This is the Third Section of the manuscript "Radio Stations Common? Not This Kind" by Spurgeon G. Roscoe Radioman Special Royal Canadian Navy 1956-1961 Graduate Radio College of Canada, Toronto Graduate National Radio Institute, Washington First Class Certificate of Proficiency in Radio # 6-108 Coast Guard Radiotelegraph Operators Certificate # 054 Amateur Radio Station VE1BC

THE FIRST INTERNATIONAL CODE OF SIGNALS AND CAPTAIN MARRYAT'S CODE OF SIGNALS

At this time, the first half of the nineteenth century, a great many people were seriously creating various means of visual communications by a good number of many ingenious contraptions. It soon became apparent that something would have to be done to come to a uniform system on an International basis, if a means of benefit to all was to work as efficiently as possible. Therefore a committee was formed to bring this about by the British Board of Trade. The first International Code was drafted in 1855. This code contained 70,000 signals and used only 18 flags. It was not published until two years later in 1857 and contained two parts. The first part contained International Signals, and the second, Signals for British Vessels only. At this same time the certificates of competency for seamen became a permanent requirement for all seafaring personnel.

Although this first International Code of Signals was adopted by most of the seafaring nations, it is interesting to note that Captain Marryat's Code of Signals remained the most popular and was still found in use as late as 1895. Some writers on this subject claim that Captain Marryat took over the works of Home Popham, who had created the code of signals used by Nelson at Trafalgar, while others claim his code was one he created alone. But, the fact remains that his was the one that was the most popular of them all.

Like so many who worked at bringing about an improvement in communications, Captain Marryat was an officer in the Royal Navy. He had his code of signals published through the firm of Richardson Brothers in London. The last issue he personally edited was the one for the year 1841, after which Mr. Richardson extended and improved this signal code. By the time the 1856 edition came out, it was rare to find a European vessel that was not using this code. This 1856 code consisted of six parts as follows:

- 1) A List of English Men of War.
- 2) A List of Foreign Men of War.
- 3) A List of Merchant Ships of all Nations.
- 4) A List of Lighthouses, Ports, Headlands, Rocks, Shoals, Reefs, &c.
- 5) A Collection of Sentences.
- 6) The Vocabulary.

As can be seen this would be a most valuable book to have on board a vessel with no other means of communication. Mr. Richardson was in the business of producing these books and intended to put out as good a product as he could. The 1856 edition cloth bound sold for twelve shillings. In 1926 the International Code of Signals for the use of all nations sold for one pound five shillings.

Captain Marryat had not only been stationed in Halifax but had visited the area frequently during his naval career. He became a very popular writer and took an early retirement from the Navy in order to devote his full time to writing. When he retired he was in command of HMS ARIADNE on station in the Azores.

Ironically, ARIADNE's call code was 43 in his code of signals, identical to Camperdown in the Nova Scotia Code of Signals.

The first International Code of Signals that was published in 1857 was a fairly large document in the form of a hard covered book. This was the origin of the official numbers assigned to ships, and more important for us radio operators, the origin of the four letter signal codes assigned to ships for a uniform and simple means of identification. For some unknown reason these four letter codes commenced with the letter H, and it is interesting to note that there was no way of telling the country in which the vessel was registered by these flag signal codes. This latter facet did not take place until the many revisions that came about from the 1933 edition of this International Code of Signals, when the Flag or Visual Signal Code and the Wireless or Radio Call Sign became one and the same.

Each and every vessel has been assigned an official number since this first International Code of Signals of 1857 and they are assigned these numbers to this day. It is also mandatory to carve these numbers inside a wooden vessel and have these numbers welded into a main frame of a steel vessel. These numbers appear on all the official records of each and every vessel but today the signal code is issued only to vessels fitted with some means of radio communication and these signal codes are issued by the authorities within the country that the vessel is registered. Therefore, if a vessel changes her country of registry this signal code changes accordingly. The four-letter signal code is a much easier and more convenient means of identifying any ship. Why we in Canada did not use our full international allocations is another of the many mysteries surrounding this portion of our communications. I will go into this in more detail later. Using these call codes means many things. The first and foremost is that any number of vessels can have the same name, but this call will signify the exact vessel in question. It is much easier to identify a certain ship by merely four letters, than by the lengthy names some of them have been assigned. Another fact is that it is a simple means of identifying the nationality of any vessel in question. Still further is the simple fact that many countries seem to find some excuse for splitting their call code allotments into various sections so that a certain prefix will identify one class or type of vessel from another. For some strange reason I have had an interest in this since I first became a radio operator. The first or first two characters of any call sign will tell me a lot about the station using that call sign. This I will also describe in more detail later.

HELIOGRAPH

As so often happens when something has been placed in service and has been working quite efficiently for some time, it soon becomes obsolete. By the time this first International Code of Signals became available, although it had little to do with any inland signal station, these inland signal stations very quickly became obsolete. Mr. Morse had perfected the landline electric telegraph to the point that the Nova Scotia Electric Telegraph Company was formed in 1851. This put an end to the majority of the visual stations, except for a few along the coast engaged in communicating with ships. These coastal stations would remain in service for another hundred years. Some, including Camperdown, were to use a variety of visual systems including that of heliograph.

I have found no actual record of heliograph ever being in use at Camperdown. So many of the old-timers who had at least a passing acquaintance with the station mention this fact that I feel certain that at one time it was in use. The Citadel Hill station can be seen from Camperdown, weather permitting, and I honestly feel the Army did communicate via heliograph over that distance. It was not until Marconi installed his first wireless stations around the coast that either the landline telegraph or the telephone was placed in service at this site.

Heliograph was a visual signaling system used during the late 1800's and remained to see some use as late as World War II. The Armies of several countries used this equipment and the equipment varied from country to country. It was a system of mirrors used to flash sunlight in Morse code. The distance that heliograph could normally be seen was 30 miles with the naked eye and much further with a telescope. The limiting factors were the clearness of the sky, the size of the mirrors used, and the length of uninterrupted sight.

Heliograph improved the speed of these stations in passing messages. A good operator using Morse code via light can copy around 13 words per minute. During the time that heliograph may have been used at Camperdown the station consisted of a staff of four soldiers. The one in charge held the rank of Corporal and the other three were signalmen, or heliographers. All four were assigned the necessary duties to see the station operate in an efficient manner. No doubt, one of the signalmen was cook. With reduction in staff it would also indicate that these signalmen were communicating with the vessels via Captain Marryat's Code of Signals or the International Code of Signals, one that did not involve the manpower that the first system required.

Heliograph certainly helped in speeding up communications. It is surprising how many messages can be handled or passed from one of these stations to another. In other words with the advent of the heliograph, plus a signal lamp for night use, using Morse code, good operators could move much traffic in the form of messages over these circuits.

THE TELEGRAPH

The telegraph preceded the railroad along the main arteries of the province of Nova Scotia. Some locations had telegraph service for as much as twenty years or more prior to a railroad line running through their area. The telegraph lines were installed in Saint John, New Brunswick, connecting New York before they were installed around the Bay of Fundy to the city of Halifax. This produced a most interesting bit of history for Nova Scotia in that a Pony Express was operated – every bit as wild and woolly as any out west. The reason for this was that the world was every bit as hungry for news then as it is today. On the arrival of a ship in Halifax from Europe a pony-express man would obtain the latest newspapers normally rowed ashore from the vessel in the approaches to the harbour. On receipt of this he would ride like mad, obtaining a fresh horse at various relay points, until he reached the Annapolis Basin. There the news was placed aboard a small steam packet, which was awaiting his arrival, and it would run full tilt for Saint John, so that this news could be telegraphed to New York City. This express operated for less than one year but none the less was every bit as any other Pony Express.

The telegraph lines eventually reached the city of Halifax, putting the Pony Express out of service immediately. The town of Digby opened its first telegraph office on December 3rd, 1855, on the second floor of a store then owned by a Mr. Edward M. Marshall, located on the eastern side of Water Street. This was four years after the formation of the Nova Scotia Electric Telegraph Company by an act of the Provincial Government in 1851. Digby's first telegraph operator was John Robinson who received a salary of 25 pounds per annum payable in monthly installments. The receipts for January 1856 were 6 pounds 14 shillings and 4-1/2 pence. The balance for the year ending December 1856 showed one penny in favour of the Company, but the main expenditure was for office furniture that would not require replacing for some time. The balance for this Digby office for the year of 1859 showed 7 pounds 5 shillings and 10-1/2 pence in favour of the Company. Therefore, this new means of communication was well patronized and showed a good profit to the Company, the Provincial Government of Nova Scotia.

It is practically impossible to try to explain the value of money in 1855, or compare it with anything we could understand today. But, should it be of any help, the Captain of a Saint John, New Brunswick, ship "signed-on" in 1878 for a salary of 15 pounds per month with a gratuity of 20 pounds at the end of the voyage if it was terminated in a satisfactory manner. The Mate who signed on with this Captain was paid 10 pounds per month, and the Second Mate 7 pounds per month. This means that Mr. Robinson, the telegraphist in question, was paid around 2 pounds per month, or to be more explicit something less than half of what this second mate received. My experience at sea in the 1970's was for the Radio Officer to be paid much the same as the second mate. Naturally, salaries vary a good deal from one job to another today as they did in the 1800's.

There was a telegraph office in operation at Weymouth, Nova Scotia, in 1858, at which time Mr. C. D. Jones was the Manager and Operator. The Western Counties Railroad did not open for service between Digby and Yarmouth until September 29th, 1879. The first telegraph offices around Nova Scotia were owned by the Nova Scotia Electric Telegraph Company. In May 1860, the American Telegraph Company leased all telegraph lines in Nova Scotia and controlled the telegraph operation from Newfoundland to

Louisiana, retaining the Directors and Managers of the old Nova Scotia Electric Telegraph Company. The Western Union Telegraph organization took over this company after a few decades of its operation. The Western Union Company retained offices within the province of Nova Scotia until well after World War II. The telegraph was a big part of the operation of all railroads soon after they started operating. The railroads had a combined Railroad Station Agent – Telegraph Operator at most of their Railroad Stations as soon as they were in operation. The railroad used telegraph for various train orders and other railroad business. I've not found the date when the railroads of Nova Scotia started handling routine message traffic. They handled these messages as far back as I can remember and took this service over completely when Western Union terminated its operation in this area. As can be seen, it was a period of nearly 24 years that the telegraph operated in Digby prior to the arrival of the railroad.

The following is a list of the Railroad Stations of the Dominion Atlantic Railroad, the number of the station, the name or location, and the telegraph call code for those that were fitted with telegraph. The Dominion Atlantic Railroad was a branch of the Canadian Pacific Railroad that operated in the province of Nova Scotia.

Halifax Sub.

1000 Halifax	OC
1001 Armdale	
1002 Fairview Junction	
1003 Rockingham	А
1004 Bedford	BD
1005 Windsor Junction	WI
1006 Beaverbank	BN
1007 Fenertys	FN
1008 Groves Quarry	
1009 South Uniacke	
1010 Mount Uniacke	BU
1011 Quarry	
1012 Stillwater	SW
1013 Ellershouse	US
1015 Newport	NO
1016 Three Mile Plains	
1017 Windsor	RW
1018 Falmouth	FA
1019 Shaw Bog	SB
1020 Hantsport	HN
1022 Avonport	AV
1023 Horton Landing	Η
1025 Grand Pre	GP
1026 New Pit	
1027 Wolfville	CY
1028 Port Williams	MS
1029 New Minas	NM
1030 Kentville	HB



Public Archives Nova Scotia This is the railroad station at Kentville, Nova Scotia, about 1900. This was the home of landline telegraph station "HB".

Kentville Sub.

1030 Kentville	e	HB
1089 Coldbro	ok	CB
1090 Cambrid	lge	JC
1093 Watervil	lle	V
1094 Berwick		BK
1096 Aylesfor	d	JD
1097 Auburn		AU
1098 Kingston	ı	Κ
1099 Wilmot		NY
1100 Middleto	on	DN
1102 Brickton	l I	BKN
1103 Lawrenc	etown	Л
1104 Paradise		RA
1105 Bridgeto	own	BG
1107 Tupperv	ille	UK
1108 Round H	Hill	RO
1109 Round H	Iill Pit	
1110 Annapol	is Royal	AN

Kingsport Sub.

1030 Kentville	HB
1062 Aldershot	DR
1063 Mill Village	
1065 Centreville	CV
1066 Ford Crossing	
1068 Sheffield Mills	
1069 Hillaton	
1070 Canning	I was told RS but needs confirmation.
1071 Pereau	
1073 Kingsport	

Weston Sub.

Yarmouth Sub.

1110 Annapolis Royal	AN
1111 Clementsport	CN
1113 Cornwallis	RN
1114 Deep Brook	DB
1115 Bear River	BR
1116 Digby	BY
1175 Digby Wharf	
1117 Acaciaville	ACAC
1119 North Range	NR
1120 Plympton	PN
1121 Weymouth	QN
1123 Church Point	RU
1124 Little Brook	LB
1125 Saulnierville	SA
1126 Meteghan	AC
1128 Hectanooga	NG
1129 Brazil Lake	В
1130 Ohio	0
1132 Hebron	MI
1133 Yarmouth	J



Mrs. Ellsworth Kinney This is the town of Weymouth, Nova Scotia, 1905. The Railroad Station is up from the two three-master schooners awaiting a lumber cargo. The landline telegraph served this town for at least 110 years and the station with call code "QN" was housed in the Railroad Station.

Truro Sub.

1017	Windsor	RW
1035 I	Dimocks	DKS
10361	Mantua	MTA
1038 I	Brooklyn	BO
1039 \$	Scotch Village	SV
1040 1	Mosherville	MO
1041 \$	Stanley	
1045 \$	Stanley Airport	
1047 I	Lowes	
1042 0	Clarksville	CS
1043 1	Midway	
1044 I	Kennetcook	KC
1046 1	Upper Kennetcook	
1048 I	Doddridge	
1049 I	Burtons	
1050 I	Hayes	
1052 \$	South Maitland	MA
1053 (Green Oaks	
1055 I	Princeport Road	
1057 (Clifton	

1058 Truro OR

It can be seen from this list that Halifax had a number of telegraph stations. Telegraph lines ran into the city from the South Shore and also from Truro. The only detail I was able to locate was that Halifax had two main stations serving these lines as follow:

Halifax HX was the Wire Chief and handled any technical requirements. Halifax AX was the Commercial Station and handled the routine message traffic.

There must have been some connection with Dartmouth and the line that ran out to Musquodobit.

The two earliest railroad lines in Nova Scotia were the ones stretching from Halifax to Windsor and from Halifax to Truro. Construction commenced in 1848 and these lines opened for service in 1857. Because of the bridges required in the Bear River area, it was not until the summer of 1891 that a railroad train was able to run from Halifax through to Yarmouth.

The construction of these bridges was quite an engineering feat. They were constructed in wood until technology advanced to the point the wooden bridges were replaced with steel several years later. These bridges had to be constructed with a swinging centre so that they could open and let the many sailing vessels go up and down these rivers. There were a lot of these bridges throughout the province of Nova Scotia and the majority had openings for the use of sailing vessels. Three of these bridges were across the Sissiboo River at Weymouth, the Moose River at Clementsport and the one across the Bear River.



Public Archives Nova Scotia This is an early railroad bridge near Kentville, Nova Scotia, about 1900. This bridge is much smaller than those required for this railroad around Bear River. The telegraph code used over the landline telegraph for its 120 years (in Nova Scotia) was the revised Morse code of 1844 and this was known by many as the American Code.

A dash was equal to three dots. The space between parts of the same letter was equal to one dot. The letters and punctuation with double characters had a space equal to three dots between the characters. The space between two letters was equal to three dots. The space between two words was equal to seven dots. The L was a longer dash than the T and the zero was a longer dash than the L.



This is the Canadian Pacific Railway Station Agent sending a telegraph message at Pendleton, Ontario.

Various organizations and people hired their own personal telegraphist during the heyday of the telegraph. For example, if an important political figure held a meeting at some small town he would take along a telegraphist as a member of his party. When this person had a message or press bulletin to send back to his office or the major newspaper of his area, this telegraphist would take it to the nearest telegraph office and take over the operation of the telegraph. He would have the Wire Chief on this line connect him as near as possible to the office of destination – on occasion direct into this office. These telegraphists were some of the best available and could send fast clear code. The terminus operator would be of a similar caliber. These two were capable of passing lengthy messages as fast as possible and the company which owned the lines involved would receive a fee for the time the lines were in use. This was a rather prestigious and most interesting position.



Canadian Pacific M5276 – photographer N. Morant This is the Canadian Pacific Railway Station Agent, R. Lefebvre, receiving a message via landline telegraph at Hudson, Quebec, 1950.

Many private companies were sufficiently large to hire their own telegraphist and have their own company telegraph line. These were mainly the large mining, lumbering, and fishing companies. The largest users of

telegraph on an individual scale would have been the various armies of the different nations around the world. Most armies used landline telegraph for several years after World War II.

The Camperdown Signal Station opened as a military project and retained that distinction until a few signalmen from the Royal Canadian Regiment of the Canadian Army were removed in the early 1920's. This makes it very difficult to find records of its activity and therefore little is known of the actual events taking place on the site. I was unable to learn if telegraph had been installed by the Army and I know very little of the operation of heliograph from the site.

THE FIRST SETTLERS

One must try to understand the whole of the history of the area in order to understand the history of communications; it is all so very much interconnected. Although I do not know as much of this history as I would like, there are a number of things that appear to stand out.

One thing is rather obvious, that as soon as the European or white settlers started arriving, they began constructing their own vessels out of the timber readily available from the vast forests covering the area. Naturally these forests had to be removed to produce the farms so necessary in order for the new settlers to survive. These forests not only produced the ships, but the actual buildings to protect these settlers and their possessions, plus the fuel to heat their dwellings during the long winters, which are as much a part of this country as the land itself. The things that are moved by motorized vehicle today would have been carried by boat until some time after World War I. Therefore, lighthouses, buoys, fog signals, and the coastal signal stations became necessary.

Wars have brought about great changes in our societies throughout the years. People seem as though they are at their best in making changes when trying to kill each other. If any good comes from these changes, it normally appears during or soon after a war. The first Thrum Cap Station was constructed in 1762. The Chappes designed their first Signal Stations during the Napoleonic wars in which France and England were directly involved. The British attempted to equal or improve upon this signaling system. The reason the Duke of Kent went about changing the installations so vigorously around this area was he expected another war with France. There are records which show another but minor problem the Duke of Kent had in establishing his signal stations throughout Nova Scotia. Occasionally those posted on a station next to the coast deserted as a complete unit to an American vessel that came close by, leaving no one at the station. Then there was the skirmish between Britain and the United States during the first part of the century, the war of 1812. There was the civil war in the United States during the 1860's and a number of Nova Scotians fought on each side in this war. There have been Canadians, both French and English, who have fought with and for the Americans in every war they have had to date. Men from this area fought in the Boer War in South Africa from 1899 to 1902. But, during the 1800's we, in this area, were rather fortunate that all was relatively quiet. All these incidents mentioned affected the local communications somewhat, but because there was no direct involvement, nothing outstanding took place.

Another point I have found most interesting. Since I do know that I am a descendant of the English speaking section of these settlers going back to the very first to arrive, is that the English settlers were different from the French. Different in the fact they remained by themselves and did not mix with the native Micmac Indian or the French who preceded them. Within the last few years the Micmac first nation Indian tribe changed the spelling of their name to Mi'kmaq. The French readily intermarried with the Indians. As soon as they arrived, the French Priests converted the Indians to their Catholic religion.

This history is more intriguing to me because of the fact my wife is a descendant of the Acadian French who were expelled by the English in 1755. When these French families returned to Nova Scotia they formed a colony along the shore of St. Mary's Bay, stretching from Weymouth to Yarmouth. From the first they have been known and respected for their honesty and fair play. For example, until a proper postal service was installed in the province, it is a well-known fact, that if anyone wanted to send a letter from Digby to Yarmouth, he merely gave it to the first of these French residents he met. Delivery was guaranteed.

The interconnection or the crossing of the English French line, with my wife's family, did not take place until the time of her father and mother. Religion played a very important part of the day-to-day life of early Nova Scotia, much more than it does today. I consider this fact as the main issue involved in this segregation. The French were strong or totally Catholic, whereas the English were Protestant, two sects much opposed to each other.

Having eleven living Grandparents when I was born, I was very fortunate to know many from my family tree. It seems to me rather strange that more intermingling did not occur. They were a good cross-section with all the peculiarities associated with human-type beings. Realizing this and knowing little has changed since the world began it is rather odd that with these, so few in such a small area, there was very little cross-cultural communication.

THE ACADIAN FLAG

There is another point connected with this subject that is of interest. Although these French descendants are much the same today as they have been for over two hundred years, some appear more militant towards the English. At least this seems more obvious now than at any time previous. The fact I find more interesting is that they chose a flag in 1884 that is now displayed regularly. Instead of choosing something containing the flower of the lily (fleur-de-lis) they chose the current French Flag; the red, white, and blue tri-colour with the addition of a yellow star in the canton.

Acadian is the name given these first French settlers, a mistake on their part. They found the Micmac Indians using a word sounding like AK-A-DE, which translated "place of", and thought it was the name these people called their country. Therefore this became Acadia and these people became French Acadians. At least this is one of several theories I have seen. Why these Acadians chose this flag is a mystery, their French connection was severed 43 years before France adopted this flag. I could easily understand their flag containing the flower of the lily, but possibly this falls into the same category as that of Newfoundland adopting the actual flag of Great Britain as her provincial flag for many years.

If I have interpreted this history correctly, France had made it a tradition to totally ignore these people, so why they would want a flag signifying any close union to such a so-called mother country is beyond me. I can understand them, to a point, wanting to retain their language, religion customs, culture, and so on. But, if France had shown any sympathy towards these people, there are several times she would have stepped in and done more to help them. One time was right after the expulsion in 1755. Those that were expelled, on reaching the colonies that now make up a part of the United States, were treated and lived as perhaps the lowest animals on earth. When they could tolerate this no longer, they did not create any real disturbance or mischief; they merely elected certain among them as their spokesmen, who cleaned themselves up, as best they could, and approached the proper authorities for help. One hell of a price to have to pay for the misdeeds of a few of their so-called leaders, mainly one priest who was alleged to have been a mental case, but had instigated the Micmac Indians into making blood curdling raids on the English settlements. Then again, maybe a French Catholic is not permitted to question the actions of his priests or the actions of his mother country. This priest was from France and it is very hard to understand this today and a lot of the problem appears to be the Acadian people. There were no Acadian priests, Acadian nuns as nursing sisters, teachers and so on. There was no Acadian army to protect their people and their country. If they had these people the British would have had something to negotiate an agreement or settlement and the history today would be quite different.

There are several groups or areas that now contain remnants of these Acadian French. One is the State of Louisiana that has the main body of those expelled to the American colonies. Another is along the shore of St. Mary's Bay stretching between Weymouth and Yarmouth, Nova Scotia, where live descendants of those who hid in Nova Scotia after the expulsion. Another area is along the northeastern portion of the province of New Brunswick in the area of Shippegan and Caraquet, where live the descendants of those who returned from the American colonies after the expulsion. Still another two areas are the western portion of the province of Prince Edward Island and the area of Arichat on Cape Breton Island, Nova Scotia.



LOUISIANA ACADIANS

Many of the Acadian French who were expelled in 1755 made their way eventually to the present state of Louisiana. Recently there has been a restoration of interest in retaining their French language and customs in this area. For many years these people have been known as "Cajuns" and the area they call home in Louisiana is now known as Acadiana. With this recent interest on their part in retaining their French identity, they have designed their own flag. This flag is the one that makes the most sense (to me) for these Acadian French.

Thomas J. Arceneaux, the former dean of agriculture at the University of Southern Louisiana, designed this flag. The flag consists of three main parts: a white equilateral triangle at the hoist, and two horizontal bars on the fly, the top bar royal blue and the bottom one red. The upper side of the triangle is the hoist end of the blue bar and the lower side is the hoist end of the red bar.

In the center of the white triangle is the yellow Our Lady of the Assumption Star. Three white fleur-de-lis the flower of the lily of Bourbon, France are on the blue bar and a yellow castle, the Tower of Castile of Spain is on the red bar. This is, I think, a most appropriate flag for the Acadian French.

THE QUEBEC FLAG

Other than the odd bit of inter-marriage, my wife's Grandmother being one example, Quebec and the French of that area have remained separate from these Acadian French and were not involved with the expulsion of the Acadians in 1755. The people of Quebec adopted their flag, which is the provincial flag (of the province) in 1948. This is a blue flag containing a Greek or St. George's cross in white. This cross stands for the cross left on Quebec's soil by Jacques Cartier, who discovered the Gulf of St. Lawrence in 1534. Within each of the four rectangles created by this cross is one white fleur-de-lis. This is a much more appropriate flag for French-Canadians than the Acadian flag of this area who had their association with France terminated in 1758, thirty-one years prior to France adopting their tri-colour flag in 1789.



THE BRITISH NORTH AMERICAN SHIPS

Ships have played a big part of the history of Nova Scotia. The most common of these vessels were small and were used much the same as the family automobile is today. They were used for everything from fishing and hauling various cargoes to a family's afternoon outing or picnic. There still are fishing and pleasure craft around that have been built from the knowledge gained through these early sailing vessels. But up until the first half of this century the coast was literally alive with these little sailing boats, the more common being small schooners and shallops.



Graham Hardy This is Hall's Harbour, Nova Scotia about 1900 and these are typical two masted schooners that were so plentiful around the coast of Nova Scotia for many years.



Graham Hardy

This is Hall's Harbour, Nova Scotia, about 1900 and one can see where the two photographs were joined at one time. The Lighthouse is the Amateur Radio Lighthouse Society's number CAN614.

It was during the twenty years from 1860 to 1880 that the shipbuilding industry reached its peak in Nova Scotia. Many of these ships were sold in the United Kingdom and many were built especially for overseas buyers. Some of the names assigned to these early ships can be seen on ships of Britain's present merchant fleet because some companies use the same names over and over as their ships are replaced.

I have been unable to locate a ship that flew the Nova Scotia flag as a signal of the vessel's registry prior to the forming of the Dominion of Canada in 1867. This particular flag was granted by royal charter and first flown in 1621, and is the provincial flag of the province to this day. These ships were of British registry and flew the flag as though registered in Britain. They were known as British North American ships and more commonly abbreviated to the initials, thus a BNA ship.



The flag of the province of Nova Scotia

The records indicate that there was a difference in these sailing ships much the same as there is today. The owners of the particular ship dictated or determined the quality of the material, design, and comfort found in the ship.

A merchant ship not only has to pay her own way she has to show a profit of some form to her owners in order to justify her existence. Therefore the world economic situation determined life in these older ships, just as much as it does today. In other words, if the times are economically good, there is lots of work for a merchant ship and she will be kept busy. On the other hand if the times are economically bad, there is little work and the ships that continue to work do so at less profit and are considered lucky to be still working. During these times some ships are laid up for want of work. What this means in terms of conditions is that during the good times everyone is working. During the bad times some are left unemployed and therefore only the best are hired and they have to produce at their best or they know they will soon be replaced. If the merchant ship has had no trouble in hiring a good crew, she is likely to go about her day to day routine with everything running smoothly. But if times are economically good and the merchant ship has had trouble in hiring a crew, she is taking what she can find, and in this case all hell can cut loose.

A good example of this was during the 1880's. Times were economically good and therefore merchant ships were having trouble in locating good crews. The practice then was to hire the crew for the movement of the ship. In other words, while the ship was loading or discharging her cargo, which would take some time compared with today's standards, the crew was paid off. Once the ship was ready to sail again another crew would be rounded up and hired. On occasion some of the lazy, unskilled, and so on, would find themselves in a BNA ship.

A BNA officer was not one to put up with anything but the best of anyone in his ship. If a certain individual was not up to his expectations he would revert to a good old-fashioned cuffing, better understood by its proper term a boot in the ass, if need be.

Great Grandfather George Sydney Spicer lost a cousin through these circumstances. Daniel Spicer was the Mate, with another cousin, Captain George Dimock Spicer in the full rigged ship E. J. SPICER (1268 tons built at Spencers Island, Nova Scotia, 1880). This ship had been named for Captain Spicer's wife, the former Emily Jane Morris. As can be seen the descendants of Loyalist Robert Spicer were prominent in all areas of Nova Scotia's wind driven fleet.

On August 4th, 1882, while the E. J. SPICER was at anchor in New York and getting ready to sail for England, Dan Spicer gave some orders to an Irish seaman. The seaman apparently gave Dan more lip than action so Dan went after him, in order to straighten the guy out at the beginning of the voyage where it counted. A fight quickly developed. The seaman grabbed the capstan bar. Dan managed to wrestle the bar from him and as he did so the seaman grabbed his knife, stabbed Dan in the chest killing him instantly. At the time Dan was not yet thirty, a fairly big man around six feet tall, and had recently been married. He had just seen his wife off for her trip back home to Nova Scotia, after visiting with him while they were in New York. This incident was to make the vessel well known, but shortly after another large American vessel was to be involved in a similar incident.

The year before this distressing incident, Captain Spicer had made some excellent trips with the E. J. SPICER. He sailed from Norfolk, Virginia, on January 14th, 1881, and arrived in Liverpool on February 4th, making the trip in twenty days. He made the round voyage from Norfolk to Liverpool and back to New York, including time spent in port, in the fast time of 58 days.

Captain George Spicer was to retire from a sea-going career spanning a period of 52 years. If this incident involving Dan did not leave him with recurring nightmares, another would. In 1898, while off Luzon in the China Sea, he saw his son washed off the jib boom during a storm. He was unable to do a thing about it. His son was lost and only 18 years old.

When we think in terms of ships today, we naturally think of these old sailing ships as much larger than they actually were. The sails of course made them look a lot larger, but the largest of these ships was around 2,000 gross tons a hundred years ago. For example the figure of 1600 gross tons was the magic figure in that a ship measuring that size or larger had to be fitted with a radio station and carry a Radio Officer when engaged in foreign voyages. Therefore few of these old sailing vessels would meet this requirement, although the first laws governing the compulsory fitting of radio or wireless read much differently, which will be explained later.

THE INTERNATIONAL CODE OF SIGNALS

Looking back on some of the statements left by some of the earliest committees appointed to look after the International Code of Signals, one gets the impression they are practically admitting defeat to Captain Marryat's Code of Signals. His code remained the more popular for some time after the first International Code of Signals. It was soon apparent the 1857 International Code of Signals was very inadequate. Although this code only contained eighteen flags it did constitute 70,000 codes, much too complex to record here. Therefore the committee appointed for this purpose, sifted through the many suggestions it received for improvements to this code. One of the main suggestions was from France wanting the letter X and Z included in the Alphabet. In the end, the committee decided to rewrite the whole code and came up with a complete alphabet containing a flag for each of the 26 letters in the alphabet. This, of course, meant that there were now 26 flags instead of the 18 of the old code, and meant that the old four-letter codes could be terminated and that many of the three-letter codes could be reduced to two. This naturally meant less chance of error in both reading and bending the necessary flags on to make a hoist. This became the first major change in the International Code of Signals and once approval was given by all the various maritime nations involved it came into force on January 1st, 1902.



John Rae VE1AGN from Brown's Signal Book 1917



John Rae VE1AGN from Brown's Signal Book 1917 These are the flags and pennants making up the International Code of Signals that went in service in 1901.

The major point concerning this code, which is rather noticeable, is that there was no provision made for hoisting figures, and this code did contain an additional pennant known as the code flag that was also used as the answering pennant. Numeral signals were signaled with a prearranged code as follows:

Code Flag over Flag M meant that the signal that follows is from the Numeral Table. The Numeral Table was rather interesting. Flags for the Alphabet from A to K meant, as one would expect, the digits from 1 to 11 inclusive. Then it changed as follows:

$$L = 22$$

 $M = 33$
 $N = 44$
 $O = 55$
 $P = 66$

There are two other prearranged codes that had to be kept in mind. Code Flag over Flag N indicated the decimal point. Code Flag over Flag O meant that the numeral code had ended.

A couple of examples are now necessary to explain this in more detail. To make the numeral or figure group 78700 it would be done as follows:

1st hoist Code Flag over M (the signals which follow are numeral signals)
2nd hoist G H 78
3rd hoist G V 700
4th hoist Code Flag over O (numeral signals are ended)

Again, to make the numeral or figure group 9.99876 it would be done as follows:

1st hoist Code Flag over M (the signals which follow are numeral signals)
2nd hoist I 9
3rd hoist Code Flag over N (the decimal point)
4th hoist S H G F 99876
5th hoist Code Flag over O (the numeral signals are ended)

All very interesting, but this code is the one which could not stand the rigor of the signal requirements of World War I, which has been mentioned in many texts dealing with that war in detail. This 26 flag alphabet code, it should be noted, was identical to our present Alphabet Code with the exception that the pennants for the letters C, D, E, F, and G are now our numeral pennants 1, 2, 3, 4, and 5. This meant another major change in the International Code of Signals that will be explained later.



John Rae VE1AGN from Brown's Signal Book 1944

These are the flags making up the current International Code of Signals that went in service in 1930. Note the changes between this and those of the 1901 Code.