

October 30, 2007

This is the Tenth 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

KENT LINE LIMITED AND ATLANTIC TOWING LIMITED

Many tankers over the years have been registered in Canada, carried a Radio Officer and were owned by a number of the world's major oil companies via a Canadian subsidiary. The only company I will mention is located in Saint John, New Brunswick. The radio operators in this fleet contacted station VCS on a regular basis and some of these operators came ashore and operated the stations in this area.

The ships making up this fleet that were fitted with radiotelegraph were registered under Kent Line Limited. This fleet started in 1934 with a 729 gross ton tanker named ELKHOUND. She was registered in Saint John, New Brunswick, and assigned call sign VCXL. She did not have a radio of any description and the call sign was for visual communications only. ELKHOUND was sold to B. Hill and Sons at Bristol, England in 1943 and was last listed in 1948. She had been built at Bristol in 1929. This fleet started immediately after World War II with the WILDWOOD PARK a 10,000-deadweight ton tanker. This tanker was renamed IRVINGDALE in 1947 and was registered in Canada with her original call sign VDYJ. In 1952 another Park ship, the NIPIWAN PARK joined this fleet as the IRVING LAKE, also with her original call sign VDZN, but because she was a former 3,600 deadweight ton tanker, was fitted with radiotelephone only. After that the tanker fleet fitted with radiotelegraph was:

VDYJ IRVINGDALE
VCKX IRVING WOOD
HPBN IRVING BROOK
ELYJ IRVING GLEN
CYNJ IRVING STREAM
CYML IRVING OURS POLAIRE
VGWT M. J. BOYLEN
VXZR H1070
VGLN IRVING ARCTIC
VCRJ IRVING ESKIMO
VCRZ IRVING NORDIC
VCTG IRVING OCEAN
VCWX IRVING CANADA



Kent Line Limited

IRVING ESKIMO

Each of these ships will require a brief description in order to be understood. I have listed them with their Canadian call signs while they were registered in Canada, but two were never registered in Canada. IRVING BROOK is shown with her Panamanian call sign and was damaged early in her career. Her stern section became the stern of IRVING STREAM. IRVING GLEN is shown with her Liberian call sign.

The M. J. BOYLEN was renamed H1060 and four of these tankers were changed from Canadian to Bermuda registry:

ZCEH IRVING WOOD
ZCEI IRVING STREAM
ZCEJ H1070
ZCEK H1060

Two were registered in the Bahamas:

ZFNN IRVINGDALE
ZFNW IRVING GLEN

In 1947 IRVINGDALE was fitted with a Marconi station. This station had the Reliance transmitter, Salvor emergency transmitter, Seaway radiotelephone, Mercury main receiver, Electra high frequency receiver, and Alert 500 kHz receiver. This was the equipment we had to learn inside and out while I was at Radio College of Canada, Toronto, in 1961. The only piece of equipment I had to study at Radio College and sailed with later was the Marconi Lodestone Direction Finder. IRVINGDALE was also fitted with a Decca navigator and a very high frequency audio modulated station for use between 156 and 174-mHz. This is according to her 1947 Radio Licence so has to be accurate but hard to believe. VHF did not become popular until the 1970's.

When the Bahamas gained their independence from Great Britain this country was allocated the block of call signs from C6A to C6Z and sometime after this IRVING GLEN's call sign became C6NW.

IRVINGDALE had been scrapped by this time. IRVING GLEN was scrapped in 1979 and her RCA 5U station went with her. IRVING GLEN was replaced with the IRVING ESKIMO.



Radio Officer Skid O'Sullivan

This is Radio Officer Skid O'Sullivan on duty in MV IRVING GLEN with call sign C6NW.



Radio Officer Skid O'Sullivan

This is the Radio Room in IRVING GLEN with call sign C6NW.

The IRVING OURS POLAIRE was fitted with a Marconi Globespan station, but to my knowledge never carried a Radio Officer. The IRVING WOOD never carried a Radio Officer, but was listed as capable of transmitting on 500 kHz with emergency equipment, possibly a lifeboat radio of some description. How this British ship, IRVING WOOD with call sign ZCEH of 2,491 gross tons managed to sail so long in this area without a proper radio station and Radio Officer was one of many mysteries.

H1060 and H1070 had the standard Marconi Globespan station and for some reason were changed back to the Canadian flag in January of 1980. This change in registry probably involved access to fuel in some political manner. Naturally these two ships did not get back their former Canadian call signs.

VCJQ H1060
VCKW H1070

Both the H1060 and H1070 were laid up at Sydney, Nova Scotia, in 1981 when the IRVING OCEAN joined this fleet. They both went to the ship breaker's yard from there.

IRVING STREAM's radio room was fitted with equipment of many nationalities. She used a British Marconi Atalanta and a British Eddystone for receivers. Her main high frequency transmitter was a 375-watt German Telefunken and her medium frequency transmitter was a Netzteil, Sender MS 350, manufactured by the Danish Hagenuk Company. The emergency transmitter was also from the Hagenuk Company. Usually these "hodge podge" stations were easier to operate and maintain because the components were not all crowded into the one container. This station gave a good clear signal when it had the proper voltage fed to it from the main generators in the engine room. One voyage gave us a rough time at station VCS because of this poor voltage. These older stations always sounded better because of the many harmonics that made up the signal from their transmitters. The signals from the last radiotelegraph transmitters had been perfected to the point of boredom. The radiotelegraph stations prior to the last of these stations in service were such that one could tell, with practice, the make of the transmitter before the operator identified with his call sign. IRVING STREAM was scrapped shortly after IRVING OCEAN joined this fleet. IRVING OCEAN was launched in 1981.

During the mid 1970's the Saint John Shipbuilding and Dry Dock Company, one of the many companies that made up the Irving Empire, built seven tankers for the Esso Oil interests and six for the Shell Oil interests. The seven Esso tankers with their Liberian call signs were:

A8PR ESSO EVERETT
ELXN ESSO HALIFAX
6ZLD ESSO MONTREAL
5LFY ESSO PROVIDENCE
6ZRL ESSO SAINT JOHN
5LPR ESSO SAINT PETERSBURG
A8XC ESSO TORONTO

The six Shell tankers with their call signs were:

D5OZ ELONA
D5MJ ENSIS
GXUN ENTALINA
GVUR ERINNA
GXXQ ERODONA
GVUQ ETREMA

The first two on the list were Liberian flag and the other four British. Those who know shells will recognize these names because Shell Oil named their ships after various shells. The hierarchy of Shell Oil neither understood nor appreciated the full potential of the marine communication world. I found several cases where the various national organizations made Shell clean up the working and living conditions for their Radio Officers within the ships they owned in those countries. Yet Esso was just the opposite. If you happened to work a poor Esso radio officer you did not work him for long. Two of these radio officers come to mind. The Spanish radio officer sailing in ESSO BAHAMAS with call sign 6ZBN that sailed around eastern Canada and Hudson Bay in the 1970's was perfection to say the least. The Filipino radio officer in ESSO KURE with call sign 5LSI around 1974 was another. Those who know the continental radiotelegraph code will note that 5LSI has one dash only. This Radio Officer transmitted this call sign as a musical wave of dits with the one dash right where it should be. It was definitely 5LSI and I spent all summer practicing but never came close to imitating the way he transmitted it.

The Irving Oil tankers carried excellent radio officers and they were not always Canadian. Quite a few were British and some came from the many other nations one can think of. When the Irving Company added the new tankers they built in the 1970's they copied some of the features of the thirteen they built for Esso and Shell. The IRVING ARCTIC, IRVING ESKIMO and the much smaller IRVING NORDIC were copies of the Esso tankers. Those three had excellent radio rooms just behind the bridge. The IRVING OCEAN and IRVING CANADA were copies of the Shell tankers. Now I understand the criticism better. The radio rooms of those two were on the deck below the bridge within the officer's living accommodation. Not only was this an awkward position, it was a damn nuisance because of the noise involved while carrying out one's normal duties. It was lonely as well. At least behind the bridge the radio officer and duty mate got to know each other if nothing else. Why Irving Oil did this remains a mystery. There must have been something in it to attract them to this poor layout.

All five new Irving tankers were fitted with the latest from the British Marconi Company in the form of the Conqueror as the main transmitter and the Apollo as the two main receivers. IRVING ARCTIC made some interesting voyages when new, including a trip to Australia. Tony Charon was the lucky Radio Officer on the Australia run. Bill Kerwin sailed as her Radio Officer on a voyage to Brazil in 1981 after an excellent voyage to the African Congo in 1980 with IRVING ESKIMO. Bill is from Saint John, New Brunswick, and after sailing in the Irving ships went ashore as a controller with Fundy Traffic. The radio officers in this fleet made several contacts each day with station VCS when at sea. IRVING CANADA made her first voyage, a run from Saint John, New Brunswick, to Montreal, Quebec, on November 3rd, 1981. IRVING NORDIC was assigned to the coastal service of eastern Canada with AIME GAUDREAU, IRVING OURS POLAIRE, and IRVING WOOD. After the death of Mr. Kenneth C. Irving, the founder and general manager of this empire, there were a number of changes made. The coastal tankers were renamed with the suffix KENT. The funnels were repainted a bright green with the name Kent painted on them. The funnels had been yellow with the Irving diamond crest so common around eastern Canada. The deep sea or ocean going tankers retained this yellow funnel scheme. Right after World War II Mr. Irving purchased a few former naval corvettes and converted them to freighters. I was told 20, there may have been 5 and I found three. The three were registered in Newfoundland as:

VOQM GALLOWAY KENT
VOTL WELLINGTON KENT
VOPX REXTON KENT

The Irving family is from Kent County, New Brunswick and at least some of these names are villages in that county. GALLOWAY KENT was the former HMCS NORTH BAY, WELLINGTON KENT was the former HMCS HUNTSVILLE and REXTON KENT was the former HMCS LONG BRANCH. Apparently HMCS COBOURG became DUNDAS KENT and HMCS FERGUS became HARCOURT KENT but I was unable to find any information on their radio stations. They were definitely radiotelephone only because the three I found were fitted with radiotelephone only and these ships were not big enough to be fitted with commercial radiotelegraph. In order to be accurate one should check the actual record of the ship that should provide the call sign, and then compare that with the record of the radio station. There is a possibility that HMCS NORTH BAY was the Norwegian ship KENT COUNTY II with call sign LMMK for a while. If so, she carried a Radio Officer according to the record of the radio station. The three coastal tankers IRVING NORDIC, AIME GAUDREAU, and IRVING OURS POLAIRE were renamed some of these exact names and I no longer remember which tanker received which name. They retained their radio call signs so a List of Ship Stations for 1996 or later should sort them out. They did not use radiotelegraph so I lost interest.

In 1992 some of this fleet was registered in the West Indies at Barbados. Two of these ships became:

8PAJ IRVING OCEAN
8PAO IRVING CANADA

These ships disappeared around this time as they switched from radiotelegraph to satellite communications along with so many that we had communicated with over the years. The Irving owned Saint John Shipyard and Dry Dock Limited built several new ships for this fleet after those described above and had at least two

large oil tankers built in a foreign yard. But these new ships were not fitted with radiotelegraph and did not carry a radio operator so I had no interest in them.

The IRVING NORDIC went to the Arctic in 1988 and carried a radio officer who maintained contact with station VCS. Arthur Fletcher was a very well known radio officer with this fleet and seemed to be assigned to each of these ships when new. I believe it was Art who made this voyage in IRVING NORDIC. While in the Arctic he transmitted a very long message of several hundred words. Shortly after this the station supervisor got a phone call from one of the managers at the Irving Saint John office wanting to know what became of this message. He said he was in the Radio Room of IRVING NORDIC and had watched Art transmit it. Station VCS had another modernization in 1988 that included a computer operated message system. This system took some time for the operators to learn to operate. This missing message was found stuck in one of these computers. The operator at the station had copied the message but did not get it any farther than the computer on his operating desk.

In addition to these tankers the Irving Empire owned two ships that were designed and built to haul wood products. These two were fitted with radiotelegraph, carried a radio officer and communicated with the VCS station continuously when at sea. The various Irving companies grow, harvest, purchase and sell a lot of wood products. These two ships had been built and used in Europe to haul wood products before they were purchased by the Irving organization. The German ship UTA SABINE with call sign DHBJ became the IRVING FOREST. The Finnish ship FINNALPINO with call sign OIBR became the IRVING TIMBER. Both were renamed when purchased by the Irving Company in the 1980's and I believe operated under Kent Line with the tankers.

VSBG8	IRVING FOREST
VSBT2	IRVING TIMBER

Both ships were registered in Bermuda. The IRVING FOREST was on a voyage from St. John's, Newfoundland, to Rouen, France, with a cargo of wood pulp and newsprint when she encountered heavy weather in mid-Atlantic, January 1990. She developed ballast problems and began to list heavily and lost engine power, and needless to say transmitted a distress call. The tanker NESTOR rescued all 19 people on board, before she sank on January 11th, 1990. Among the crew were Canadians, Britons and Filipinos.

Atlantic Towing, another Irving Company, had a large fleet of tugs named with the IRVING prefix. The three largest were IRVING MIAMI with so called call sign VC8137 at 972 gross tons, IRVING BIRCH with call sign VDYT at 827 gross tons, and IRVING MAPLE with call sign VGSF at 487 gross tons. This is another example that the Department of Communications had no ruling on who was assigned what from their international allotment of call signs. Most of these tugs had a suffix of a well-known type of wood, OAK, HEMLOCK, MAPLE, and so on. But only two of the tugs carried a Radio Officer and both had the same name, IRVING BIRCH. The first of these was a steam-powered tug and was registered in the United Kingdom. The second replaced that one and was built at the Company's Shipyard, Saint John Shipbuilding and Dry Dock. This one was launched in 1967 and was fitted with radiotelegraph, the Marconi Oceanspan station.

GBHH	IRVING BIRCH
VDYT	IRVING BIRCH



Wilson Studio, Saint John, New Brunswick

This is the motor tug IRVING BIRCH April 14th, 1967 with call sign VDYT.

The crew in IRVING BIRCH had some fantastic trips during 1979 alone. She had been to England, Colombia, twice to the Arctic including Greenland, plus a trip to one of the United States ports on the Gulf of Mexico, besides the mundane life of towing barges of oil around eastern Canada. Atlantic Towing purchased a tug they named IRVING CEDAR during the 1980's that is worth mentioning. This tug did not carry a radio officer, was radiotelephone only and registered in Bermuda as a yacht with call sign ZFWI. One wonders what was behind that and for what reason. On the Atlantic Towing Limited website in 2004 IRVING CEDAR was renamed ATLANTIC CEDAR and listed as registered in Barbados with Canadian call sign VOSV from Newfoundland's old block of call signs. A vessel registered in Barbados is assigned a call sign with 8P as the prefix.

When the coastal tankers were renamed with a KENT suffix in each name these tugs of Atlantic Towing were renamed also. They all received the ATLANTIC prefix and retained their various type of wood as the suffix. In other words IRVING ELM became ATLANTIC ELM and so on up and down the list of names.

The Atlantic Towing barges were named after fish: IRVING WHALE, IRVING DOLPHIN, IRVING PORPOISE and so on. I believe these were also renamed and the only one I know for certain is that IRVING WHALE was renamed ATL 2701.

I did not meet anyone who had sailed in an Irving vessel that did not enjoy the experience. The majority spoke very highly of this fleet. The only Canadian ship I wanted to sail in and didn't was IRVING BIRCH. I did not get this experience because I simply kept putting it off until it was too late. I regret that I did not get to sail in this fleet.

SHIPYARD CALL SIGNS

All the shipyards in Canada were assigned a four letter call sign for use in testing the radio station fitted in a new ship prior to the ship being handed over to its owner. The Saint John Shipbuilding and Dry Dock Company held call sign VDDC, and we often received a call from one of those ships for a radio check whether the new ship was to be registered in Canada or some foreign country. Occasionally a new ship from one of the other shipyards would call as well. Those calls would sound rather odd at times, especially if the ship had a very odd foreign name and used the Canadian call sign. At least one ship built for Cuba left her ship builder's yard in Quebec and came to Halifax with the Canadian shipyard call sign. This ship had a date for a name like so many Cuban ships and it was possibly MAY 26th if I remember correctly. It may have been Mr. Castro's birthday for all I know. I remember one I think it was the APRIL 19th followed us for more than a day in the Caribbean Sea. She appeared to be a large molasses carrier.

SHIPBOARD EQUIPMENT

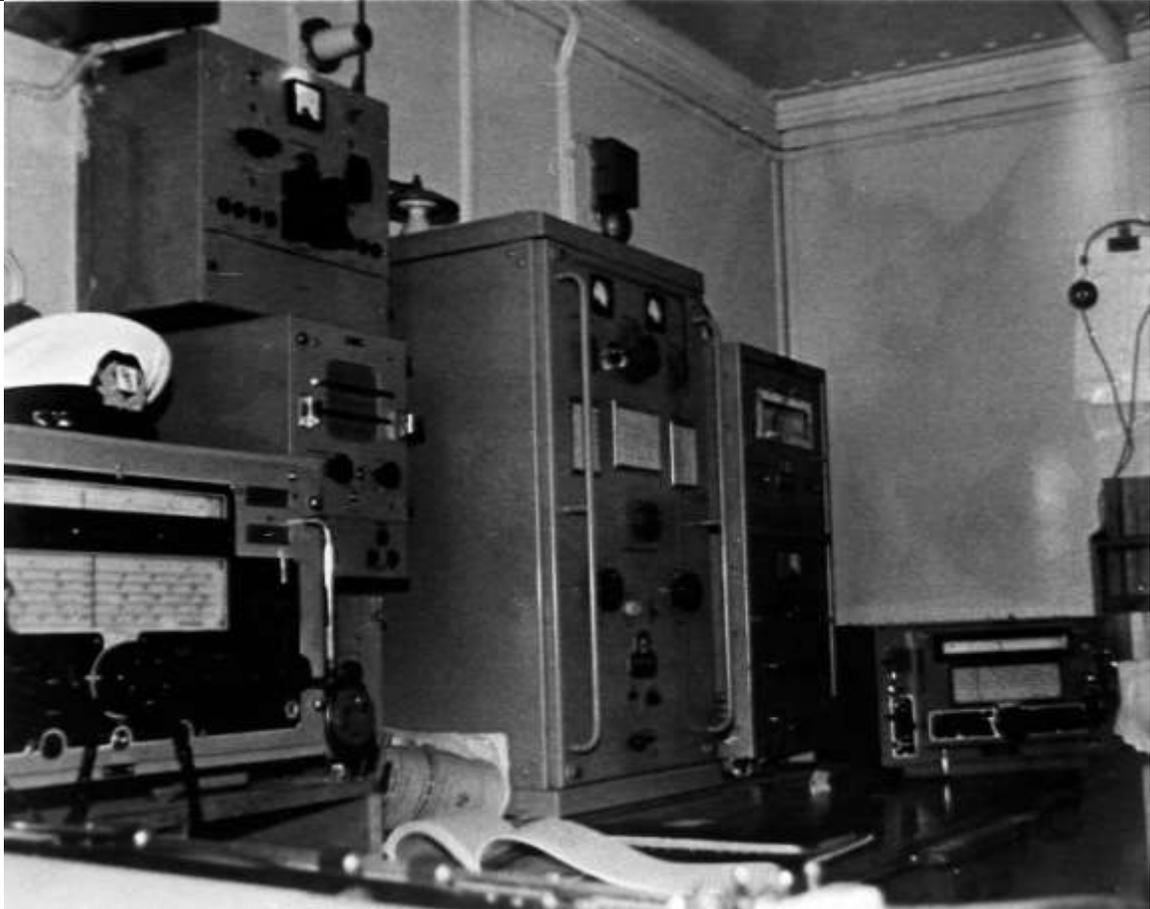
The modern technology resulting in the numerous electronic magic boxes we now have was greatly speeded up during World War II. We would eventually have had these things, but they would still be some time off in the future. By the late 1950's the use of radar and direction finding had advanced to the point that so many ships carried their own equipment that it became feasible to close these services at Camperdown Radio VCS. Today, even small yachts and fishing vessels have radar and the direction finder is never used in a vessel of any kind. The only place one will find a direction finder in use is a few computer-operated units on a few coast stations. This is on the VHF radiotelephone channels and the unit will provide a visual indication of the station's (ship's) actual location on a chart shown on a computer screen. The Canadian Coast Guard has removed all the radio beacons for use by direction finders fitted in ships. Direction finders were mandatory in most ships up until the radio officer was removed because they were the only means of obtaining a bearing on a ship's transmitter. This was a big asset in trying to locate a vessel in distress.

There are now several satellites in place over the world providing a system of navigation for everything imaginable. These are used in a system known as the Global Positioning System or GPS. One can get a GPS unit in their automobile or ship, their aircraft or even a hand held unit to use anywhere. This system has replaced the Direction Finder, Loran, Omega, Decca, and any number of other familiar navigational aids that were so well known not so long ago. My son carries a cell telephone and a hand held GPS unit with him at all times in his 14-foot aluminum boat. This gives him communications and navigation capabilities the Captains of the Queen's (SS QUEEN MARY and SS QUEEN ELIZABETH) could not dream of back in the 1930's.

The most difficult part in getting these new electronic aids to work in ships was in training the crews to use them. For years the Captain was the sole person in charge of a ship and placed on a very high level. Many of these older Captains were not very well educated and on getting to know a few you often wondered how they ever elevated themselves in the first place. When the ship owner installed a new aid like radar many Captains would not permit anyone to touch them. One case in point is rather interesting and rather amusing for us today. The Captain of the ferry PRINCESS HELENE that operated between Digby, Nova Scotia, and Saint John, New Brunswick, for many years, had such high regard for his radio officer that when radar was first installed he made them install it in the radio room for this operator. But in the majority of cases these units were installed in their proper place on the bridge although no one but the Captain was allowed to touch them.

Captain Charles Melanson, an old friend and shipmate of mine tells an interesting story which will help explain this. Charlie had been master for some time in the small wooden freighters owned by his family in Gilberts Cove, Nova Scotia. These small wooden ships eventually disappeared because of the routine changes made in shipping over the years. Charlie then had to get out and sail in the larger ships. One of these trips involved a run off the Labrador Coast with one of these Captains who claimed the radar his own personal toy. Charlie knew radar well by this time and was becoming concerned about the possibility of icebergs in their path, when he took over his watch as mate. This Captain was still on the bridge, had the radar turned on with the gain turned down so far it was of no use to them although did appear to be working and not seeing anything. Charlie noticed this immediately but did not dare say anything and had to wait

until the Captain was out of sight. When the Captain left the bridge for a few moments Charlie made his move and reached over and turned up the gain on the radar. Sure enough, there she was. A large berg was dead ahead but luckily still time to leave all as is and let the Captain find it on the radar. If Charlie had said anything on seeing this, he would have been fired for touching the radar, and no mention would have been made of his preventing a disaster.



Radio Officer Paul du Mesnil

This is the Radio Room MV QUEBEC call sign VCXL April 1971

Left to right:

Atalanta Main Receiver

Battery Charging Unit Top

Alert Emergency Receiver Middle

The Autokey on the bottom with only a corner showing

Reliance Emergency Transmitter

Seaguard Auto Alarm

Mercury or Electra Back-up Receiver

The QUEBEC had the Irving's old ELKHOUND VCXL call sign.



Radio Officer Paul du Mesnil

This is another view of the Radio Room MV QUEBEC call sign VCXL April 1971

That is a good view of a Gypsum Transportation Limited Cap and left to right:

Oceanspan VI Main Transmitter

Atalanta Main Receiver

Autokey Automatic Distress Key with the Alert Emergency Receiver on top and the Battery Charging Unit sitting on the Alert Receiver.

Just above the clock is the Antenna Switching Unit.

THE DEPARTMENT OF TRANSPORT SCHOOL AND THE LOSS OF THE CERTIFICATE

Around 1960 the Department of Transport not only amalgamated many of the Coast and Aeradio stations into a combined station, but decided to open a school and give all new operators additional training over and above their commercial certificates. This school was to be known as the Air Services Training School and was first established in the upper floor of the terminal building at the Uplands Airport, Ottawa, Ontario. The first class graduated in 1960. Up until 1966 all these graduates were holders of at least the commercial second-class certificate from private schools within Canada or the British Commonwealth. Most came straight from these schools.

With the newer radio regulations annexed to the International Telecommunication Convention at Montreux, 1965, it became possible for Canada to terminate the necessity for the operators to hold a radio certificate on the stations within the country. After that the only requirement to become a radio operator on any station in Canada was a high school education and graduation from the Air Services Training School that was

expanded accordingly. A new modern and very expensive school was opened in 1979 at Cornwall, Ontario, replacing the Ottawa school.

One question that always puzzled me and I did not find a suitable answer was the technicians in the Coast Guard Ships. The law stated that anyone who maintained a ship's radio station must hold the required certificate of proficiency in radio according to the size of the ship the station was fitted. These technicians went aboard the Coast Guard Ships in 1962 and did all the maintenance on the ship's equipment. No one said anything and the Radio Officer's did nothing to prevent this. It should have been their job to maintain this equipment. One technician I knew used to brag that he made a trip to the Arctic one year and changed one radar tube only for the entire trip. If his services were not in more demand than that, he would have made an excellent second operator if this had been laid out according to law, and according to the way the seafaring nations operated. Then there was the Captain who hired a technician to come aboard and repair the main radio station to find nothing but a blown fuse. That Canadian Radio Officer involved must have felt very foolish if nothing else. When one finds records of these things it is probably a good thing it is all over.

In 1993 all coast station radio operators were given a certificate of proficiency in radio called a Coast Guard Radiotelegraph Operators Certificate. This certificate looked like the old First Class and Radiocommunication Operator's General Certificate (Maritime), abbreviated to RGMC and came complete with a five-year expiration limit. If there was ever an outfit that could down grade anything of an international nature to make it look like something "it ain't" it was this outfit. What this certificate was supposed to accomplish, besides a waste of the tax dollar, was a mystery to me. It gave one the feeling it was to be used in the coast guard ships with the idea it might impress those in foreign nations that a Canadian coast guard ship might visit with a radio operator on board.



Department of Transport

This is the Radio Operator Class "23" Air Services Training School, Ottawa, 1963 and S. G. "Spud" Roscoe is second from the left in the front row. Unfortunately I can no longer name very many of them. Howard Vallis is third from the left in the back row and Howard retired from the Canadian Coast Guard in

Dartmouth. Bob Bullbrook was one of the instructors and he is fourth from the left in the front row. Bob held Jerry Proc's VE3FAB call sign at that time. I held call sign VE1AGN at that time and changed it to VE8RM a few days after this photograph was taken when I was transferred to Teslin, Yukon Territory.

COMBINING THE HALIFAX AREA STATIONS

The technology of radiotelephone improved rapidly after the war to the point the majority of boats of all types were fitted and with this increased workload and the closing of the radar and direction finder service, it was decided to move Halifax Radio VBQ to Camperdown Radio VCS. About the only real improvement made to VBQ after the war was the addition of the other Collins AG10 transmitter, which naturally brought forth a sigh of relief from the operators at VBQ. With the move of VBQ to VCS it became necessary to build a transmitter site at Pennant Point, and a remote receiver site just south of Ketch Harbour. This move was made on November 1st, 1962 and this combined station was renamed Halifax Marine Radio VCS. The word marine in the name became popular in Canada with coast stations, in order to separate the station, or portion of a station from the Aeradio Station. A number of the Canadian Aeradio stations and Coast stations were combined to form one station in order to cut down on the cost involved of operating two stations in the same area. This word marine must have sounded rather odd to foreign operators because it is the only place in the world they would have heard it, because everywhere else, the name of the station, the word radio, and the call sign was all one would hear. VCS was one of the few stations not combined with the local Aeradio station, although over the years the VCS operators went out to the Halifax International Airport, forty miles away, and filled in at the Aeradio station for awhile for one reason or another. The West Coast sister of VCS, a smaller but similar station, Vancouver VAI, was combined with Vancouver Aeradio and was located at the Vancouver International Airport.

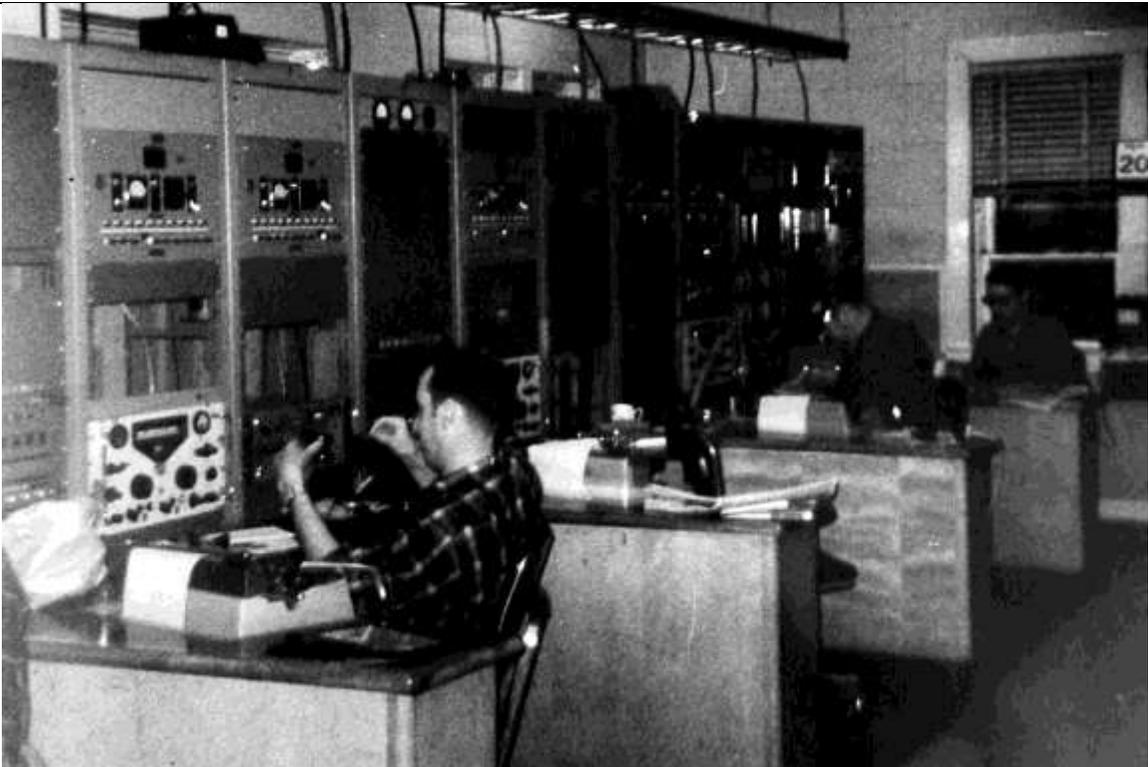
The Royal Canadian Navy during the early 1960's equipped most of their vessels with radio-teletype and wanted to terminate training their radio operators in radiotelegraph during the early stages of their training. They wanted to retain radiotelegraph at CFH for their smaller and auxiliary vessels and as a backup for their regular radio-teletype communications. Therefore, the British Commonwealth Communication Scheme portion of Halifax Radio CFH was transferred to Halifax Marine Radio VCS on April 1st, 1964. This necessitated a further expansion of VCS to include high frequency transmitters, receivers, and extra operating positions for the greater number of operators required to operate this equipment.

From improved shipboard equipment, much more powerful transmitters and more sensitive receivers, the British Commonwealth Communications Scheme was phased out in April 1968. After that a ship monitored the traffic list transmitted every odd hour on the hour, Greenwich Mean Time, at the VCS station. They also monitored the traffic list for any station the ship could expect traffic for one reason or another. If a vessel had a message to receive or one to send it called the station. The message traffic was either sent or received by the operator on receipt of the call. There was no longer free communications between countries. These stations handled messages to anywhere in the world for a fee and it was cheaper if the ship called a station in the country to which the message was addressed.



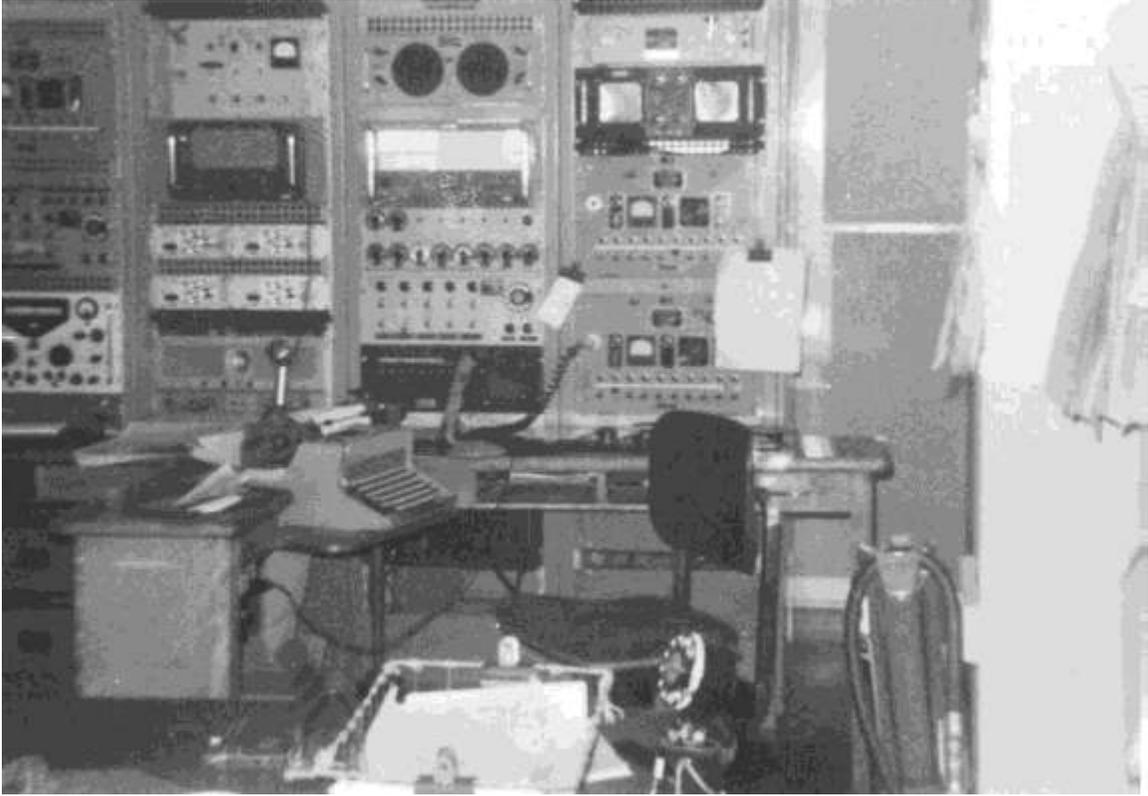
Roger Teed

This is the Operations Building Halifax Marine Radio VCS just prior to moving to Ketch Harbour 1970



Roger Teed

This is the Operations Room Halifax Marine Radio VCS just prior to moving to Ketch Harbour 1970



Shaw

This is the Operations Room Halifax Marine Radio VCS just prior to moving to Ketch Harbour 1970



Shaw

This is the Teletype Operating Position Halifax Marine Radio VCS prior to moving to Ketch Harbour 1970



Shaw

This is the Operations Room Halifax Marine Radio VCS prior to moving to Ketch Harbour 1970 and that is the late Sid Hatcher VE1BJR with his feet up in the middle and the late Ted Daley VE1AIG operating just behind him. If you can help in identifying any of the others please contact me or if you have anything you would like to pass along I would appreciate hearing from you.



Shaw

This is the Operations Room Halifax Marine Radio VCS prior to moving to Ketch Harbour 1970



Shaw

This is the Operations Room Halifax Marine Radio VCS prior to moving to Ketch Harbour 1970



Shaw

This is the Operations Room Halifax Marine Radio VCS prior to moving to Ketch Harbour 1970

THE MOVE OF STATION VCS TO KETCH HARBOUR

With the amalgamation of the three stations, Halifax Radio CFH, Halifax Radio VBQ, and Camperdown Radio VCS, at Camperdown, and the fact the old operations building was now reaching thirty-five years of age, it was decided to improve the Station's building and equipment. For various reasons it was decided to do this at the Camperdown Radio VCS, Receiver Site in Ketch Harbour, a few miles down the road on the south side of the village of Ketch Harbour. One of the main reasons was the fact that the equipment at the remote receiver and transmitter sites had to be connected to the operating position at Camperdown via telephone lines leased from Maritime Telegraph and Telephone Company Limited. The Ketch Harbour site eliminated the lines necessary for the remote receivers, and Pennant Point, the remote transmitter site, was much closer to Ketch Harbour, making these leased lines shorter and less costly.

Therefore, Halifax Marine Radio VCS, the largest coastal radio station in Canada, moved from the old original site on the hill overlooking the approaches to Halifax harbour to a new more modern operations building on March 1st, 1970. My impression on first seeing this new site was that of a gravel pit with a paved driveway and over the years my feelings towards the site have not changed. The excellent view from the old site did much towards my feelings of the new site. Any spare moments that we had to look out the window were now spent staring at a choice of sand, gravel, weeds, or fog-stunted spruce trees, instead of a beautiful view overlooking the approaches to Halifax harbour, and the ships traversing that area.

The operations building constructed and placed in service at Camperdown, July, 1935, was torn down and removed during the summer of 1980, ten years after the station at Ketch Harbour opened and forty-five years after the building was constructed at Camperdown. Douglas Garrison, Sambro, purchased the site a few years after this and converted it into a housing subdivision.



Basil Carroll

This is Radio Operator Basil Carroll operating the 8-mHz radiotelegraph position at VCS with Technician Bill Turner sitting in the medium frequency radiotelephone position probably 1975. Bas Carroll came to VCS in 1973 and was a Shift Supervisor from 1975 until promoted Area Operations Manager in 1978. He retired as the Regional Standards Officer. He holds amateur radio call sign VE1VAY. Cape Hopes Advance VAY was his first radio station.



John Rae and Paul Britton



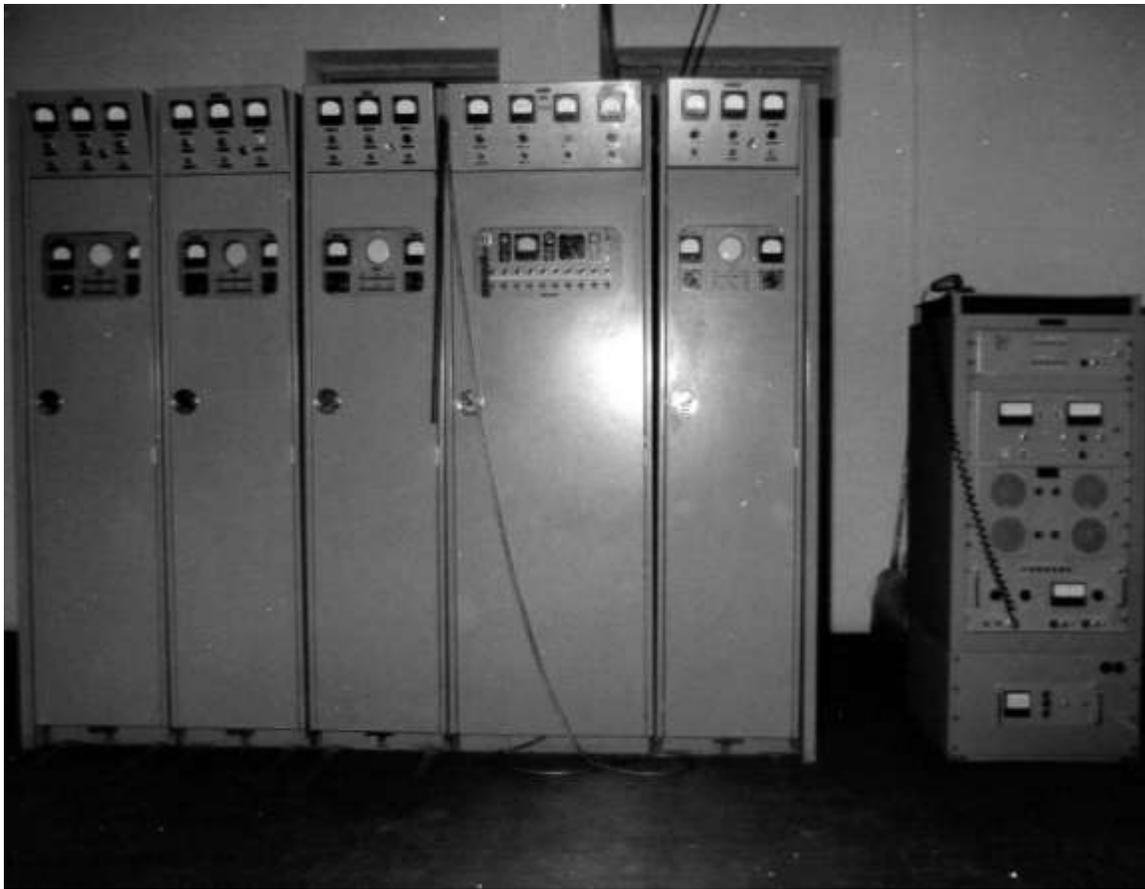
John Rae and Paul Britton

These are two views of the interior of the Transmitter Building at Pennant, Nova Scotia, on May 19th, 1980, taken from the opposite ends of the building.



John Rae and Paul Britton

This is the old Nautel 500 KHZ Transmitter on the left and the new Nautel 500 KHZ Transmitter on the right. A very small corner of R2D2 can be seen at the far left behind the test meter on the table, May 19th, 1980, VCS Transmitter Building, Pennant, Nova Scotia.



John Rae and Paul Britton

Left to right: Northern Electric One Kilowatt Radiotelephone Transmitter as follows: 2612, 2182, 2598, kHz, Power Supply, and 2612 kHz. The best voice we had on radiotelephone at that time was the Nautel Radiotelephone multi-channel transmitter affectionately known as Little R2D2, from the Star Wars Motion Picture.



John Rae and Paul Britton

This is the interior of the Transmitter Building at Pennant, Nova Scotia on May 19th, 1980.

Left side front to back: Five kilowatt Radiotelephone Transmitters as follows: 6-mHz, 4-mHz, 8-mHz, 12-mHz and 16-mHz.

Right side front to back: One kilowatt Radiotelegraph Transmitters as follow: 4-mHz, Power Supply, 16-mHz, 16-mHz Back-up, 12-mHz, Power Supply, Back-up Radiotelegraph Transmitter (22, 12, 8, 6, and 4-mHz), 8-mHz and 6-mHz.



John Rae and Paul Britton

This is the Transmitting Antenna Farm Halifax Coast Guard Radio VCS at Pennant, Nova Scotia on May 19th, 1980.



John Rae and Paul Britton



John Rae and Paul Britton

These are two views of the Operations Building Halifax Coast Guard Radio VCS, Ketch Harbour on May 19th, 1980. This is how the building looked from March 1970 until May 1988 and it was rather ugly. The place looked like a gravel pit with a paved driveway.



John Rae and Paul Britton

This is the Transmitter Building Halifax Coast Guard Radio VCS at Pennant on May 19th, 1980 and it still looks much the same in 2007.

Automatic scanning receivers that improved the ability of a ship to make contact with the station were installed at this new station. The marine radiotelegraph bands were broken up into various segments for calling coast stations and segments for the actual communications between these stations and ships. Until the advent of these electronic scanning receivers, the operator had to hand-tune a receiver across these calling frequencies, listening for a call, when not engaged in communication with a ship. This had to be done on each radiotelegraph band and normally one operator was assigned to each of these bands. These bands were identified by their frequency in megahertz and were located on the harmonic that is an even multiple of the lowest frequency possible on these bands. For many years the early equipment was capable of being heard on the harmonic above the actual frequency in use, especially when in close range of the receiving station. This assignment on harmonics tended to prevent these stations from interfering with stations performing other services outside these bands. This is one reason or excuse, for a distinct call sign for the service being performed on each frequency at the stations of the British Commonwealth Communication Scheme described elsewhere. This also helped in the construction of the ship's transmitter that was often tuned to certain frequencies by a crystal of certain crystalline materials. When an alternating voltage was applied across these materials it would cause them to oscillate at the frequency the material had been cut. This frequency can then be used to tune an electronic circuit. The advantage in tuning these transmitters was that the one crystal could be used to place the transmitter on many frequencies up through the different bands by using the harmonic or multiple of this crystal frequency. The band known as the two-megahertz band was the bottom of these frequency bands, although VCS and most other stations did not monitor or communicate with ships on the two-megahertz radiotelegraph band. Therefore, you had the two, four, six, eight, twelve and sixteen, megahertz marine radiotelegraph bands. There was also a twenty-two and a twenty-five megahertz band, but those two bands for some reason were not even multiples of the two-

megahertz band. VCS could operate on the twenty-two megahertz band but was not capable of using the twenty-five megahertz band.

The automatic scanning receivers were solid state (transistor) and were designed and built here in Nova Scotia at Dartmouth. They worked well. These scanning receivers took away the job of hand scanning (tuning) the calling bands. Now all the duty operator had to do was sit back and listen to these units swing back and forth across the calling frequencies on his assigned band. When the call sign VCS was heard a switch on the scanning receiver would stop this scanning process and stay on that particular frequency in order to answer the call and obtain the calling ship's working frequency. The operator then switched from the scanning receiver to his regular receiver, while the ship's operator switched his transmitter to his working frequency. They then communicated with each other.

Each automatic scanning receiver could be heard from anywhere in the operations room, providing its speaker was turned on. The World Administrative Radio Conference, an international body that governs the world's radio communications including the assignment of frequencies to the various services, kept taking frequencies from the marine radio world to give to other services. With each new agreement from this organization it seemed as though the broadcasting service of nations like Albania received more of the available radio spectrum. These marine calling frequencies were narrowed down in order to provide more room for the working frequencies. It took us awhile to get the technicians to shorten up the sweep or frequencies these scanners covered. It was just plain frustrating when one had to listen to one of those scanners sweep back and forth over some ship transmitting a message to another coast station. The eight-megahertz band was the most popular and the interference was so severe on this calling band that it was very difficult to hear ones call quite often.

In the end the World Administrative Radio Conference, the International Telecommunication Union, and any other authority that was involved, managed to get together on this problem and they came out with a system of calling channels. A calling channel was simply one frequency. Each channel was given a number for identification. There were 18 calling channels assigned to each band of frequencies for the 4 to 16 megahertz radiotelegraph bands inclusive. There were 10 calling channels assigned to the 22-megahertz radiotelegraph band. Channels designated number 5 and 6 for the various bands between 4 and 16 megahertz became the common calling channels for these bands. Those calling channels allotted and designated number 3 and 4 became the common calling channels for the 22-megahertz band of frequencies. In other words, all the coast stations around the world monitored the two calling channels assigned to each band of frequencies. This meant that those ships that were not fitted with synthesized transmitters were capable of using this system. A synthesized transmitter was one that could transmit on any frequency and was the one that replaced the crystal-controlled transmitter. We called the crystal-controlled transmitter a rock bound transmitter. The crystal controlled or rock bound transmitter could transmit on the frequencies each of its crystals was cut or tuned only. The crystal-controlled transmitter simply made sure they had crystals for the two common channels 5 and 6 and then they could contact any station around the world. In addition to the two common calling channels a station could be assigned another calling channel or more for each band. Halifax VCS monitored the two common calling channels in each band and one additional channel. Halifax VCS monitored channel 11 for the bands between 4 and 16 megahertz and channel 8 for the 22-megahertz band. Therefore, the most interference was found on the two common channels, 5 and 6.

These first electronic scanning receivers could not be made to monitor one frequency and then another in each calling band. They had to sweep from one frequency, the bottom frequency they were assigned across all the other frequencies to the top frequency they were assigned. When Halifax VCS was assigned these calling channels these scanners were adjusted to swing over the following frequencies:

From 4181.5 kHz to 4184.5 kHz
From 8363.2 kHz to 8368.8 kHz
From 12544.8 kHz to 12553.2 kHz
From 16726.0 kHz to 16738.0 kHz

One scanner had become defective by this time and was not replaced nor repaired. It was probably used as spare parts for the others. In other words there was no scanner for the 6-megahertz band. In order to listen

to the calling channels on 6-megahertz a receiver was set on 6274.5 kHz and on the 8-kilohertz bandwidth setting. There was no scanner for the 22-megahertz band. The 22-megahertz band was hand scanned during the short periods that it was open for service.

There were eight main operating positions at the Halifax VCS station that opened in 1970. They were set alongside each other in pairs with a message belt running down between each pair. Starting at the front of the operations room and working back: There was a training position alongside the medium frequency radiotelegraph (500 kHz) position. There was a 12-megahertz radiotelegraph position alongside the medium frequency radiotelephone (2182 kHz) position. There was the 6-megahertz radiotelegraph position alongside the high seas (high frequency) radiotelephone position. And finally there was the 8-megahertz radiotelegraph position alongside the 4 and 16-megahertz radiotelegraph position.



John Rae and Paul Britton

This is the Sable Island G.N.T. Back-up Transmitter on the left and the Five-Kilowatt Harris High Frequency Radiotelephone Transmitter on the right in the VCS Transmitter Building at Pennant on May 19th, 1980.



John Rae and Paul Britton

This is David MacKinnon, VE1ALO transmitting the traffic list from VCS on May 19th, 1980, from the 500 kHz Radiotelegraph Position.



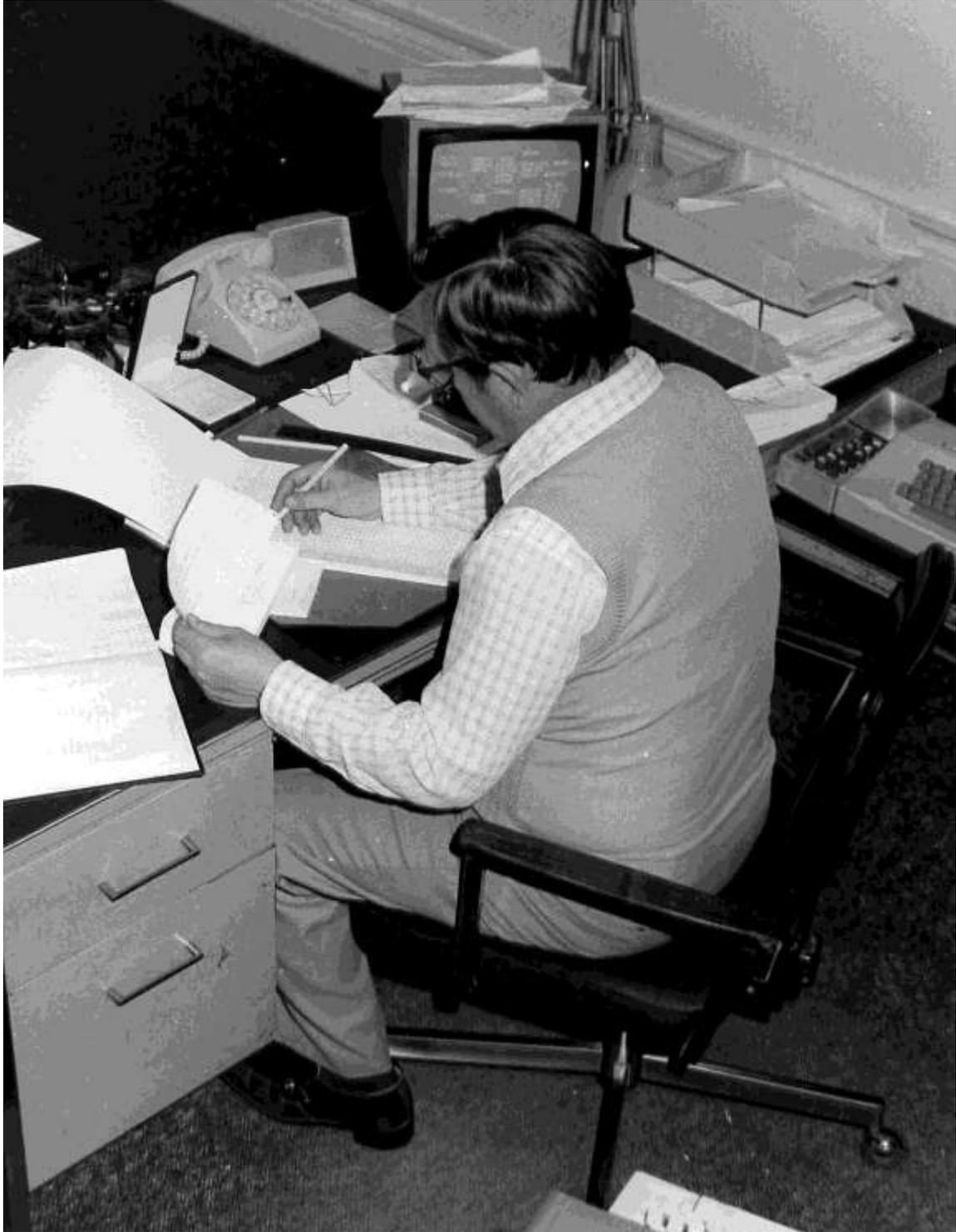
John Rae and Paul Britton

This is the late Jim Cable operating the 12-mHz Radiotelegraph Position at VCS on May 19th, 1980, with Dave MacKinnon operating the 500 KHZ Radiotelegraph Position in the background.



John Rae and Paul Britton

This is David MacKinnon operating the 500 KHZ Radiotelegraph Position at VCS on May 19th, 1980. The late Bill Gillespie can be seen in the background at the Shift Supervisor's Desk. The tape in the machine on the right is a regular telex or teletype tape and that machine would transfer that tape into Morse code for the broadcasts at any speed.



John Rae and Paul Britton

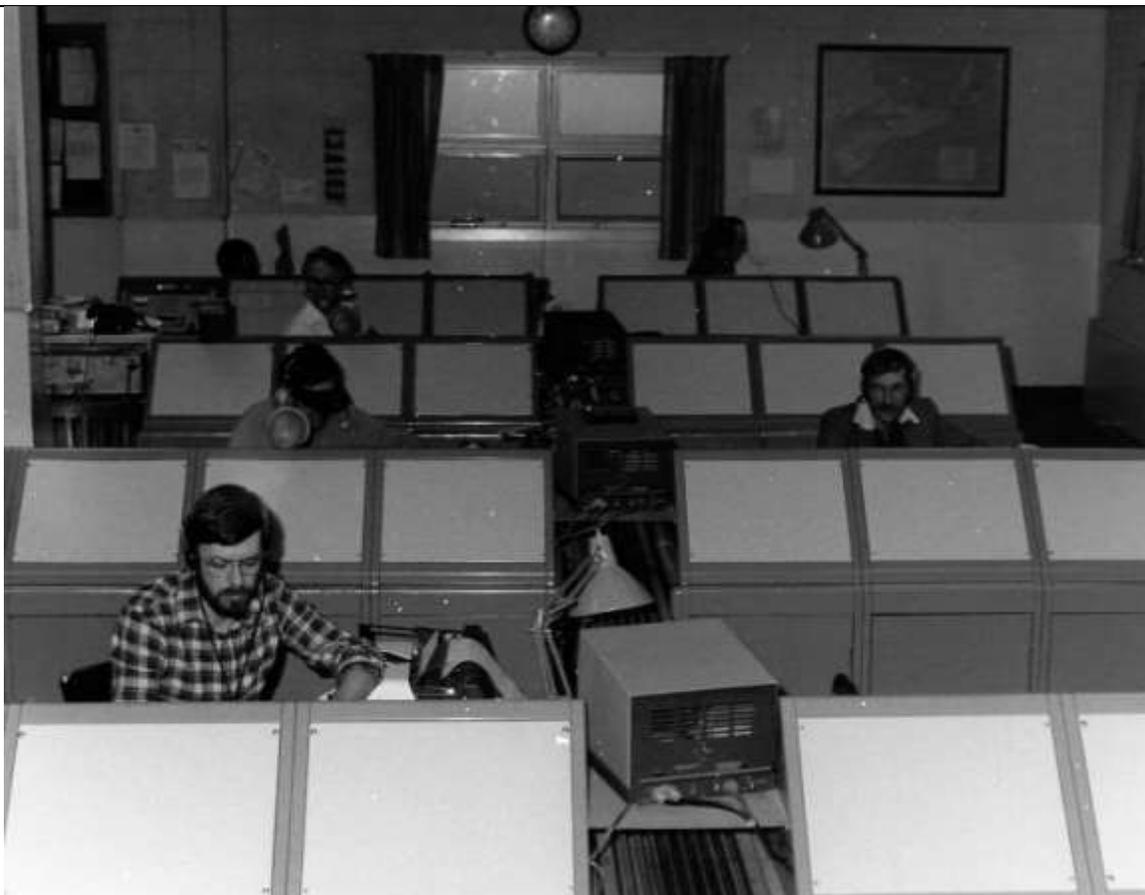
This is Shift Supervisor the late Bill Gillespie at the Shift Supervisor/ Routing Desk VCS May 19th, 1980. Bill is checking over the daily abstract of received message traffic. The pile at his right elbow is that for a normal day or twenty-four hour period. The telephone is also connected to the speaker next to the telephone and was a "Hot Line" between all the Radio Stations, Traffic Centres, Search and Rescue, etc., around the Atlantic Provinces. The Television Screen lists the message traffic on hand that can be seen in the top tray of the basket. The small rectangular box with all the buttons below this basket was the Fanon Intercom.

Pushed next to this is the A. B. Dick keyboard for updating the Television Screens with Ship Call Signs for any Messages on hand.



Bas Carroll

This was a ceremony in the early 1970's to present the late Stan Greer and Reg Fagan with plaques for twenty-five years of service as radio operator's. In the photograph from the left to right are Stan Cairns the Senior Operations Supervisor, the late Gus Crewe the Technical Station Manager, Reg Fagan, the late Stan Greer, Bob Adams from the Regional Office, Dick Olhausen Technician and Supervisor Bas Carroll.



John Rae and Paul Britton

This is the Operations Room Halifax Coast Guard Radio VCS, Ketch Harbour on May 19th, 1980.

Front to back on the left side:

Dave MacKinnon VE1ALO 500-kHz

The late Ted Daley VE1AIG Medium Frequency Radiotelephone

Reg Fagan High Frequency Radiotelephone

The late Mike Warden (deep into the Want Ads) on the 4-mHz and 16-mHz Radiotelegraph Position
Front to back on the right side:

The Training Position minus a Trainee

The late Jim Cable on 12-mHz Radiotelegraph

The 6-mHz position minus an operator or else the invisible operator was on duty

Dave Oldridge VE1EI on 8-mHz Radiotelegraph

The message belt was capable of conveying any piece of paper (message) to or from the front of the room to each position. A received message went up the belt and landed in a basket for that purpose. The duty communicator collected these messages and sent them on to the addressee. The communicator sent these on either a landline Teletype or on the telex network. The landline Teletype was Canadian National or Canadian Pacific Telecommunications who handled these messages at that time. The telex network was a Teletype one dialed like a regular telephone and connected to another telex machine in the office of the addressee. There was also a special machine for transmitting any weather observations direct to the weather office.

The natural environmental conditions that affect the earth's ionosphere made it necessary to change from one frequency band to another dependant on whether it was day or night. The ionosphere is that portion of the earth's atmosphere that controls radio signals throughout portions of the radio spectrum. There was ample provision made for these changes at this station. The foremost was the fact that the 4 and 16 megahertz radiotelegraph transmitters used the same power supply. When one of those frequencies was in use it was rather pointless to have the other in use. Therefore, those two frequency bands used the same power supply and were operated from the same position.

Another feature which assisted this process was that the 12 and 6 megahertz positions could be operated from either or the other. This made it possible for one operator to cover both of those bands for short periods while changing from day to night operation.

The training position contained the emergency or backup transmitter. If one of the main radiotelegraph transmitters failed, the backup transmitter was placed in service on the frequency with the failed transmitter until it was repaired. The backup transmitter had all the radiotelegraph transmit frequencies assigned to VCS with the exception of the 16-megahertz frequency. The 22-megahertz frequency was on the backup transmitter in place of the 16-megahertz frequency. When all the main transmitters were working the backup transmitter could be placed on 22-megahertz. There was no 22-megahertz scanning receiver. The only position that was feasible to monitor the 22-megahertz band was the 6-megahertz position. The 6-megahertz operator was normally so busy that it made this operation impractical.

THE OPERATIONS ROOM

HALIFAX MARINE RADIO VCS 1970 – 1975

HALIFAX COAST GUARD RADIO VCS 1975 -1988

Communicator's Room

Routing or Supervisor's Desk

Training
Backup High Frequency Transmitter

Coastal Telegraph
Transmitters: 500, 484 and 446 kHz

12-mHz radiotelegraph
12874 kHz

Coastal Telephone
Transmitters: 2182, 2134, 2514, 2582,

2103.5, 2612, 4394.6, 4410.1 and
2800 kHz and VHF FM

6-mHz radiotelegraph
6491.5 kHz

High Seas Telephone
All the Coastal Telephone Frequencies
plus 4410.1, 6518.8, 8787.1, 13138.0,
and 17242.2 kHz.
Continuous Marine Broadcast Unit
and the SITOR Unit.

8-mHz radiotelegraph
8440 kHz

4 and 16 mHz radiotelegraph
4285 and 16948.5 kHz

The one operator could operate or send code on all the high frequency radiotelegraph transmitters from any of the high frequency radiotelegraph positions. The 8-megahertz radiotelegraph position was open around the clock or 24 hours every day of the year and this was common with all the world's coast stations assigned an 8-mHz radiotelegraph frequency. It was the operator's job on this position to hand send the Traffic Lists on all the high frequency radiotelegraph transmitters that were in service at the traffic list time of on the hour every odd hour Greenwich Mean Time. This operator logged these lists so that the station had a record of every call sign transmitted. The 500 kHz Operator transmitted the Traffic List by hand at the same time but did not log the actual call signs transmitted. He just logged the time he transmitted his Traffic List on 484 kHz.

The 500 kHz position had three receivers; one fixed tuned to 500 kHz, the distress and calling frequency; another fixed tuned for each frequency assigned to ships on this band; the third was the main receiver and covered the medium and high frequency bands. There were two solid-state (transistor) transmitters on that position capable of transmitting on three frequencies, 500, 484, and 446 kHz. The normal procedure was to answer a ship that called on 500 kHz and then shift to the working frequencies. This was usually 480 kHz for the ship and 484 kHz for station VCS. The 446 kHz Frequency was handy for one reason or another usually when the 484 kHz Frequency was busy with a lengthy broadcast. There was a unit on this position that would transmit radiotelegraph from the paper tape made by a telex machine. I remember reading about this unit in 1958 when it was first created and thought it was the most fascinating piece of equipment I had heard of in a long time. I believe some Japanese engineers created it around that time. It made transmitting all broadcasts from the VCS station a lot easier.



John Rae and Paul Britton

This is the Operations Room VCS on July 12th, 1977.

Left to right:

Bob Minty on 6-MHZ Radiotelegraph

Reg Fagan at Shift Supervisor's Desk

Unidentified at the end of the Message Belt

Kevin Layden on 500-KHZ

Florence Gulak on the Medium Frequency Radiotelephone Position



John Rae and Paul Britton

This is Florence Gulak operating the Medium Frequency Radiotelephone Position at VCS on July 12th, 1977. Florence was the first female operator to operate station VCS.



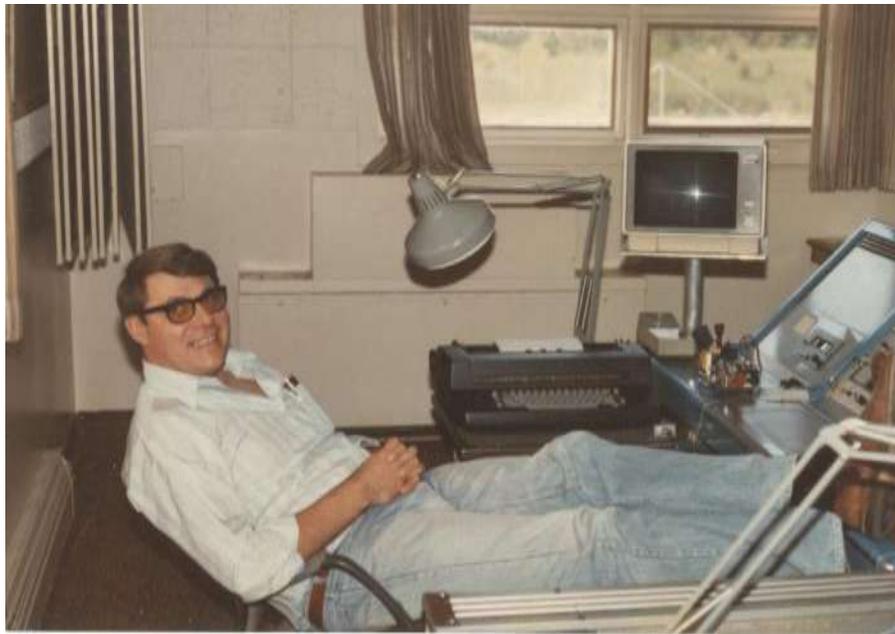
John Rae and Paul Britton

This is David Oldridge VE1EI operating the High Seas Radiotelephone Position at VCS on May 19th, 1980. David moved back home to British Columbia when he retired and now holds call sign VA7CZ.

Every operating position in the operations room had a black and white television screen that displayed an up to date list of all messages on hand. This displayed each ship's call sign that had a message at the station awaiting delivery. One typed the call sign on the screen but had to enter it alphabetically manually. The messages were prepared for transmission and up dated on this display from the supervisor's desk at the front of the room facing these operating positions. Every position, including the technical workshop below the operations room, was connected to the supervisor's desk by an intercom. Ordinary classroom blackboards were mounted on the wall at the front of the operations room for the radiotelephone traffic list and various pieces of information often required for the efficient operation of the station.

The medium frequency radiotelephone (2182 kHz) position as it was known, the coastal radiotelephone service for ships around one hundred miles from the station, was much the same as the one known as the High Seas or high frequency radiotelephone position. That position contained a number of fixed tuned modules that selected various channels so that the duty operator on that position could handle most of the duplex telephone calls between ship and shore. This position created the most noise in the operations room from the type and frequencies that had to be monitored. The duty operator also guarded the 2182 kHz distress and calling frequency and the channel sixteen VHF (156.8-mHz) calling frequency continuously. This operator did all the radiotelephone broadcasts including the twice-daily schedule with ten lighthouses strung along the coast and monitored six radio beacons along the coast twice each day. The radio beacons were for ships to use with their direction finders in order to ascertain their position at sea. This position had a distress tone generator that made a good racket on 2182 kHz in order to alert ships that a distress incident had taken place.

The High Seas or high frequency radiotelephone position contained fixed tuned modules and was capable of operating all the frequencies on the medium frequency position. This position had one high frequency channel assigned to it for each of the high seas radiotelephone bands, again the four, six, eight, twelve, and sixteen-megahertz bands. The duty operator on this position could handle duplex telephone calls to anywhere around the world, via the two-megahertz through to the very high frequency bands assigned to ships and coastal stations for that purpose. For example: a yacht in Halifax harbour using a very high frequency radiotelephone, a cargo vessel off Lunenburg, Nova Scotia, using a medium frequency radiotelephone, or a passenger liner in the West Indies using a high frequency radiotelephone, could all make a telephone call to anywhere in the world via this position. This position also had a telephone that could be connected to the Sable Island radiotelephone module and provide close to normal telephone service for the dozen living residents of Canada's Graveyard of the Atlantic. This was their only communication with the outside world at that time. The operator on that position was also responsible for the efficient operation of a Continuous Marine Broadcast on very high frequency channel 21 (161.65 MHz). This was a unit that continuously played taped recordings of the latest weather and notices to shipping (mariners) broadcasts. This unit appeared at the station in the early 1980's and used tapes called cassette tapes that were very popular at the time.



Joan Roscoe

This is S. G. "Spud" Roscoe VE1BC on the 8-mHz position at VCS in June 1983.

I fully intended to record an accurate description of each piece of equipment making up the VCS station at that time. My description of this detail became rather hopeless. When I had no more than completed a description for each position, I would go to work to find that a piece of equipment had been replaced by something quite different. This is the best I can do and is the equipment at the station about 1980.

Every position in the operations room had a Fanon FI-13 Intercom, an Electrohome EVM-11R Video Monitor, and a typewriter with a continuous belt of three-ply paper, for logging. Each of the radiotelegraph positions had an ordinary hand telegraph key for the transmission of radiotelegraph. These positions also had provision for the use of any telegraph key and the majority of the operators used their own personal semi-automatic bugs. The station issued each operator on joining the station's staff one radiotelegraph headset and one radiotelephone headset complete with microphone.

Medium Frequency Radiotelegraph (500 kHz) Position:

All frequencies are in kilohertz.

VCS	SHIP
	512
500	500
484	480
	468
446	454
	425

The two VCS transmitters were five hundred-watt solid-state Nautels, manufactured in Nova Scotia by the Nautel Electronics Company. These transmitters were located at the transmitter site at Pennant. Both transmitters had all three frequencies and were capable of either continuous wave A1 or modulated continuous wave A2 emissions. One receiver was the Measurement Engineering fix-tuned to 500 kHz so that there was a continuous listening watch on that frequency. This receiver could be heard by any operator nearby. One receiver was an ITT Mackay 3021A Digital for general coverage use. The third and final receiver was the TMC Model VLRE crystal-tuned to all the ship frequencies listed above. It should be noted that TMC stood for Technical Materials Corporation and that Douglas Carroll, the Navy Lieutenant who was awarded the M.B.E. for putting CFH on the air in 1943, was instrumental, after he retired from the Navy, in forming a Canadian branch of this American Company.

Each of the high frequency radiotelegraph positions operated one or two of these frequencies. All frequencies are in kilohertz.

VCS	SHIP
4285	
6491.5	
8440	Various on all bands
12874	
16948.5	
22387	

Each high frequency radiotelegraph position had the same equipment. One Canadian built Northern Electric Type CRC/C-2 FRT one kilowatt transmitter. The transmitter was located at the transmitter site at Pennant so the unit at the position was a control unit for the transmitter. One EMI Cossar Scanning Receiver manufactured by the Cossar Company at Dartmouth, Nova Scotia, and one receiver the ITT Mackay 3021A Digital Receiver for general coverage. These Mackay receivers replaced the Plessey FR155 general coverage receivers that were held as spares. The technicians could replace a Mackay temporarily with a Plessey for routine maintenance.

Medium Frequency (2182 kHz) Radiotelephone and the High Seas or High Frequency Radiotelephone Operating Positions.

All frequencies in megahertz (VHF)

International Channel	VCS	Ship or other station
16	156.8	156.8
19A	156.95	156.95

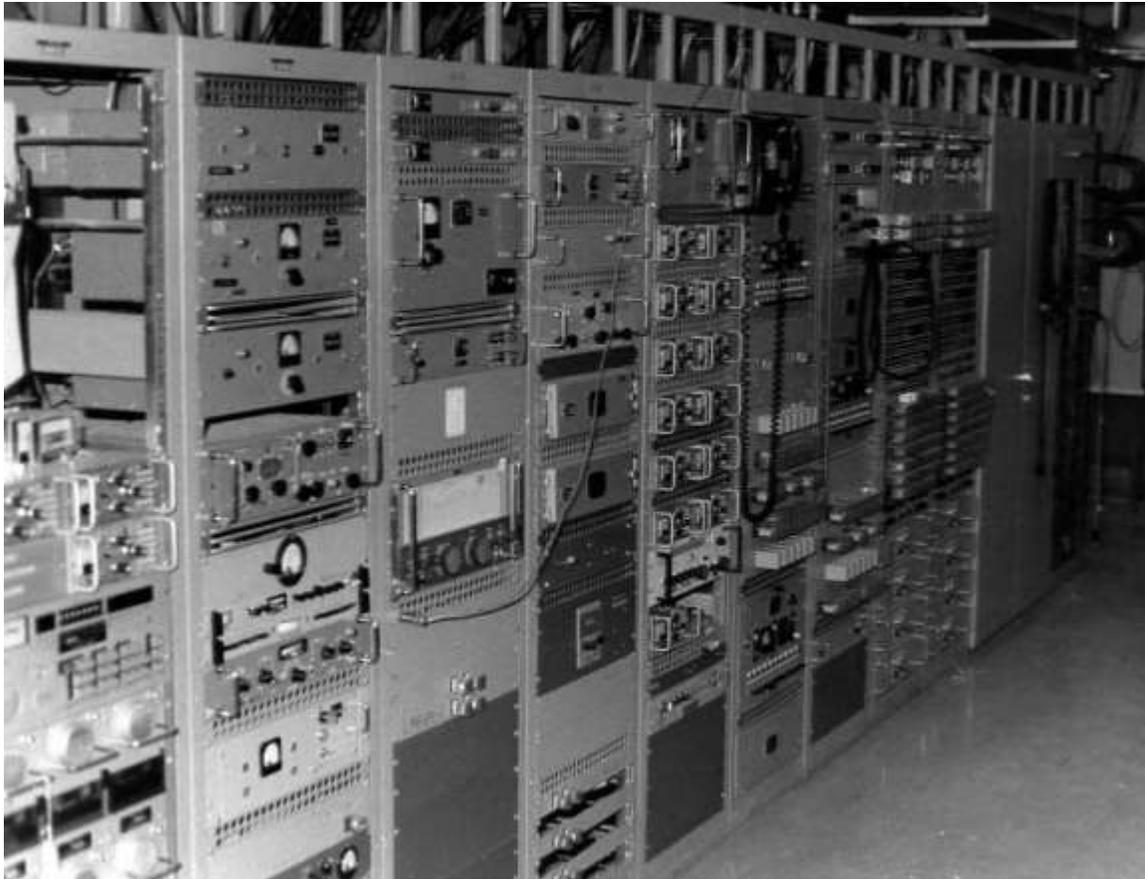
21	161.65	None
22	157.10	157.10
26	161.90	157.30

All frequencies in kilohertz (MF & HF)

	2134	2134
	2182	2182
	2612	1792
	2514	2206
	2598	None
413	4394.6	4100.2
418	4410.1	4115.7
605	6518.8	6212.4
823	8787.1	8263.2
1213	13138.0	12367.2
1604	17242.2	16469.3

The VHF equipment was from the American General Electric Company or the British Pye Company. The VHF equipment was located in the basement of the station's operations building at Ketch Harbour. The VHF channels 19 and 22 were for communications with the Coast Guard ships, helicopters, or vehicles. There was a VHF British made Racal Telephone Converter for connecting stations on those channels to the regular telephone lines for communications direct to the various Coast Guard offices. This unit was so seldom used that it never worked. The technicians would repair it immediately but when it was required a year or so later it was defective again.

I was unable to obtain the actual frequency of the Lighthouse VHF radio. This unit had an automatic call system and gave good clear communications with a number of the Lighthouses in the area.



John Rae and Paul Britton

This is the Equipment Room VCS, Ketch Harbour on May 19th, 1980

The MF and HF frequencies each had a Marconi XH14 or a Plessey type CRA/R-1001/FRR Receiver, both British located in the basement of the operations building. These were fed to the modules on each of the two positions. Most of the frequencies in use on both positions could be operated from either position. There were three transmitters available for the frequencies from 2134 to 4394.6 kHz. One a one-kilowatt Nautel built here in Nova Scotia and two, one-kilowatt Northern Electrics manufactured in Ontario. All three were capable of transmitting in either the old audio modulation mode or the newer upper side band mode. There were two receivers on the distress and calling frequency of 2182 kilohertz and an ITT Mackay 3020A step-tuned receiver for general coverage on both operating positions. The Mackay receivers replaced a British built Eddystone receiver. The Eddystone was a much cheaper receiver and it showed in the general operation of the unit. Many of the operators used the ITT Mackay receiver for all contacts because it was a better receiver than the fixed tuned units. There were two transmitters available for the frequencies from 4410.1 kHz through to 17242.2 kHz. One was a new five-kilowatt R. F. Harris manufactured in New York and the other a standard Northern Electric similar to the other Northern Electric transmitters.

A brief description of each of these channels is necessary to help understand that portion of the station. Channel 16 was the VHF calling frequency in order for a station anywhere in the world could contact another station then shift to a working channel for communications. Naturally the range on that channel was limited to a few miles but from this assignment all ships had the same channel for calling another station, ship or shore. Channel 19 and 22 were mainly for communications with our Coast Guard as stated. Channel 21 was the broadcast channel for this band, the VHF band of marine frequencies. The Continuous Marine Broadcast (CMB) unit broadcast continuously on that channel. Channel 26 was the normal duplex channel that handled the duplex telephone connections to anywhere in the world via the regular telephone system.

Frequency 2134 kHz was an inter-ship channel for fishing vessels. Many fishing vessels, especially those not fitted with their own company channel, monitored this channel only. For this reason we were given this channel in order to announce storm warnings and important broadcasts so that these vessels would have no excuse for missing a broadcast. 2182 kHz was the distress and calling frequency for that band for anywhere around the world. That was the frequency we handled the majority of the distress communications handled by the station.

2318 and 2800 kHz was the channel to communicate with the residents of Sable Island. The transmitter on that frequency was fixed to that frequency and there was a backup transmitter. Both transmitters were controlled from the training position.

2612 and 1792 kHz was the medium frequency Lighthouse channel. We had a contact with each lighthouse around the coast twice a day on that channel.

2118 and 2514 kHz and 2206 and 2582 kHz were the two channels we used to handle all communications with ships on that band, including many duplex telephone calls. This had been changed to 2118-2514 from 2530-2815 kHz, the old channel used for communication with the National Sea Products Fleet. We tried to get our customers to use this new 2118-2514 channel because so many of the stations around the coast used the 2206-2582 kHz it created a lot of interference. It was amazing the number of Canadian vessels that were "Rock Bound" – crystal tuned – to that 2206-2582 kHz channel and could not use 2118-2514 kHz.

With the flexibility of the ITT Mackay receiver we were able to work any ship on any frequency providing they were able to receive us on one of our frequencies. Many foreign vessels did not have our frequencies and many insisted on transmitting on 2049 kHz. With this Mackay receiver we could communicate while they listened to our 2514 or 2582 kHz frequency. Sometimes they actually listened to us on their radio direction finder while transmitting on their crystal-tuned radiotelephone.

The 2598 kHz frequency was the broadcast frequency. We did weather, notice to shipping, and whatever that needed to be broadcast each day on this frequency. I saw fishing vessel's leave this frequency tuned in on full volume while alongside a dock in order to get the latest forecast.

International Channels 413 through to 1604 were known, at least by Canadian Officialdom, as the High Seas Radiotelephone Service and I wonder what desk bound Admiral created that title. The old terminology of Short Wave Service or the more modern terminology of High Frequency Service would have sounded better.

The Supervisor's Desk or Routing Desk had the AB DICK 995 keyboard for operation of the Video Monitors. The Sync Generator for this unit was located in the basement of the operations building. The main operating unit of the Fanon FI-13 intercom to each position including the technical workshop and equipment room in the basement was on this position. All messages on hand for delivery to various ships and stations were held in a basket on this position. A British Racal Electronic Radiotelegraph keyer was located on a table in front of this supervisor's desk. This unit continuously keyed the high frequency radiotelegraph transmitters with the appropriate frequencies that were in use, the frequency the radio Teletype (SITOR) was tuned and a solicitation for any AMVER or OBS messages a ship might have to transmit.

This electronic radiotelegraph unit replaced the old GNT tape machine left over from World War II that used to key all the transmitters. This World War II unit cut a paper tape that would transmit radiotelegraph. The typewriter style unit that cut the tape was located in the operations building basement and this unit keyed the transmitters from there. A tape was cut with the desired information and the ends of the tape were scotch taped together to make a continuous belt. There were usually several of these belts hanging over a piece of equipment that had the information on the tape written on it in pen. If one was lucky when they went to change the information transmitted, they could use a previous tape and not have to cut a new one. During the war these units were used to send high-speed radiotelegraph. The radiotelegraph was copied on an ink tape recorder. This tape simply copied the characters of the Morse code. This tape was fed

through a steel bar built to hold it so one could watch it and transcribe the code onto a standard typewriter. One controlled the speed of the tape with a foot switch similar to the foot switch that operated an electric sewing machine. I spent many hours transcribing this code that had been received at 300 words per minute or faster at one of the first stations I operated. It was amazing how good one could get at reading these tapes and could transcribe the code nearly as fast as one could type.

The information these units transmitted needs an explanation. SITOR was an acronym for ShIp Telex Over Radio. It was the first attempt to connect a telex machine ashore with a telex machine in a ship. The result was the most frustrating piece of junk anyone tried to operate. In the end the Federal Communications Commission turned it over to the Amateur Radio community to see if they could make it work. The Amateur Radio world has created most of the electronics we take for granted today. They called theirs AMTOR that meant Amateur Telex Over Radio. This improved it considerably but thank God the Satcom or Satellite Communications replaced it.

We did broadcasts on the SITOR. A friend who had been in the radio room of a foreign ship said one would not believe the mess he saw. The Radio Officer in this ship had left this machine on and there was teletype paper piled up behind it. This pile of paper was so deep no one could ever read it. It was a copy of all our broadcasts for several days. I presume this Radio Officer felt he might get a call from some office ashore on their telex machine and left it on for that reason. He was not making any use of our broadcasts that is for certain. Towards the end and just before the station closed this machine did receive some use from those who knew how to operate it at sea. It would appear that the amateur radio community had managed some realistic changes.

AMVER meant Automated Merchant VESSEL Report that was controlled by the United States Coast Guard. They kept an up to date position report on any and all vessels that wanted to participate. That was a big help in trying to assist a vessel that desired assistance in one form or another. If someone radioed for help the Coast Guard would advise the nearest vessel they had on file that could be of assistance.

OBS was the abbreviation for a weather observation message. Many ships recorded the actual weather they were experiencing several times each day and would forward this information to the various international weather organizations. Most ships transmitted more of those messages than any other type of message. Actually many ships transmitted very little other than those weather observations.

Hopefully this brief description of the actual equipment in use at the VCS station at that time makes sense and is of some interest. This description is of the station just prior to moving into a new operations room in May 1988 with computers for each operating position. The station was an excellent place to test any new equipment. The station often had a piece for that purpose only. The equipment had to be the best available in order to tolerate the continuous hard use.

The VCS station was one of the better stations of the many I operated over the years. The operators on the whole were an easy bunch with which to work. The job required shift work of course but because of the size of the station there were several shift plans available. I preferred the plan that contained two evenings, short change, two days, short change and one night. This was followed by two or three days off but of course someone created enough of a fuss that we lost that plan and most of the others in order to work several of the three shifts at one time. There was plenty of overtime if one wanted it and the odd overtime cheque kept your friendly banker happy.

The various operating positions or circuits were assigned on a rotational basis and this lasted until the station closed in 1996. Each operator put in four hours on each position as follows: if you had two evening shifts you had a choice on a first first serve basis of the positions left vacant by the operators who finished their evening shifts the evening before. You took your choice of those available and put in four hours on the following rotation:

500 kHz to High Frequency Radiotelephone and SITOR
Medium Frequency Radiotelephone to 12-mHz radiotelegraph
8-mHz radiotelegraph to 6-mHz radiotelegraph

6-mHz radiotelegraph to 4 and 16-mHz radiotelegraph
4 and 16 radiotelegraph to Medium Frequency Radiotelephone
12-mHz radiotelegraph to Routing Desk
Routing Desk to 500 kHz
High Frequency Radiotelephone and SITOR to 8-mHz radiotelegraph

If any position was not open for one reason or another you simply by-passed it. The Routing Desk was the Supervisor's Desk and involved the updating of any message traffic and the traffic list. This was the first position eliminated for the want of an operator. If for some reason there was a shortage of operators the High Frequency Radiotelephone position was the first operating position to close. The 4 and 16-mHz was the next target but it was rare that the station got that short staffed. When it came to that the offices were raided for a supervisor to fill in.

The three duty operators and the communicator had the building to themselves on night shift. The technicians terminated their night shifts in the early 1980's and only worked day shift or the occasional evening after that. I no longer remember why. The supervisors did not work nights for awhile but I no longer remember why. There had to be 3 operators on duty to justify a supervisor and this was the reason for the overtime more than any real shortage of operators or any need for extra operators. I would not want to know the total hours I spent on duty and did absolutely nothing. The three night shift operators were split up with one on 500 kHz, one on Medium Frequency Radiotelephone and the other on 8-mHz radiotelegraph. They followed the normal four-hour watch on each position scheme.



John Rae and Paul Britton



John Rae and Paul Britton

This is two views of Communicator Joy Horlick on duty in the Communicator's Room at VCS on May 19th, 1980. One can see a bit of Supervisor Bill Gillespie sitting at the supervisor's desk.

The Teletype equipment was located in the communicator's room which was just off the main operations room at the supervisor's desk, and the equipment was operated by around five staff members trained for that job only. The equipment was one radio-teletype receive only from Sable Island for their many weather reports and message traffic, and one teletype for the Meteorological Teletype Data Network across the

country including portions of the United States. Three regular telex machines and one computer operated teletype. The latter was a real labour savor. A message was placed on a television screen then at the push of a button took off to its destination leaving a printed copy. This would also deliver traffic to the station in much the same fashion. When the landline telegraph was replaced by teletype equipment in 1956 it was decided that a proper communications staff for this purpose would be necessary with the continued increase in message traffic.

I wanted to give a brief resume of each of the station's staff but my notes became as hopeless as trying to keep up with the equipment changes. The majority of the communicators were former military personnel like so many of the operators and technicians. Once in awhile a radio operator would go in the communicator's room and give them a hand or fill in when short staffed. There were 28 radio operators, 5 communicators and over 10 technicians and at least 5 supervisors. Several were mentioned elsewhere on these pages and that is the best I can do.

The main floor of the operations building at Ketch Harbour contained the main operations room, the communicator's room, plus three offices, two washrooms, a kitchen, and cloakroom. The cloakroom had a small locker for each operator that they could lock and hold a few personal effects. The kitchen contained stove, microwave oven, refrigerator, cupboards, sink, dishes and anything one would need for a banquet, including a soft drink machine for cold drinks.

I was working the 8-mHz radiotelegraph position one afternoon a year or so before this operations room closed. I acknowledged receipt for a message transmitted by some ship's radio officer. This officer then asked me what was wrong with the guy on 12-mHz radiotelegraph. He said he had called for over a half hour and got no answer. I looked up and could see this guy was in fine shape but answered his question. I simply said I do not know but will check. If this guy is asleep I will wake him and if he is dead I will cart him off to the cemetery. I then went back to work and completely forgot the incident. I did not want to get involved in anything and by this time I was getting pretty well fed up with everything in general. I had just completed a good comparison of what we had in Canada with the other ships around the world and was not the least impressed with what I found. A few days later Supervisor Dave MacKinnon came out of the office laughing and said I guess you told him. I said who did I tell what, and he repeated the above incident.

At that time IBM (International Business Machines) sold a variety of recording equipment. One of these units was a large reel to reel tape recorder that would record for a period of 24 hours. Many organizations had purchased these units to record everything that was said over a telephone, radio and nearly anything else. The Canadian Broadcasting Corporation was using one here in Halifax to record everything they did. The Royal Canadian Mounted Police was another organization that used this equipment and we had recently had one installed in our equipment room. We changed the tapes each morning at the start of the day shift. This thing recorded everything in the building: the telephones, each radio operating-position and may have recorded each time the toilets flushed for all I know. We did not pay any attention to it and simply called it Big Brother. It would have been handy if any argument had taken place over a distress incident of some description and for this reason the tape was held when one occurred. The recordings were not the best in quality but did provide a good record.

Dave MacKinnon had been assigned to monitor these tapes. Can you imagine the work it took for him to find that one entry not knowing it was on there? It did have a means of finding a certain item at a certain time if you wanted something and knew at what time it took place and on what piece of equipment. It makes one wonder why they were so foolish to waste such a good life at such foolishness. At times I ask myself why I wasted my time at that when there was so much I could have done for a living.

The old signal station and radio station site at Camperdown was put up for sale and the tender for this sale closed on October 14th, 1986. This sale included 13 acres of land and at least one house. Douglas Garrison from Sambro was the successful bidder and purchased the site. He turned the site into a housing subdivision. He named the only street Jacquelon Purcell Drive after his wife. She has been Jackie Garrison a lot longer than she was a Purcell and it is rather a shame when one thinks of all the history it could have been named after. No one cares nor is interested and within a short time no one will have any desire to be

reminded of this history. There may at some future date be a magazine article on this history that few will bother to read.

NOTICES BROADCASTED BY CANADIAN COAST STATIONS

Notice to Shipping was strictly a Canadian concoction. They were known as Notice to Mariners everywhere else around the world. The latter term in Canada meant the same thing, except the Notice to Shipping was broadcast over the air and the Notice to Mariners was transmitted via the regular mail service. To add further mystery to these they were abbreviated to NOTSHIP and NOTMAR. This was but two of these typical labels we had hung on to various things. A Notice to Airmen was known as a NOTAM. MAFOR broke down to Marine Forecasts. The powers that be came up with another in the form of a NOTFISH. No, we did not master the art of talking to fish although at times you wonder. This one meant a Notice to Fishermen. One of the operators, while looking over these notices, stated that before long we would broadcast a NOTIT. Further inquiries revealed that a NO TIT would be a notice to Italians. Hopefully his prophecy did not come true because it would be an insult to most of the Italian girls I ever met. The federal government controls and operates the communications in this country. You would have had to live with it in order to believe it. The late Captain Robert T. Lucky called me aside one day while I was sailing as his Radio Officer and gave me a royal tongue lashing for copying these broadcasts. He claimed he was not paying me to copy such foolishness and that the pilot, on joining the vessel, had all the information that was necessary.

About 1956 the province of Nova Scotia constructed a causeway across the Canso Strait, the body of water that separates Cape Breton Island from the rest of the province. Shortly after this was constructed a small freighter was passing through the strait at night. Apparently the crew was sailing along enjoying the pretty lights ahead with an out of date chart, and ran smack into the causeway. When all the dust settled, I was told that they blamed this accident on the radio operator for failing to provide the Captain with the latest Notices to Mariners. This was the only thing I could think of in my favour for arguing my point with Captain Lucky. I also had to agree with him – because he took my freshly copied broadcast and went over to the chart table. He took a NOTSHIP I had just copied and pulled out the appropriate chart. I had been over five minutes copying just that one and it pertained to a wharf that only had about five feet of water around it for as many miles. There was no chance of any operator-equipped vessel going near it.

These broadcasts that took over an hour to copy could have been condensed to at least ten minutes. The powers that be could have got everything necessary in such a short broadcast, and if there was anything that involved a ship it could have called in for further information. I continued to copy these broadcasts, but was rather worried for awhile. If Captain Lucky had insisted that I terminate the practice, there would never have been a hope in hell of my getting any help from some office ashore. He never mentioned them again and I continued to copy them while at sea. I copied them from one ship or another for years, but can only remember one that had anything to do with us. Needless to say I had some fun with it. This was one I copied from station VCS as we were passing up along the Nova Scotia coast on our way back from somewhere down south. This particular broadcast was over one hour long and for awhile I thought it would never end. The NOTSHIP involving us was one that indicated we would be sailing through the area of a naval exercise the next day. The late Captain J. A. Blinn was in command this particular time and when the broadcast terminated he was on the bridge. I went into the chart room, checked the chart and could see he had our course laid out to pass through the middle of this area, so I brought this to his attention. Naturally he went on about how the Navy did not own the ocean and they weren't going to push him around. I went away chuckling to myself and thinking we'll see. The next morning I ran up to the chart room before breakfast for a quick peek. He had redrawn our course towards the outside of this area, but still well within the limits. Right after breakfast it became rather interesting. Three Canadian destroyers came up on the horizon and sat there watching us as Captain Blinn ordered a ten-degree course change to take us a little farther out of their way. This was before the big leap in oil prices and container ships were racing back and forth across the pond (Atlantic) in excess of thirty knots (they have since slowed down to around twenty to conserve fuel). A large German containership was racing up our port side a few feet farther inside this area, looking more like a destroyer than a merchant ship. She had white water flying off both sides of her bow like a naval ship rather than a merchant ship that rarely goes anywhere fast enough to make white water.

The Captain of this containership must have been playing the stubborn bit as well, but was not long in swinging over next to us out of the Navy's way. These three destroyers were right sassy looking, and after watching us for a few minutes they turned as one unit and went back out of sight, as much as to say "there, after this do as you're damn well told".



John Rae and Paul Britton

This is Radio Operator Kevin Layden monitoring the NOTSHIP Broadcast Transmitted from station VCS on July 12th, 1977. The unit to his right is doing the actual Morse Code Transmission and the Telex Tape can be seen lying on the floor.

DEPARTMENT OF COMMUNICATIONS AND COMPANY RADIOTELEPHONE

During the 1970's a new federal government department was formed known as the Department of Communications, and all the inspection, policing, and examination duties were transferred from the Ministry of Transport to this new department. The Ministry of Transport was the terminology for the old Department of Transport. About that same time licences became available for companies who were qualified or in a position to make use of high frequency single-side-band communications direct from their offices to the vessels with which they had a need to communicate. Several of these companies then installed this equipment and one of the first to make use of it was National Sea Products Limited. This terminated the daily schedules via duplex and meant that VCS lost a good portion of its history. After that we received an occasional call only from one of their vessels. The rare contact we had was when a crewmember wanted to talk to someone at home or the Captain had business he could not conduct via the company radiotelephone. This meant no reduction in the amount of radiotelephone traffic handled at VCS because so many boats of all descriptions had radiotelephone equipment and this traffic seemed to increase continually. The station got the odd duplex call from an aircraft.

CANADIAN COAST GUARD RADIO HALIFAX VCS

Halifax Marine Radio VCS became Canadian Coast Guard Radio Halifax VCS on October 1st, 1975, along with every other marine radio station in Canada. VCS at this time would average twelve thousand contacts per month and as of June 26th, 1979 the operators on these coastal stations became part of the Canadian Coast Guard. All these stations were in the process of becoming separate coast stations again. The Aeradio Operator and the Marine Operator were a distinct species again, and the Aeradio Operator had a new label – Flight Service Specialist.

This new Halifax Coast Guard label for station VCS took a while to feel at home and did not feel comfortable until the International Telecommunication Union publications were changed accordingly. Many of the operators in the ships stated they did not want the Coast Guard, and only wanted to make a telephone call. Many had arranged these calls via radiotelegraph and did not answer the operator on radiotelephone, but went to the trouble of going back in radiotelegraph to make this statement. I felt the main reason for the new label was to try and benefit from the publicity surrounding the United States Coast Guard. The VCS station had only one fault that could be broken down into two parts. Canada did not have a large merchant fleet and much of the little Canada had wandered around wherever it pleased without a proper Radio Officer as required by international law. Therefore the station did not have a large merchant fleet in order to design the station around. And the second part is rather obvious. The station did not have experienced radio operators from this fleet to operate the station. The VCS station did a commendable job and the lack of this fleet only created a lot of petty foolishness that had to be overlooked or possibly understood is the better terminology. The unnecessary and over use of acronyms is but one of these faults. This was easily understood after listening to our illustrious leaders address to each other. They used these same acronyms to the point that they sounded like a few cans of alphabet soup chatting among them selves. There was no room for these acronyms in that type of communications for two reasons. The first was the fact we had to spend time in explaining them to the English speaking users and the second that was worse, is that the foreign speaking users were unable to break the acronyms down in an English-Native language dictionary. Having had to translate from one language to another over the years I can find nothing humorous in the many incidents that were created from this unnecessary habit. For example, a Japanese vessel was told to report ASAP Sydney and ASAP meant as soon as possible to his agent in Sydney. After the Japanese crew translated this English message into Japanese, formed their reply, and translated this into English; you guessed it – we receiver a message addressed ASAP Sydney, thinking ASAP was a registered telegraphic address. When you consider twelve thousand contacts made each month it was a mystery more such errors were not made. The one we wasted more time on than all the others was ECAREG CANADA. That was the address for a multitude of sins and had to be used by all ships in order to obtain a clearance in order to enter the territorial waters of eastern Canada through the vessel traffic management centres of the Canadian Coast Guard. It broke down to Eastern Canada Regulatory Area, but would have been much easier and better etiquette on our part if it were simply Coast Guard Halifax.

Another bit of petty foolishness that irked me was the way we made the weather broadcasts. The VCS station was assigned certain areas to broadcast the weather and instead of broadcasting the complete list when one of these areas was included with another area, they simply omitted the other areas in the same broadcast. When station VAR Saint John, New Brunswick closed the only station that made the Bay of Fundy broadcast was VAU Yarmouth, Nova Scotia. One could not hear this in Minas Basin, but the VCS Halifax broadcast was loud and clear. We would copy the VCS broadcast and then add the Bay of Fundy to the one that looked appropriate. Trying to get this changed was a complete waste of time. This also applied to the morning broadcast from VCS while heading up along the coast towards Sydney. You ran out of the VCS broadcast before you could hear the VCO Sydney broadcast. Each station should have done a complete forecast broadcast of the Maritime region. And the stations next to Newfoundland should have done both, a complete broadcast of both the Maritimes and Newfoundland areas, and so on around the coast. Actually it was petty foolishness because after the coast was saturated with the Continuous Marine Broadcasts on VHF FM, that was more than sufficient for the coastal weather broadcasts. Each coast station should have done a broadcast of the Western North Atlantic Gale Warnings and the Technical Synopsis from the Canadian weather office only.

This was all petty foolishness because there was such a wall of pure ignorance in charge. One time the Navy was having an exercise and wanted a broadcast to all Canadian Merchant Ships. I set this up the proper way: VGGG VGGG VGGG de VCS VCS VCS and came back on duty to find it going out as CQ CQ CQ de VCS VCS VCS because someone complained it was too long. I can just picture the foreign operator taking this into his captain who would translate it into his language, whatever it was, and then give his operator hell for wasting time in copying it.

There were many things that could have been done at the station to help the operator at sea that would have said we know you're there and we are trying to help, but one could not get through this wall of ignorance in order to say just that. It was amazing how the lotto tickets got around. I had an American ship request the numbers in a recent draw one time. For the little time it took to transmit them after a weather broadcast would have been plain good will on our part.

To generate good will to those in ships, the VCS station could have advertised all weather systems of gale strength or higher on the high frequency automatic radiotelegraph marking transmissions. This was the automatic tape that indicated the high frequency radiotelegraph frequencies in use and solicited OBS and AMVER messages. These weather systems or storms could have been abbreviated to a few groups as follows:

GALE 081600Z 48N56W NNE 2 KTS
HURRICANE ALICE 211200Z 40N62W N 5 MPH
TROPICAL STORM DAVID 310600Z 32N30W STATIONARY

There were very few storms of this nature in the area at any time. They could have been taken from the Western North Atlantic Warnings that were delivered to the station continually. It would have been very rare to have to transmit two of the above warnings and the most of the time there would have been none at all. This would have meant so much for those at sea and would have given station VCS a very good reputation for those at sea. As it was I am sure some of the operators at sea had a good giggle over the foolishness that took place if nothing else.

ECAREG CANADA

On February 4th, 1970, the Liberian tanker ARROW with international call sign 5LHI grounded on Cerabus Rock in Chedabucto Bay, Nova Scotia. This created a severe oil spill that took some time to clean up. This incident prompted the Canadian government to create another empire; one of marine traffic centres around the country, to control the movement of all ships traversing the areas of these various traffic-zones as they were known. The controlling organization for eastern Canada was known as the Eastern Canada Regulatory Area, a part of the Canadian Coast Guard Traffic Centre, and naturally this was abbreviated to ECAREG CANADA which became their telegraphic address.



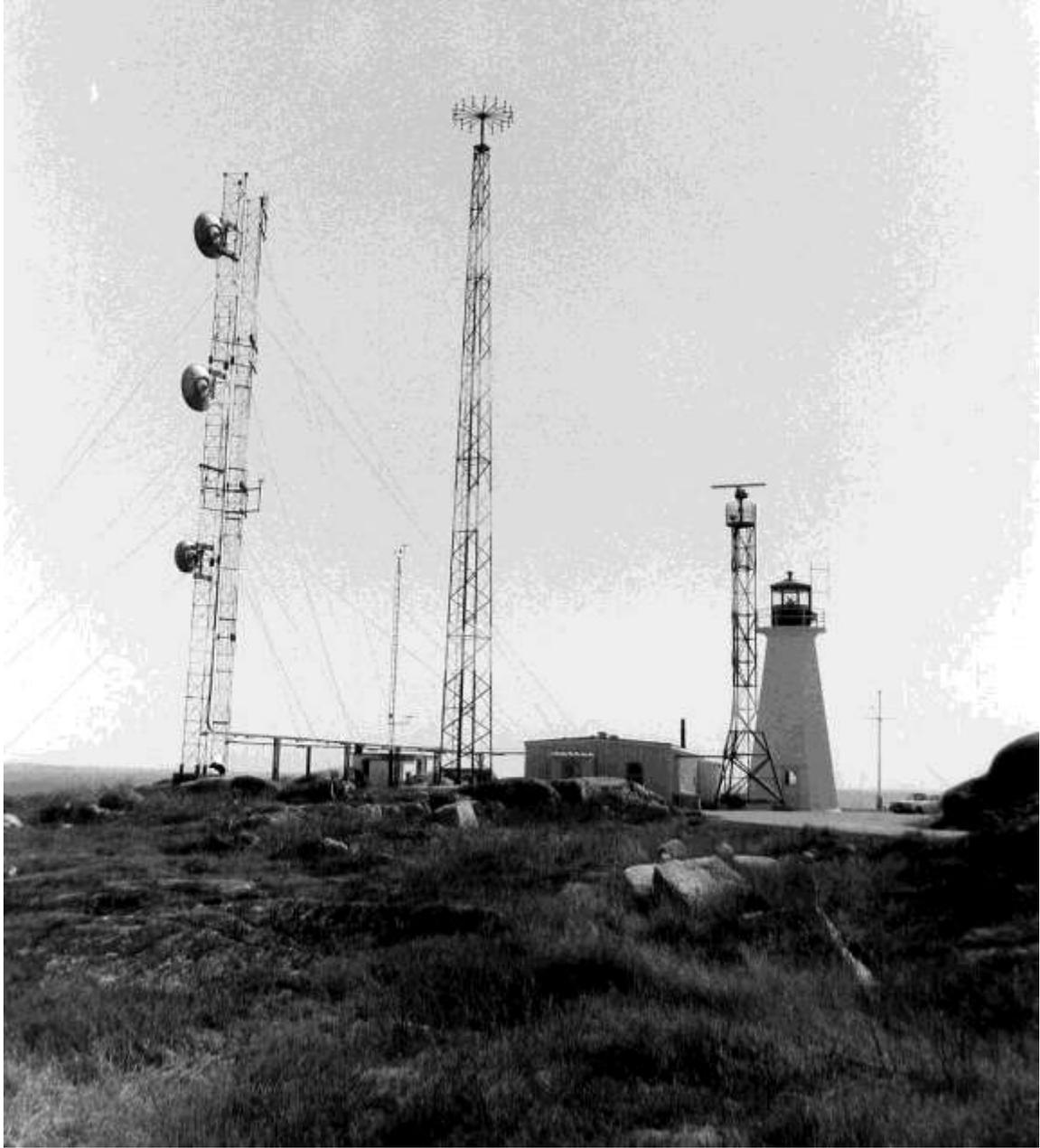
Warren E. Hagar

The ARROW was not the first vessel lost on Cerabus Rock. There had been many vessels lost on this rock and this is the SPICA that struck in the same spot as ARROW and became a total loss. Unfortunately Warren did not supply the date this one was lost.

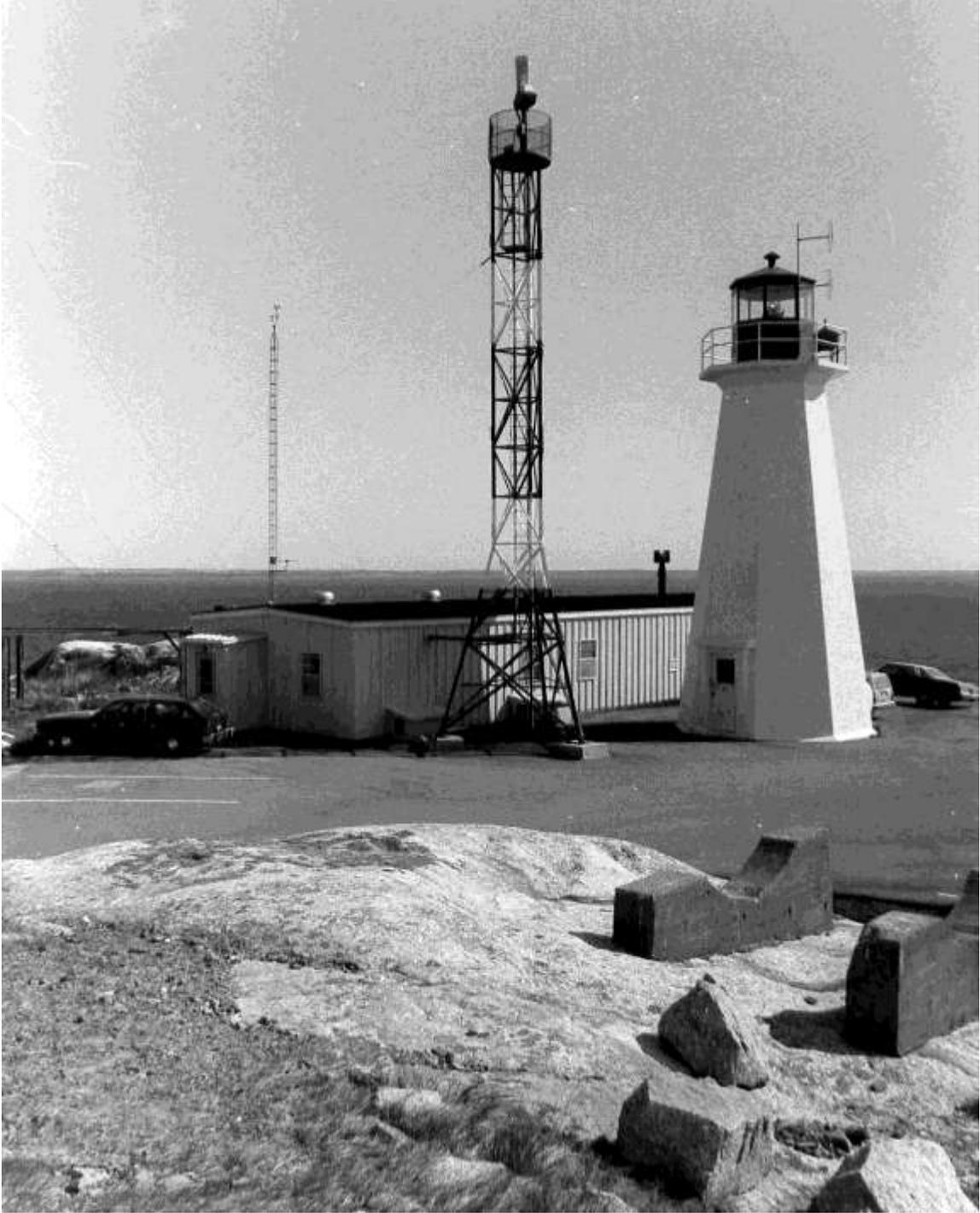
A site chosen for one of these Vessel Traffic Management stations was the old Chebucto Head Direction Finder site that first opened as station VAV in 1917. This station opened on October 6th, 1972, and was officially known over the radio as Halifax Traffic. The call sign of this station was VBJ20. There was no radiotelegraph service at any of the VTM (Vessel Traffic Management) stations and most of their communications was conducted over the VHF FM radiotelephone channels. Each station was equipped with a small ship's type two-megahertz radiotelephone for use with vessels that for some reason could not communicate on the VHF channels.



John Rae and Paul Britton



John Rae and Paul Britton



John Rae and Paul Britton

These are three views of Vessel Traffic Management Station VBJ20 "Halifax Traffic" and the Chebucto Head Lighthouse on May 19th, 1980. I am member number 1052 of the Amateur Radio Lighthouse Society and for you members this is number CAN-133.



NOVA SCOTIA, CANADA

VE1BC

S. G. "Spud" Roscoe



TO RADIO : _____

DAY	MONTH	YEAR	UTC
RST	BAND	MODE	PSE QSL
			TNX QSL

printed by www.qslcanada.com

QTH _____

This is the vehicle you made contact with at the above noted location. The antenna is a Comrod AT82, 50C 50237 Smartcreeper and the rig is a 50 watt Ten Tec Beant via solar powered batteries. The battery room is the little door in front of the wheels. The yellow power cord assists charging the batteries when available. Everything operates on 12V or propane.

This is the front and back of one of my amateur radio QSL cards and is the vehicle I take around to the lighthouses and operate radio.



John Rae and Paul Britton

This is the Operations Room of "Halifax Traffic" on May 19th, 1980

In a way this station was nothing more than a more modern version of what was first opened in 1917. The fully automatic radio direction finder at this station covered the VHF channels only. When a ship was heard on this direction finder the bearing was displayed automatically on a digital display. There were several radars at various sites around the area that were fed into this station on closed circuit television displays via microwave circuits. The operators were able to record these radar displays on video recorders that could be played back and would show the location of a target (ship) on those units for any given time. The operators that manned those stations were former radio operators, deck officers and members of the radar branch of the Armed Forces. When you realize the expense involved in operating those stations, one was left with the feeling you could have run two fully loaded ULCC's (Ultra Large Crude Carriers) together. This should have created one-large ULCC times the power of two-bang, and would have come away with less expense involved. But these stations were there and most Captains were not impressed. The expense was apparently justified in looking at the system in a long-range scale. New York City had nothing like this and there was more ships and shipping in a day there, than comes near this coast in a year. But it became mandatory for all ships to send in a large list of detail concerning the ship and request a clearance in order to enter the area. This organization wanted to grow to the point it controlled ships in the same way as Air Traffic Controllers controlled aircraft.

This system had its growing pains. The first years it was in service I did not receive a clearance to enter until we had entered and in some cases departed. Most of the Captains I was sailing with could have cared less and only one insisted on this clearance before arrival. I therefore had to request it in order to receive it before we arrived. Afterwards while operating VCS I sent the late Wilf Fontaine a clearance for his ship CCGS WOLFE with call sign CGCT to enter Canadian Territorial waters. We had a little fun with that one that was a mix-up on Ecareg's part. CCGS WOLFE had not left Canadian territorial waters since she was built in these same waters back in 1959. The sad part was that while we were tied up in this

communication, including the minute or so it took me to ask him how it felt to be flying the Greek flag, this prevented any other communication on this circuit, and probably some paid communication with a merchant ship.

When these stations first opened one Captain told me they would be great for running up and down this coast in fog when little or none of his navigational equipment was working. I could tell by the way he told me this that he already knew how he would extract his position from these operators and without admitting his navigational equipment was not serviceable. It would have been interesting to hear him accomplish that feat.

Since these stations had no radiotelegraph the regular coastal radio stations handled all the long-range communications and we at VCS got the largest portion of this message traffic. The technicians at the nearest coastal radio station did all the maintenance at the VTM stations, so the technicians at VCS also maintained all the equipment that made up Halifax Traffic.

We were tied up in transmitting and receiving many lengthy messages to and from many of these ships because so many of the foreign ships did not understand this service or these stations. All of the messages were handled free of charge and a ship could request anything from this ECAREG CANADA address. Actually during the ice season especially many of the routine clearance messages were rather long and contained mostly information on ice conditions and the route the ship was to follow through the ice. These ships were required to follow these instructions in order to obtain icebreaker assistance. Transmitting one or two of these messages was no problem, but on about the fourth in little more than one hour, tended to get you in one way or another. The majority of the messages were identical.

Unless there was something outstanding, I seldom read anything I received or transmitted via radiotelegraph. A minute or so after I received or sent a message with a ship I had no idea the name of the ship or what was contained in the normal run of communications. I honestly feel most operators got this way after a certain length of time on the job, and I feel this is the way with most jobs. Much of this job was repetitious. But a good case concerning this subject involved one of these Ecareg messages. The telex machine or the Ecareg telex operator goofed – at least somewhere along the route one line of the text of this message was repeated three times for no reason, before continuing with the text. In other words, three lines of the actual wording of the message were identical, one right after the other. I had just transmitted so many of these messages that I transmitted this one identical to the way we received it. I did not realize this until the operator on the ship questioned this – talk about feeling foolish.

THE LIFEBOATS

The Canadian government has maintained a number of lifeboat stations around our coasts for nearly two hundred years. The lifeboat station at Duncan Cove, in the approaches to Halifax Harbour was established in 1886. For many years many of these lifeboats remained nothing more than large rowboats, but these boats were improved with the advancement of small boat construction practices. As the combustion engine decreased in size and increased in horsepower, they were gradually fitted into these vessels.



C. R. "Sprack" Spracklin

This is one of the Coastal Lifeboats during World War I

The first to be fitted with radio communications did not appear until 1966 and the first of these was the one based at Clark's Harbour, Nova Scotia, granted, during the interim many boats fitted with radio played an active role in this type of service. The many boats in service with the Royal Canadian Mounted Police, and the Royal Canadian Air Force are good examples. This first boat assigned to the Clark's Harbour Lifeboat Station in 1966 was actually built in the United States, and is one of the United States Coast Guard's forty-four foot steel utility boats. Since then the Canadian government built a number of these at various small shipyards throughout the country. There must have been over twenty of them in service by the early 1980's. All had a number rather than a name, and the prefix of this number was the digit one. The one at Clark's Harbour was 101 and they were numbered upwards from that number.

www.mlb.com gives an excellent description of these lifeboats.

These lifeboats were identical to the ones I described with the Marine Squadrons of the Royal Canadian Air Force. Nine served in the air force and may have been the reason the Coast Guard decided to purchase more of these vessels.

The one that was based at Sambro was the 117 and it replaced the lifeboat at Duncan Cove. The radio call sign for the 117 was CG2613 and all those lifeboats had a similar call sign. The call sign was longer than the name.

Shortly after 101 commenced, she and all those built afterwards were modified for Canadian use. The main modification was a fiberglass house. All these lifeboats had more electronic aids on board than any merchant ship in which I ever sailed. Each had: radar, loran, CB-GRS, VHF, and SSB radiotelephone both

VHF and MF radio direction finders, to name the more important pieces. Some of this equipment spilled over from the deck/wheel house down into the small galley, washroom, and sleeping area.

They were supposed to be self-righting and fitted with safety harnesses for the crew for this purpose. When a close friend picked a new one up at the shipyard and wanted to roll it over as part of the sea trials, the shipyard employees would not permit it. This same friend and boat had a hair-raising experience on running into some bad weather during this very delivery. The boat rolled over so far the cutout switches of Canadian design, shut down the engines and nearly caused this boat to wash up on terra firma before the crew could get an anchor out and the engines restarted.

These lifeboats made their base at the government wharf of the port they were assigned. Nearby was a base in the form of a trailer that contained the office, washrooms, storeroom, and duplicates of the radio communications equipment. The VCS station communicated regularly with several of those lifeboats. They all transmitted weather observations to the extent we at VCS had those for 117 memorized up to the point of the actual observation. The first part containing the identification, position, and date/time was always the same. These lifeboats transmitted these weather observations from the office ashore, because there was insufficient room to record the observation while the boats were out on a mission.

There were six crewmembers assigned to each boat that worked a week-on and a week-off system. Three crewmembers per week worked a four-hours-on eight-hours-off schedule when not actually out on a mission. One crewmember of each crew is known as the Coxswain. Bill Stewart and the late Murray Garrison were the two Coxswain assigned to 117, with Bill in command overall. All of these boats have performed some excellent examples of humanitarian deeds, in one form or another, and if there was any way of putting a price on their service, they probably return the expense involved in their up-keep.



National Film Board 68-4346

This is the Coxswain Ron Newell and Seaman (in background) on board the Coast Guard Lifeboat 101. This was the first of a series of these Lifeboats. This one was purchased from the United States Coast Guard and this photo was taken in 1968, prior to a complete wheelhouse being installed. The rest of this class of Lifeboat was Canadian built (with the wheelhouse).



United States Coast Guard

A model of a 40-foot U.S. Coast Guard steel utility boat whips along the coast of Ketchikan, Alaska. Designed primarily for law enforcement duties and rescue in moderate seas, this class of boat operated in U.S. coastal and inland waterways out of Coast Guard rescue stations, bases, and Captain-of-the-Port offices. Among a variety of duties, they coped with anchorage problems in harbour areas, inspected piers for hazardous conditions, assisted in fighting pier and vessel fires, watched over pleasure boatmen, and assisted in distress cases ranging from towing a small boat ashore to pulling victims from a ditched aircraft. They were powered by twin six-cylinder 190 H.P. Diesel engines, they ran at a maximum speed of 23 knots, and had a range of 28 nautical miles at full power. Their fuel capacity was 370 gallons. They were constructed of steel with a "V" bottom, with an overall length of 40 feet 3 inches. They had a beam over fenders of 11-feet 4-inches and a normal draft of 3-feet 3-inches. Fully loaded they displaced 26,570 lbs. They were manned by a crew of three and with room for 20 persons or 5,000 lbs of cargo. This model was a follow-up improved version of the first group of steel 40 footers begun in 1951, under construction at the Coast Guard Yard, Curtis Bay, Maryland.



John Rae VE1AGN

This is Coast Guard 117 at her home base Sambro, Nova Scotia on May 30th, 1980. Note the trailer with duplicate communications equipment.



John Rae VE1AGN

This is the Wheelhouse of the Coast Guard Lifeboat 117 on May 30th, 1980. Note the difference between this and the 101 in 1968.

All these lifeboats changed their names around 1990 and were named after the village or port they were based. They were given the terminology Cutter that had been assigned to a larger boat described in the next portion of this exercise or history. 117 became the Coast Guard Cutter SAMBRO. Since then these lifeboats have been replaced with a larger boat of the same name, but the overall job has changed little. They no longer stand a watch at the office but one crew is on for one week at a time with the other taking a week off. Chris Fleming and Steve Beazley replaced Bill and Murray in the Coast Guard Cutter SAMBRO. They are forever on course of one description or another and forever testing out new equipment of one type or another. They often have exercises with some of the military equipment, aircraft, helicopters and the like, that are assigned to the search and rescue branch of the Armed Forces.

THE COAST GUARD CUTTERS AND MORE ON THE ROYAL CANADIAN MOUNTED POLICE MARINE DIVISION

The United States Coast Guard has to be one of the finest organizations known to man and it is very frustrating to think we Canadians could have an organization just as efficient, had we retained the Royal Canadian Mounted Police Marine Division. The Canadian Coast Guard at its best will never be the equal of the Mounted Police Marine Division at its worst. The reason for this has nothing to do with the ships or personnel and is simply the nature of the beast. The Canadian Coast Guard employees are unionized government personnel on a civilian plan. The Mounted Police Marine Division was a paramilitary organization. The Coast Guard does not have the law of the country behind it as the Mounted Police Marine Division had. In other words, a Coast Guard vessel has to carry various officers from the Mounted Police or whatever organization is involved in whatever duty it is performing. The Coast Guard will never have the

communications capabilities or the backup service that the Mounted Police Marine Division had. Communications is by far the most important tool of any organization. A good organization can look very bad with poor communications, whereas a poor organization can appear more efficient with good communications.

Was the Mounted Police Marine Division as efficient as it should have been? The only contact I had with this unit occurred during the summer of 1962. At that time I was sailing as Radio Officer in the square rigged sailing vessel BOUNTY, built at Lunenburg, Nova Scotia, to film the movie Mutiny on the Bounty. On completion of this movie, we took the ship on a publicity cruise and when we entered the various ports we visited on this cruise, we were well received by the local population. These ports were crowded with small pleasure craft that came out and sailed in with us. These small pleasure boats were well organized in the United States, but in Canada they were as near a nightmare as you would care to witness. The United States Coast Guard placed an eighty-foot patrol vessel that I have always known as the Point Class Patrol Boat at our bow, and led us in with a small patrol boat on either side of us. This eighty-foot boat has been labeled the Point Class because they all, at least to my knowledge, had the prefix Point in their name. The Point Class Boat is the boat the Canadian Coast Guard copied for their Search and Rescue Cutter. These six Canadian boats were a good example of the fact our government had no idea what it was doing when it assigned call signs from our blocks of calls. All six of these boats were sisters and identical.

CG2233	RACER
CGCF	RALLY
CG2232	RAPID
CG2230	READY
CG2231	RELAY
CG2242	RIDER



United States Coast Guard

This is the USCGC POINT LEDGE with international call sign NDLK.



Canadian Coast Guard

This is the CCGC RELAY with international call sign CG2231



National Film Board 63-7073

This is Captain H. J. Crocket using the Radiotelephone in one of the Canadian Coast Guard Search and Rescue Cutters.

Why did RALLY have a four letter call sign, one of the FORT FRANCES' old call signs, and the others a two letter four digit call sign? At least one had a call sign. Because of all the extra equipment incorporated in the Canadian version of these boats, our fishermen were not long in naming them fair weather boats. These six could not handle the rough weather necessary for a rescue vessel, and many who sailed in them during a storm, got down and actually kissed terra firma when safely back. If operated as designed they were an excellent patrol craft, and in the United States Coast Guard the crew went home every night unless needed for a mission, whereas the Canadian crew remained on board for twenty-eight days followed by fourteen days off. CCGC RALLY was based at Dartmouth and the other five were spread out over the Great Lakes and the West Coast.

The American Point Class Boat normally carried out its duties with a Chief Petty Officer in command. While taking the BOUNTY in and out of these American ports, Captain Coggins could sit back and relax, letting the pilot do most of the work. The two small patrol boats on either side of us were the forty foot utility boat described above and carried two Coastguardsmen, one standing and steering on one side and the other on the opposite side hanging on to a handle that was there for that purpose. Both wore white uniforms

and life saving jackets. The one steering was of the seaman trade or branch and the other was a motorman, both would have been Petty Officers, probably third class, the equivalent of a Leading Seaman in the old Royal Canadian Navy. Neither of these boats tolerated any foolishness from those in the pleasure boats. Those in the American pleasure boats appeared just as drunk as those in the Canadian pleasure boats that came out to greet us. You could feel BOUNTY's deck vibrate from the vibration of the large engines in these two small patrol boats. When a pleasure boat started to drift down on us, the patrol boat nearest to it would use a loud hailer, naming the offending boat and state it was getting too close to BOUNTY. If this offending boat did not move over immediately, the motorman in the patrol boat got a good hold on his safety handle. The patrol boat let go a blast on a siren. The boat leaped ahead so that it literally scooped the water out from under its stern and jumped at the offending pleasure boat. No matter how drunk the skipper of that pleasure boat appeared he got out of the way in a hurry, because he knew that the Coast Guard Patrol Boat would go straight through his boat if he failed to do so.

Entering Vancouver, British Columbia, was a different kettle of fish to say the least. We had no help whatsoever and why no one was run down and drowned is a mystery. One old Royal Canadian Air Force Crash Boat remained as close as possible to us, and the nut driving this appeared to be as drunk as any we met. At one point he ran across our bow so close he dragged his radio whip aials under our bowsprit. At that point Captain Coggins was losing his cool and yelled to our Chief Engineer, Murray Munroe, for full astern. Murray snapped both engines astern with such force it felt as though he lifted the old girl's butt six feet in the air. We did not move until Captain Coggins was certain all was clear ahead and no one had been hurt, and that was one of the few times we were to hear him swear.



Royal Canadian Mounted Police

This is RCMP VICTORIA with international call sign CGMS. Apparently it was hard to get her to come in close for an official portrait as well. This is the steel built copy of the navy's Seaward Defense or Bird Class patrol vessels. She is a sister of the wooden RCMP BLUE HERON.



This old photograph was given to me by someone traveling the Alaska Highway in the early 1960's.

This is the Canadian replica of HMS BOUNTY entering Vancouver, British Columbia, 1962.

While entering and leaving port with BOUNTY, I spent most of my time down in my room monitoring 2182 kHz. This was before the days of the very high frequency radio, with many walking around with a walkie-talkie strapped to their belt. Every so often one of these pleasure boats would call us and welcome us to that particular port. This not only gave me something to do, but gave those in these boats a little more to remember of our visit. It also let any of the official sources know that I was available if they wanted us. While entering Vancouver and as we were nearing the docks, one of these boats called and told me we were going to the wrong dock. I answered the boat that identified by the boat's name only, and said that our Captain and Pilot were quite capable of getting us to the proper dock, but thanked him for his concern. He immediately became rather panic-stricken and said he was the Harbour Police and gave me a description of his boat, an ordinary pleasure boat, stating he had a sign in one of the windows. I told him how I was dressed and that I would run up on deck. When he saw me he should wave and I would point him out to the Captain.

I then ran topside and spotted this boat off our starboard bow just where he said he would be. Captain Coggins by this time was as keyed up as we ever saw him. I had some trouble in getting his attention and when I did point this out to him he blew his cool completely and ran up the mizzen ratlines shouting to this boat. The pilot we had taken on board did not know the dock we were to go alongside. Captain Coggins turned BOUNTY among that mob of pleasure boats and got her back to her proper dock without incident. This has to say something about his capabilities in handling BOUNTY, but the big mystery behind all this confusion remained with the R.C.M.P. Marine Division. We had to wait a few days hidden in a small cove in order to arrive at the time advertised by the owners, Metro Goldwyn Mayer. While waiting at least one of the small R.C.M.P. Marine Division Patrol Boats came alongside for a chat. When we entered Vancouver the steel Bird Class Patrol Boat, RCMP VICTORIA with call sign CGMS remained off on the horizon from us. We felt at the time that she had just happened by for a look at us while we entered port. One thing is for certain, had she been ordered to assist us into the harbour she did a damn poor job of it. A couple of their small patrol boats, one on either side of us, with her in the lead keeping the drunks off, would have been a welcome sight. I still say the only reason no one was killed was due to the seamanship

performed by Captain Coggins with BOUNTY. I could not think of anything appropriate to say to RCMP VICTORIA, but made a point of calling her and telling her I was closing down my radio station. Hopefully they got the message.



Marine Engineering/Log

This is the Canadian replica of HMS BOUNTY at her berth St. Petersburg, Florida during the 1970's.

ASSISTANCE FROM THE UNITED STATES COAST GUARD

I had to trouble the United States Coast Guard twice for assistance in one form or another over the years. The first time was when I was sailing in BOUNTY. Just before we gave our wives a friendly little pat on the fanny and sent them home to Nova Scotia, and then departed Boston, Massachusetts, for Calais, France, an Admiral in the United States Coast Guard came aboard for a routine visit. During this visit we mentioned that the only thing that really troubled us on taking BOUNTY across the Atlantic was the one thing that had troubled seamen for centuries – weather. We stated that we had done all possible to ensure a safe passage. This included the construction of a fairly large sea anchor of two large timbers and canvas. If we ran into a storm we were going to throw this over BOUNTY's bow and make a serious attempt at riding out this storm. Oh yes, I also had my new main aerial for the radio-station that I had been whimpering about since joining the vessel. When we mentioned this concern for the weather this Admiral, whose name I no longer remember told me that when he returned to his office he would be sending a signal to all their vessels on station in the Atlantic. That I was to call a certain call sign he gave me, anytime Captain Coggins wanted this weather detail.

Shortly after this Admiral's visit, we cleared Boston Harbour, and BOUNTY blew the dust out of her old air whistle on the mizzen mast in the traditional three long blasts, meaning; good bye, good luck, and God bless in response to the armada of pleasure craft that had escorted us out to the harbour entrance. We were on our way with several hours of pure silence, except for the duty watches the rest made serious attempts at drying-out and resting up from another memorable visit. We were rather disappointed that we could not duck into home, possibly Halifax, as we passed so close to Nova Scotia. With memories of the performance of trying to get in and out of Western Canada so fresh in our minds, I do not think many dwelt on the subject. The majority of our wives had been over to Boston for a visit and as this voyage across the pond progressed I kept a serious watch on any ship that transmitted a weather observation. I had the weather code books and could break down these observations, and I remember copying these retransmitted ship observations from Halifax Radio CFH. One interesting observation I picked up at the time was from a ship with call sign FNRR, and on mentioning this to our second officer, he claimed it was a new French passenger vessel named the FRANCE and that proved accurate. When I gave this observation to Captain Coggins, I mentioned the fact that his speed code was 9, meaning in excess of twenty-nine knots, and that he was beginning to fade out on the end of his transmission from this high speed. I was never very good at trying to pull someone's leg, and needless to say Captain Coggins caught on and laughed about this as I did. At one point as we went along towards France, I was having trouble collecting these observations and had little to offer Captain Coggins on actual weather observations. At this point he suggested we take the Admiral up on his hospitality, and asked me to call the special call the Admiral had given me. This was during the first part of my career in radio and I honestly wish now that I had had some of the experience I had accumulated after this experience to offer Captain Coggins on that voyage. The one thing I failed to realize at the time, was that few operators retain these radio call signs as well as I seem to remember them. I felt at the time that, the one who answered my call immediately on 500 kHz would also know exactly who I was from my call sign. This operator, after we shifted to a working frequency and I made my request, hesitated to the point I could almost feel him thinking "How did this nut get that call sign, and how am I going to get rid of him before every nut out here wants the same thing – weather". So I reached over and tapped QRA, from the Q code meaning – the name of my station is and then sent SAILING VESSEL BOUNTY. At that point this operator jumped as though the Admiral had reached out and smacked him on the back of the head. We got our weather but at least fifty percent was of no use to us. We did not understand it but suspected some of it was the temperature from the seabed to high in the sky. We did make excellent use of what we understood and greatly appreciated same. This was the only time on the voyage that we made use of this most generous offer. We had heavy seas and high wind at one point about half way across, but made the passage in fifteen days if I remember correctly. At one point we went up one large sea and on reaching the top got blown down into the trough. I have been told this is known as being tripped. I have experienced it twice over the years. It is not a very pleasant feeling. You are rolling along and all of a sudden the deck appears to become a wall. This means that anything not secured down becomes a flying object rather quickly. When this occurred with BOUNTY I was sitting at the operating position transmitting our routine noon position message to the MGM office in New York via Chatham Radio WCC. Needless to say my transmission terminated rather suddenly as I went ass about face, and when I fetched up

I was hanging on the edges of the radio room door just behind me. This prevented me from dropping down into the officer's pantry. This was normally across the companionway but the radio room was now up with the pantry down.

Looking back, I do not remember being scared at the time because I was so fascinated with the speed in which Captain Coggins landed in the companionway. His cabin was next to this pantry and he had gone into it shortly before. I am certain he was in the companionway yelling "All hands on deck" before BOUNTY had a chance to shake free and right her-self. At least I was still hanging on the radio room door as Captain Coggins ran past for the ladder to the main deck. At this point I was not certain whether or not I was an official hand, but what the heck I have two, WCC's operator can wait, so I let go of the doorway and fell in behind Captain Coggins and went on deck right behind him.

The aforementioned sea anchor had broken loose but we managed to re-secure this without too much trouble. The only other damage was that one of the cannon had broken loose. It took little to catch this and get it re-secured back in its proper port in the ship's side. Fortunately these cannon were not authentic. They were made of wood and coated in a plastic coating to look original in the movie. Each had a steel pipe in the barrel so that a small authentic sounding bang or charge could be fired from them. I did not see this but was told that it was possible.

If I remember correctly I was away from my operating position about one-half hour. When I sat down to finish the transmission, I felt the operator at WCC would have tired of waiting for me and had gone back to communicate with other vessels. This was not so. I reached over and gave him a quick call to find he was waiting patiently. We had a bit of a chat about the lousy weather. I finished my message and signed off. WCC gave me excellent service and the operators at the station went out of their way to assist me. Since most of my message traffic was addressed to the United States I used this station daily while in the Atlantic.

My second request for assistance to the United States Coast Guard was a better example of the efficiency and excellent organization. During the summer of 1972 nearly ten years to the day after the BOUNTY request, I was Radio Officer in the GYPSUM EMPRESS with Captain Claud Brook in command. As explained earlier on these pages, the world economic situation was good and anything that floated could find work. Good crews were hard to find, or impossible, and if I remember correctly Captain Brook and Terry Ely, our Chief Officer, spent most of that summer working six hours on and six hours off. The company could find no qualified mates to assist them. I did what I could to help by working as the third mate would have if we had had one, entering and leaving harbour, and with the cargo. Possibly I was more nuisance than good, but at least neither Mr. Ely nor Captain Brook told me to get out of the way. So I presume I was of some use. Yes, it was quite a summer, an excellent experience but one I would rather not relive.

We were coming up from Kingston, Jamaica, bound for Jacksonville, Florida, on one of our runs. I was getting ready to climb into my bunk for the night when Captain Brook knocked on my door and stated one of our cooks was quite sick and wanted to know if I could get some medical help. The first thing that flashed through my mind was, "damn, with all the trouble this guy (Capt. Brook) has had this summer, now he has this to contend with". All I said was something to the effect "you bet, Cap, no problem" and tried to make it sound as though I had all the medical technology of New York City at my fingertips. As I climbed back into my khaki uniform, I said "Cap, I've never done this before but I'll give them plain statements and let those ashore ask the questions. There will probably be many so stand-by with the answers". He said that either he or Terry would be there for the questions and Terry was with the cook at the moment. That was an understatement, because I was beginning to wonder if either of them ever slept – it was one of those trips.

At the time we were in the Windward Passage just between Haiti and Cuba, and so close to Cuba we could see the fires ashore from the sugar cane fields. I have not learned why there are so many fires in a sugar cane field, but it must be some part or portion of the harvest procedure. As I staggered into the radio room I was thinking of what my best bet would be on the quickest answer. I knew I wanted the United States Coast Guard, which, in this type of situation would be akin to having one's own Mother. I was too close for Coast Guard Miami, Florida, with call sign NMA on twelve megahertz, and too far for the same station on 500

kHz because of the terrific amount of static on that frequency. That area has the heaviest level of static in the world, especially in the summer and this was August 15th, 1972. So I went for Coast Guard Norfolk, Virginia, with call sign NMN on eight megahertz, feeling it would be my best bet.

The BOUNTY was my first merchant ship and she had no emergency equipment, such as batteries to run the ships radio station if the main power from the ship's main generators failed. She was also a bit of a fire hazard, wood, canvas, and a lot of both. Therefore, I formed the habit in her of making sure all was set to go for an SOS just in case. If I needed to send one all I could manage from her main station on the ship's main generators would be all anyone would ever get. I feel it was a good habit and one I kept while at sea and fortunately did not have to use. I also sleep very soundly and that was the main reason I kept this habit. Captain Coggins had a good chuckle one night while in the Juan de Fuca Strait. We had picked up a tailwind after a voyage of steady headwind, and we were able to go into Vancouver ahead of expectations of a few hours previous. When I came around I was ready to go on 500 kHz with Captain Coggins asking what the heck I was doing. My answer was that you want me and it is the middle of the night so must be important.

So therefore, I had to wind the GYPSUM EMPRESS main Globespan transmitter up for maximum smoke or output on the eight megahertz calling frequency from 500 kHz, but I did not have to wait for it to warm up. I had learned long ago that if you wanted the least amount of trouble from those old tube rigs to leave the filament voltage on at all times. The heat from the filaments kept the equipment nice and dry especially in the tropics. So, I was ready to go in a matter of seconds. The receiver tuned to 8465 kHz if I remember correctly and as I belted NMN and reached for the log, the inevitable record, I received a strong DE. In other words, who are you? So I belted a DE GHZF, this is GYPSUM EMPRESS, and QSS, from the Q code meaning I will use the working frequency, followed by three digits like 377 meaning the working frequency of 8377 kHz or whatever this frequency was in GYPSUM EMPRESS. I had a choice if I remember correctly of three working frequencies in GYPSUM EMPRESS and used the first of these. Had there been interference on the first I could go two more on the same band with hope of locating a clear frequency before having to shift bands. Most always my first choice was okay and rarely did I ever have to shift to number two, and only once in a very rare case would I have to go to number three. The eight-megahertz calling band at the time was from 8356 to 8374 kHz. After the transmission of the QSS and three digits I terminated with the letter K, the invitation to transmit. Had I not received the strong DE after transmitting NMN only twice, I would have continued a repetition of NMN until I received the DE or until I had sent NMN something like twenty times. If no DE by that time I would have been ready to try something else, because by this time I knew the GYPSUM EMPRESS station well, and knew NMN equally as well from the many weather observations I had transmitted to them. In other words, what I had transmitted on my eight megahertz calling frequency looked like the following with the exception of the three digits that I no longer remember.

NMN NMN DE GHZF GHZF QSS377 K

It took much less time for me to do all of this than it has for you to read my description. The answer I received to this call was a bit of a surprise, but at the time a number of the United States Coast Guard Stations had the same frequency on the eight-megahertz band. I do not recall any interference problem from this arrangement, identical to all the British Commonwealth Stations. Actually it was more an asset than a liability that it proved in this case, and my strong reply looked like this.

GHZF DE NMF R UP

As I reached up and grabbed Globespan Gertie's chrome frequency change switch, I looked around at Captain Brook who was at my elbow and said, "Coast Guard Boston loud and clear Cap". He looked at me as much to say, "Why are you troubling them so far north of us". But not wanting to look a gift horse in the mouth nodded his approval. Oh yes, there was another little trick of many I had up my sleeve in those days. I always tuned my transmitter that involved a procedure of dipping one meter for resonance, and increasing the other meter for maximum output, matching the tank circuit of the transmitter to the load, the aerial, on the working frequency I intended to use. This was a little pet trick of my own, and will not be found in any manuals on the subject. It could very well have been illegal for all I know. More than likely it was, because

it was illegal to knowingly create interference and this falls into that very category, but all is fair in love and war. Operating a ship's radio station has always been a lot of the former, sometimes a bit of the latter, and on occasion something in between with me, so I justified this little trick on that basis. But this would accomplish two things in my mind. One was that it would likely clear anyone off the working frequency I intended to use, if anyone was on it, and at least would let them know I planned to land on it soon. The second and the reason I started this habit, good or bad, was that my transmitter was tuned for the frequency I would be passing messages. Therefore, tuned better for this frequency if there was any noticeable difference between the calling and working frequency in the same band. It would be very slight if there was any difference and this way I knew it was the better. There was no point in wasting time trying to improve the output. The rules stated then that these transmitters were to be constructed so that they could change frequency in five seconds or less.

So, on NMF's roger up to me I snapped over to the working frequency and was ready to go. I called him with our call signs a couple of times to give him a chance to tune me in and then went right into my request with GE OM – good evening old man. I then sent something to the effect I have a sick crewmember need medical assistance but do not know how to go about getting it. The latter was a bluff on my part. I knew about the messages known as deadhead medical – free of charge for medical assistance – but wanted to get this show on the road without having to look up the detail on these messages and waste a lot of time telling him the colour of the ship and the like. I also knew this operator would have a list of questions in front of him to ask me, and he would give me these questions long before I could find them. Besides this operator would be a United States Coast Guard Radioman using English, and my English, such as it is - is the only language I know.

In a matter of seconds this radioman was transmitting the questions I expected. As he sent them I reached over and wrote them down in front of Captain Brook. He placed the answer next to each question as he read. After the first session of these, Captain Brook left to go down to the cook's cabin and get the answers to the medical questions. For a gravel barge, and that is a very crude way of describing GYPSUM EMPRESS, we were in pretty good shape on the medical side. If I remember correctly the only medical instrument that was mentioned that we did not have, was a blood pressure cuff or Monometer that tells your blood pressure or voltage. I knew we had a good supply of pain killing drugs as it was my job to list these on various forms I had to complete for entering and leaving the different ports we visited.

It is hard to say how many trips either Captain Brook or Chief Officer Ely made between the radio room and the cook's cabin that night. By four in the morning everything had wound down to the point that neither the Coast Guard Radioman nor I had anything to ask each other. I told him that I was the only Sparks on board and that I was going next door to my bunk and catch a couple hours of sleep and would call him as soon as I was up. A couple of hours later, that seemed more like seconds, I was staring sleepily at Chief Officer Ely who wanted to know if I thought I was a passenger in QUEEN ELIZABETH 2. He said there was nothing more to report on the cook, we had done all possible, and he was not good at all. So I jumped out of my bunk and ran to the radio room, a few steps around the corner, and called the Coast Guard again on eight megahertz. This time Norfolk NMN answered me and said everything had been passed to them from Boston. A few minutes later all their questions had been answered and I got cleaned up for the day and breakfast. The catering staff consisted of a steward, two cooks, two mess-men, and a utility or cleaning man, so these people were shifted around to make up for the disability of the one cook.

As the day progressed with an occasional contact between Norfolk NMN and me, we eventually decided to switch over to Miami, Florida, NMA. NMA would have been on 440 kHz and I was on 454 kHz. At the time we would have been traveling at our maximum speed or as one engineer put it "with a vapor trail flying off our stern". With a three thousand horsepower steam turbine engine in a ship of 8180 gross tons, the vapor trail was only a figment of his imagination. We were running flat out and up around thirteen or fourteen knots. We were traveling towards Miami so our signals could do nothing but improve. I should mention that all five of the Gypsum ships built between 1947 and 1961 were more or less identical, and all five had beautiful main aerials. They were the standard Marconi long wire, but nearly three hundred feet long. My best contact on these was to pass a message from Cape Cod Bay, Massachusetts, to Hamilton Radio VRT, Bermuda. I used 425 kHz and VRT was on 426 kHz. This took place at midday and involved a distance of over eight hundred miles, so any who know radio at all will have to admit that it was a good

hump or performance. But as far as I know the record was around six thousand miles for the same band and this meant that conditions were perfect and it was probably during the hours of darkness across the night side of the earth or globe. If I remember correctly this two way contact took place between Chatham Radio WCC, Massachusetts, and an American ship in the South Pacific back during the 1920's.

As sunset was drawing near on August 16th, 1972, the Coast Guard Radioman at NMA asked me for a complete description of GYPSUM EMPRESS, stating they were coming out to us. I immediately asked him if they were bringing out a medic or planned to evacuate our patient. He said to stand by and he would find out. About a minute later he told me they would be evacuating our patient.

What an outfit, because for all they knew we were from England because GYPSUM EMPRESS was registered in London, England. Here we were cruising up the imaginary line on the chart separating Cuba from the rest of the world, the twelve-mile limit. The political situation between the United States and Cuba had not been the best by any means for some years. On occasion we would see a Cuban Gunboat off in the distance, but to my knowledge none troubled any of the ships transiting the area in any way. From an error in navigation GYPSUM EMPRESS had gone hard aground on the western side of Cuba a few years previous to this, but managed to free herself at high water with no damage or interference from the Cuban people.

If I remember correctly we were all English Canadians on board this particular trip with the exception of Chief Officer Terry Ely whose home was London, England. We did have two or three Polish nationals on board, who had jumped from their Polish fishing vessels on a visit to Halifax, Nova Scotia, and had landed Canadian immigrant permits. The United States would not allow them ashore when we visited their ports, a decision well founded. Poland must have been quite pleased to be rid of them all, because they all managed to get themselves fired before we had come to a full agreement on which we had assigned the names, George, Bill, and Joe; their actual names were impossible. They were experienced seamen, something we could ill afford to lose at the time, but sitting in a bar uptown guzzling beer when you are supposed to be on board and on duty is something that cannot be tolerated time and again.

Meanwhile, I gave Coast Guard Miami a detailed description of GYPSUM EMPRESS and stated all on board were Canadian, and all spoke English, in reply to their routine question as to whether anyone on board used that language. I also told them a helicopter would have no trouble landing on one of our seven steel hatches. Our forward house (or superstructure) was well forward leaving nearly three hundred feet between this superstructure and the one back aft, and there was a ninety-five foot mast on each house or superstructure. I told them the only obstacle was the main aerial I was using at the moment, that would have to be taken down on the helicopters arrival, but we had either a VHF or 2182 kHz radiotelephone for communication when the main aerial was down. I suggested to Captain Brook that we leave the main aerial in place until we had radiotelephone contact, because the helicopter would likely want a signal from me on the radio direction finder frequency of 410 kHz in order to find us with their ADF – Automatic Direction Finder. Aircraft Pilots then used ADF as one of their main navigational aids. Just prior to joining the Gypsum fleet I had spent six years at Aeradio Stations in the Western Arctic and Western Provinces of Canada. I had spent a fair amount of time flying with a number of Bush Pilots in various types of aircraft. Many of these pilots had let me fly their aircraft so I knew what it would be like for the crew of this helicopter coming out to us.

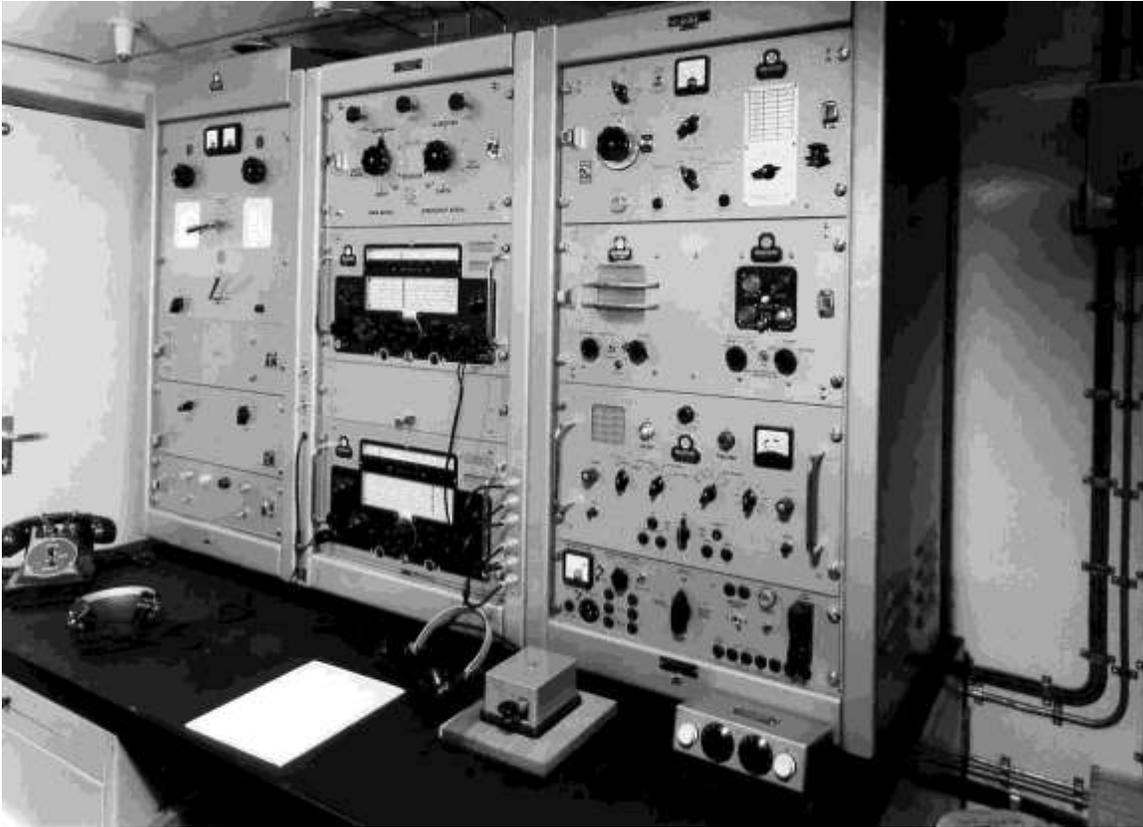
I believe the radioman at NMA asked me to remain in contact with him until we had established radiotelephone contact with their helicopter. At least I felt this best at the time and Captain Brook had Bosun Randall loosen the down-hauls on my main aerial and get it ready to drop as quickly as possible. Our 2182 kHz radiotelephone and VHF radiotelephone on channel sixteen were turned up to their limits. The 2182 kHz radiotelephone had a small wire aerial to the foremast and was not in the way of the helicopter. The VHF radiotelephone had a whip aerial on the forward house that was not in the way. It was nearly ten in the evening before we established contact with the helicopter. One of those moonless pitch-dark nights in the Caribbean where you have the feeling you could reach up and pick any of the thousands of stars out of the sky.

I made the first contact with helicopter Coast Guard 1476 on 2182 kHz, and we remained on that frequency until the mission terminated. On this first contact the pilot of the helicopter told me he had nearly sixty ships on his radar, and asked for a long count, one to ten and back, in order to home-in on my transmission with his ADF. This was good news, and the first I was to learn of an airborne direction finder capable of tuning that high in frequency. Any I had seen went to the top end of the broadcast band only, and many pilots went from point A to B on their charts, listening to the hometown AM broadcast station, with this same station pointed dead ahead on their ADF's. When the ADF swung around, the pilot knew he had just passed over the transmitter to which the ADF was tuned.



Captain O. K. Langdon

This is SS GYPSUM EMPRESS with international call sign GHZF. Note the round ports or windows just below the square windows of the bridge. Note the two sets of two ports in the centre of the superstructure. The two on the starboard side are the captain's office and the two on the port side are the radio room. The single port on the port side is the radio officer's cabin and the single port on the starboard side is the captain's cabin. The sets of two ports on the outboard sides simply provide forward visibility from a small outside deck on each side of the superstructure below the wings of the bridge.



GEC-Marconi Electronics Limited, England. Turners (Photography) Limited, Newcastle Upon Tyne

This is the Marconi Globespan installation on board the British MV PRIAM, 1966, with international call sign GPGE. This station is identical to the station fitted in the SS GYPSUM EMPRESS with international call sign GHZF, except for two minor features. GYPSUM EMPRESS had one Atalanta Receiver, and had a Monitor Emergency Receiver in place of the Alert Emergency Receiver fitted in PRIAM.

The radio room in GYPSUM EMPRESS was just below the bridge and chart room. The 2182 kHz radiotelephone was at the top of the stairs to the chart room, and the radio room was at the base of these stairs. On termination of this first contact with the helicopter, I ran down to the main station and told NMA we had established contact with their helicopter and that I was closing the main station in order to remove the main aerial. Meanwhile Captain Brook had Chief Engineer Joe Mano report to the engine controls, and once I gave the okay, had Bosun Randall drop the main aerial down on deck out of the way. I then ran back up to the radiotelephone to do all I could to assist.

After another contact or two with the helicopter, which was continually increasing in signal strength, Chief Officer Ely stuck his head in the door from the port wing of the bridge, and said he had the helicopter in visual contact. This I relayed to the pilot at which time he said he would appreciate having us steer a certain number of degrees from the wind direction and maintain a speed of eight knots. Captain Brook relayed the speed request to Chief Mano while Chief Officer Ely got accurate detail on the wind direction. Then Captain Brook altered course accordingly. In the meantime the pilot said he wanted to circle us for a good look. At the time we were running with only our normal navigational lights, red port, green starboard, white masthead, and white stern lights, with a desk lamp on over the chart table for illumination of the chart room. After the pilot had circled us, he asked us to turn on all our lights for a closer inspection. Captain Brook reached over to the main electrical switchboard and gave him everything, including all our bright cargo lights, and then picked up the microphone and told the pilot the lights were all on.

Most of us at one time or another, manage to do something that seems very stupid. This for me was one of those times. Captain Brook telling the pilot the lights were on struck me so funny I burst out laughing and had a job to suppress the feeling. There were a number of factors that prompted this improper reaction from

me. First and foremost is the fact we were tired and tense, but wanted a perfect performance on our part. I had had only about two hours sleep in the last thirty-six hours, and I doubt if either Captain Brook or Chief Officer Ely had had as much. My job in this mission was coming to an end, and when Captain Brook took that microphone in hand, you could say it had ended. I was beginning to relax inwardly and for better or worse I had done a perfect job. My choice in frequency for the initial call had been perfect, with help from a very alert Coast Guard Radioman in Boston. All had been perfection even the equipment had performed flawlessly. I had had a lot of trouble with the electronics in GYPSUM EMPRESS for the past four months. That is mentioned elsewhere, and if that part or portion of my career is used on judgement day, my chances will not be very good, but at the moment I was very pleased with myself, my station, my shipmates, and all connected with any of these.

The first thing that flashed through my mind, when Captain Brook turned on the lights, was the feeling I experienced one time when landing at the Edmonton Industrial Airport during the middle of the night in a small Cessna aircraft. The Edmonton Industrial Airport must be the only airport located in the centre of a city. The airport was built and the city grew around it. Sitting in this small Cessna as we turned down wind and slowed to land, I felt as though I were suspended in a sea of lights – a fantastic feeling.

When Captain Brook turned those bright lights on I could imagine the crew say something profane and reach around the cockpit for their shades or sunglasses. It all made for a very amusing situation to me, but the next morning when I saw Captain Brook after we both had time to unwind I made a point of apologizing to him, and tried to explain the reason. He just laughed, and said he wanted the pilot to know he had all the lights we were able to give him, and this of course was quite correct. No one would have done it differently, but not everyone would have a damn fool laugh while they did it.

After the helicopter looked us over for a minute or two he asked us to turn out the lights, and told us he was coming over our number two hatch and lower a basket. We were to place our patient in this basket, making certain no one secured the basket to the ship in any way. The radioman at NMA had stressed the latter, and Captain Brook had briefed the crew accordingly and by this time all the crew, with the exception of those on watch in the engine room were out watching this performance.

Our sick cook was Bill Sprake, who was sixty-three years of age. He had come to Canada early in life from England, and settled around home, the Kentville area, and knew both my father and grandfather, which gave us something to talk about. He was rather proud of the fact we called him Willie Sprigs around home. He also made the best hot cakes I ever ate.

As the helicopter came over us I watched the proceedings from the chart room window with Captain Brook, who was kept busy making sure all was in order. Although the lighting was rather poor, we could see a crewmember standing in the open door of the helicopter with a white helmet and harness on. Out from the door was a short boom and hanging from this boom was the wire basket, seemingly hanging on a thread. Down on the walk was Willie who did not look good at all, although he was able to navigate with the support of two of our rugged seamen. When the basket reached the hatch cover, several of the crew helped him up onto the hatch into it. Willie looked even worse sitting in that basket hanging on while the helicopter lifted him off and took off into the darkness. We all stated afterwards that we had no desire to ever make a trip in one of those baskets because it was a flimsy looking apparatus indeed but no doubt quite safe or so many organizations would not use them.

On completion, Captain Brook thanked the pilot over the radio, ordered us back on course, called Chief Engineer Mano, and we started to get back into routine. Shortly after this Bosun Randall came up and told me my aerial was back in place. I called NMA and told them the mission was complete then got ready for a good night's sleep. Captain Brook had me transmit an excellent message the next day, thanking all concerned. The Coast Guard told us they had taken Willie direct to the Parkway General Hospital in Miami, and I felt Willie would appreciate a copy of Captain Brook's message of thanks, so made up a copy, wrote him a note, and mailed them to him at the hospital. We heard nothing more from him so I assumed after a stay in hospital he went back home. It was a couple of weeks before I got home and when I stopped in to visit my Mother, she handed me a newspaper clipping asking "Did you know him?" The newspaper clipping was Willie's obituary. This was quite a blow because I honestly did not expect it since



United States Coast Guard

Helicopter Coast Guard 1469 a type HH-3F and a twin sister of Coast Guard 1476 helping a construction crew set up aids to navigation daymarks on a jetty off Barnegat Inlet, New Jersey. The type HH-3F is a versatile amphibious twin-turbine rescue helicopter equipped for supporting worldwide navigational aids, border patrol, law enforcement, and cosanographic and geodetic research. The work of search and rescue is made easier by the airborne navigational computers they carry.

There is one interesting item I have found worthy of note and the next morning while Chief Engineer Joe Mano and I were having breakfast naturally all the talk was on the helicopter and evacuation. The helicopter Coast Guard 1476 was a type HH-3F, a large turbo-powered helicopter. Joe told me that when it came over the ship he had to open the throttles nearly wide open to maintain the eight knots the pilot requested, and for a few minutes became rather concerned he would be unable to maintain that speed for lack of power. I found this rather interesting realizing the helicopter did not touch the ship. This force was the air the helicopter was displacing in order to remain airborne. Someone must have the formula for this because it is the reason a hovercraft can act like an icebreaker.

This mission probably fell into the books as a routine run. Quite likely none of the Coast Guard personnel involved remember it. This adds to the overall picture of the efficiency of the United States Coast Guard. Bravo Zulu – BZ – meaning WELL DONE, and once again THANK YOU.