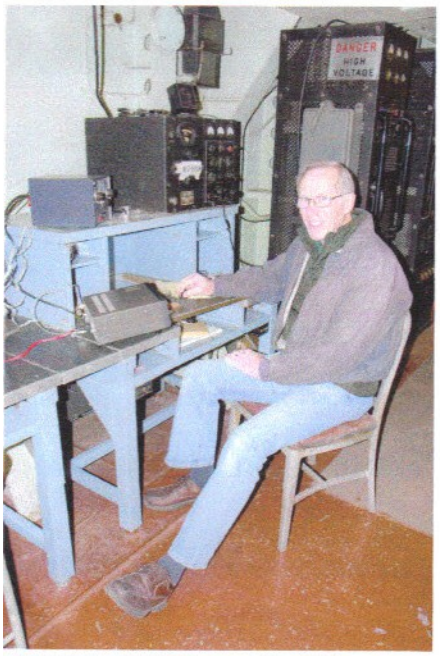
When the Forestry Minister of Mynamar (Burma) visited the ship and learned of its importance, a donation of two tractor trailer loads of the finest teak as well as eight trailer loads at a low price to restore the decks of the ship was arranged. A local company, Dean Hardwoods, dried and prepared the wood for the operation. Many people work behind the scenes donating time and money to keep this ship in superb shape.

Radio Operations

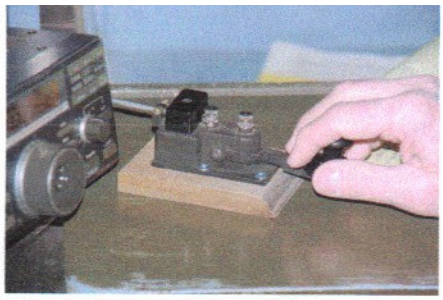
The number of volunteers who help this ship is amazing. For example, one group that has contributed greatly to the ship is the ACARC. Their members have restored the radio rooms and much of the equipment to the state they were in when the ship went into service. What they refer to as Radio 1 is where the banks of receivers were. Radio traffic was heard here and passed on to the cryptographic room which is right next door. Several restored, original receivers can be seen as you tour the ship. Each desk has a switch and a Morse key used to activate the transmitters which were kept in what is referred to as Radio 2. Transmitters lined both sides of this room when the ship was operational.

The club has restored several transmitters along one wall. The transmitters were powered by their own generators which are in a room nearby. These too have been and are being restored so the original equipment can be put on the air. The generators were used to produce the 3,000 volts which was needed on the plate of the 861 transmitting tubes. As far as they know, this is the only museum ship to use the original transmitters on the air.

I met several members of the club but mainly spoke to Allan Pellnat KX2H, Jack Jacobs WD4OIN and Norman Clements KI4KSY. The club originally had an R-7 vertical on the stack and operated special events



Allan Pellnat KX2H operating CW.



Donated flash proof WWII Morse key in use.

from the bridge area. Since this was part of the public tour, Kim Robertson Sincox suggested they might want to restore the actual radio rooms. The club took on the challenge and they tried to activate the original antennas. Trying to connect to 60 years old wiring was quite a challenge. There is a huge patch board that would allow any antenna to be connected to any of the radio centers on the ship. Although there are two main set ups, there were others throughout the ship so that, in case the main centers got damaged, communications could be maintained.

For some reason, many of the transmission cables were cut off at the smoke stacks so a lot of tracking had to be done. As Allan said, they have no idea of the impedance of these old lines but they do work well. The coaxial cable used is different from today's RG 2123 etc. The dielectric is not solid but is actually Bakelite beads. They had quite a time getting connectors on the cables. Their latest project according to Norm, is to connect across two feed lines so a long wire can be brought into use. The modern transceivers work well on the old antennas as you will see later in this article.

Jack, along with Carl Filipiak started the work, and Allan, Norm and the late Bill Usher joined them. The TBM4 transmitter was the first item they undertook to restore. Checking wiring for bad insulation, cleaning all the switches and contacts, and reseating all the plug-in components, such as resistors, was a major undertaking. The generators had to be lubricated as well as having brushes and armatures tested. It took over a year, with several failures, until the transmitter was functioning. The first signal went out on November 27, 2001.

The most memorable contact with this transmitter took place on January 28, 2002. They worked W1SRR using the TBM. This was Richard "Mac" McCullough who was a "plank holder" and a radio operator on the ship. A plank holder is someone who joined the ship when she was commissioned and left her when she was decommissioned. This was the first contact on the equipment in 60 years.

On May 30, 2006 the TDE transmitter was activated. This is a smaller unit that was put on the ship in 1944. Again, the first contact was with W1SRR. You have to respect these hard working gentlemen as they arranged for Mac's son to bring him to the battleship. Allan said they almost had to carry him down the ladders but they got him to the radio rooms where he could actually make some contacts on the restored equipment. You can still see the smile on their faces as they remember Mac operating the sets. There is an original chalkboard in Radio 2 that still has the dates of the contacts with Mac. Unfortunately Mac became a silent key two years ago. The TBK-7 transmitter was brought to life in 2009.

Several of the RCA receivers have been restored. There are three types including the RBA (for 500 kHz and below), the RBB (for 500 kHz to 4 MHz) and the RBC (for 4 to 18 MHz). These rigs were restored in Arizona and work well. I was surprised at the sensitivity and selectivity of the radios. In fact, their analog calibration was quite accurate.

I guess I will always be an SWL as I could not keep my hands off the receiver. When I get back there, I plan to do some real listening on these sets. I listened to CFRX as stated earlier as well as CHU on 7.850 and 14.670 MHz. I never hear the 14.670 signal at home. The story of moving this 100 pound receiver from Radio 1 two decks above is well worth hearing.

Restored receiver bank in radio 1.

The generators are the problem at the present. They are down so the original transmitters are silent for a while. A local repair shop has done many hours of work on these at very low financial return to get them back into working condition. They even sent one armature to Florida to be rebuilt. They want the station to be run as original.

They had a problem replacing brush caps on these generators. They could not get them, but a local community college, Cape Fear Tech, had their students make many of them as a project. One of the field pots had the ceramic break and they had no replacement so a local amateur made replacements out of wood.

As you look around you see many vintage pieces of equipment. A three foot high TDQ transmitter grabs your attention. This was the VHF unit and I would not want to run this mobile in my car. Nearby there are Hallicrafters S20R and S27 receivers.

On the 65th anniversary of the signing of the surrender documents in Tokyo Bay, the *USS North Carolina* used their original transmitter to make a contact with the *USS Missouri* on which the document was signed. The operator, Charlie Vaughn K4UWH, is the son of an operator from the North Carolina. The operator on the *Missouri* was the son of a man who went ashore under the covering fire of the *North Carolina*. Charlie is currently president of the ACARC.

Norm, Jack and Allan have many stories about the work they did on the ship. They usually stop working on the ship in late May and return in October as the ship has no air conditioning and you can imagine how hot a