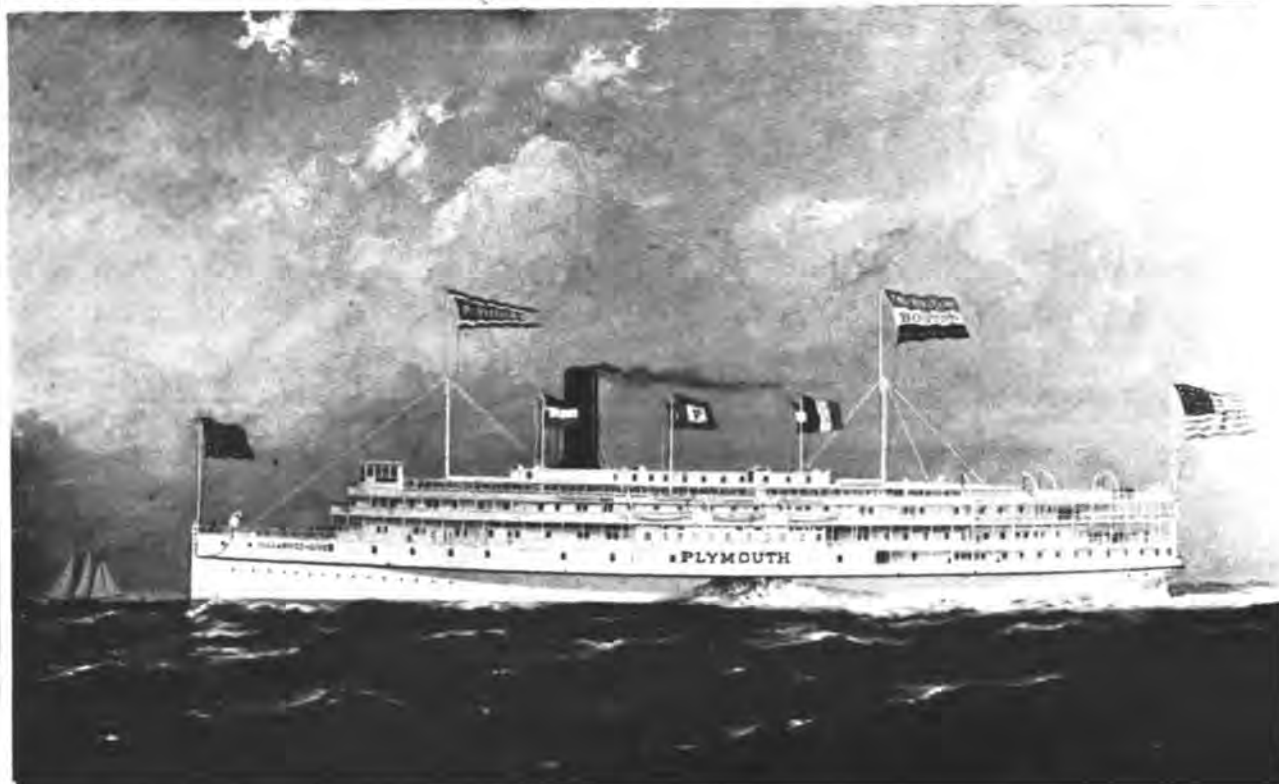


# THE FALL RIVER LINE STORY



Fred Pansing

STEAMBOAT "PLYMOUTH"



BY - RAYMOND J. GREEN

395—SSGP

Hello, Bill Breniman and my many SOWP friends. I am going to write you another of my memory stories similar to the TRT banana boat story you printed in the POC 1973, only this one will be five years earlier. The year is 1913. I was sixteen years old, the youngest of a broken quarrelsome family living up town on Washington Heights New York City, now referred to as the suburban getto of Harlem. A senior at Stuyvesant high school and not doing very well. It was a lovely warm October afternoon and I was walking across the Brooklyn Bridge. In my left hand was a carefully rolled up first class wireless telegraph license which I had passed an examination for at the Brooklyn Navy Yard at Sands Street, Brooklyn, much to the credit of teaching by Frank Knockel who was a prominent wireless amateur living in the same flat house I did. Yea, my friends, I was far from the proverbial "Bare foot boy with cheeks of tan," a typical big city product.

As I walked across the bridge my eyes settled on the big United Fruit liners and the sleek black painted Ward Liners. "Some day, I said to myself, I'll be a wireless on one of them." Crossing the bridge and arriving at New York City's hall bark, I decided to stroll down to Fulton Street to No. 24 to the Electro Importing Company store and pick up a copy of "Modern Electrics" edited and published by Hugo Grensback. It was about the most up to date wireless magazine to be had those days. In the window of four panes of glass was displayed a pair of Brandes light weight headphones priced at \$13.00 a Murdock variable condenser, several crystal detectors and an electroletic detector, a Clapp Eastham rotary spark gap and a two slide loose coupler wound with green silk wire.

A cup of coffee at the Fulton fish market oyster bar and a donut, and I weaved my way across West Street, which was heavily trafficked with horse drawn trucks. Ducking the West Street horse drawn trolley car, the noise of horses hooves on cobble stones was deafening. Before me a long pier front rose, PIER 14, and in big bold white letters "THE FALL RIVER LINE," and under this in smaller letters, "The New England Steamship Co."

Stepping into the office where I was drawn by the sound of Morse telegraph sounders and relays, I saw a fellow with black curly hair, a green visor, and sleeve protectors on his arms. He was sitting at an old Oliver typewriter with his ear close to a Morse sounder in a sounding box with a Prince Albert tobacco can jammed in it to make a certain sounding effect. He was copying a message. When he got finished he came over to me and said, "What can I do for you, young fellow?" He had real dark brown eyes with a merry twinkle about them. I asked him if I could apply for a wireless operator's position on the Fall River Line boats.

## The "Deacon" Meets George Cole

He said, "Oh, yes, but you will have to see George Cole and he is down on the Mohican putting the finishing touches to the wireless set on board."

"Can I just walk down to the boat?" "Sure," he said, and pointed the way. I walked down the long pier jammed with bales of cotton, and more arriving on trucks from the Morgan Line ship at pier 34 up West Street.

I arrived at the cargo ramp, did not see any gang-plank so I stepped aboard, a man with a uniformed cap with "Mate" on it, asked me what I wanted, and I said to talk to Mr. Cole. He thought a moment and said, "You must mean that wireless man", and pointed to a stairway to the upper deck. Once on the top deck I saw a neat four wire antenna running from the smoke stack to the short flag pole on the stern of the steamer. I followed the lead in to the wireless room. Soon I was standing before an open door labeled "Wireless Room." A pair of long legs were extending from under the operating table. I said, "Mr. Cole?" "Yes," was the reply. "I would like to speak to you a minute." My heart was pounding.

"Just a minute. A few twists of this lead and I will be finished under here." George Cole pulled himself out from under the table and stood his full six feet three inches. "Yes," he said, "what is it?" "I am looking for a wireless position," I said. "Have you got a license?" and I handed him my brand new license. He unrolled it. "Ah," he said. "You are a brand new operator, eh?" "Yes, sir." "Yeah, the ink is hardly dry, and I see Gunner Tucker's USN signature on it." "How much do you know about a wireless set?" "I have been a wireless amateur for five years, a ford spark coil set with a two slide tuner." "Huh, the usual start," said Mr. Cole. "Mr. Frank Knockel taught me all I know." "Oh, you know Frank Knockel?" "Yes," I said. "He is a great friend of Harry Earl the morse operator up on the end of the dock." Here cemented a great and long friendship between Earl, Cole and Knockel and myself.

"You want a job you say?" "Yes, sir, very much." "Can you sail out tonight, say in about four hours for New Bedford, Mass. on this steamer?" I was taken aback and in a trembling voice I said, "Yes, sir." "OK, I'll finish up this transfer of equipment and show you how to start and stop it, send and receive. But first come with me," and he took me up to the pilot house and into the Captain's quarters. "Captain Snow here is your wireless operator." Captain Snow turned around and I never saw a sterner face in my life. He had snow white hair and long mutton chop sideburns and the most steeley blue eyes I have ever seen. He eyed me up and down but said nothing. He nodded to Cole and



said, "Instruct him in what his duties are" and turning to me he said, "We eat at 5 p.m. Be in the mess room and I will acquaint you with the rest of the officers," and turned away. So my friends, a wireless operator was born that October 1913. I never went back home to live, only to visit. Three meals a day, a dry bunk to sleep in, and thirty dollars a month pay, a fine job back in those days.

For the record, my two brothers, ten and twelve years older, worked at the Metropolitan Life for fifty cents an hour, a 48 hour week. They brought home \$24 a week, a white collar job. My sister, thirteen years older, worked at Wannamakers from 8 a.m. to 6 p.m., 54 hours a week and earned \$14 a week. Oh, well, a big schooner of beer cost 5¢, a good cigar 5¢ with free lunch. So?

Here suddenly I found myself free of all the gripes, real or imaginary of the typical teenager of any period of living.

## Massie Wireless Telegraph Co.

In 1913 the Massie Wireless Telegraph Company being reorganized, emerges as the National Electric Signal Company. Its president, H.M. Kintner of Pittsburgh, John V.L. Hogan, General Manager and Chief Engineer, George E. Cole, personnel, manager of operators, installation and maintenance, offices pier 14, North River.

## Stations - 1913

Three coastal stations and fourteen Long Island Sound steamers equipped; WCG located on the roof of Bush terminal dock, Brooklyn, in a penthouse, two tall lattice self-supporting towers with extending yard arms at their top. A corner of the penthouse partitioned off was the receiving and operating room with several types of crystal receivers, and one in particular consisting of a variometer in the antenna primary circuit and capacity coupled to the tapped secondary, tuning from 200 meters up to 1000 meters, and long single slide tuning coil to be switched in for MCC south wellfleet Mass., WSL Sayville, L.I., or Arlington NAA Virginia. It tuned very sharply, a series of detectors, electrolytic (whoolston wire, platinum wire coated with silver and drawn out as thin as a human hair, an inch of this, set screwed in place and micrometer adjusted to dip into a carbon cup with sulfuric acid, the acid eating away the silver leaving a pinpoint of platinum, this with a local battery resulted in a very sensitive wireless spark detector. Then there was a perikan detector, iron pyrites and zincon, then silicon, galena, and lastly a sensi-

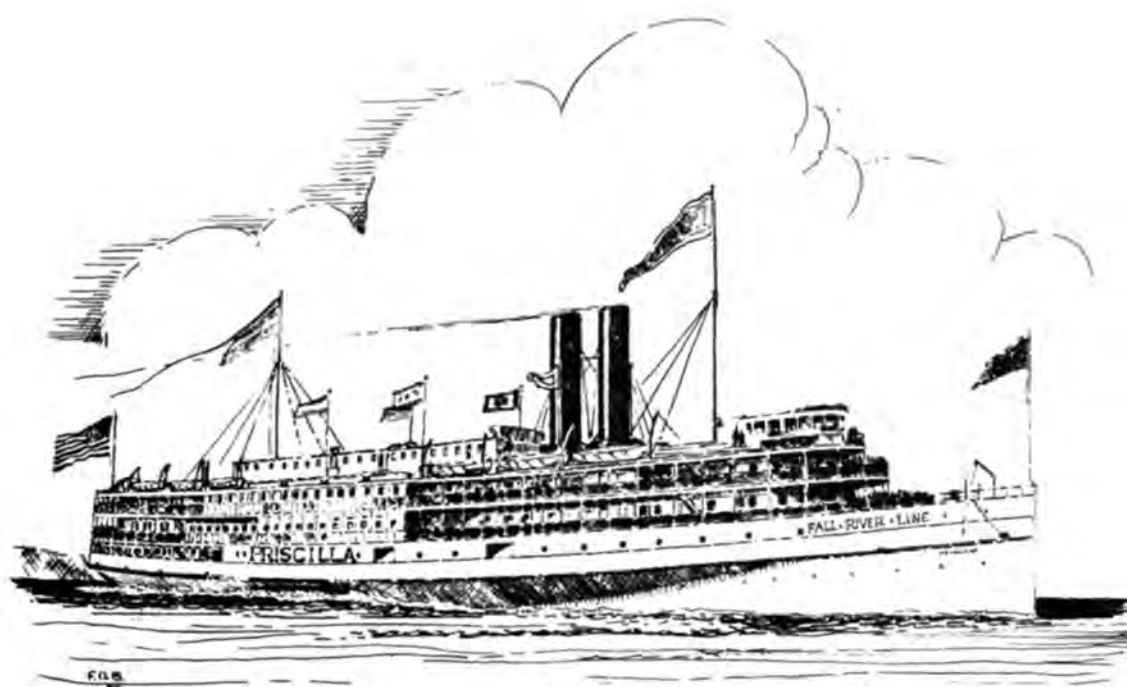
tive piece of carborundum clamped between two brass strips, also operated with a local battery supply. This latter detector was not quite as sensitive as the others but was a favorite account of its staying in adjustment. All of these detectors were on a hard rubber base with suitable switching arrangement. The usual antenna send receive switch and typewriter and filing shelves made up the receiving part. Outside the partitioned portion was the 2 KW synchronous fessenden 500 cycle motor generator and gap mounted on shaft end, compressed air condensers, helix. This all similar to the TRT ship transmitters of the time. The operators in charge were Mr. Wallace and Mr. Vosberg.

Now we come to W L C New London, Conn., a 150 foot lattice tower with a slanting four wire antenna. This station was installed with a standard United Wireless 1 KW non synchronous 240 cycle rotary spark gap, the usual green silk covered wire loose coupler receiver I believe known as the type "E", with the usual crystal detector. Brandies light-weight navy headphones, typewriter were all housed in a small shed on pier located on the Thames River. Mr. Black was in charge. He worked a long time and finally came up with the most pleasing musical note that made WLC famous up and down the Atlantic coast. It really was outstanding. He was the watch dog of the fleet.

Now we come to the third shore station, WCI Fall River, Mass. This installation was a ¼ KW set similar to those on the sound steamers including the receiver. The operator in charge was named Nick Carter. After a long night watch he was the one you closed down with--and then turned in after clearing the 'hook.'

## The "K X" Boats

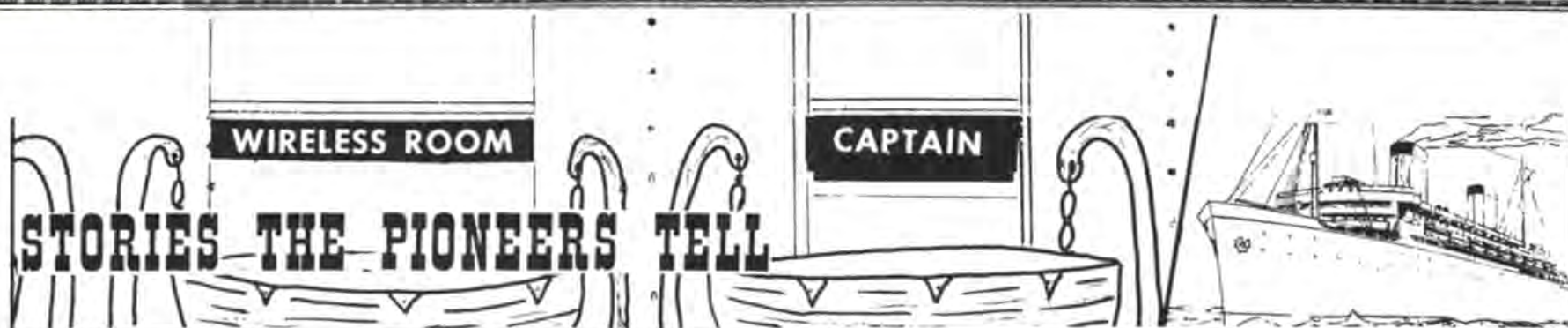
There was a fleet of thirteen or fourteen sound steamers whose call letters all began with "K X." The last letter of the call used the first letter of the steamer where possible. The equipment was all the same and easily interchangeable by Mr. Cole which was quite often and on short notice. The transmitters were ¼ kw mounted on a two, possibly three, foot square panel with four copper clad lyden jars and usual helix and transformer on the back. Two, three inch insulators supported the spark gap which was unusual for a special reason: This gap consisted of an insulating tube of mica on which was mounted ten aluminum disks three inches in diameter and one eighth inch thick, separated by one sixteenth inch mica washers one inch in diameter. (This is not to be confused with the then existing Telefunken quenched gap.) On the end of this supporting mica tube was a ratchet and a protruding keeper-shaft which turned the entire as-



## The Sound steamer PRISCILLA

Built in 1893 at the cost of \$1,500,000 she was queen of the Fall River Line's Long Island Sound run. An institution, she served 44 years. Red plush carpets and other luxuries made her one of the best known and loved overnight boats on the Sound.





sembly each time you operated the send receive switch one quarter inch--this to keep it burning evenly, the purpose of this arrangement was quietness of operation. In operation it emitted a sort of tea kettle sizzling sound quite softly, but it did emit considerable ozone and power.

The power plant was a small quiet running motor generator, and an emergency twelve volt dynamotor, all neatly mounted in a black box with insulating cover. It operated by means of the usual large snap toggle switches and even had a pilot light to remind you it was on. The reason for all this quiet operation was because most of the wireless rooms were located in line between the passenger cabins or staterooms, so quietness was essential. The receiver was the new capacity coupled variometer in series with the antenna and ground it had three dials, three inches in diameter. It was a neat looking set with four large brass binding posts marked A G Det. On a hard rubber base was mounted two detectors, silicon and carborundum. The variometer was Clapp Eastham, condensers were all made by Murdock and the two pair of headphones were Brandies regular type 2000 ohms. This receiver was supplemented by an external single slide tuning coil for long wave lengths and the Arlington time-tick (seldom asked for). The regular wavelength range was from 200 meters to 1000 meters and it worked very well. I think they were made down at the Bush Terminal station by Mr. Hogan and Mr. Cole and associates.

## The "Sound" Steamers

Here are the sound steamers. (Where two are together they run opposite each other.)

Commonwealth and Priscilla  
New York to Newport and Fall River  
Plymouth and Providence  
New York to Providence, R.I.  
Maine and New Hampshire  
New York to New Bedford, Mass.  
City of Lowell and Chester W Chapin  
New York to New London, Conn.  
Richard Peck  
New York to Bridgeport and New Haven  
Concord and Lexington (Colonial Line)  
New York to Providence, R.I.  
Mohican and Pegonnic freighters  
New York to all places.

The Antennas on all the steamers were rigged from the smoke stack to the after flag staff and were of the four wire variety. That is my recollection of many years ago. I will try to tell of the operating procedures in the following paragraphs and of the daily trips of this fleet--adding my comments on wireless communication as it existed at that time.

## Blue Peter Flies

A good supper at 5 p.m., across West Street for evening New York Journal, dodging thousands of commuters headed for Cortland Street Ferry and New Jersey R.R. So on a clear evening we pull out from Pier 14, spin around and head down the Hudson River, around the battery. You set the pump handle on the transmitter to 750 meters, listen, all is quiet. You call WCG; a quick reply and you send your departure time, received from the pilot house, acknowledged. It is hard here to level with a modern radio man. Imagine it as I remember it. No loud speakers, no amplifiers, no regeneration squeal, no phones or voices, sitting on 600 meters you hear Seagate. (Believe Davie Sarnoff at key then.) That's Coney Island, working the steamer MONROE of the Old Dominion line, DF with Jack Duffey at key, and now and then "NAH" (Brooklyn Navy Yard) booms in with a "Get off, and stay off." He was the boss around NYC in those days. Your steamer rounds the Battery and glides up the East River, under the

Brooklyn Bridge. You make the curious observation that the spark signal from a ship off the Jersey coast would build way up, then drop out for a few seconds and suddenly return and fade down again. Up the river under the Manhattan Bridge, Blackwells Island and the big train bridge and Hell Gate and on to Execution Light. Again you call WCG and report passing it as received from the pilot. If you are the last steamer, WCG ok's with a GN and closes down until 5 a.m. in the morning to greet the east bound fleet. The strip of travel from Pier 14 to Execution Light was considered highly accident prone.

Once out in Long Island Sound, you would take a little stroll down the beautiful carpeted and lighted corridors, grand staircase, and public rooms filled with finely dressed men and women. Or you would sit in your wireless room with the headphones half on (one ear) and hear some sweet thing say to her boy friend, "What is that?" and he reply, "Oh, that is that new fandangled wireless stuff you hear so much about these days!"

All this activity was also going on down at the east end of the sound. WCI Fall River, was collecting the departure times from the New Bedford, Providence and even New London. He also closed down after the last steamer passed Point Judith to greet you in the morning. Thus the full fleet is underway about seven large steamers both ways or fourteen in all.

Around midnight we all would be in the vicinity of New London, Conn., and WLC musical note would check and record our time passing him from position reports furnished by the pilots. On a clear night you could see the lights of Long Island and Conn. and all the steamers ablaze with light--truly a beautiful sight. This was a routine activity six nights a week (no sailings on Sunday). Promptly at 8 p.m. you tuned to 800 meters and copied O H X sending press, which was the New York Herald station, owned by Gordon Bennett, located on the Staten Island Ferry Building, Battery Park, N.Y.C. (Fine practice with a pencil at 25 W.P.M.)

All this routine was on a fair weather night and was subject to various disruptions caused by weather conditions or ice, pea soup fog, poor visibility which whipped things into a frenzy at times and put everybody on nerve's edge, as there was very little elbow room, and to lose your vision and rely on whistles, bells, flashes of light, and wireless to tap your way along was really something. I remember the early mornings when all seven steamers were strung out from Execution Light to way down the East River inching along in practically zero visibility. All this sounds stuffy and old fashioned, but back then it was really exciting if not nerve-wracking! There sure was a lot of traffic on Long Island Sound and very few accidents over the 100 years of marine operation. All is quiet now, gone with the wind and fog, as they say, four lane super highway from NYC to Boston and diesel trucks rule the day, the New York Hartford RR (bankrupt in 1935) and the selling of the lovely Commonwealth, Providence, Plymouth and Priscilla in 1938 for scrap put an end to the era. Once again Long Island Sound is for pleasure boats.

## The "Lingo" was "Ships"

The lingo on the Fall River Line was steamer not ship. It was right or left, not port and starboard. Up and down not above and below, front and back, about the only deep sea thing around was the green and red running lights. There were no ports but windows with sashes and curtains on rods. The paddle wheels could be operated separately, from each other, with one slow forward and the other slow aft or astern, these steamers could turn in a pinwheel fashion, to watch a steamer back out of pier 14, pose a second, then turn on its center beam, was really something, compared with all the noise and fuss and tugs puffing to get the big Cunarders and French line ships out of dock and on



their way. The Mates were concerned, mostly with bales of cotton, and immigrant care. A square was made for the many immigrants arriving from Europe and on their way to the New England cotton mills. This all has changed and the mills have moved to the south where they grow the cotton.

Yes, the sound steamers were a cozy back door entry for many early wireless operators. Each ship carried three pilots--one of whom was an apprentice. They took the steamers down the sound from light house to buoy, no navigation as at sea, the quartermaster was called wheelsman. The food was excellent at all times. Many of the crew were in their late 60's or middle 70's--sailors from the tall clipper ship days of the Australian grain trade. Captain Albert Snow was a famous record setter in his day, many of the young men were the sons of these old sailors of a previous generation. It is surprising how little of the deep sea talk was heard--the only visible traits were the fancy rope and twine work they did. After all, the only rough sea we ever had was a short strip as you rounded Point Judith. Here in a down east storm you felt a little trouble between Block Island, Narraganset Bay, the New Bedford boats hard going some times. Another thing to remember--we did our sailing from dusk to dawn, you were at dock side during the day and Sundays. I used to sunshine on pier 14 telegraph office for Harry Earl, contrasting to moonshining of today. Not many years passed before this Horatio Alger got deep sea fever--what a surprise and shock but that's another story.

## "Flash Back"

As I remember in the year of 1912 a big wireless meeting was held at Bern, Switzerland. All the large countries were represented. There they thrashed out frequency control, call letter assignments, to the various countries, thus: F-France, I-Italy, G-Great Britain, etc., as we know it today. The word Radio emerged and by 1915 the examining of operators, licensing of stations, assignment of call letters, etc., moved from the Navy Department to the Department of Commerce with offices in the Custom House at Battery Park, NYC. Major Krumm was in charge, Harry Sadenwater, and others. Mr. Cadmus at Baltimore, Kolster at New Orleans and later transferring to various cities of the West Coast and Great Lakes, later of Boston. My first license was taken at the Navy Yard, but the second had the names William C. Redfield, Sec. of Commerce, E. T. Chamberlain, Commissioner of Navigation and examining officer was Harry Sadenwater. They were valid for two years only and if you failed to show a sea endorsement for six months period of the two years, you had to be reexamined. The days of "Certificate of Skill" were over. Terms such as C-W were unheard of; it was A1, A2, A3 emissions. The audion had not been invented till later when De Forest put the grid in between the filament and plate of the Fleming Valve.

There were no loud speakers. In fact the captains and others soon let you know that you were off watch when you did not have the head phones on your ears by the snide remark, "Who's on watch"--especially the hard looks from the captains. The term Radio Shack not yet heard--it was "wireless office" or room. Ham not yet, it was Amateur Wireless. "Sparks" not yet--it was Mr. Marconi or just Marconi. The Gold Sparks had not shown up yet. I had "Wireless" in the gold wreath of my uniform cap; some wore Marconi but no Radio Officer yet.

One of the nice things about those days was that you were brand new. There were no old timers standing around sneering at your operations and abilities. As simple as it seems now, then nobody knew anything about it. Captain Snow used to stop in front of my wireless room door, not at my "good evening", pause then slowly stroll down the corridor, his hands folded behind his back and shaking his head.

## The "Posh" SS Commonwealth

The morning after my first round trip to New Bedford, about eleven a.m., there was a knock on my wireless room door. "Hello, Ray," says Louis Bear, a sandy-haired hunchbacked fellow with a marvelous sense of humor and wit. "Well, you made it but your sending sure sounded wobbly those first reports. Oh, well, it's all over now. Hey, come on over and let me give you the tour of the pride of the Fall River Line steamers." So we crossed the pier to the S.S. COMMONWEALTH. Gosh, what a



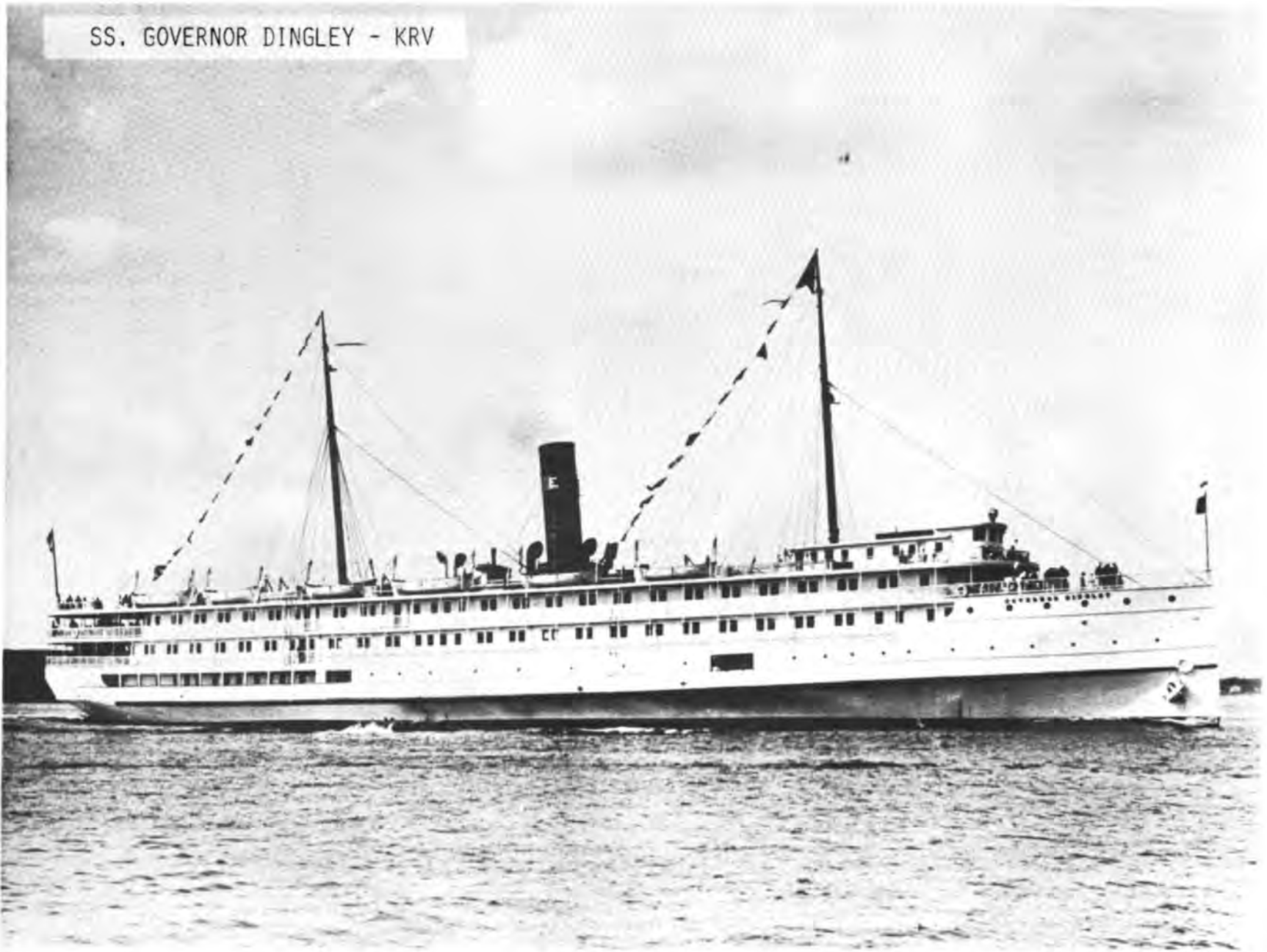
"If that's what you're afraid of we'd better hurry and pass 'em."

sight as I stepped from the canopied plush red carpeted companionway--everything was ablaze with lights. Louis said, "The Mayor of NYC is going to throw a big Tammany Hall political dinner today." The first thing that caught my attention was the sweeping and beautiful mahogany staircase that swept up to the corridors of state rooms and her many saloons. Louis got out a post card with a picture of the ship on one side and on the other in fine print a description and started reading as we went along. It said she appeared on the sound around 1908 and cost two million dollars and she was 456 feet long. Her grand saloon was Venetian Gothic. I was too young to know then that her dining room was in Louis XVI. (Seems I heard about him in my history books.) The cafe was in 16th century Italian but the grandest room of all was her main dining room under three big domes and all glass on the outside. As a poor boy I sure was stunned and even to this day I can't tell you how beautiful it all was. A dance hall and grill in Spanish style, everywhere soft rugs, large roomy chairs and beautiful lamps and lighting effect, and we came to the wireless OFFICE mind you, it was a half door arrangement--the top half swung in along the wall, the lower half became a sort of writing desk. The combination office stateroom measured about eight by ten. On the far end was a mahogany bunk arrangement with four drawers and a clothes locker. When the bunk was made up it had two velvet curtains that tied back on rods displaying a **snow white made up bed and generous pillow** and a cream colored blanket. Talk about comfort! Sure better than anything I ever had at home. Along the side of the wall was the operating table with the gear on it. Louis about ran out reading that post card story and said he had to refer to it because he did not know the names of all those beautiful rooms. I was to make a few trips on the S.S. COMMONWEALTH as relief when Louis had a sick spell.

It is surprising how routine things got to be. Rounding the Battery, thence under the East River bridges through Hell Gate to Execution Light and on out into the sound. Many nights when the weather was clear I would go down to the cargo deck where the bales of cotton were so arranged in a clear square to make a bed on. There would be fifty to a hundred immigrants fresh from Ellis Island and Europe. Fathers, skilled weavers and leather workers, mostly from the Polish Corridor bound for their new country and jobs in the New England cotton mills and the Boston shoe factories. Each had his name and number of his family tied to his lapel and where he was headed. The women and children gathered together. They were comfortable bedded down with their own bedding. It was warm and plenty of good food served, cooked and made by themselves. We were all very kind to them. There were lots of bread, milk and cheese; good toilet facilities; maybe some of them are still alive and will remember. None spoke English.

Parallel to the speaking tube from the pilot house there ran a pair of annunciator bell wires than rang a call bell. In addition to the tea kettle whistle on the speaking tube. I soon contrived it so that by connecting my receiver phone posts to one end I could go up to the pilot house and connect my phones and stand watch. Signals were just a little down but on 600 meters I sat in the dark back of the pilot house and listened to many stories and the pilot lingo on clear nights at certain hours because on a foggy night you sat close to your set. As I have said before, when you removed your head phones you might as well be ashore or in your bunk asleep. The entire range of the wireless was not normally more than fifty to one hundred miles. I used to listen to the transatlantic liners working Siasconset and Seagate and the coastwise steamers and the fleet at New Port, all on a crystal detector.





FURNISHED BY OUR LATE MEMBER, CAPT. EDWARD N. DINGLEY, JR USNR/RET. 625-SGP

### A Memorable Occasion

One week end Mr. Cole sent me down to the Bush Terminal penthouse station with instructions to stop at the restaurant up on 36th and 4th Avenue and pick up two good sized baskets of food. I would have to make two round-trips, five long blocks and eleven flights of stairs, arriving with the second load, Mr. Cole, Wallace, and Vosberg were preparing luncheon, setting improvised tables. I was to be the waiter and handy errand boy. They all were much older than I. Soon the guests arrived and I am going to write down their names for posterity. They were all pioneers of wireless--Ellery W. Stone, Fessenden, Nickla Tesla, Professor Pupin, Professor Goldsmith, Admiral Bullard, Greenleaf Pickard, Pierce, J.V.L. Hogan, Kintner, Alexanderson, and others. No deForest or Armstrong as I remember. After the greetings and welcoming, they settled down to serious talking and setting up some kind of organization. I have often wondered if it was the beginning of the famous Institute of Electrical Engineers or I.R.E. Anyone recall?

### Prelude to History

These were the days before four lane super highways and diesel trucks and there were several flourishing coastwise steamship lines. Two Canadian boats. The STEPHANO sunk by German U-53 submarine off the Newfoundland coast. Then there was the S.S. NORTH- LAND and S.S. NORTHSTAR. (Portland to NYC out side run). The "Bunkerhill" and "Massachusetts" (Buz- zards Bay Boston to NYC). The Old Dominion line with the S.S. MONROE and sister ship. The merchant miners line out of Providence and such ships as the S.S. DORCHESTER, NARRAGANSETTE, etc. The Clyde Line, the Mallory Line, the Morgan Line with a big fleet coastwising. The Red "D" Line with the Car- acus and Maricabo. The Ward Line with its fleet, then the Intercoastal Line, the Luckenback Line and the American Hawaiian. These were all jobs for early wireless men. I sailed on many of these ships. There were two fast ships built by Jim Hill of Great Northern Railroad fame that were to run from Portland, Me., to NYC but were sent to the Eng- lish Channel to transport troops in WW1. They ended up on the California SFO La run, the Yale and Harvard. Jack Duffey, George Cole and Vogal were the men I contacted for assignments.

### Epilogue of a "Vanishing American"

If ever there was a cosier, safer, more comfortable steamship line than the "Old Fall River Line, I've never heard of it. It was the birth and starting point of many of the SWP Spark-Gap Pioneers on the East Coast. Most of the things you mention in your "Strange World of Sparks" article (SPARKS-II), were not met up with until as a fledgling I left the nest of Long Island Sound from the paddle wheel sound to the screw propeller vibrations. Don't find too much fault with my memories. After all Pier 14 is gone, across street stands the two trade-center sky- scrapers. I hear a strong coffer dam is to be built from Whitehall Street all the way up to 79th Street, connecting all those long piers extending out into the Hudson. Fill it all in and a beauti- ful park along the west side of Manhattan for its teeming millions. And the old Brooklyn Bridge is resplendent with its new coat of aluminum paint. I have lived long enough to see worldwide fleets of ships built, used, scrapped and sunk. And the beautiful Transatlantic liner UNITED STATES decay- ing at her dock at Hampton Roads, Virginia, and the last beautiful liner the FRANCE retiring from the service. A post card from my XYL, "Gently took off Kennedy Airport at 7 p.m. in a 747 Jumbo jet with 308 passengers and crew and just as gently let down at Orly Field, Paris, at midnight, a most en- joyable trip. Yes, there is a 'Communication's Officer.'"

Guess it's time to bid my SWP friends 73. Greet- ings and Hail to the "Communications Officers" of the Boeing 747's Jumbo Jet.

Horatio Alger, you have grown old.

THE VANISHING AMERICAN MARCONI WIRELESS TELEGRAPH OPERATOR

RAY GREEN





# The Unique Career of Ellery W. Stone



REAR ADMIRAL ELLERY W. STONE, VICE-CHAIRMAN OF THE BOARD, I.T.T. CO.

## A FACTUAL STORY BASED ON RECORDS

BY—FRED ROSEBURY

Maybe he didn't plan his future: Admiral Ellery W. Stone thinks his career was largely due to a "series of freak happenings," as he says, yet it looks very much as though the working rule of his life had something to do with it: "DO MORE THAN ANYONE HAS A RIGHT TO EXPECT OF YOU: IF YOU ONLY DO WHAT IS EXPECTED, YOU ARE ONLY AVERAGE."

### S.S. QUEEN LAUNCHES CAREER

Ellery started as a ham in 1908 or 1909 when he was a high-school student. In 1910, when he was sixteen, he tuned in one day to the 600-meter band and to his surprise he heard a distress call (CQD or SOS) from a coasting vessel, the *SS Queen*, bound for Eureka. As there was no response from anywhere, after a few minutes, he went to the phone and called the San Francisco maritime station "PH" (now KPH) and then the U.S. Coast Guard. Later he phoned the Oakland *TRIBUNE* to find out what happened, if anything. He learned that the ship had been rescued by the Coast Guard and all hands were safe. The editor wanted to know who was calling; when Ellery told him it was he who had notified "PH" and the Coast Guard, the editor asked him to stop in on his way to school next morning to be interviewed and to have his picture taken.

### The Early Days

His first transmitter was a 1/2-kw spark which he built in his home at 317 Lee Street, Oakland, just north of Lake Merritt. The high-voltage transformer, wound by himself--the "pig" as he called it, had its secondary insulated with melted paraffin. The condenser was built up out of Belgian plate glass with tinfoil sheets cemented to the glass with white of egg.

For the receiver, his first detector was carbon and needle, from which he went by stages to various types of electrolytic devices, then carborundum. Some of these required a local battery. This was followed by silicon, galena, and at last a De Forest "Audion," a gassy "soft" tube, invented only a few years earlier, a tube that would go blue if the B-battery was more than 45 volts. He found a temperamental glassblower, specializing in the repair of x-ray tubes, who repumped his Audion down too hard.

Since there was no amplification beyond the detector stage, a thermionic tube had its greatest sensitivity just short of this blue ionization point. Ellery and a ham friend, Palmer Hewlett, who lived on a farm at Hollister, California, found that when the tube was warm it became more sensitive. They figured the heat was driving occluded gases out of the tube elements and the glass walls, thus reducing the degree of high vacuum. They mounted the Audion head downward in a glass beaker of oil under which they had a spirit lamp with an adjustable flame. By controlling the temperature of

Honorary



Member

The honorarium of "HONORARY MEMBERSHIP" (#12) has been conferred upon Rear Admiral Ellery W. Stone by the Society of Wireless Pioneers, Inc., for the remarkable achievements he has brought to the world through a lifetime of preeminent leadership in many fields, including military, civil government, and business.

He has authored books, especially one on the fundamentals of wireless that was outstanding in its field and used as text in early years by those interested in communications. He served with distinction in a most difficult position as Chief of the Allied Commission for Italy after World War II and has received the highest awards of many Nations. Admiral Stone was sponsored by Eben K. Cady, Past President of the Society.

the oil precisely they were able to get maximum sensitivity. They also found they could "soup it up" still further with a U-shaped magnet from a discarded car magneto. In exactly the right position this magnet deflected the electron stream between the filament, grid and plate, to obtain an absolute and critical maximum of efficiency, so necessary for DX reception without amplifiers.

Today, we are so accustomed to the use of superheterodyne and multistage amplifier circuits that it is hard to conceive of getting along without them, and it is really amazing what sort of long-distance communication Ellery Stone and his fellow hams were able to achieve in the early days.

When Ellery was seventeen he designed a rotary quenched gap which Haller Cunningham on Lower Market Street in San Francisco made up for him. He found that he could get a Poulsen-arc effect by dripping alcohol on the sealed-in spark gap!

Station licenses for hams were of course not required in those days, and not for any shore stations either, except those like "CH" or "PH" which worked ships. The wavelength of his rig was probably in the neighborhood of 700 meters (no one used kc. then except a few people in the Navy and the Bureau of Standards). His call "LK" he says, "had a nice rhythm, and still has."

In 1913, Ellery was admitted to the Bay Counties Wireless Telegraph Association of California. The secretary, L.M. Clement, gave him the theory and code tests at Clement's ham station - tests which were far more difficult than the First Grade Operator's exam Ellery himself gave later to aspiring ship operators. But he passed it with flying colors; it gave him the privilege of having an "S" call: that is, his call became "SLK" which had an enhanced rhythm.

### The First Job

The US Ship Act went into effect in 1910 and Ellery got a Limited Commercial station license for his ham outfit, and a Commercial Operator's license for himself, December 13, 1912. R.B. Woolverton became the Radio Inspector in the San Francisco area, as did W.D. Terrell in New York. The Radio Division, then under the U.S. Department of Commerce, was almost immediately inundated with a large number of applications for operator and station licenses because of the Act, for ship, maritime shore stations and hams. Finding himself unable to handle this flood of paperwork, Woolverton got permission to hire an assistant for thirty days. This was in early 1912. Ellery, then a student at the University of California, obtained leave from his classes and was taken on as a paid employee, conducting operator exams for ship billets. Woolverton, as Radio Inspector, signed the tickets of the successful candidates. Ellery received \$80 for that month, his first paid job!



Colonel Mario Infante, R.I.A.F. and Ellery Stone in the New York marine control room of Mackay Radio and Telegraph Company in July, 1933, while monitoring the flight communications of the Balbo seaplane expedition that month.