

Extract from the Log of Frank Start - VE3AJ (Hi-Q, December, 1978)

## **1926 Going to Sea With a Crystal Set**

*by Frank Start - VE3AJ*

It is now many years ago that my itchy feet found me heading for New York. After two years of sailing on the Great Lakes, it had got somewhat monotonous and I was now seeking broader fields (or oceans).

It was 1926 and I had a new job waiting for me as a Wireless Operator on the oil tanker "G. Harrison Smith". This ship, when it was built in 1921, was said to be the largest vessel of its type in the world. Length 571 feet and gross tonnage 15,271. It was capable of carrying a full cargo of ore in its centre holds or a full cargo of oil in the tanks which surrounded the holds. It was owned by the International Petroleum Company.

When I finally found the ship in a Brooklyn shipyard, I learned that the operator I was to relieve had gone ashore. I had to find my own way to the Wireless/Telegraph (W/T) cabin, or if you prefer, the radio shack. What a shock awaited me! Did I ever find an imposing array of smart receiving gear, slide rule dials, chrome plated toggle switches illuminated by the soft glow of the numerous pilot lights, a six-foot rack of transmitter gear etc. Alas, also on the table before me was a crystal set. An old English Marconi Type 31-A with a vertical loading coil and slider. The transmitter was supported on a shelf housed in large polished teak boxes, large brass terminals hooked together with patch cords. On the deck below was a large rotary converter with a rotating spark gap on the end of the shaft. All equally ancient as the receiver. I had used crystal sets and transmitters when on the Lakes, but not of the type used by Noah when he sailed in the Ark.

I learned later that the equipment outlined above was at one time on the C. P. Steamship "Montrose" and had earned some claim to fame in 1910. It had been used to capture the notorious Dr. Crippen of London. He murdered his wife, buried her in the basement of his home, and departed to Canada with his "typist" on the "Montrose". The Doctor had failed to reckon with the long arm of the law to reach out with the means of communication-wireless telegraphy to ships at sea. Men from the Yard (Scotland Yard, that is) awaited the ship's arrival at Father Point. When the ship stopped there to take on a St. Lawrence pilot, the Law also came aboard to take the Doctor and his "girl friend" back to London.

Came the day when we cleared the dock and headed for foreign shores. Being a little anxious as to how the receiver was going to perform, I went "on watch" and was unable to see the scenery. Also, I was unaware that it was getting foggy. Sure enough, the Bridge phoned down requesting a D. F. Bearing. This was annoying. I suddenly had to recall some special instructions that the former operator had given me. I must explain that at that time, all ships worked on 600 Meters, (nowadays it has become 500 kcs) for D. F. Bearings, it was necessary to shift (QSY) to 800 Meters. But, this transmitter had never been tuned to 800. The ship had never been to a Canadian port for refit. So, some previous operator, with the aid of a jackknife and some aerial wire, had made a coil to load up the antenna. This contraption was hung from the deck-head. With the operator sitting in his seat beneath this contraption it was possible for the said operator to electrocute himself by standing as he pressed the key. Having seated myself in this electric chair,

I got in touch with the D. F station on shore and shifted to 800 Meters. (At this time all D. F. bearings were taken by one or more stations on shore and transmitted to ship. Present day procedures are reversed. Bearings are taken on beacon stations on shore with equipment on the bridge, by Navigation Officers.)

The picture now becomes one of a P. B. O. (Poor Bloody Operator), liable to be electrocuted any second, sending the ship's call for 30 seconds using the antiquated 1 kW spark set, in the New York Narrows of all places, and jamming everything on the air between 600 and 800 Meters. And of course, the first test was unsatisfactory so that more repeats were necessary for a bearing. By this time, all the operators for miles around had gone for coffee or jumped overboard. Fortunately, and to my great relief, the Old Man (Captain) put his head in the door and said, "Never mind." I unhooked the monstrosity over my head and went out on deck for some fresh air. To my amazement, I found we had now left the Narrows and were approaching Sandy Hook Light Vessel. Here the pilot went over the side and we were Full Away for San Pedro, California via the Windward Passage and the Panama Canal.

Having covered the first lap of our voyage to Los Angeles, about 2273 miles, we were about to arrive at Colon, Panama, the Atlantic end of the Panama Canal. I had now my first experience with the notorious tropical static. A two hour watch listening to the constant QRN with a pair of headphones clamped on our head, in 90 degrees is no picnic. No loud speakers of course, especially with my receiver. As I had anticipated, my biggest headache was the lack of time signals. The ship's chronometers (Clocks that is) had suffered from a long stay in port. A whole week in port was unusual for a tanker. I had managed to get one time signal on our first night out of New York, but we were then not far off the coast and Washington, where the signals originated.

Transit of the Canal, about fifty miles, takes about one day and we were now going up the coast of Central America and Mexico. I was still working on the receiver while on watch. Winding coils and rewinding coils, sweating around the ears and developing corns. I would like to see the man who designed the headset wear them for eight hours. Finally six days north of the Canal my efforts were crowned with success and I was able to whistle a time signal to the bridge via the speaking tube, at noon.

Had some traffic from San Pedro (port of Los Angeles) a few days before our ETA (Estimated Time of Arrival). This had to be handled by another ship owing to the heavy QRN. One day our skipper wanted a D. F. Bearing. So I hung the "possible electrocution coil" over my head and called a station. At this point, Murphy struck again. A transmitter breakdown. There was then a delay while I replaced a cracked plate in the H. T. Condenser. But with repairs completed I was still unable to secure a bearing due to the heavy and continuous static.

We had a couple of days in San Pedro and I found a small store where I was able to buy some more wire and a couple of UV-199 tubes, batteries etc. I was still after a reliable time signal and we had a long way to go. We had loaded 18,000 tons of fuel oil for the Chilean railroad, destination Antofagasta.

Nineteen days or 5,140 miles later we arrived at our Chilean port and tied up at a mooring buoy.

There were no docks on this coast, it is on open roadstead. This is because of the usually heavy surf from the thousands of miles of the Pacific Ocean to the west. Ships have to anchor or tie up to the sea buoys. We discharged our cargo into undersea lines.

Between our ship and the shore there was a large outcropping of rocks upon which many large sea lions loitered all day. To get some pictures here, the Chief Engineer and I borrowed a small boat and went a little closer for pictures. After this we rowed over to a Chilean Naval cruiser, called the "O'Higgins" to get more action pictures. While doing so I saw a deck officer waving at us to come over. I thought this looks bad, maybe they will just take my camera. In trying to make a seaman-like approach to the bottom of the accommodation ladder I went to "full ahead" when I should have gone "full astern". The result was I rammed the battle cruiser head-on. However we were welcomed aboard by several officers, most of them speaking English, and invited us to the Officers Wardroom.

We soon learned that they did not only speak English, they also indulged in one other English custom. This was the toast. The Captain of the ship *made the first toast* using an amber coloured liquid with the quaint name of "Duggan's Dew of Kirkintilloch". There were three Captains present and there was a toast for each one. After which we toasted the Ship and then the Chilean Navy. Then a toast for the Captain of our ship and one or two other Chilean VIP's. At this point the Chief Engineer whispered to me that we should be going or we will find ourselves in the Chilean Navy. However, the senior Captain suggested that we join him for dinner this evening and that we bring our own skipper. We returned to our ship. I think we rowed back.

The dinner invitation was passed on to the OM and we then decked ourselves out in our best shore clothes. The Chilean Navy was not risking any more collisions and in true Navy style, sent the Captain's gig with eight oarsmen and the Bosun's Mate. We climbed into the stern sheets for a quick ride to the battle ship.

There was a brief delay in the Wardroom where the old English custom was repeated *with* the afore-mentioned "D. D. of K". Then into the Officers Mess, all a-sparkle with silverware and white linen. The dinner was superb plus white wine and red wine, which ever comes first. The toasts were a continuous interruption, to one who had been eating on a tanker for the past three weeks, but we toasted again all those who we had toasted before plus others, too numerous to mention. There were no after dinner speakers. Our skipper got busy on the piano and a good time was had by all. We were taken back to our ship in the ship's steam pinnace.

From Antogasta we headed up the coast for a five day trip to Talara, Peru. This is a hot dry place about eight degrees south of the Equator. Again we picked up oil lines from the sea bottom and took on a load of Peruvian crude. This refinery has now been "acquired" by the Peruvian Government. We cleared Talara for a five day trip to the Canal and then we were on the last leg of the voyage to New York.

The ship now becomes a hive of activity. Everything gets a coat of paint. Even the radio shack was washed all over and repainted. This excess display of energy proved to be disastrous to my receiver. My two little UV-199's which had been doing a good job since attached to ye olde crystal were removed from their sockets and hid in the typewriter and placed on a shelf. The

final operation in the clean-up was to scrub and holystone the deck. The decks were not painted but kept white as in the days of sailing ships. While scrubbing with a long handled brush, the handle ran foul of the typewriter. The tubes fell with a sickening crash and were instantly relegated to a condition of permanent disrepair. In short I was back on a crystal for the rest of the trip, eight days. We returned from voyage number 28 on August 26 having covered 13,515 miles. We cleared for number 29 on August 29. Such is the life on a tanker.

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