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This is the Fourth Section of the manuscript "Radio Stations Common? Not This Kind"

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## SILVER LEAF

Anyone would be hard pressed to find a cove, harbour, creek, or whatever, around the coast of Nova Scotia that did not give birth to a vessel of some description. It was a common statement during the days of sail to hear someone state, on referring to a strange vessel that she probably comes from a Nova Scotia creek. Launching day, for a new ship, was treated as a common holiday. The schools, shops, and so on, would close and people for miles around would gather for the launching, making a real picnic of the affair. The ship to be launched was more than likely all ready for her first voyage, complete with sails, crew, food, and so on. Many were even filled with their first cargo, mostly lumber to be shipped to various ports around the world. Quite often the Captain would have sufficient power to sail, trade, and whatever, the way he saw fit. This would include selling the ship if he felt it would warrant the best interest of the owners.



*Warren E. Hagar*

This is a three masted tern schooner so common around Nova Scotia.

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All of these ships were equipped with the latest signal flags and were using them according to the date and time they were in service. They all were registered properly and were assigned a proper signal code call and recorded accordingly. The Signal Code Calls were shown on their papers of registry that also showed the exact way they were to be flown. On launching, these ships were well decked out in these signal flags. This is still the practice. It is interesting to note that in many cases instead of a particular ship using her actual code call, she flew a plain flag with the name of the ship sewn on same as it appeared on her bows and stern. Normally this flag was flown from a very conspicuous spot on a mast and quite often from the top of the mizzenmast. Overall they made a most colourful sight. Many ships were painted all white with black trim and did not change colour until several years of service, then had their hulls painted a dark shade of blue, green, and quite often black, to cover the scars of use. Some were to enter service with their hulls the dark colour from the beginning.

A type of vessel that became very popular around the Nova Scotia Coast was known as the tern schooner. The tern was the last of these sailing ships and some were still around during World War II.



*Warren E. Hagar*

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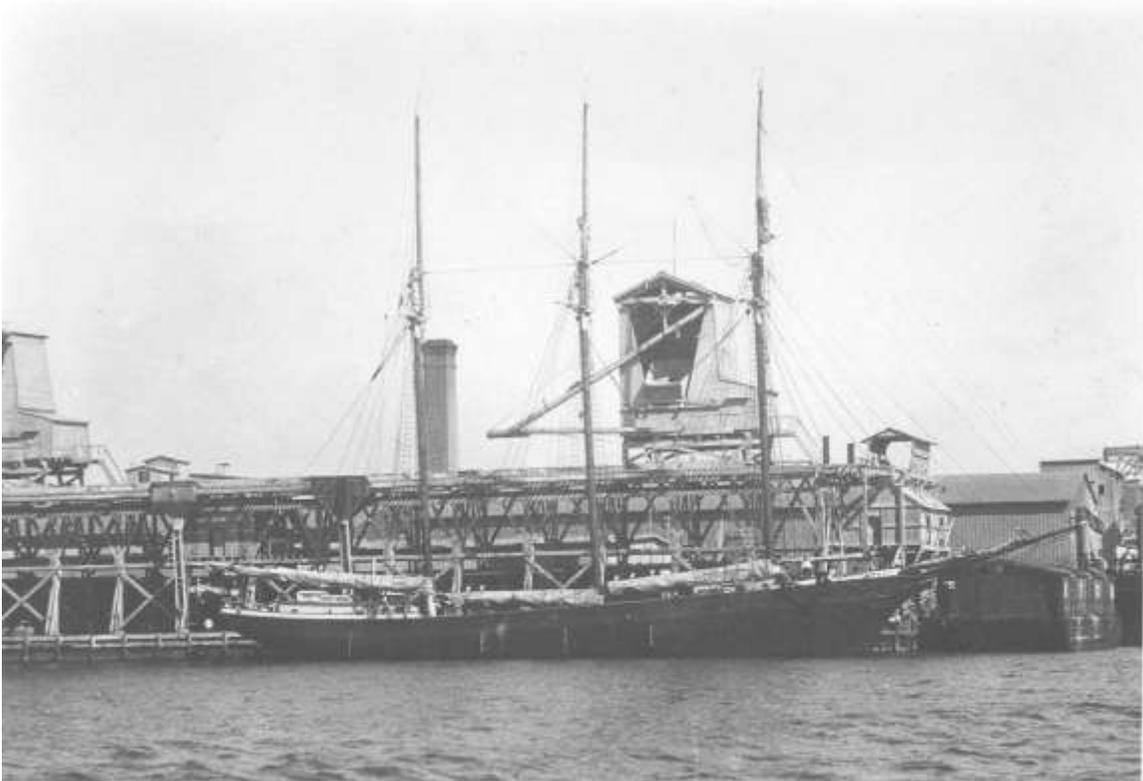
This is a four masted tern schooner, not common but not un-common around the Nova Scotia coast.

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I am not certain why I was born with so many living Grandparents, other than I was the oldest of the oldest, going back for a generation or two. I guess the main reason there were so many was the simple fact they all enjoyed life so much that they did not realize it was time to quit. They were a wonderful bunch for a kid to grow up with. One whom I enjoyed very much was my Great-grandfather George Sydney Spicer. He was my father's Mother's father and he lived until I was twenty-three years old. As can be seen, he and I spent much time together, an opportunity few people ever get. He was in his nineties when he died and had been quite active up until that time. He had spent a good portion of his life at sea and his are the stories I remember most.

I remember asking him which of the vessels in which he sailed was the one he liked most, after one of the many trips we made with Grandfather Spicer. This was most likely the usual run to the West Indies and back, complete with a storm, sickness, everything to keep us wide-eyed and speechless. He named this one for the very reasons I look back on some of mine more fondly than the others. He had sailed in so many that had nothing but visual means of communication, I decided to see if one of them would not be appropriate to use in this project. When I started this, I did not know that the one Grandfather named was relatively famous, although relatively unknown outside of the Maritime Provinces of Canada. This was the tern schooner SILVER LEAF. One of the reasons he considered this his favourite is that he enjoyed sailing with her Captain, Captain Charles Salter.

SILVER LEAF was built at Spencers Island, Nova Scotia, Grandfather Spicer's home village, by Johnson Spicer another relative and another descendant of Loyalist Robert Spicer. SILVER LEAF, launched on May 27<sup>th</sup>, 1903, was 130 feet in length with a registered tonnage of 283 tons. This would make her a rather small vessel today, but at that time she was what one could call an average size. Being a tern schooner meant that all her sails were rigged fore and aft, running parallel to the hull of the vessel, and that she had three masts. Occasionally one of these terns would have one square sail, the exception and not the rule. Also, on occasion one would have four masts or more.



*L. S. Salter*

This is the tern schooner SILVER LEAF alongside a dock and it is a bit hard to make out the ship.

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SILVER LEAF was launched in 1903. This meant that she entered service just as wireless was making an appearance and her only means of communication was visual. She would have been using the International Code of Signals for 1903, the one that entered service on January 1<sup>st</sup>, 1902. This was a document in the form of a hard covered book eleven inches high by nine inches wide and two inches thick. A copy of the registration for SILVER LEAF lists her signal code as TQMF. It also indicates how it is to be flown, in a vertical line commencing with the T at the top and terminating with the F at the bottom.

When SILVER LEAF was launched she was a typical wooden vessel, one requiring men of iron as has been said many times. She was completely wood and manpower. There was nothing but manpower to wrestle with her lines, sails, anchors, and so forth. She was to have a routine career but one must admit a most interesting one by today's standards. Grandfather Spicer told me that she was a very pretty vessel painted all white with a bit of black trim. I managed to locate Captain Salter's son who loaned me a photo of her alongside a dock. As can be seen in this photo she has a black hull. This certainly does not make Grandfather erroneous in any way. This means he must have referred to her when she was relatively new. There are so many of us who were raised on Grandfather Spicer stories, that if I took the time to canvass the whole family for same, I could no doubt come up with most of his career in SILVER LEAF.

My father's mother remembered being on this vessel with her father. Captain Salter often had female members of his family with him. Grandmother was aboard while SILVER LEAF was at Canning, Nova Scotia. Captain Salter had his sister with him on this particular trip. The thing that Grandmother remembered, more than anything else, was the lovely Ivy plant growing around the bulkhead in the Captain's cabin.

The majority of these wooden sailing ships had two houses. The one forward normally housed the crew, galley, cook, carpenter, carpenter shop, and so on, with their necessary equipment for running the ship. The house aft, or on the after part of the ship, housed the Captain, Officers' dining saloon (meals were carried aft from the galley), normally all the officers including the steward, if one was carried, plus their washroom

and possibly an office and storeroom. The actual layout of these cabins varied a great deal from one ship to another. The ship's wheel was just behind this aft house on the open deck. These ships were by now carrying at least one good magnetic compass and the normal position for this compass was mounted inside the aft house, with a window so the compass was visible to the helmsman at the wheel outside this house. There was also room for a candle or lantern in order to see the compass during the hours of darkness. It was also mandatory for these vessels to show lights at night, and these of course had to be displayed with lanterns, a red light on the port or left side, a green light on the starboard or right side, and a white light on the stern. Various lights were and are used to signify; either a sailing or motor ship and still further the type of ship for certain cases, such as the pilot boat, dangerous cargoes, fishing vessels, and so on.

The mirror sextant, which greatly improved the accuracy of navigation, had been invented in 1730. These sextants were not only mandatory they were the main piece of navigational equipment in obtaining the ship's position.

The first logs used for measuring the speed of the ship through the water were simply a piece of wood attached to a long line. One of the officers would stand next to the rail with an hourglass and a seaman or two would pay out this line until the hourglass ran out. By measuring the length of line paid out they were able to calculate the speed of the vessel.

Another item used for navigation was the lead line. This has been used since man first ventured out in ships. This is a line with a weight on one end and is used to measure the depth of the water below the ship. These sailing ships had two lines for this purpose: one of 100 fathoms known as the Deep Sea Line, the other of 22 fathoms known as the Shore Line. The depth of water was recorded on their navigational charts and by knowing this depth it was used as a navigational aid.

Naturally they needed to know the correct time especially when using the sextant. Before the invention of radio and time signals by radio, this presented a very real problem. The ship normally carried a chronometer. This was protected very carefully in a special case normally built into the chart table. These chronometers, when necessary, were taken ashore, cleaned, calibrated, and in general given necessary maintenance to ensure as much accuracy as possible.

These were the only navigational aids available at that date and time and their general accuracy depended on the quality of the crew. On occasion only the Captain was capable of using a sextant and his knowledge was often limited. The emphasis on training was not very good. Some of the old BNA officers sailed on knowledge gained solely from a course given on navigation by a common school teacher, but none the less, did an excellent job of taking these ships around the world.

Having had the pleasure of sailing with a few of the seamen that had started in the last of these sailing ships, I learned of a most interesting piece of equipment. While talking with one he mentioned that these old Captains with whom he sailed always carried a shotgun. I started to laugh and said, "They must have really expected a riot to carry something that big for self-protection". He said, "It wasn't for protection, it was to knock down the water spouts you see down south a lot". Since I became rather intrigued with this bit of knowledge, I asked him how big a hole he had seen these old boys blow through one of those waterspouts. He claimed the shot had nothing to do with it and it was the sound of the shotgun discharging that broke them up, although he could not say how efficient it was. I do believe that it all boiled down to the fact they had little or nothing to go by and anything including the heaving of the "honey-bucket" at such things was considered a help, whether physically or psychologically. It was a fact that these waterspouts and associated squalls could do a lot of damage to the ships especially during the hours of darkness.

Captain Salter's wife sailed many times with him in SILVER LEAF, and during one voyage on the way back from the West Indies while she was with him, they got caught in a very bad storm. This did much damage to the sails and the masts and they had a pretty bad time of it for awhile. At one point they had nine feet of water in the hold which broke up the cargo of molasses. They managed to limp into Baltimore and obtain repairs before proceeding north and home. Another time when going south with a cargo of potatoes they were becalmed for thirty days and ran out of food. They spent the last part of this voyage living on

potatoes from the cargo and any fish they caught. As can be seen the SILVER LEAF had a most interesting career, by today's standards, but her voyages were much the same as any other of these sailing ships.

Captain Salter and Great grandfather Spicer had left SILVER LEAF previous to her last voyage in 1918. After about seven years service it was usually more economical to sell these schooners. Captain Salter did not sell out his shares until July 17<sup>th</sup>, 1917, at which time she was fourteen years old, just double the normal age. This indicates SILVER LEAF was one of the better tern schooners, and had it not been for an accident, she probably would have given practical service for many more years.

On SILVER LEAF's last voyage she loaded a cargo of lumber at Saint John, New Brunswick, and was to deliver this cargo to Cape Town, South Africa. She had been leaking badly so just previous to starting out on this voyage her first and only motor driven pumps were installed. After leaving Saint John she was becalmed for sometime. When nearing Barbados, it was decided to put in there and have her bottom cleaned that had been fouled through such a long period of becalming. In this condition she was hard to manage and was wrecked on the reefs off South Point Lighthouse, Barbados, on September 29<sup>th</sup>, 1918. The SILVER LEAF was lost but the crew and lumber cargo were saved. Practically every publication I have read on these old sailing ships, mentions the SILVER LEAF. Around the Bay of Fundy, she was a household word until long after she was gone.



*Robert Owen Wilcoxon*

This is the wreck of the Sailing Vessel SILVER LEAF.

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When the weather is not good, no vessel is comfortable, but when the weather was fairly good, these vessels must have been comfortable ships in which to sail. There were no engines and no radio with the latest agony of a hit tune, and better yet, no way for the owners and agents to bother the crews. It must have been a most relaxing way to go to sea, no noise, no vibration, just the gentle motion of the ship with only the squeaking of the rigging, the sound of the wind, and the sea hissing along the hull. Can you picture SILVER LEAF when she was new meeting you under full sail at sea and exchanging some flag hoists with you? First she would be most beautiful, all white with a bit of black trim, as Grandfather described her to me, under a full suit of white sails. The Canadian red ensign would be hoisted to her mizzen gaff or mizzen top on first meeting her. The Canadian red ensign was the Canadian flag for many years. It was identical to the plain red ensign flown by all British merchant ships, often called the "red duster", except it had the Canadian Coat of Arms on the fly. SILVER LEAF flew the Canadian red ensign flown from 1868 to 1921 that I will explain later.

SILVER LEAF, either under her ensign or next to it in clear view, would break her four-letter signal code call TQMF in a vertical line. By the term 'break' it means that all the flags are bent on a signal halyard, then hoisted to the top and with a quick jerk these flags break and fly free. The ensign is never hoisted this

way, but all signal hoists are. In other words, it is hard to notice anything – then all of a sudden you get a virtual explosion of colour. It is hard to believe these old merchant ships would break their signal hoists. The majority probably simply hoisted each signal and left the fancy breaking to the “Man O’War”, as the warship was known.

SILVER LEAF was a most beautiful sight and nothing at sea these days can compare. When you have read her signals made thus far, break your Answering Pennant. SILVER LEAF will then lower her TQMF hoist and break the following in this order:

- 1<sup>st</sup>: Port from which last sailed.
- 2<sup>nd</sup>: Destination.
- 3<sup>rd</sup>: Number of days out.
- 4<sup>th</sup>: Longitude.

The Answering Pennant and Code Flag were/are one and the same; a triangular pennant twice as long as the signal flags in use, consisting of vertical bars, three red separated by two white all of equal width.

For an example we will pretend we met Grandfather bound for Canning, Nova Scotia, with a cargo of molasses from Havana, Cuba. SILVER LEAF will fly code hoist AXNW, the code for Havana. When you fly your Answering Pennant she will replace this hoist with code hoist BCER, the code for Canning, Nova Scotia. If SILVER LEAF had departed Havana six days ago she would replace the BCER hoist with Code Flag under code UG. There were no flags for the figures and one had to fly these three flags in order to make the digit 6. At least this was the simplest way from the Section Code Flag Under Two Flags Numeral Table, rather than using the Section on Numeral Signals described in my last description of The International Code of Signals. If SILVER LEAF makes the Longitude 68 degrees west she will fly Code Flag over GB, from the Section Code Flag Over Two Flags. She would replace each hoist with the next once you answer her with your Answering Pennant each time. One would think that it was much easier to receive rather than transmit a message. One simply looked up each code as copied, whereas when one transmitted they would have to find the information and the proper code they wanted to convey. The Captain and a mate or two could be making these signals, which would make it easier than one working alone.

After this SILVER LEAF might make any communication she desired. Naturally the ship you are in is doing the same, but for those who could take the time to do nothing but enjoy the view, it would certainly be something to behold. The many signal flags would make additional colour to an already colourful sight. When SILVER LEAF had finished; she would likely fly hoist DJX, meaning adieu or farewell.

There were four types of stations listed in this Signal Book: An International Signal Station, A Time Signal Station, A Weather or Ice Signal Station and A Life Saving Station, and these stations are noted by a special sign alongside their four-letter code for their place name. Halifax, Nova Scotia, is listed as having a Life Saving Station (the one at Duncan’s Cove) and a Weather or Ice Signal Station. The Camperdown Signal Station must have supplied some weather signals of some description via a few flags or balls. One could not communicate to any office via this station, although this signal station would notify the station at Citadel Hill in Halifax that this vessel was inbound.

On occasion if the two ships knew each other and the weather permitted, they would stop and communicate by means of rowboats. On other occasions they would sail close to each other and communicate by the spoken word. The most colourful sight of all was when they met and happened to be going in the same direction. Invariably they would adjust the sails in order to obtain every ounce of speed. No one could resist a race and the race would be on. The only damage that could be caused from this was to have a mast carried away or a sail blown out. So common were these incidents that no one ashore would pay any attention to them, not so today. If the crews in these modern behemoths try to do a little racing, the office would fire them for the fuel they would waste. The best I have ever seen is to catch a sister ship advising the office of her ETA (estimated time of arrival). If she were headed for the same dock, as we were, I would give this ETA to my Captain who would adjust our ETA, if appropriate, a half-hour or so ahead of the other ship so we could have the dock first. If it did create any response from the other ship it would merely be in the form of the other Radio Officer tapping, wise guy, smart alec or some such mundane crack to me, and at

that he would never dare tap “smart ass” over the air. Some colour! Some exciting! One incident I do remember was when a sister ship caught my ETA. Her Captain sent his with a two-minute time difference trying to grab the dock ahead of us. When I showed this to my Captain he merely grunted and said, “Who the hell does he think he is?” and I doubt there was a sense of humour among the other crew, so I totally ignored the other operator, and let on I had never caught his ETA. We were already running, at our maximum revolutions on our old steam turbine percolator so there was nothing to do but wait for the word from the powers that be ashore. If I remember correctly we were odd man out and merely idled back to a dull movement and slid into the anchorage, dropped our hook (anchor), and waited our turn.

## CANADIAN RED ENSIGN

Canada was the first of the British Colonies to gain a form of independence from the mother country, Great Britain, and this produced an incident worth mentioning. The BNA ships came under British rule, law, customs, traditions, and what have you. They were required to fly the red ensign as any other British registered, or flag ship. Around the time Canada was formed some of the crews of the BNA ships felt they should be entitled to something more than a plain old “red duster” flying from their ships. They therefore defaced their ensign with an assortment of paraphernalia, anything resembling something of Canada. This was more often than not, a maple leaf, a cluster of maple leaves, a beaver, or some such design, on the fly. This created quite a commotion among the powers that be back in the mother country. They were dead set against it and felt we colonials should be given a good lesson in proper flag etiquette. Surprisingly, the British officials here in the colony, as it was known, were in favour of this practice and actually assisted in same to the point of bringing about the Canadian Red Ensign, the red duster with the Canadian Coat of Arms on the fly.

There were actually several of these Canadian Red Ensigns. The first had the coats of arms of the first four provinces to form the Dominion of Canada and this ensign flew from 1868 until 1921. The Parliament Building in Ottawa first flew this ensign in 1904 when it replaced the British Union Flag better known as the Union Jack. The Canadian Coat of Arms with three green maple leaves flew from 1921 until 1957. Then from 1957 until 1965 the Canadian Ensign had the Canadian Coat of Arms with three red maple leaves and with a slight change in the Irish harp, and this was the Canadian flag or ensign until February 15<sup>th</sup>, 1965, when the Canadian red and white maple leaf flag was adopted as this country’s official flag.



*Wikipedia*

1868 – 1921



*Wikipedia*

1921 – 1957



*Wikipedia*

1957 – 1965



The flag of Canada since 10-AM local time February 15<sup>th</sup>, 1965.

I had worked the night shift at Teslin Aeradio, Teslin Yukon Territory but stayed up in order to replace this flag with the Canadian red ensign. I wanted to be one of the first to fly this flag. I was one of the first but one of the last because the Yukon was the last area in Canada to turn 10-AM local time. My wife recorded this event with our old 8mm home movie camera.

## **THE TELEPHONE**

When the telegraph and telephone first went into service, a good many people became involved in many companies, to produce and operate these new gadgets. During the first years of their use they were owned, operated, sold, and maintained by many companies. Many of these first companies were amalgamated to form the companies we know today. Just as many went broke financially and disappeared without leaving any noticeable record of their existence. There were many financial wars between various forms of business to control the operation of these pieces of equipment. Therefore this installation rotated as much or more on the amount of money available as it did on the actual service it would provide to people in general.

To invent the telephone, telegraph, and later wireless telegraphy and make them functional was something but to sell same to the average person was something else. Several units, or even two, might be practical in an area but one unit by itself would be useless. Therefore the first telephones were purchased by fairly large organizations to use as an intercom between their various offices, homes, warehouses, and so on.

The late Mr. J. Furber Marshall, Historian/Archivist, Maritime Telegraph and Telephone Company Limited stated:

“The telephone first came to Nova Scotia in August 1877 and over the next two years pairs of telephones appeared in various Nova Scotia communities as intercom systems between home and office, store and

warehouse, and the like. In the fall of 1879 a Toronto firm, the Dominion Telegraph Company, converted part of its Halifax network of telegraph lines into a telephone exchange. For the first time, Nova Scotia telephone users could ask an operator for a telephone connection. The rival Western Union Telegraph Company quickly followed with a competing exchange in Halifax.

In 1880 the Bell Telephone Company of Canada was formed and within the year they moved into Halifax and took over both telephone companies, those of the Dominion Telegraph Company and Western Union Telegraph Company. Bell operated in Nova Scotia for about seven years during which time the telephone became better known and businessmen from Cape Breton to Yarmouth, realizing its potential began organizing local and regional companies. By 1887, it was obvious that Bell was overextended and would not be making the investments in Nova Scotia necessary to provide a provincial network. This produced the incorporation of the Nova Scotia Telephone Company, and they began the consolidation of all the telephone companies in the province, a process which was not completed in 1910 when Maritime Telegraph and Telephone Company was formed with even wider areas of consolidation in mind.

There is no known record of the Maritime Telegraph and Telephone Company ever having used telegraph within its operations. When the Company was named, it was a practice to obtain as wide corporate powers as possible at the time of incorporation as a hedge against the telegraph companies later obtaining legal injunction against the telephone company's operations. Being first in the field of wire communications, the cable and telegraph companies were powerful enemies in the early days of the telephone business. Maritime Telegraph and Telephone have traditionally offered private wire telegraph services to allow their customers to communicate by key-and-sounder and teletypewriter, first on a private wire basis and more recently on a dial-up exchange basis (TWX). One technical reason in the earlier days was that a Morse leg could be superimposed on existing telephone circuits with little or no degradation to the voice path with little effort and expense. Further, these Morse Legs could be tandem-linked together through mechanical repeaters to cover great distances when voice transmission was limited through lack of the vacuum-tube amplifier."

Mel Saunders retired several years ago from a lifetime as a telegraph operator on the landline through the Annapolis Valley. His most distant direct contact was Calgary, Alberta. At the time Mel was operating at Windsor and had the Wire Chief of each line connect him direct to Calgary for some long messages he had been asked to deliver. He said he had a very good clear line all the way to Calgary and had no trouble delivering these long messages.

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*G. B. Roscoe*

This is the Government Wharf at Kingsport, Nova Scotia shortly after a Cornwallis Valley Railroad train was able to back down on to this wharf. The CVR opened this line in 1890 and this photograph may have been taken as much as ten years later in 1900. This was the terminus of the railroad line from Kentville to Kingsport, where the trains met the small steam packets that landed passengers and freight from Saint John, New Brunswick. The one meeting this train could be the BRUNSWICK, but I was unable to identify either it or the tern schooner outbound. There is a ramp at this site in 2007 for launching boats.

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Another good example of what Mr. Marshall states was the railroad from Kentville through Centreville to Weston and from Centreville in the other direction as far as the wharf at Kingsport, which has now disappeared. This line was constructed with horses and wagons, quite a feat when you look at some of the rough terrain that had to be filled and leveled. The line to Weston was constructed in 1913 and the various stations along the route were fitted with telegraph and the corresponding lines. A very severe snow and ice storm did much damage and destroyed these lines on December 13<sup>th</sup>, 1913. For some reason when these lines were repaired, they were used for telephones and not telegraph. Possibly the cost of renting this telephone intercom system was more attractive than hiring telegraph operators for this line. Most of the railway stations on this line had no agent for many of the years they were in operation. Any business was carried out with the conductor of the train involved. Centreville did have a telegraph and had call code CV. The Grafton station on this line had an emergency type telegraph key and sounder. This one was complete with long poles in order to attach this unit to the wires passing nearby without having to climb a telegraph pole.

During the time the telegraph was the main means of communication for the railroads and many of the villages these railroads served, the majority (if not all) of the various elements on these lines carried these emergency units. Many an incident took place for example where someone working on the tracks became injured. The Foreman of the job would then get out his sounder and key, climb up the closest telegraph pole and connect same. He then sent down the line the nature of his request (or requests) and could if need be alert the next train to stop and take the injured person to the closest medical centre. Naturally any request could be made over such a unit and most people in such positions knew enough of the operation in order to make this communication. Now this is handled by mobile radiotelephones and the cell phone has probably taken over a lot of this communication.

During the time the Grafton station and the others making up this railroad line were in service, if for any reason the telephone equipment became inoperative, communications could be established via telegraph over the same lines providing the lines were not totally disrupted because of a serious break.

Mr. Marshall continues:

“The earliest known telephone directory for the Camperdown area is that of May 1900. While it has no listings for any subscribers in this area, it does have toll rates covering Chebucto Head Lighthouse, Ferguson’s Cove, Sambro, and Herring Cove. This would indicate there was public service of some description in the area, probably what were called toll stations or in modern terminology, pay phones. The first reference to telephone services in Nova Scotia communities are the Station Statistics in the company magazine, starting in January 1908. There Sambro appears as an exchange in January 1908 with four telephones and steadily grows until, with the first Maritime Telegraph and Telephone directory, for 1911, list the Marconi Wireless Station at Camperdown, pay stations at Chebucto Head, Duncan’s Cove, Herring Cove, and Sambro, plus ten private telephones. There are no telephone numbers for any of them and the exchange Agent is listed as Mr. Brown, the manager at Halifax. This indicates that there really was no exchange at Sambro, merely a long party line out of the main Halifax exchange, St. Paul, on Salter Street at the head of Granville Street. This exchange existed from 1892 until 1916, and was replaced by the Bishop Exchange on Sackville Street. This arrangement lasted about forty-five years, until the Lorne Exchange dial service was extended to the area, succeeded in 1963 by Spryfield Exchange service and still later by the Ketch Harbour Exchange.”

Therefore from the time the telephone was installed at the Camperdown Signal Station until this station closed in 1953, it remained nothing more than a party line. This line had the Chebucto Head Lighthouse, the Pilotage Office in Halifax, the Citadel Hill Signal Station while it remained in service, the Signal Station on the top of the Post Office building on George Street which replaced it, and the Camperdown Wireless Station after it entered service. Places like that, which provided that type of service.

The telephone was introduced on the southeast side of St. Mary’s Bay for the area of Digby and Yarmouth counties of Nova Scotia in 1886 and through the peninsula of Digby neck to Westport in 1888. These telephones would have been connected with the other telephones in the province shortly after this date.

I have no record of Great Grandfather Spicer sailing into Halifax in SILVER LEAF. The procedure they would have followed would have been no different than that followed by so many for so many years. On entering the harbour approaches they would have flown the Canadian Red Ensign and more than likely just below it, the letters TQMF in a vertical line. Flying these signal letters was known, and still is, as “Making her Number”. On her foremast she would have flown the flag of the country she was coming from. If this had been the United States – the United States flag, if she had been coming from another port in the province she would have flown either the Canadian Red Ensign or the Union Flag. Likewise for whatever port it involved.

When SILVER LEAF was sighted by the signal station at Camperdown the duty signalman would make note of this, look her up in his code books and pass the word along to the appropriate authorities. For years this was done by visual signals. Now that the telephone was in use it was done via telephone. If there had been any questions he would have signaled to SILVER LEAF passing along the questions or answers. Naturally SILVER LEAF could have made any queries to him that she felt necessary. For many years the Citadel Hill station would fly the house flag corresponding to the approaching vessel. The Shipping Agents and the citizens of Halifax became accustomed to keeping a close watch on this signal tower. They would then know of any arrival and naturally those involved were forewarned and able to do all necessary for berthing the vessel on arrival, seeing to the discharging of cargo, loading cargo if necessary, and in general, helping to speed up the arrival and departure of any vessel.

One of the first telephones installed in the village of Sambro was that of James L. Hart, the local postmaster and storekeeper. This enterprise was taken over by his son C. W. Hart and was taken over from him by Helen and Alfred Gray in 1970. Helen learned the Post Office routine while working for C. W. Hart and thereby knew the routine well when she and husband Alfred took over.

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*Douglas Hale*

This is Mrs. Jim Moody talking on a telephone at Grafton, Nova Scotia, February 1955. This telephone was in the Berwick telephone exchange and is the telephone in the home of Mr. and Mrs. Stanley Hale. Mrs. Hale was Mrs. Moody's daughter Jennie. Jennie was a telephone operator for the Farmers Telephone Company at Grafton before she was married. The Farmers Telephone Company was formed in 1898 and was one of the many small telephone companies that operated throughout Nova Scotia. The Nova Scotia Telephone Company began the consolidation of all the telephone companies in the province, a process

which was not completed in 1910 when Maritime Telegraph and Telephone Company was formed with even wider areas of consolidation in mind. I must quote Mr. Marshall:

“Mrs. Moody is using the magnetic wall telephone which was listed as 247-22 on the Berwick Exchange. It is the standard Type 1317E or 1317CG built by Northern Electric from original designs of Western Electric in the United States going back to around 1900.

The three dry cell batteries used to power the transmitter required half the size of this telephone.

The signaling was done by turning a crank on the right side of the box to operate a “Five-bar” AC generator inside. This produced about 90 volts of 20 hertz AC current which was sufficient to ring up to 40 sets of telephone bells on a line up to 40 or 50 miles long.

A special arrangement was used to call the operator without ringing all the bells on the line. A small black button (seen in the photo an inch back of the middle hinge) was depressed while turning the crank and the operator’s line signal (drop) No. 247 would fall.

Our principal problem with this set was replacing batteries for people who habitually listened in on the line. My old mentor showed me how to prove this fault by checking the black paint on the back of the transmitter “cup”. If it was worn off it was highly probable the users were holding the heel of one hand over the “funnel” mouthpiece to block out background sounds and the fingers of that hand extended over the back of the transmitter cup, gradually wearing the paint. At the same time they were listening – and draining the batteries.

The upper telephone is a Type 1293GP, common battery dial wall set (as opposed to “local battery, magneto”). Again this is a Western Electric design of the 1900 era, first built without the dial for the “lift-the-receiver” system. The dial was added around 1919 and would have been the “big seller” in 1921 in North End Halifax.

The drastic reduction in size was accomplished through elimination of the generator and batteries, as all current required for both transmitter energy and signaling came in over the line from a large bank of glass storage cells in the exchange.

Lifting the receiver closed an internal switch to “turn on” the set and, if the system was “manual” using switchboards, a light in front of the operator. If the system was dial, the closing, or “looping”, of the line pulled up a relay in the dial exchange to start the automatic sequence of dial tone, etc.

Berwick skipped the manual stage, moving straight from the magneto to dial on 21 October 1954. So therefore, everybody had two telephones through the late summer of 1954 with instructions to continue using the old one until probably 10 p.m. on that date, therefore changing to the new set.

The Hale’s number and code ring also changed: instead of listening for two longs and two shorts (-22) their new number 474-0 probably gave them long, short, long, or something else not indicated by the suffix “0”.

The new Berwick dial system used three digit numbers for the one party line and three digits plus a code digit for the party lines. I do not have the code conversion table at hand but I would guess the multi-party lines were limited to 10 telephones per line with “split” ringing (five codes audible to each half of the customers on a line). In other words each customer heard his own code ring plus up to four others.”

## **MARCONI’S FIRST STATIONS**

Guglielmo Marconi was successful in obtaining transatlantic communications from a temporary station he set up on Signal Hill, Newfoundland, to one at Poldu, Cornwall, England, on December 12, 1901. He was unable to obtain permission to operate a permanent station in Newfoundland, because of an agreement made with the Newfoundland Government and the Cable Companies operating transatlantic cable service, therefore this Signal Hill station was moved to a permanent location at Glace Bay, Nova Scotia, in 1902.

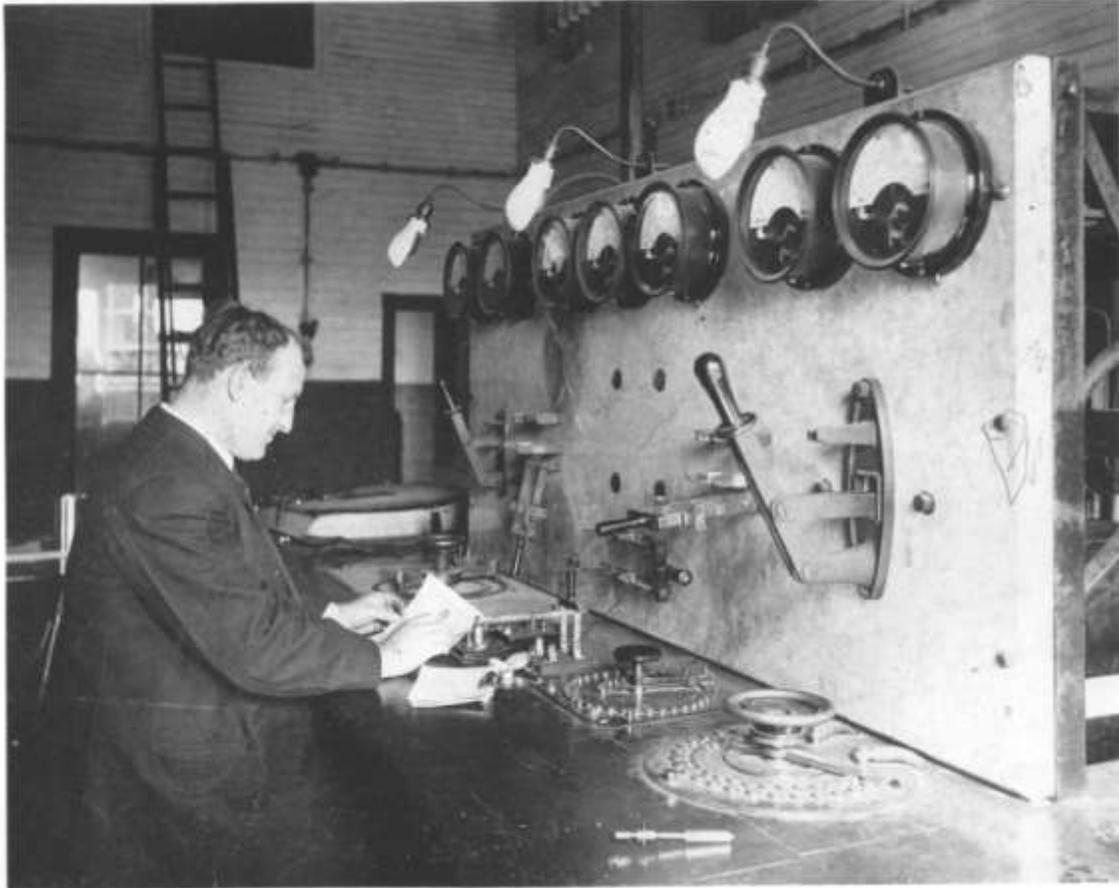
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*Public Archives Nova Scotia*

This is Guglielmo Marconi on the left and James Harris at Glace Bay, Nova Scotia, March 17<sup>th</sup>, 1907. Mr. Harris is operating the receiving portion of the station. This station passed telegrams between Canada and Europe and did not communicate with ships.

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*Public Archives Nova Scotia*

This is Leonard R. Johnstone operating the transmitting portion of Glace Bay, Nova Scotia, on March 17<sup>th</sup>, 1907. This station used a two letter call sign and by 1923 there were six such stations in Canada:

DR	Bird's Hill, Winnipeg, Manitoba 3400 meters
DO	Glace Bay, Nova Scotia 3000 meters
GB	Glace Bay, Nova Scotia 7925 meters
DQ	Markham, Ontario 3300 meters
FC	Montreal, Quebec 13,150 meters
BC	Vancouver, British Columbia 25,850 meters

The last three stations had not gone on the air by 1923 and therefore most of the message traffic reached this station via the landline telegraph. In other words it more or less served as an over the Atlantic Ocean link for the landline although there were under-water landline cables in service.

In 1904 the Marconi Company was issued a license by the Canadian Government to set up a system of radio stations to serve shipping approaching the East Coast and St. Lawrence River. The first station to go on the air in 1904 was Fame Point, Quebec, on June 25<sup>th</sup> and the first contact was with the Allen Line R.M.S. PARISIAN outward bound.

The first merchant ship to be fitted with wireless was the German, Norddeutscher Lloyd, passenger liner KAISER WILHEIM DER GROSSE. The installation of this station was completed on February 28<sup>th</sup>, 1900. The next merchant ship was the Belgian steamer PRINCESSE CLEMENTINE that was fitted in November 1900 and operated on the Dover, England, to Ostend, Belgium, route. All Canadian ships were British at this time and for many years after. I found conflicting detail on which British merchant ship held this

distinction. Some claim the Cunard Liner LUCANIA in 1901, but I was unable to locate the actual date the equipment was ready for service. Others claim the British Liner LAKE CHAMPLAIN whose installation was completed and ready for service in May 1901. There were many passenger liners in service at this time, sailing to various places on the globe, ships being the best and in most cases the only means of transportation during that era. Therefore some of the many were fitted, although most shipping organizations felt this new toy would be only a passing fad and if they did their best to humour it along, it would soon disappear and be forgotten.

Looking back, these first shipboard operators must have thoroughly enjoyed themselves. The crews did not know what to make of them so more or less ignored them. Their equipment was capable of a range of only a few miles, so once they passed out of this range they had little to do. For the most part they merely played with their equipment and impressed any of the opposite sex they could entice into witnessing a demonstration. This demonstration must have been the biggest racket most of them had ever witnessed, and anyone who could communicate any distance with such an apparatus must have been placed on a level up near their God. And to think I missed it. The best I ever managed was a little chat with a Navy buddy in Morse code on our car horns. If it didn't impress those with us, it certainly made us a couple of good candidates for the two biggest nuts to ever pass the farm we went by.

These first sets (both ashore and afloat) were naturally very primitive but were to remain basically the same for about three decades. They were known as spark sets; the transmitter consisted mainly of a coil coupled to a long piece of wire for the aerial. The two rods on top of the set which were placed end to end with a gap between the two adjoining ends. When the telegraph key was pressed or closed, electricity would be applied to these rods causing a spark to jump from the end of one to the other. Therefore the term spark and the operator became known on board as Sparks or Sparkie and the term stuck to the very end. All of my personal effects which I carried with me at sea over the years were clearly marked Radio Officer S. G. Roscoe because all on board knew me only as Sparks or Sparkie and only a few of the officers would have known my name.

The first receivers were primitive forms of crystal sets using a coherer as the main receiving component until the actual crystal material was discovered. Actually these first sets more or less created a healthy burst of electrical static which is the reason they have been outlawed for many years. There was no such thing as a frequency band, you were either heard or not heard for the first few years. Once they became more popular a schedule was set up and each ship fitted was permitted a certain time to transmit while in a certain area. There were no laws governing the operation of this apparatus for more than the first decade of its operation, merely laws governing the licensing of the stations. The operators for the most part were landline telegraph operators who went to sea and served on the coast stations. No uniform type of code was used. You merely used any of the many codes. A code the receiving station could understand.

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## **THE FIRST OPERATORS AND CANADIAN STATIONS**

These first primitive wireless sets were most frustrating to operate at times. With no laws or jurisdiction other than some company instructions to go by, the language sometimes heard would offend delicate ears. One favourite term was GTH for Go To Hell. If someone got nasty, he flashed up his transmitter for maximum power and threw a book on his key creating as much interference as possible. The sets were never designed with much safety in mind and many old operators have been tossed in their grave with a number of scars on their hands from getting burnt by the sparks emitted from these old sets. But from this has grown our expanding communication networks. Fame Point, Quebec, was our first station as stated and the other five to enter service that first year, 1904, were Heath Point, Anticosti; Point Amour, Labrador; Belle Isle, Cape Ray; and Cape Race, Newfoundland. These first stations could communicate for maximum distances of between 60 and 130 miles.

The first Canadian ships to be fitted were CANADA, MINTO, and STANLEY. All three were fitted in 1904, but I have been unable to locate the actual date. I presume sometime in the spring and all three were owned and operated by the Canadian Government, and were known by the prefix DGS (Dominion Government Steamer). CANADA was assigned to the Department of Fisheries and MINTO and

STANLEY were specially constructed to provide a ferry service between the province of Prince Edward Island and the mainland.



*Warren E. Hagar*

This is the DGS STANLEY in 1930.

The CANADA was using wireless call code or call sign "CT", MINTO was using "MT" and STANLEY was using "ST". One would assume this was the suffix of a three letter call sign with the prefix "M" as all Marconi stations were using at the time. Apparently this is not so. A 1912 listing states all three calls had the suffix "D". This must have been used to indicate Dominion Government Steamer if it had any meaning.

The radio stations at Cape Bear, Prince Edward Island, and Pictou, Nova Scotia, opened in 1906 to provide communications with the MINTO and STANLEY mainly. Alf Lawton stated in his attempt to record this history that Cape Bear was assigned call code "BE" and that Pictou had call code "UB". Neither call code is listed in a 1912 list of these stations provided by Laval Desbiens so I am unable to confirm this.

Taking a serious look at the sites chosen by the Marconi organization for these first coastal stations, one is given the feeling they were chosen as much for their beauty as for their communication capabilities. Most were located at very good locations so that the operators had a good view of the surrounding area. Of ten these operators fixed up the actual grounds with flowering bushes and the like, making the station a very nice home-like setting. Most of these sites were located on the highest hill in the area with the idea of obtaining maximum range from the equipment because of this elevation.

The Camperdown Signal Station site was one of these locations and established as part of this undertaking. Ground was broken on Thursday, May 4<sup>th</sup>, 1905, for the construction of the station that was fitted and ready for service on Wednesday, June 14<sup>th</sup>, 1905.

When the Camperdown station was completed and ready for service on June 14<sup>th</sup>, the cables ship MACKAY-BENNETT was ordered to conduct tests with the station in order to give some indication of its useful range. These tests for one reason or another did not take place until Monday, June 19<sup>th</sup>, 1905.

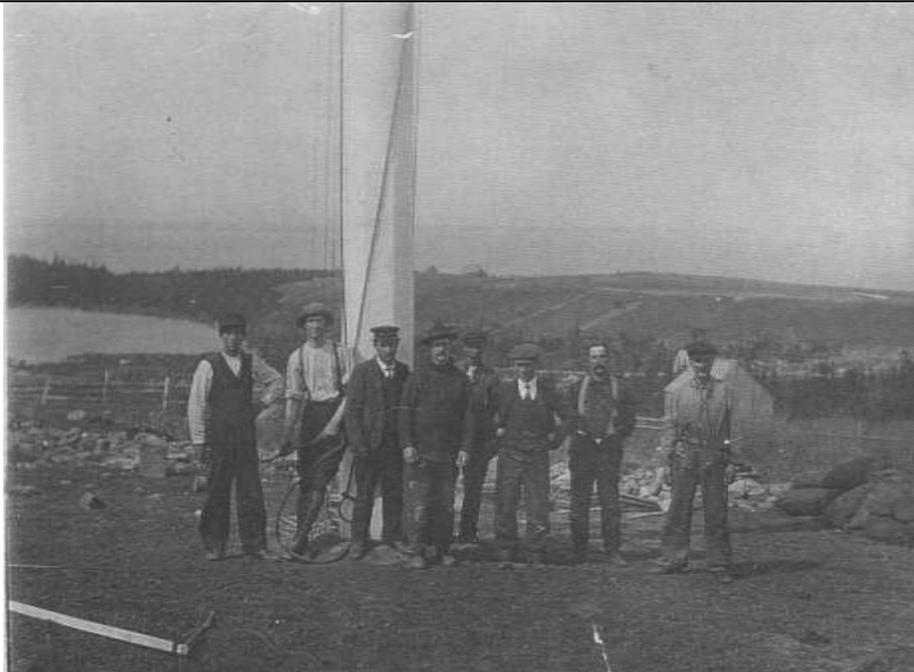
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*Cyp Ferland*

This is the Camperdown Wireless Station VCS from 1905 to 1926.

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*Michael Christie*

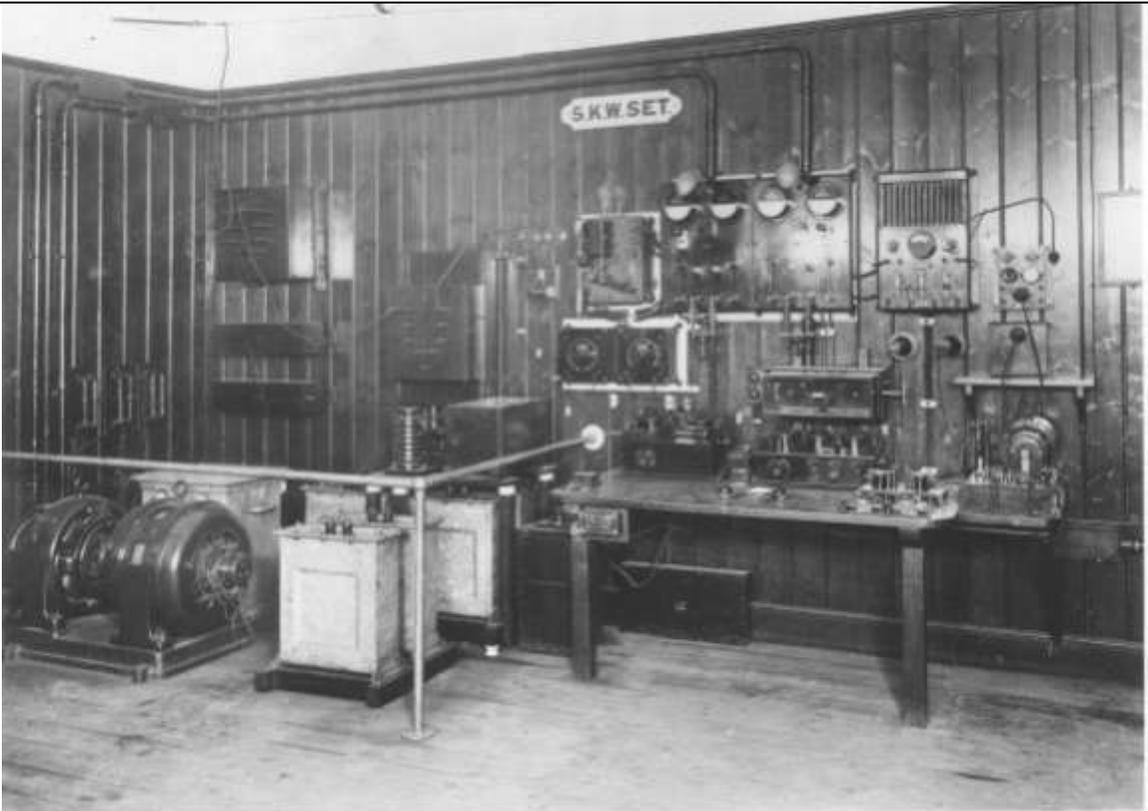
This is the crew erecting the antenna at Camperdown 1905. Left to right: Alf Pettipas, B.S.Y. Clifton, Captain Henry R. Cook, the next two are unknown, J. D. Taylor, Sam Pettipas and an unknown rigger.

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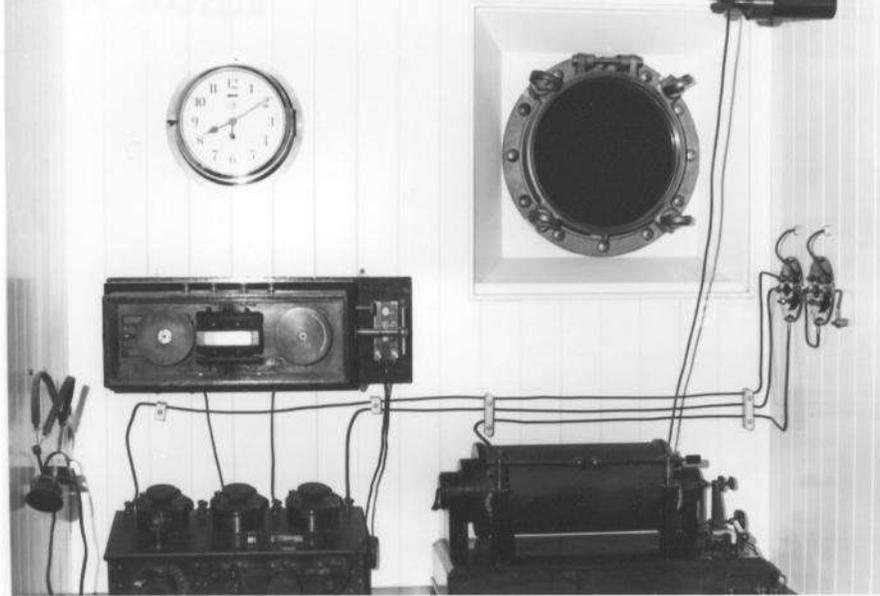
*Michael Christie*

This is Camperdown in 1906.



*The Marconi International Marine Communications Company Limited*

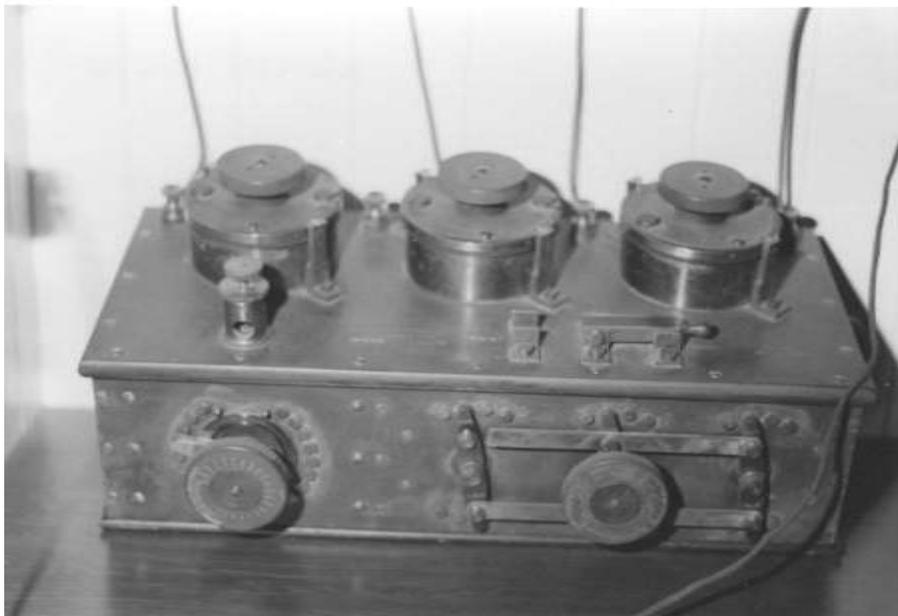
This is a museum display of a typical five kilowatt wireless coast station from 1904 until 1918.



*R. J. "Dick" Roscoe*

This is a shipboard wireless station of around 1910 on display at the Museum of Science and Technology, Ottawa, Ontario.

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*R. J. "Dick" Roscoe*

This is two views of the Spark Receiver on display at the Museum of Science and Technology, Ottawa, Ontario.

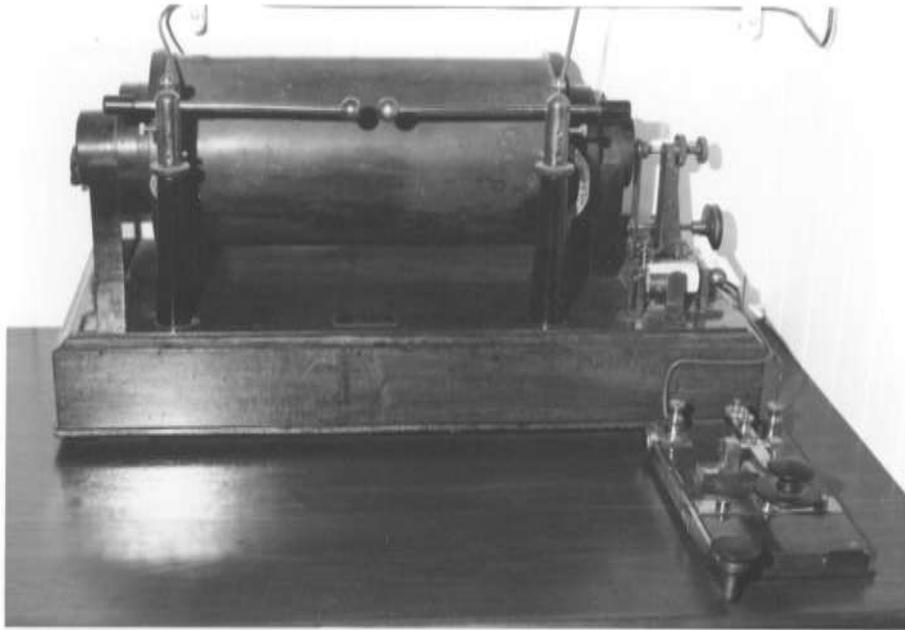
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*R. J. "Dick" Roscoe*

This is the Transmitting Key of the Spark Transmitter on display at the Museum of Science and Technology, Ottawa, Ontario.

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*R. J. "Dick" Roscoe*

This is the Spark Transmitter of the Shipboard Station on display at the Museum of Science and Technology, Ottawa, Ontario.

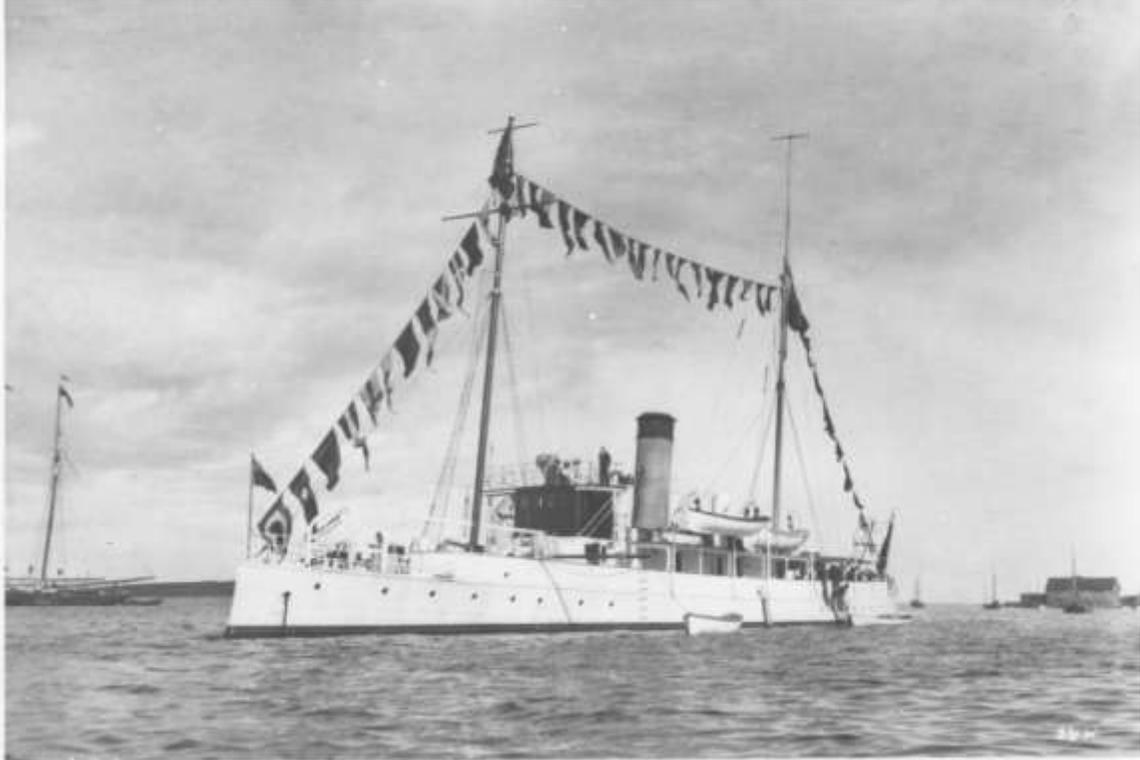
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*The Marconi International Marine Communications Company Limited*

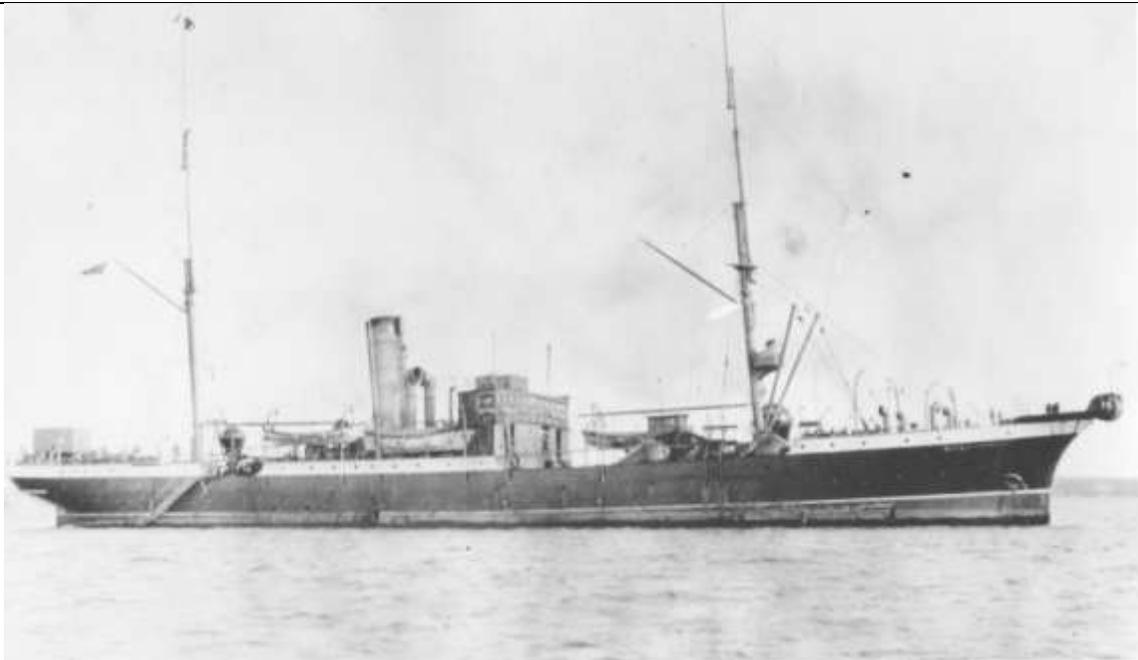
This is a museum display of a typical one kilowatt wireless coast station from 1904 until 1918.

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*Public Archives Canada PA-42011*

This is the first ship to contact the Camperdown Wireless Station DGS CANADA.



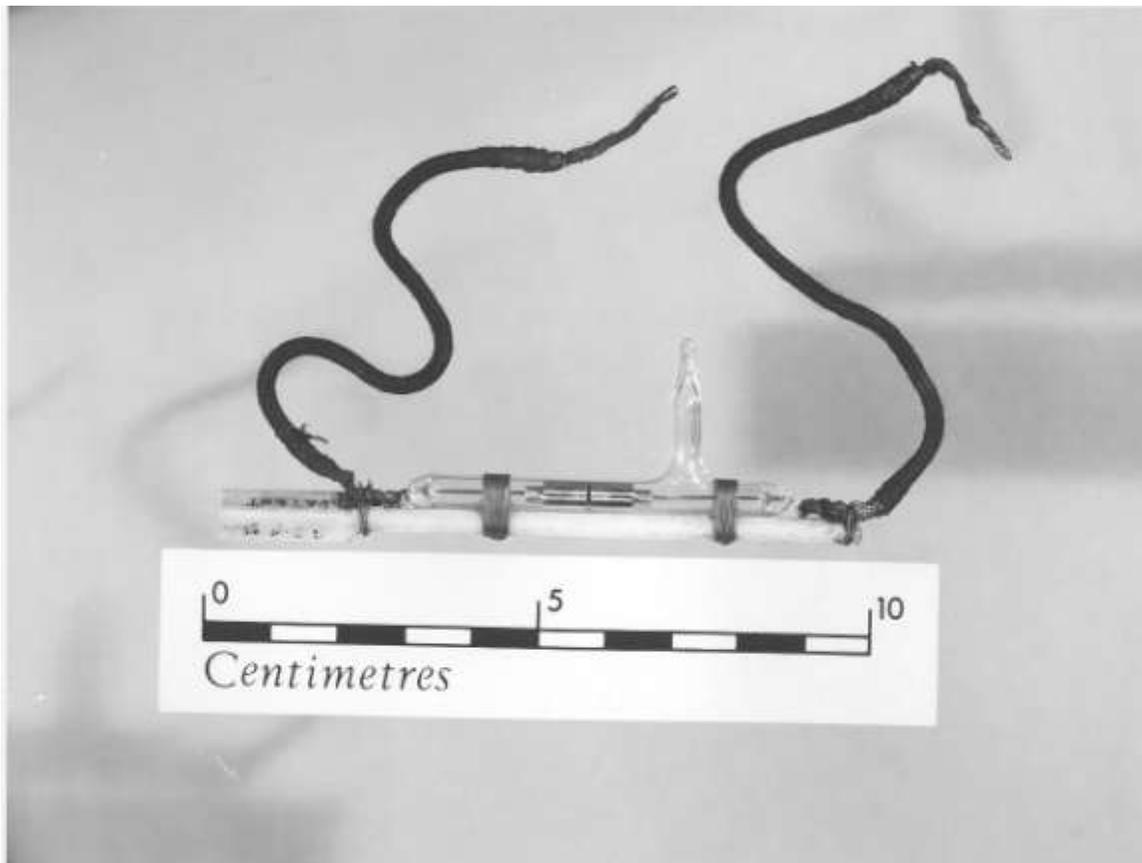
*Thomas H. Raddall papers Dalhousie University Archives, Halifax, Nova Scotia*

**MACKAY-BENNETT**

Thomas H. Raddall states:

“The “Mackay-Bennett” was a cables ship based at Halifax from 1884 to about 1924, when she was retired from sea service. Her American owners (The Commercial Cable Company) had her built in Glasgow and named after the company’s founders, John W. MacKay and James Gordon Bennett. The owners kept her under British registry, and her officers and crew were mainly Canadians and a few English. I served as a wireless operator in this ship in 1920-1921.

Her first wireless outfit was a primitive little set using a ten-inch induction coil in the transmitter and a “coherer” in the receiver. I located this outfit in the ship’s fore-peak, where it had been stowed away and discarded for many years, and took the “coherer” for a souvenir. It is now in the Raddall Collection at Dalhousie. Marconi in person installed this set in the ship in 1899, when “Mackay-Bennett” was sent down to New York to observe and report the famous yacht race between Sir Thomas Lipton’s first “Shamrock” and the defending “Columbia”.”



*Dalhousie University Archives Thomas Raddall Collection*

This is the coherer from the original receiver on the Cables ship MACKAY-BENNETT.

On Monday, June 19<sup>th</sup>, 1905, the staff of Camperdown was under the authority of Mr. B. S. Y. Clifton, Camperdown’s first officer in charge. While Mr. Barridon, an operator at Camperdown, was conducting these tests with MACKAY-BENNETT, which commenced with him standing by at noon on Monday, they heard another station sending a series of the letter V in Morse code. The letter V consisting of three dots and one dash is used to this day for testing or tuning purposes. It is normally transmitted in a series of three letters at a time. The automatic calling or marking signal emitted continuously from the last station started with three letters (in three groups) of the letter V, on all high frequencies used for radiotelegraph.

One can almost feel the excitement running through Mr. Barridon on hearing these first letters, the first heard by Camperdown Radio. He must have been thrilled on establishing contact with this station at 4:25 PM to learn that it was none other than DGS CANADA.

DGS CANADA was Canada's first operational warship. Although she belonged to the old Department of Marine and Fisheries, she operated much as a small warship until our Royal Canadian Navy was formed on May 4<sup>th</sup>, 1910. CANADA also carried Canada's first deep-sea wireless operator.

The first of these wireless operators were landline telegraph operators. They brought along many of their former procedures and practices to the wireless world. One of these was their call codes, a letter or two to denote specific stations, whereby all stations had a brief and simple means of identification rather than spelling out the name of each station during the working of any communication. All of these first coastal wireless stations were assigned two letter identifiers, known as call codes, which have become standardized and in today's terminology call signs. In many cases the landline telegraph operator of a specific station when it first went into service had his initials used as the call code.

Although these first telegraph operators to be assigned ships had a ready-made call code in the form of the flag signal code they did not use same. They must have felt these four letter codes were too cumbersome, because it was close to three decades that ships operated with a separate wireless and visual signal code. The signal code was four letters and the wireless code was two for a few years and then three letters were assigned.

I am convinced that CANADA's first deep-sea wireless operator was Mr. C. T. West, although I have looked in vain for a record of such a gentleman. I have searched all known records including my own family tree that is not only wall-to-wall, but tree-top-tall in Wests. My reason for basing my assumption is that on the margin of the first Camperdown Log the operator wrote C. T. West as though he had had a chat with the individual and obtained his name. The log entry next to this, the first communication of the station, clearly states that the DGS CANADA was 25 miles east of the station. The practice of these landline operators in using the initials of the first operator assigned to a station as its call code, convince me that CANADA's call code "CT" was Mr. West's initials. The oldest record I could locate of the operator in CANADA was May of 1907 when a Mr. H. H. Lyle was sailing in that capacity.

Camperdown went on the air with call code "HX" for Halifax and was one of the few stations to retain the name of the site it was located, rather than the name of the nearest town or city, as most other stations in Canada were to do. For example Yarmouth Radio went in service as Yarmouth although the station was actually located in the village of Rockville outside the town of Yarmouth, Nova Scotia.

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*Cyp Ferland*

Our first wireless operators had no other means of improving the quality of their transmitting other than to mimic those blessed with a natural ability for this art. Jim Myrick was the one on the Eastern Canadian stations whom they all tried to copy. This is the only photograph of Jim I was able to locate. He is seated on the left transmitting, while Cyp Ferland is seated on the right receiving, on the opening of the transoceanic beam service from Montreal to Overseas August 1926. The other men are unknown.

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The first call signs of some of the first stations in this area were:

FP	Fame Point, Quebec
HP	Heath Point, Anticosti Island, Quebec
BL	Belle Isle, Newfoundland
CR	Cape Ray, Newfoundland
CE	Cape Race, Newfoundland
BE	Cape Bear, at the eastern side of the entrance to Charlottetown, PEI
UB	Pictou, Nova Scotia
SJ	Partridge Island, outside Saint John, New Brunswick
SD	Sable Island, Nova Scotia
SB	Cape Sable, Nova Scotia
CY	Cape May, New Jersey
NY	New York, New York
SE	Seagate, USA
SK	Sagaponac, USA
CC	South Wellfleet, Massachusetts
SC	Siasconsett, Nantucket Island, Massachusetts

The Canadian stations were either equipped with landline telegraph or had a landline telegraph office nearby where messages received via wireless could be transferred to the telegraph lines for forwarding. Camperdown's landline telegraph was completed and in service at 4:25 PM on Wednesday, August 30<sup>th</sup>,

1905. One would think everything of importance was to happen at Camperdown at 4:25 PM, as both the landline and the station's first radio contact took place at that time.

Camperdown's call code on this landline was "CD", from the name Camperdown and remained the same call until replaced by the Teletype in 1956, fifty-one years later. It was the only station on a line into Halifax at station "AX". The operators at Camperdown had to be proficient in both the radio and landline codes, these fifty-one years, like the operators on so many of the other stations. There is a pronounced difference, not only in the characters of the two distinct codes, but for anyone not familiar with either or the other the landline was a "clickety click" and the radio a "buzz buzz".

Camperdown's main job at the beginning was to forward all messages collected from ships by Sable Island and Cape Sable, Nova Scotia, in addition to any messages sent to Camperdown direct by any ship within range. At times it was a very busy station collecting all these messages from three locations, involving several spark stations, and then transmitting it all via "CD" into Halifax "AX". The messenger boys at the Halifax Telegraph Office would deliver all the messages for Halifax and the remainder would have to be retransmitted via the various landline telegraph circuits to their destinations.

There was a time signal service available via these landlines, which the wireless operators retransmitted over the air via their wireless transmitters. The first record I found of Camperdown receiving this service was from the Western Union at ten o'clock on the morning of September 13<sup>th</sup>, 1905. These time signals originated from an observatory at Saint John, New Brunswick, and this service remained in operation until the mid 1950's when it was replaced with the present service provided by radio station CHU Ottawa. CHU transmits these signals continuously on three high frequencies, also known as short wave depending on the terminology most familiar to you.



*John Rae VE1AGN*

These are the only log books of Camperdown Radio known to be in existence. These are the logs from 1905 to 1910 and are now held at Dalhousie University Archives, Halifax, Nova Scotia.

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I was very fortunate in locating the first logs of Camperdown and have spent many hours going through them trying to fully understand what the operators were thinking at the time of the entries. I turned these logs over to the Archives at Dalhousie University, Halifax, on completion of this project so that they will be available for future use. Most of these entries I have managed to understand but of course cannot fully understand what it was actually like to live and work at one of these stations. There are several things that become more obvious but are now more amusing than anything else: travel was by horse and buggy, of course, when the station first entered service in 1905 and for many years after. A trip to Halifax for supplies was a real safari and would involve going in on one day and with luck, providing all business could be transacted, returning to the station the next day. Some of the actual workings of the equipment are interesting. In order to operate the transmitter on power or at its maximum output a large gasoline engine had to be started by crank. This thing in its primitive form gave a lot of trouble. The gasoline feed line was but one of its weaker or more troublesome points. There are entries in the log that the duty operator rectified this trouble with patches of lead. There is another entry that the actual crank for starting this engine was broken and the operator was complaining of the inconvenience of trying to start this beast without it.

The actual radio language is just as interesting. X's are recorded numerous times and this meant static or natural interference. It is hard for us to believe at this date and time that the station was actually put out of service for periods of several hours from static alone. This static can still be most severe, but the quality of the receiver limited the capabilities of these first stations. Another favourite log entry is "Bi Tis". This meant that the operator had shut down his gasoline engine and was sitting back listening on batteries only. There were no speakers and the operators on duty wore large headphones continuously. They were capable of very low power transmission from these batteries, but the normal procedure was to start the gasoline engine and give them all the power available. These transmissions could be heard and copied for some distance by the naked ear that will give an indication of the racket made while transmitting. The operators at sea must have had some rather unpleasant experiences from the racket these first sets created, especially if they happened to have the misfortune of being located near some of the other crewmembers.

These log entries are most interesting and a few entries on the distance the station managed in the first months of its existence are as follow:

Thursday, September 14<sup>th</sup>, 1905, "Worked CA 190 miles from HX". CA was HMS CORNWALL.  
December 1<sup>st</sup>, 1905, at 12:30 AM, contacted SC, Siasconsett, Nantucket Island, Massachusetts.  
December 9<sup>th</sup>, 1905, at 12:20 AM "Ex TR's AA 240 miles east". I was unable to find the name of the ship with call code AA, but this ship communicated with HX Camperdown many times.

One early entry has me rather mystified. At 11:50 AM October 23<sup>rd</sup>, 1905, the station heard RA5 call RA but no reply. Do you suppose this was some kind of boat belonging to a ship? Hard to believe with the size of the equipment in use, and I suspect it was most likely a couple of military stations of some description, or some operator playing with his station.

One early entry is most interesting:

"The whole Wireless World Working – Quite the Job" at 9:00 PM, Sunday, October 15<sup>th</sup>, 1905.

The commercial operators were more or less snowed under from interference when the Naval Ships came near their stations. In true military fashion the Navy not only had a lot to say to each other but felt they owned the available air space. About the time of World War I the Naval Ships commenced their transmissions with a signal like our letters TUUU sent as one character today. This was the signal for all commercial or merchant stations to clear off the air and let the Navy stations through. But in 1905 this signal was a few years off in the future. A Naval Squadron was in the area of Halifax on October 21<sup>st</sup>, 1905, and the duty operator at Camperdown made the following entry:

“1:15 to 2:15 PM – Not a dot (strange) Fleet must be taking a holiday in wireless. Perhaps they are waiting for us”.

## **LADY LAURIER AND SABLE ISLAND**

The grand old lady of the East Coast, DGS LADY LAURIER, entered service from her Scottish builder’s yard in 1905. She made the fourth Canadian ship to be fitted with wireless and entered service equipped with her first call “LR” of the many she would wear out in the next sixty years of faithful service. One would assume this first “LR” call would have been “MLR” but not so. It was “LRD” according to a 1912 list of these call codes provided by Laval Desbiens. The “D” suffix may have stood for Dominion as in Dominion Government Steamer if it meant anything at all.

One of the first tasks of DGS LADY LAURIER must have been that of taking the construction crew from Camperdown out to Sable Island to construct the famous Sable Island wireless station. She departed on June 21<sup>st</sup>, 1905, and this station was constructed and put in service making its first contact with Camperdown “HX” at 7:15 PM on Saturday, June 24<sup>th</sup>, 1905. This log entry at Camperdown was made in red ink and large lettering.



*Canadian Coast Guard*

**DGS LADY LAURIER**

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*Warren E. Hagar*

This is the Sable Island Beacon in the old Marconi building 1937.



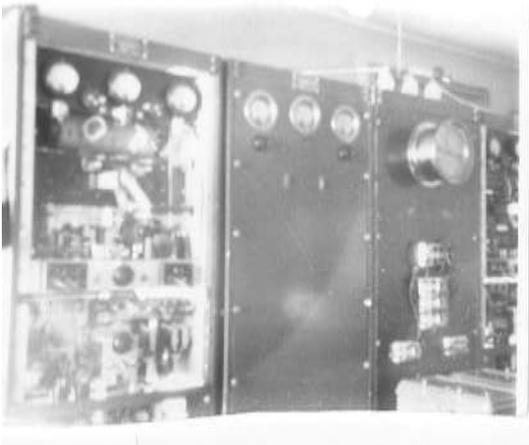
*Warren E. Hagar*

This is the Sable Island Beacon building in 1938.



*Warren E. Hagar*

This is the Sable Island Beacon transmitter in 1937.



*Warren E. Hagar*

This is the Sable Island Beacon transmitter in 1937



*Warren E. Hagar*

This is the Sable Island Beacon transmitter in 1937. These are all the photographs I have of Sable Island and I do not have a photograph of the communications station or the communications equipment.

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This first Sable Island station used call code "SB" until the Cape Sable station went in service, at which time Cape Sable used the "SB" call code and Sable Island became "SD". This of course is no big thing, but it creates a problem for me because I do not know whether it should be filed under the heading of human nature or stupidity. This is one of the many mysteries in the "radio world" of this area over the years. The call codes SB and SD will mean nothing until broken down as they sound in Morse code. The letter B is a dash and three dots and the letter D is a dash and two dots. It is hard for us today to use such similar calls and at that time it was a nightmare with their primitive equipment. Many entries in the old HX logs leave you sympathizing with the duty operator. Because of his X's he was unable to tell which station was trying to contact him. I can understand these stations entering service with these calls, but why one was not changed is beyond me.

## **ODE TO A WIRELESS TELEGRAPH OPERATOR**

When the air is fine and balmy  
and the ether's free and clear  
and the sigs come in like thunder

with a biff that jars the ear,  
Then the PBO\* is happy and he  
wears a sunny smile and  
doesn't curse the traffic that  
keeps coming all the while,  
But when X's come on steady  
with a sizzly frizzly roar  
and the sigs die down to nothing  
Then the common Op gets sore  
and the language that he uses  
melts the contacts off his key  
burns the "Bradfield" to a cinder,  
leaves the aerial hanging free,  
And the Old Recording Angel wears  
a stern and saddened look as he  
logs the bad Op's language in  
the big Recording Book.

- Poor Bloody Operator

by Harry Pearson, Sable Island, 1905

## **FREQUENCIES**

A few years after these first spark sets saw service, it was discovered that these bursts of electrical static produced by them consisted of waves, which are known in modern terminology as radio frequencies. Not only could these waves be measured, these spark sets could be designed to transmit and receive on certain waves. These waves have been known as wave lengths, meter bands that are in common usage, and frequency bands or frequencies.

As this newer equipment became available it meant that Camperdown, Sable Island, and Cape Sable could communicate with ships on one frequency and communicate with each other on another. This of course meant that communications would not be disrupted because they could use different frequencies. In other words Camperdown could be in communication with Cape Sable while Sable Island was in communication with a ship and no interference would be generated from the other stations.

## **THE FIRST GERMAN STATION**

When Marconi first put these apparatuses into service, mainly the United States, Canada, and the United Kingdom, he owned and operated all of them under companies formed in each country. Actually he tried, through various patents and through various business schemes, to control the whole of this marine communications around the world. This led to some very interesting legal battles when other companies started operating similar services. One notable case was when Kaiser Wilhelm II of Germany was sailing in the German Hapag Liner HAMBURG and wanted to send a telegram to Germany which did not have a coastal wireless station at the time, 1905. This telegram could have been sent to a station on the island of Borkum and then via cable to Germany. The Marconi Empire refused to accept messages from any stations other than Marconi. The HAMBURG was fitted with a German Telefunken station and therefore this telegram was refused. Needless to say one rather frustrated Kaiser Wilhelm II landed back in Germany and immediately set about creating a German wireless station that became Norddeich Radio. Norddeich Radio entered service on April 30, 1907, for communication with German merchant and naval ships. Telefunken is, and has been, the main German, marine communications organization. They build much of the electronics produced in Germany, but the main point of interest to us, which came about from Kaiser Wilhelm II's outburst against the Marconi Empire, was the alteration of the call codes. From that time on

all the Marconi call codes were given the prefix M at which time Camperdown became MHX, South Wellfleet, MCC, and so on around the world. The German stations were assigned a D prefix signifying Deutschland, the German name for their country. I also believe some of the American ships were assigned an A prefix because the old HX logs record a few such stations, which I have interpreted to be either a United States Naval or Coast Guard vessel, but was unable to actually break down to the ship's name. This move in the call signs was made on January 1<sup>st</sup>, 1908.

This made little if any difference to the actual operation of these stations. The operators continued to identify any stations heard by their sound rather than call code or name. For example Dr. Deforest was one of the prominent American experimenters and manufacturers and his signal became known as copper, or Deforest signals. Telefunken became Telefunken and Marconi became Marconi. In other words the operator would record strong signals heard, Telefunken, copper, or whatever he felt them to be. The operators continued the practice of using the two-letter suffix. Therefore on the air Camperdown remained HX, South Wellfleet, CC, Sable Island, SD, and so on.

## **THE FIRST DISTRESS CALLS**

Soon after the first wireless stations were to see service in ships, it became apparent that they were going to be more than a passing fad soon to be forgotten. The one thing that made this so obvious was the simple fact that ships that were fitted and found in a condition of distress were able to notify others and thereby save the lives of those involved. In many cases these lives would have most certainly been lost had there been no wireless station. This was one of the reasons Mr. Marconi worked so hard to give ships a voice capable of communicating many miles.

The first incident of wireless being instrumental in distress was on March 3<sup>rd</sup>, 1899, when the Goodwin Sands Lightship, on the south coast of England, was in collision with the steamship R. F. MATHEWS. This Light Ship had recently been fitted with wireless and was capable of calling for assistance.

The first distress call, as such, was sent by Relief Lightship number 58 on December 10<sup>th</sup>, 1905, with the effective signal "HELP" before it sank in a gale on station at Nantucket Shoals, Massachusetts.

## **CQD**

The landline telegraph operators had used the signal CQ for some time as a general signal for all stations on their various lines. They naturally brought this signal with them as a part of their operating habits they were to bring to the wireless and later radio world. When it became obvious that wireless was to play such an important part in these distress incidents, the Marconi Company sent instructions to all their operators that they were to use the signal CQD as a distress signal. Therefore any vessel finding itself in a state of distress could precede its communication with this signal and this communication would be given priority over all other communications.

## **REPUBLIC**

Jack Binns was one to use this CQD signal. On January 23<sup>rd</sup>, 1909, Jack was sailing in the British White Star Liner REPUBLIC and was outbound from New York for the Mediterranean with 460 American tourists as passengers. At 5:40 AM REPUBLIC collided with the Italian Liner FLORIDA inbound to New York from Italy with 830 emigrants on board, mainly people evacuated from the Messina earthquake. FLORIDA was not fitted with wireless when these two ships collided off Martha's Vineyard, Massachusetts, in thick fog. Jack's wireless station was located in the typical shack of the era, a wooden shack fitted on the boat deck. The collision left this shack in a mess and Jack had to operate his set in the fog and the cold. He managed to rig a canvas and cover himself in a blanket for some protection but at that he did much shivering while he spent seventy-two hours talking another liner and a sister ship, the BALTIC, in alongside to rescue his passengers.

Jack was made a hero from this incident and was credited with the saving of probably 1500 lives. The crew and passengers were transferred from REPUBLIC to the FLORIDA shortly after the collision and on the arrival of the BALTIC the majority of the FLORIDA's passengers and crew, and the crew and passengers from REPUBLIC were again transferred to the BALTIC. A considerable feat that was done by small life boats in rough seas during the hours of darkness.

FLORIDA managed to limp into New York for repairs but the REPUBLIC was not so fortunate and sank while attempts were being made to tow her. Jack was not the type to welcome any kind of publicity. He became an overnight hero both in the United States and his home in England and was stuck with the title CQD Binns for the rest of his life – which ended in a New York hospital at the age of 76.

1100 - Call MKC No ans.  
1105 - Call MKC No ans.  
1115 - Ad Nil B. tes  
1105 - Ch 14 from Ad B.  
1140 - Ad Nil B. Call MKC no ans  
1112 - 1 fm Ad B. give 'S' for calls 'H' seems unable raise him  
1115 - Ad B tells 'fa' to try tune up for 'MKC' as she is calling 'Baltic'  
1120 - Ad on par after 'S' by request of Ad B. tell Ad B. to  
1125 - Ad B tells 'fa' he heard 'S' say 'KC' about 115 miles east of Ambrose light  
Lat 40.17 Long 70  
1130 - 1 fm Ad B.  
1130 - E. G. M. C.

John Rae VE1AGN

This is the log entry of Camperdown HX recording the participation of the station in the loss of the REPUBLIC with call sign MKC after she was in collision with the FLORIDA. FLORIDA was not fitted with wireless.

This incident was the one to make wireless an important part of the shipping world and to knock the passing fad theory out of their vocabulary. From that date there became a mad scramble to fit more and more of the world's ships with wireless. Camperdown MHX was already a veteran by this time, nearly four years old and the station log entries for this incident are reproduced on these pages.

## E. GEORGE ECCLES

The world's first wireless operator to lose his life in the line of duty was a Canadian, E. George Eccles from Almonte, Ontario. George was one of 213 people in the liner OHIO that struck Steep Rock off British

Columbia on August 26<sup>th</sup>, 1909, seven months after Jack Binns experience with REPUBLIC. I was able to locate twenty-five incidents previous to OHIO in which wireless had been involved in distress situations. Although ships rarely get in trouble, but when they did, this new wireless equipment made a big difference in the outcome.

George Eccles sent the CQD signal and managed to have all on board OHIO rescued except three of his shipmates and himself. George had been a typical example of our first wireless operators. He had wandered around western Canada and the western United States as a landline telegraph operator. This voyage in OHIO was to have been his last because he had accepted a position in Alaska to operate a wireless station being erected at Seaward. Those who knew George remembered him mainly from his fast clear sending.

George did not know his CQD signals had been heard. The coast was not very well charted in that area in 1909 and was the reason OHIO hit steep Rock at 1 AM. Ships and coastal wireless stations were few and far apart but an alert operator at Ketchikan, Alaska, heard George's CQD and relayed it to the operators in the ships HUMBOLDT and RUPERT CITY.

George's body was found on the beach the next day with a head wound that indicated he had apparently been killed by fallen wreckage, or a swinging davit. A fellow wireless operator escorted his body home to Almonte. The town of Almonte erected a small memorial to his memory.

## **WIRELESS OPERATORS MONUMENT**

Battery Park in New York City has a monument:

“In Grateful Memory of Those Wireless Operators Who Made The Supreme Sacrifice At the Call of Duty They, Dying so, Live.”

On this monument are engraved the operator's name, the name of the ship, the date, and the general location; i.e. Atlantic Coast, Pacific Coast, North Atlantic, Off Azores, and so on.

The dedication of the monument took place on May 12<sup>th</sup>, 1915, and this monument is still maintained. The Veteran Wireless Operators Association has an annual memorial service in memory of these operators. George Eccles' name was the first of the ten operators to be engraved on this monument when it was dedicated in 1915.

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*Veteran Wireless Operators Association*

The annual Memorial Service, Wireless Operators Monument, Battery Park, New York City, Friday May 25<sup>th</sup>, 1979. The gentleman facing the camera on the right of the monument is the Norwegian Vice Consul, Kjell Nordang, who was present for ceremonies honouring two Norwegian Operators lost at sea. Girls had been sailing as Radio Officers since this equipment was first fitted in ships. Both these Norwegian operators were girls, twenty-four year old Bente Knudson, Radio Officer in MV NORSE VARIANT, and twenty-seven year old Kari Bergelien, Radio Officer in MV ANITA. Both ships were the same size and both sank in the same storm on March 22<sup>nd</sup>, 1973, shortly after they departed Norfolk, Virginia. Kari had transmitted a message to station VCS that was to be her last, but a station on Prince Edward Island claimed it heard her make three attempts at contacting another station on March 22<sup>nd</sup>. Motorman Stein Gabrielsen in MV NORSE VARIANT was the only person to survive the loss of both ships. Bente Knudson initiated a search that was to learn the fate of both ships, by remaining on duty and transmitting a distress call. She was not among the crewmembers that left in the life rafts.

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