## Big Signals, Big Ship

By Ron Walsh VE3GO (All photos courtesy of the author)

eep inside the battleship USS North Carolina, a radio operator concentrates intensely on the receiver in front of him. The state of the art, 22 tube, RCA receiver, known as an RBB, tunes from 4 to 18 MHz. The receiver, built in 1941, is connected to a large vertical antenna near the smoke stack of the vessel. He carefully tunes the bands, checking several known frequencies, until he comes on the frequency 6.070 MHz. He carefully tunes in the signal and listens intently. The voice on the radio is giving target information. The signal content is written down so that an accurate reception report can be made. He could almost feel the huge 16 inch guns turn to be ready to fire at the targets.

Just then a touch on the shoulder from Allan Pellnat KX2H reminds me that it is 2013 and I am a guest aboard the battleship memorial. The station is CFRX, the shortwave service of CFRB, from Toronto, Ontario and ironically, the target information is actually a news article about the Target chain of stores coming to Canada this year. We are not in the South Pacific but in the harbor of Wilmington, North Carolina.

I had been waiting for over a year to visit the radio rooms on the battleship, areas not normally open to the public. Allan and I had corresponded and set up the chance for my visit during the annual North Carolina QSO party and to come back again to gather details for this article. The honor to actually operate from this museum ship was one I was not going to pass up. Few get the chance to see and actually use some of the original equipment from World War II. As a marine history enthusiast and a radio enthusiast, this was a chance of a lifetime.

I met some of the volunteers last year and they put me in contact with the Azalea Coast Amateur Radio Club (ACARC) which maintains the communication equipment aboard the ship. I had three purposes in mind as I went aboard. I wanted to actually see the original radio rooms and operate aboard. Second, I wanted to do an article about the ship and the communications that were used in the 1940s.

However my third purpose was the most important to me. Don Cudney VE3WDC had given me a flash-proof WWII Navy Morse key for helping him with his equipment. I could think of no better place for the key than aboard this naval memorial ship in a restored radio room. Allan had already told me they would love to have the key for the ship and had done some research about it. I also had a collection of old, black radio knobs of various sizes that I thought they might be able to use. Allan, is involved with the Antique Wireless Association and he is sure they will find a home.

## **Ship History**

The USS North Carolina, BB55, has quite a history and is a fitting memorial to the brave sailors of World War II. Her keel was laid in October 1937 and was the first U.S. battleship constructed in 16 years. Along with her sister ship, USS Washington, BB56, they comprised the North Carolina class of battleship. The ship was commissioned on April 9, 1941 and was considered the world's greatest sea weapon.

She was armed with nine 16-inch guns, twenty 5-inch guns and many antiaircraft weapons. She carried a crew of 144 officers and 2,195 enlisted men which included about 100 marines. She started in the Atlantic but was transferred to the Pacific theater of operations. She participated in every major Pacific naval offensive and received 15 battle stars. She was in action from the Guadalcanal landings of August 7-9, 1942 to the bombardment of the Japanese Home Islands from July 10 to August 15, 1945. She was reported sunk by the enemy six times but she survived many close calls. On September 15, 1942 she sustained her only hit of the war when a torpedo hit the port side. Ship's repair crews kept her with the fleet and by the end of the war she had only suffered 10 casualties and had 67 of her crew wounded.

However, as most people know, the era of the battleship had come to an end and the aircraft carrier had become the main weapon of the navy. The ship served as a training vessel for midshipmen but was decommissioned



TBM transmitter.



Restored RBB receiver.

on June 27, 1947. The ship was in the Inactive Reserve Fleet, at Bayonne, New Jersey until 1958. When the scrapping announcement was made, a statewide campaign was launched by the citizens of North Carolina to bring the ship back home. The Save Our Ship (SOS) campaign saved the vessel and on October 2, 1961 she was taken to her present berth in Wilmington. The ship was dedicated on April 29, 1962 as North Carolina's memorial to its World War II veterans and the 10,000 residents of North Carolina who died in the war.

## Museum

The ship is a self-sustaining museum and receives no tax money. Their multi-million dollar annual budget is entirely raised by the staff of the memorial. The majority of this comes from the more than 200,000 visitors who cross her gangplank every year.

Having had a chance to talk to Kim Robertson Sincox, Director of Museum Services, and Heather Loftin, Promotions Director, I am impressed by the effort that goes into financing this well maintained memorial. They run many extra tours that illustrate the firepower, power plants and damage control aboard the ship. Twice a year they do the "Hidden Tour," where people can see parts of the ship not open to the public. This includes the radio rooms where members of the ACARC explain the radio equipment.

If anyone is interested in donating to the hull restoration of the vessel, you may make a donation through the Friends of the North Carolina organization. All donations are tax deductible as allowed by law. Their mailing address is P. O. Box 480 Wilmington, North Carolina 28401. You can phone 910-251-5797 extension 2045, or you can donate online at <a href="http://battleshipncfriends.org/Friends-Donation-P24.aspx">http://battleshipncfriends.org/Friends-Donation-P24.aspx</a>. If you particularly want the donation to go to radio restoration you indicate this when you make your donation.