trip, but have advised him that it is better to obtain the necessary authority for incurring expenditures before doing so in order to obviate the necessity of challenging accounts when presented for payment.

If you have the accounts in your possession will you kindly return same to me when same will be paid.

Yours very respectfully,

C Gautre

Purchasing & Contract Agent.

The Agent,
Dept. Marine & Fisheries,
Victoria, B.C.

GOH!
D.25.

Gonzales Hill Radio-Telegraph
Victoria, B. C.

March 5th'10

Sir:-

I have received the following report from Operator Buchanan, who arrived at Pachena after a very trying trip over the trail.

"There was three inches of snow and about a foot of mud on trail, I had to pack two suit cases and the tuner, arrived at Station very much done out and then had to rustle up wood, nothing dry around the place. There is nothing in the house but some of the articles shown in your list (See list) and a lot of these are broken. No window blinds, rooms all empty, except for beds, which are those small single ones. Will have to scrub all the floors and afterwards paint them. There is no fireplace in the house and the only heater belongs to Mr. Bradbury, and office stove belongs to the C.P.R. lineman. Mr. Bradbury has some furnishings here which he will sell, such as heater, lamps washtub and washboard e. There is no place to put an assistant, no furnit r. The kitchen will be all right, it is the only place anything in. The walls are badly smoked.

The office--- The 6 hp engine does not seem to be able to handle such a large dynamo and excite you can almost stop the engine by sending heavily a engine appears to be in good shape, but very poorly installed. Engine is set on level concrete floor making flywheels come only half an inch above base

which causes belts to come in contact with the concrete, impossible to remedy this, as belts can not be made tight enough to prevent some slip.

Anchor spark gap is burnt badly, at closest adjustment it has about half an inch arc, rotary has not been used, will get it into shape.

Small set is in good shape.

The aerial is in bad shape, several bad leads and the receiving set is all to the bad. I can hear you at night O K and in the daytime with engs stopped, but Seattle Port Townsend Astoria and Bremerton come in strong. Will do my best to get things in shape, but do not think there is sufficient aerial up, nor is it in proper shape to do successful work. (letter ends)

This certainly is not a flattering description of either the dwelling or the operating house.

In another short note he adds, dated later, "This house is leaking badly, water runs right through it, plaster all cracked and smoked."

It is an outrage that the property should have been let go to such an extent of ruin, practically uninhabitable for an ordinary human being.

I am enclosing his requisition for furnishings and also Bradburys list of what he owns and Government property, or what remains of it.

The total amount of furnishing supplied to Bradbury was only $80.00, this included kitchen stove and utensils, pots pans dishes, etc.

I am,

Sir,

Your obedient servant

Sup't ... C. Stations

C. P. Edwards Esq,
Dominion Sup't,
Prince Rupert, B.C.

CPE-TME

MARINE AND FISHERIES
CANADA
MARINE BRANCH

OFFICE OF SUPERINTENDENT OF

CANADIAN GOVERNMENT RADIOTELEGRAPHIC SERVICE

Ottawa, 11th June, 1910.

REFER TO No 28758.

Sir:-

Please have Mr. Hughes make a working drawing of the engine room at the Estevan station, and show on same position of the duplicate plant. You will submit the drawing for my approval before commencing any construction.

The general lay-out of the engines and machines is to be similar to Prince Rupert, and all pipes and wires are to be carried in boxings flush with the concrete floor.

In the meantime, if you have an opportunity of sending the material down to Estevan on one of our steamers, you might send cement and necessary lumber there immediately, and have the men proceed there later.

The outfit to be installed at Estevan will be the 1 K. W. plant now at Cape Lazo, or the one from Victoria, whichever can be spared first.

Immediately the 2 K. W. engine and machines arrive at Victoria, have your 1 K. W. plant packed up for shipment to either Point Grey or Estevan as may be required.

I am, Sir,

Your obedient servant,

C. P. Edwards

Superintendent Dominion Government Wireless Stations.

E.J.Haughton Esq.,
District Superintendent,
Govt. Wireless Stations,
VICTORIA, B. C.

5,000-31-1-08

CPE-TME

MARINE AND FISHERIES
CANADA
MARINE BRANCH

OFFICE OF SUPERINTENDENT OF

CANADIAN GOVERNMENT RADIOTELEGRAPHIC SERVICE

Ottawa, 15th June, 1910.

REFER TO NO 3907.

Sir:-

I have not yet heard from you about a sample of hard pan which McIntyre was to forward to Victoria for a test. Will you be kind enough to ascertain what has been done in the matter, and if Mr. Killeen says that this material is of no use for concrete, please arrange to have sand and gravel transported to Ikeda Head Station.

You can also have the excavation for the new engine bed commenced at once. Same will be 16' X 10', and will be on the engine room end of the house. The main block of concrete for the engine will be 8' long, X 5' wide, X 4'6" deep. The remainder of the floor will be of concrete 6" thick. The bearers for engines and machines will be installed as before. I will instruct you with reference to the extension to the building as soon as I hear from the Standard House Company.

The mast stays which are anchored to a log on the southern side are to be secured to a proper deadman, which is to be put down at least 6', and is to have four chains on it.

You will place Mr. McIntyre in charge of the work to be done at Ikeda, Skidegate and Prince Rupert, and give him Mr. Dewhurst as assistant. Once McIntyre gets the work at Ikeda started, Dewhurst should be able to look after it.

You will consult with Mr. McIntyre as to what supplies tools, &c., are needed, and you will, of course, use up as much of the old construction material, tents, &c., as practicable. Local labour is to be used as much as possible, and if you can do so, you will arrange for the men to board themselves.

I am, Sir,
Your obedient servant,

C. P. Edwards

Superintendent Dominion Government Wireless Stations.

E.J.Haughton Esq.,
District Superintendent,
Govt.Wireless Stations,
VICTORIA, B.C.

OFB-EOW.

MARINE AND FISHERIES, CANADA
MARINE BRANCH

OFFICE OF SUPERINTENDENT OF

CANADIAN GOVERNMENT RADIOTELEGRAPHIC SERVICE

Ottawa, July 15th, 1910.

Refer to No 29946.

Sir,

I beg to acknowledge receipt of your favour of the 2nd inst., with reference to warrants issued for the 1910 construction work.

The machines and engines are to be charged against the warrant numbers. The engines are worth approximately $560 each; the generators are worth $400 including spare armatures, duty and freight. The transmitting apparatus is worth approximately $900.

I am, Sir,

Your obedient servant,

C. P. Edwards

Superintendent.

E.J. Haughton, Esq.,
District Superintendent Government Wireless Stations,
Victoria, B.C.

3,000-11-1-08

CPE-MCL

MARINE AND FISHERIES
CANADA
MARINE BRANCH

OFFICE OF SUPERINTENDENT OF

CANADIAN GOVERNMENT RADIOTELEGRAPHIC SERVICE

Ottawa, August 16th, 1910.

REFER TO No. 2490

Sir,

With reference to the allowance made for a launch between Digby Island and Prince Rupert, it would appear to me that we are being held up in this matter.

When I was at Prince Rupert the "Rover" owned by Captain Babbington would make a trip to thw Island for $2.50, and you will find she did make several trips at this rate for the Department.

It would, therefore, seem that $3. a trip for a regular service is a fair price.

I am not in favour of purchasing a gasoline launch or a row-boat for this station. The gasoline launch would undoubtedly be abused and the row-boat would be too dangerous,as a very heavy sea is often met with between Prince Rupert and the Island.

We will allow the matter to remain in abeyance until I arrive out west when we will visit the station and look into the matter.

I am, Sir,

Your obedient servant,

C. P. Edwards

Sup't. of Wireless.

E.J. Haughton, Esq.,
District Sup't. Government Wireless,
Victoria, B.C.

5-010-31-1-06

CPE-MCL.

4,500-8-10.

DEPARTMENT OF THE NAVAL SERVICE

RADIOTELEGRAPH BRANCH.

OFFICE OF THE SUPERINTENDENT.

Ottawa, November 25th, 1910.

REFER TO NO.

Sir,

With reference to the annex to be built at Cape Lazo for the accommodation of the third Operator; I beg to advise you that I am having plans and specifications for this addition prepared at this office. The same will be sent you within the next few days.

Please advise the contractor who has already tendered on the building to this effect, and state that we will send him the official specifications as soon as possible.

Yours faithfully,

C. P. Edwards

Superintendent of Wireless.

Mr. E.J. Haughton,
District Sup't.
Government Wireless,
Victoria, B.C.

Bank of Montreal.

Victoria, B. C. 19th Dec. 1910

To E.J.Haughton,Esq.,

City

Dear Sir:-

I beg to advise you that the sum of

$ 1298.50 (Twelve hundred and ninety

eight - - - -50/100 dollars) is at your credit

at this office, being proceeds of

Deposited by Department of Naval Service.

received from Ottawa.

Yours faithfully,

MANAGER.

CPE-VBH.

DEPARTMENT OF THE NAVAL SERVICE
CANADA

Ottawa, 22nd December, 1910.

Sir,

I beg to acknowledge the receipt of your favour of the 3rd inst. in connection with requisition for bath for Estevan Point Station.

This requisition has been passed and a covering order will be issued. In the meantime you may purchase the bath and forward it by the first Government Steamer.

I am, Sir,

Your obedient servant,

C. P. Edwards

SUPERINTENDENT OF WIRELESS.

E. J. Haughton Esq.,
District Superintendent,
Government Wireless Service,
Victoria, B.C.