Tales of the Pioneers — *Some personal history from the Society of Wireless Pioneers*

By Dick Singer, K6KSG, SoWP member 662

Fig. 1: Dick Singer on the USS Midway in a transmitter room in 1959.

I worked for the CIA

I am an old Morse code CW radio guy. The FCC first licensed me in 1958. I was on contract for the Central Intelligence Agency (CIA) at sea during the raising of the Soviet Submarine *K-129* that had sunk northwest of Hawaii at a depth of 3 miles. Because of the great depth, the sub was considered unsalvageable. Because the sub had nuclear weapons and communications that were of great interest to the CIA, the Glomar Explorer was built by Hughes for the CIA for the express purpose of recovering the sub; Hughes designed it to appear as a drilling platform.

In 1973 I answered an advertisement in the *Los Angeles Times*. The ad was looking for electronics and communications people. It was the Summa Corporation and I went in for an interview. They hired me because I had served in the U.S. Navy. (See figure 1, Dick Singer aboard the USS *Midway* in 1959). Summa sent me to Chester, Pennsylvania to join the Hughes *Glomar Explorer* in the shipyard. That is when I met senior Radioman Tullio D'Angelo. Summa was still building the ship and it was nearly finished. Tullio and I installed all the communications equipment and tested everything to be sure it all worked properly. During that time some people took me to a nearby motel and told me to sign secret papers for the Central Intelligence Agency (CIA). Needless to say I was flabbergasted. From then on it was mum as for what the ship was built for. I stayed with the project until 1975 when they laid her up.

Nearby are some photos of the CIA ship Hughes *Glomar Explorer* (figures 2 & 3, showing antennas) that I worked on 1973 to 1975 when it was decommissioned. Its radio callsign was WCHG. I was on 'A' Crew. This crew picked up the sunken Soviet nuclear-armed submarine *K-129*. Another crew, the 'B' Crew, disposed of the sub after they relieved us in Hawaii. Tullio and I stood 12-hour watches in the radio room. It had to be open 24 hours a day during the mission. (See figure 4, radiomen Singer and Angelo aboard the vessel). There were no windows or portholes in the radio room. (See figure 5, the radio equipment). Communications were mostly CW Morse code or radio-teletype (RTTY). All Morse code CW messages were in plain English. (See figure 6, from a CIA video of Dick Singer operating a chrome Vibroplex "bug" key aboard the *Glomar Explorer*).

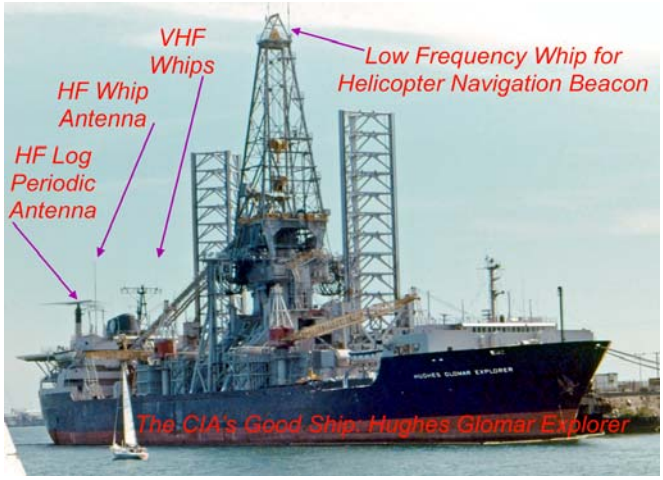

Fig. 2: Hughes Glomar Explorer, WCHG. Note antennas. The top right antenna on the derrick tower is the MF Beacon antenna for helicopter navigation to the ship.

Fig. 3: Another view of the Glomar Explorer at sunset.

A declassified video titled "AZORIAN The Raising of the *K-129*" tells the story. PBS sells it in their online store and it's on YouTube (see below for link).

My Radio History

I qualified for this CIA work as a result of my long involvement in radio. In 1947 my Uncle Parker Ingram was a ham (W3NAP/SK ["silent key" -- deceased]). He worked for the federal government. My family visited him in Baltimore, Maryland. His ham station with all the relay racks really impressed me. He built most of his equipment. I decided that one day I would like to be a ham.

I took electric shop in school at age 15. The teacher Mr. Butcher said if I got a Novice amateur radio license from the F.C.C. he would give me an A for the semester. One of the other students, Walt Shubin (K6LQO now K6WAS) said he was a ham and that he would teach me the code. I would go over to Walt's house and practice every night. I learned the code in 1957 but got my licenses in 1958. I started with a Heathkit AT-1 transmitter and a Hallicrafters S-20-R receiver, and a long wire antenna. I later upgraded to a DX-40 transmitter and a Hammarlund HQ-100 receiver and dipoles for antennas.

In 1959 I enlisted into the Navy. They said: We *will* make a radioman out of you. I was later assigned to the USS *Midway* (CVA-41), callsign NIIW. I had to learn Morse all over again because the Navy operators had to type messages while receiving. I did not know how to type, so I had to learn a Morse sound and associate it with a key top on the typewriter. I did operate CW on the ship but I wiggled my way back into the transmitter room. I was in my element there. (See, *e.g.*, figure 7, Dick Singer at a transmitter rack on the Hughes *Glomar Explorer*).

When I served on the *Midway*, the Navy staged proficiency tests: the Naval station in Hawaii would send us a change in frequency. I would set up the new frequency on the AN/SRT long distance 500- watt transmitter. We got the Navy 'E' for excellence because we beat the Naval station back on the air each time, all on CW.

After the Navy I bounced around with different jobs. I worked at a rock and sand plant and worked part time in a TV shop repairing TVs and the suddenly popular Citizen Band 27 MHz transceiver CBs. I decided to try for my commercial telegraph license and obtained it in 1968. I still have my First Class Radiotelegraph commercial license as well the ICET Electronic Technician certificate from the Institute for the Certification of Engineering Technicians.

I joined the Society of Wireless Pioneers in 1968, in the latter part of the year, while still living in California. In 1969 or 1970 I dropped in at coastal radio station KOK. ITT (International Telephone and Telegraph, abbreviated ITT) operated radio KOK as a coastal station in Los Angeles. I was going to break in as an operator. It was a real experience keying all that power on 500 KHz MF (medium frequencies), and the HF (high frequencies) band of frequencies. I loved it.

Fig. 4: Hughes Glomar Explorer, WCHG. Dick Singer, K6KSG and partner Tullio D'Angelo standing, 1973.

Fig. 5: Hughes Glomar Explorer WCHG transmitters: Collins 208U-3 (3 KW), and Communications Associates Inc. Transceiver (1 KW).

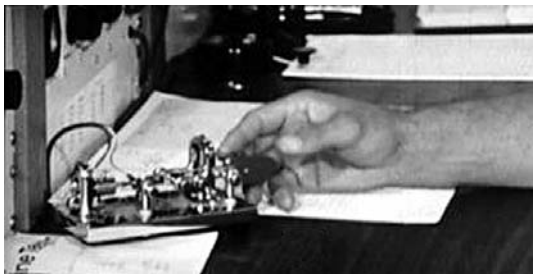

Fig. 6: Screen capture of Dick Singer operating his chrome bug aboard the Hughes Glomar Explorer, from a CIA video.

Fig. 7: Dick Singer sitting at a transmitter rack on the Hughes Glomar Explorer.

Radio Officer on the High Seas

I later shipped out as Radio Officer ("R/O") on a steam tramp tanker SS *Mount - Explorer* (callsign KTSY) in 1976 bound for Egypt. (See figure 8, its radio room). The Captain had a heart attack and I made schedules with Medical-Rome on CW for medical advice. (The International Radio Medical Centre (C.I.R.M.) provides free medical assistance to seafarers of any nationality worldwide).

We later came back to the states and loaded for Russia, a place called Novorossiysk (a port in the Black Sea) next to Georgia. The ship had a World War Two era ITT 4U radiotelegraph rack. I worked WCC (Cape Cod; RCA Chatam) from the states all the way to Novorossiysk. When in the Black Sea I would only have a window of one and a half hours on high frequency (HF) to receive and send my message traffic ("QTC"). Then we lost long distance radio propagation. I set it as a challenge for myself to stay with WCC for the voyage. It was great to accomplish the effort. I stayed on the tanker for six months and was then, when relieved, I took a vacation.

In September 1976 I had in an application for Exxon Shipping Company. They had called while I was on the tramp tanker and my wife told me when I returned home. I waited for a week before calling them in Houston. I didn't want to go back to sea for a while, but they hired me over the phone and off I went again. I signed on as Radio Electronics Officer and stayed with them for 18 years until I retired.

Exxon sent me to several schools, the Fort Schuyler Maritime Academy at Bronx, N.Y. for instrumentation and automation, and Sperry Marine for the Collision Avoidance systems. Later I attended the Communications Associates, Inc. single sideband school, then the Raytheon radar school, and also learned about Limitorque electrical valve systems, and the Tano engine room console. The SS *Exxon New Orleans* was my favorite ship. (See figure 9, Dick Singer copying KPH). All in all, I served on 19 ships in my 22-year career as a seagoing Radio Electronics Officer. I retired from Exxon Oil Company in 1994. It has been sad to since hear the demise of CW on the marine frequencies.

Fig. 8: ITT Telegraph rack on the SS Mount Explorer, KTSY, in 1976.

The Society of Wireless Pioneers

The Society of Wireless Pioneers conducted Morse code CW nets in the 40 and 80-meter ham bands. I would check in once in a while when I was still sailing. Bob Shrader (W6BOB/SK; he wrote a well respected book on radio operations) controlled the SoWP net on 80 meters up until several years ago. He was always an excellent operator. Bob kept after me to take the net on 80 meters several years ago, which I did. (See figure 12, Dick Singer at his ham station K6KSG). Over the years Ben Russell, N6SL/SK, took the 40-meter net and stayed with it many years. Due to Ben's health I manned the nets on 20 meters and 40 meters. We dropped the 80-meter net due to heavy noise on the bands during our net times. However we operate on Thursdays at 0900 Eastern Time on 14055 KHz and again on 7052 KHz at 2200 Eastern Time. I am net control. We don't have many folks left for so many now are Silent Keys. We normally have around five or six stations who check in. We are trying to keep the nets going. All radio amateurs are welcome to join in.

Fig. 9: Exxon New Orleans, WNDM. Dick Singer copying KPH (Bolinas, CA) at the ITT 4U Telegraph rack, 1979.

Restoring My Vibroplex Radio-Telegraph Key

The Vibroplex telegraph key pictured nearby is my latest project. This key has been in my possession for many years. In 1957 I bought this key from J.J. Glass in Los Angeles a World War Two "War Surplus" store. I paid five dollars for it. I didn't know how to use it but I just had to have it. It has been on all the Merchant Ships I sailed on and used it to pass many telegraph messages. I still use it on Morse (CW) for my CW nets on ham radio. It was getting to be in pretty sorry shape after all these years. So I removed everything down to the base of the unit. I wire-wheeled it to remove all the paint down to bare metal. Ooops! I found out it was a powder coated finish and I made a mess out of it. So decided to just polish up all the brass fittings and put it back together so I can use it on the nets. The nets (including the Society of Wireless Pioneers net) are mostly old commercial CW operators and we get together on CW once a week. The only thing is, the guys are all dying off.

You can read the information on the photos (see figures 10 & 11) — the contract with Vibroplex issued in 1942 for War production. (Vibroplex made it in Brooklyn, NY). It is a great key and I wonder how many coded messages were sent during World War Two with it. I have it completed except I need to insert a brass washer in the thumb side of the lever. This will take the slack out of it and help align the lever. I will wait until the weather warms up then I will take it apart again and paint the base black crinkle paint.

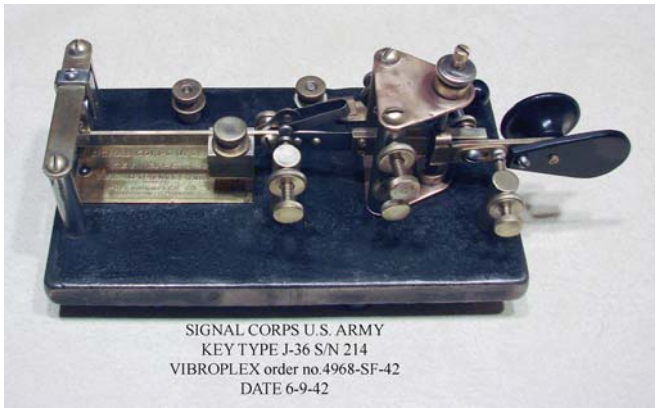

Fig.10: 1942 Vibroplex restored.

Fig.11: Another view showing data plate detail.

73 de Dick Singer, K6KSG, SoWP 662, to all the R/Os that I have passed on ships in the middle of the night on the high seas, and to CHRS for preserving the Society of Wireless Pioneers archives.

Article edited by Bart Lee.

Notes:

- Dick Singer has also posted on: www.trafficlist.net/radio-officer/richard-dick-singer/
- For the raising of the Soviet submarine *K-129* see: https://www.youtube.com/watch?v=jDqCb_83Xcg
- See also: https://en.wikipedia.org/wiki/Soviet_submarine_K-129_(1960)

Fig. 12: Dick Singer today at his ham station K6KSG working with a DX-40 and HR-60 wearing a Maritime Radio Historical Society outfit.

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