

The Basalt ARS

In the last edition of TOWLINE we ran a photo story of an ARS tow from Pearl Harbor, Hawaii to Yokosuka, Japan, submitted by NAFTS member Lt. Commander John Ackerman. John, who was skipper of the USS Conserver (ARS 39), also offered us an article on the venerable ARS design and its construction by “The Basalt Rock Company” of Napa California. How did a quarry that produced crushed stone and cement end up launching over two dozen WWII era salvage ships? Commander Ackerman was intrigued and researched the tale and sent us the following excellent story on the birth of the Basalt ARS.

The builders plaque read, "Constructed by Basalt Rock Company, Napa California." Napa, California, seems to me a very strange place to be building ships. That's what I thought when I reported aboard USS Conserver (ARS-39) in early May 1984. Why did a rock company end up building what many of us hold as being one of the best (if not the best) class of salvage ship ever produced by an American shipbuilder? It is a story of good old American resourcefulness, ingenuity, and the patriotic efforts of a large work force. The Basalt organization was proud of what it accomplished, and anyone who has ever served on an ARS built by Basalt will understand exactly how much pride went into their construction.

The story begins in 1923 in Napa, where Basalt was founded. The company produced crushed rock, used in road construction. Basalt also produced the concrete mixes that were used on the roads. The original operation was small. The company operated a small quarry, with 8 employees operating a small crusher. The rock was hand loaded onto a horse-drawn dump cart and delivered to the crusher, where it was processed and shipped to construction sites throughout California. Under the leadership of one Mr. Albert Streblov, the company's president from 1924 until his death in 1963, the company grew rapidly. In 1924, it was incorporated and named Basalt Rock Company. The name Basalt was

chosen because the rock was basalt and the deposit in the quarry was quite large. In 1930, Basalt expanded operations at its Napa facility by adding facilities for producing ready-mix and asphaltic concrete and concrete block. In the mid-1930s, Basalt began producing large stone materials, referred to as "rip-rap," which was used to provide riverbank protection throughout California. Rip-rap was also the main material for manufacturing jetties and breakwaters. Basalt provided material for the rock wall that formed Treasure Island, the breakwater at Mare Island Naval Shipyard, and the jetty at Alameda Naval Air Station to mention but a few.

The breakwater business presented a major logistics problem for Basalt because the rip-rap was quarried and processed in Napa, it needed to be transported down the Napa River to San Francisco and then on to the construction sites. The obvious answer was to use barges to transport the material, so Basalt built two wooden barges and purchased two tugboats to tow the barges down river. It soon became apparent that wooden barges, while suitable for the job, leaked badly and were damaged on the trips, resulting in high maintenance costs. To Mr. Streblov, the answer was obvious: steel barges were needed. Having no experience or manpower qualified to build steel barges; Basalt sought to contract the construction of the barges. Bids were received, but the price far exceeded what the company was willing to pay.



The Basalt Shipbuilding facilities immediately after WWII

Mr. Streblov decided that Basalt would build the steel replacement barges, and in 1938, the company purchased a plot of land adjacent to the quarry operations. On this land, Basalt built a very modest facility where it could construct the barges. A group of welders from the quarry maintenance shop and a few other technical and mechanical employees were transferred to the new barge building facility. These employees became the nucleus of what would soon become the shipbuilding division of Basalt Rock Company.

The barges did the job superbly. As a matter of fact, they were so successful that the U. S. Navy became aware of the company's accomplishment. Awareness soon turned to interest, which in turn produced a query to see if Basalt would be interested in building a number of ocean going cargo

barges for the Navy. Basalt was indeed interested, and submitted bids. The bids were approved and the contracts were awarded. Thus began a long and successful relationship with the navy.

After successfully executing the barge construction contract, the Navy once again approached Basalt with the comment, "You country boys have figured out how to produce a simple hull, now are you ready to graduate to self-propelled vessels?" One must remember that Napa in the late 1930s was primarily an agricultural area with a population of about 8000 people. Mr. Streblov replied with a resounding "Yes," and Basalt was on its way!

Drydocks and sea walls were constructed on the little barge construction site along with machine shops, a mold loft, and fabrication facilities.



An ARS under construction at Basalt.

The first two ships Basalt built were yard oilers (YOs), but not without some important lessons learned. Basalt had bid \$1 million each to build the ships, but it cost them \$2 million each. To put it in Al Streblov's words, "Lessons were being learned - the hard way!" Undaunted, the company pushed on and through experience, became more efficient at building self-propelled vessels.

Subsequently, two other vessel types were built at Basalt: mine layers and salvage ships, the ARS. The ARS became the predominant ship constructed by Basalt, and through hard work and dedication, Basalt became the lead yard for engineering of ARS vessels being built around the country. By the end of World War II, Basalt had built no less than 28 ARS type ships and was awarded several Army-Navy "E"s for excellence of war production. In addition to the 28 ARS types, Basalt also built a number of the British version (BARS) of the hull.

The ships were constructed in one of Basalt's three drydocks. The keels were laid in the docks and most of the materials were pre-fabricated in a mold loft and then moved to assembly areas. The assembled components were then transported to the drydock for final assembly.

The entire construction process took place in three basic phases. Phase one took place in the dock and produced the hull and superstructure.

Major propulsion machinery was installed during phase 1. The phase culminated with the ship being launched. The launching, with its appropriate pomp and circumstance took place by flooding the dock and floating the ship off her keel blocks. Then the dock floodgates were opened and the ship was moved out of the dock to a berth at the quay wall where phase 2 began.

Phase 2 completed the construction process and partially outfitted the ship. A complete outfitting and sea trial couldn't take place because the maximum depth of the Napa River between Napa and Oakland was approximately 10 feet. A fully outfitted and loaded ARS drew about 14 feet! So the outfitting accomplished in phase 2 was limited to that which resulted in a ship draft of 10 feet or less. At this point, the ship was ready to be moved to San Francisco or Oakland for builders trials, final outfitting, acceptance, and commissioning, which heralded the beginning of Phase 3.

Using a shipyard crew Basalt's pilot, Captain



The birth of USS Conserver (ARS 39)

Harry Lent, would navigate the ship down the Napa River to a berth at pier 42 in San Francisco, where they would take on fuel and stores. Under the auspices of the Board of Inspection and Survey, the ship would undergo builder's trials in San Francisco Bay. When the builder's trials were completed, the ship berthed at the Naval Air Station Alameda, where final outfitting was completed. From there, the ship was commissioned into active service and began an intensive training and workup period before being sent to the operating theatres of World War II.



USS Bolster (ARS 38) on sea trials after Basalt construction



The Basalt facilities circa 1980