## NEWS RELEASE (05/21/2013) NEW INSTALLATION RETURNS HOME TO FORT TRUMBULL

For many people, the work that they perform is intangible. For others, the work is tangible-a book written, a song composed, a building designed. In April of this year, a retired engineer from the Naval Underwater Systems Center/Newport Division (formerly the Navy Underwater Sound Laboratory in New London, CT) successfully solved many logistical problems to bring to Fort Trumbull State Park in New London, CT, a Transducer-an underwater speaker and receiver-which he and others had utilized during the Cold War Era. Because this very large, tangible artifact had played an important role in America's success in the Cold War, he was determined to return it to its original location.

This Odyssey began in September, 2011. Earlier, when the Navy Underwater Sound Laboratory had moved from New London to Newport, R.I., the Transducer had been re-located to a parking lot at the Naval Undersea Warfare Center (NUWC) in Newport. There it languished for many years. In 2011, Mr. Justin Daubar received a call from a friend saying that the transducer, which had been taking up a parking space, had to be removed. He was asked if he and others who had worked on this project were interested in saving it. Mr. Daubar, immediately indicating that he was interested, swung into action.

For the next 14 months, he made innumerable phone calls, sent measureless e-mails, and wrote myriad letters to various people in the Naval Undersea Warfare Center/Division Newport, the State of Ct, and the Navy History and Heritage Command. Finally, having surmounted all obstacles, the appropriate authorities told him he could "rescue" this piece of equipment. A friend of his, Mike Amaral -also a NUWC retiree- subsequently volunteered his truck and trailer to effect the transfer. On December 17, 2012, they went to Newport to bring the transducer back to New London where it had been born.

Their trials, however, were far from over. After workers from NUWC had loaded the transducer, which weighs approximately 3 tons, on the trailer, they discovered one of the trailer tires had become flat. The people at NUWC then lifted the trailer with a fork lift so that the two men could change the tire. Eventually, as they began to leave the area, they realized that the Transducer needed to be re-positioned further back on the trailer. Ingeniously, by tying the transducer to a telephone pole with heavy duty slings and chains, they were able to drive the truck and trailer forward until the transducer was sitting just right. They then accomplished the trip back "home" to Fort Trumbull State Park, New London, without further incident.

Recently, during Volunteer Clean-up Day at the Fort, three members of The Friends of Fort Trumbull scraped and painted the Transducer under the direction of Mr. Daubar. It is now inside the Fort, awaiting a final installation on a concrete pad which will be constructed by the DEEP.

The history behind this artifact is very interesting. During World War II, submarines could only operate at shallow depths. However, in the 1960's during the Cold War with the Soviet Union, both sides had developed submarines which could operate at much greater depths, making them much harder to detect. In order to obtain the data that would enable better detection of these depth-seeking subs, civilian engineers at the Navy Underwater Sound Laboratory, located at Fort Trumbull in New London, CT, set to work. In the early 1960's Sound Lab engineers developed an experimental system called Bottom Reflected Active Sonar System.

Part of the BRASS system was this transducer named BRASS II. Although the cylindrical transducer was manufactured in Walpole, MA, all of the other components were manufactured and assembled by the Sound Lab in New London. By using the reception of sound generated by or reflected from hostile submarines, these scientists were able to detect the enemy presence and locate their precise position, speed, and course. This information would prove invaluable to submarine commanders as they planned tactical operations.

In 1960, in order to perform sonar and acoustic tests and collect data, the Navy mounted this Transducer, BRASS II, inside a protective dome on the submarine USS Conger (AGSS-477). After the USS Conger was decommissioned in late 1963, the BRASS II Transducer and system were installed on the research submarine USS Tigrone (AGSS-419) in early 1964. Later, after extensive sea testing with the BRASS II Transducer, in 1965 the BRASS III transducer was installed in a dome in the bow of the USS Tigrone. Until June of 1975, when the USS Tigrone was decommissioned, the USS Tigrone operated in conjunction with the Navy Underwater Sound Laboratory, conducting underwater systems tests and evaluating this new equipment. The information provided by these tests, utilizing the transducer, would prove invaluable as the U.S. Navy met the challenges of the Cold War.



Probably, because they worked for the "Silent Service", these men, who played such an important role in The Cold War, remain reticent about speaking of their contributions. When I asked Mr. Daubar what he hoped a youngster would take away, after viewing this piece of equipment, he replied, "I hope they obtain a sense of the complexity that goes into the sonar systems in use today by the submarine fleet." For those who realize what it took to return this equipment to its home, they will also take away an understanding of what patience and persistence can accomplish.