

CLUE, 2007-05-20 - Tom's Sidewheel Steamboat Wreck ("Anthony Wayne")

On Sunday, May 20, 2007, Tom Kowalczk, David VanZandt, and Kevin Magee - all members of the Cleveland Underwater Explorers (CLUE) - went out on Lake Erie for the first dive of the season. They departed from Tom's marina on his boat "Dragonfly," which is based at Marblehead near Sandusky, Ohio. The day was sunny, breezy, and cool with an air temperature of about 60 degrees F. The seas were initially two to three feet, but the wind was blowing briskly out of the northeast, causing whitecaps. By the time they reached the wreck site, the seas were three to four feet.

The dive site was a new wreck found by Tom during the 2006 season in about 50 feet of water. From the side scan images there are two discernable major pieces that appear to be the remains of a sidewheel steamboat. The bow appears to be partially visible, and sidewheels appear to be present in the other piece of wreckage. Tom did not dive this wreck when it was found last year. The boat was anchored, and Tom was the first to descend to investigate. Unfortunately, he discovered the anchor had dragged on the bottom and the wreck was not near the anchor. Bottom conditions were acceptable at a warm 55 degrees F, bright ambient lighting, and three feet of visibility. After surfacing, sea conditions deteriorated with waves building to three to five foot. However, persistence prevailed, the wreck was relocated, and after several attempts, the anchor was holding.

Since the seas were rough Dave decided to remain aboard for safety while Tom and Kevin investigated the wreck. Tom was the first to descend and found the anchor on the northwest corner of the wreck. Moving southwest, a standing sidewheel and hub were immediately found. The sidewheel is mostly broken, but parts of the lower half remain. A small standing portion of the hull's side was also seen near the sidewheel. It consisted of frames, ceiling, and planking. Turning northeast at the hub, the main shaft for the sidewheel was seen with large bearings holding the shaft in place. Continuing to the other sidewheel, it is in better shape with the upper half missing but the lower half mostly intact. The wheel's dimensions obtained were a radius of about ten feet and a width of about eight feet. There are multiple buckets (paddles) side-by-side within each sidewheel, and the outer bucket width measured at two and a half feet.

Moving back along the shaft towards the middle of the wreck, the shaft is split in half at the middle and has a crank coming off the end of each shaft that rise up diagonally together towards the south. These cranks are several feet long and are attached by a very large pin joint to a single rectangular cross-section beam, a Pitman arm, made of metal with a prominent single row of nuts running down its length in the middle. It proceeds south downwards until it runs into the bottom near the base and slightly to the west of what would appear to be a single standing vertical cylinder with a small hole in the top. Peering inside revealed it

is almost completely filled with silt. No more wreckage was seen beyond this point. Returning to the shaft, some additional wooden structure was seen to the north but did not extend far. Also seen was a rope running along the length of the Pitman arm with a Y-splice halfway down its length. This could be a line from nets, although no nets were found. No boilers or engine were seen during the dive.

A maximum depth of about 50 feet was obtained during the dive with visibility of about two to three feet. Unfortunately, bottom visibility did not allow a better survey to be performed, and topside conditions did not allow another dive to be performed. The trip back to the marina was slow through the heavy seas, but everyone was happy and excited about this newly discovered shipwreck. More dives and better measurements will be needed to properly evaluate the wreckage and confirm its identity.

CLUE, 2007-05-28 - Tom's Sidewheel Steamboat Wreck ("Anthony Wayne")

On Monday, May 28, 2007, Tom Kowalczyk, David VanZandt, Kevin Magee, and Cindy LaRosa headed back out to the sidewheel steamboat wreck to better document the wreckage. They departed from Tom's marina on Tom's boat "Dragonfly." The day was much better than the previous trip. It was sunny and warm with the seas calm at less than one foot and almost glassy at times. A pleasant ride to the dive site was filled with excited talk about the possible identity of the wreck. Once anchored at the wreck site, Dave was the first in the water to videotape and photograph the wreck. He was followed by Tom, who explored the wreck more thoroughly. Cindy and Kevin entered the water last to obtain measurements.

Visibility on the bottom was unchanged at about two to three feet, and the anchor was at the southwest corner of the wreck. The hull sections on each side were found to be much more substantial than originally noticed but did not extend far beyond the sidewheels themselves. The southwest sidewheel was found stripped of its outer arms with just an exposed hub outboard. The northeast sidewheel is more intact with a nearly full set of undamaged buckets on the lower portion of the wheel. Each bucket is divided into three sections with two center radial supports. The total width of each bucket is eight feet with the center section about five feet long. The inner and outer sections of the buckets to the housing edges measured three feet each. The radius of the northeast sidewheel was measured to be 12 feet (24 foot diameter), and 20 arms were counted around the northeast hub.

Moving to the centerline of the sidewheel shafts, the cranks and connections to the Pitman arm were examined in more detail. The width of the wreck measured 25 feet at this point with 13 feet to the centerline between the two shafts. The

wooden structure to the north could be seen to be a 66-inch long by 69-inch wide box around the crank rod's range of motion in this direction. The sidewheel shafts measured one foot in diameter. The cranks measured approximately three feet in length to the pin joint. The pin joint is actually quite complicated and appears to have an extra linkage connecting the crank to the Pitman arm on the east side. The Pitman arm's length measured 20 feet before disappearing into the silt. Its cross section near the pin joint is 6 inches wide by 12 inches high. The cylinder standing near the end of the Pitman arm measured 28 inches in diameter and 38 inches high. The hole in its top measured 9 inches in diameter. No machinery is associated with this vertical cylinder, and there was a small open space underneath it. We suspected it to be an air expansion cylinder for the steam engine.

Not noticed on the May 20 dive to the east side of the pin joint of the Pitman arm was another standing cylinder with a cross head linkage at the top and machinery and piping coming off its side. The cylinder measured 18 inches in diameter. There are also two connecting links that come off the sidewheel shaft on the west side and extend south before turning 90 degrees downwards and disappear into the silt. We suspect these are control linkages that run off cams on the shaft to the slider valves that control the steam engine's operation. All of the equipment observed is consistent with a high-pressure horizontal steam engine with the engine and boilers probably buried low in the hull underneath the silt to the south. This, combined with the orientation of the buckets on the sidewheels, makes the south the likely direction of the bow. This is also consistent with the side scan images which show the suspected bow in this direction. Due to the poor visibility, however, the bow was not investigated.

Also discovered was a piece of PVC pipe towards the south end of the wreck. The line running along the Pitman arm was also noticed to extend exactly along the ship's centerline in both directions, suggesting it may have been purposely placed to orient divers on the wreck. Tom used a pole to probe for wreckage under the silt in both the north and south directions and discovered substantial wreckage underneath the silt for a significant distance.

The location, dimensions, and observed features suggest the identity of the wreck is most likely the sidewheel steamboat "Anthony Wayne," which sank on April 28, 1850, when one of its high-pressure boilers blew up. Historical research has determined that the "Anthony Wayne" had a beam of 27 feet, its sidewheels were 25 feet in diameter, and it had a high-pressure horizontal steam engine. This engine replaced its original vertical steam engine, and it was removed from the steamship "Columbus" after it ran aground and was destroyed in 1848. The "Anthony Wayne" was claimed to have been located by modern divers in the early 1990's. They unsuccessfully petitioned the state of Ohio for salvage rights to the ship for the purported gold rumored to be on it.

Extensive historical research by Tom Kowalczyk and Jim Paskert suggest that no sidewheel steamboat other than the "Anthony Wayne" is known to have wrecked at or near this location. The measured and observed physical evidence that has been obtained are also consistent with the historical description of the "Anthony Wayne." Therefore, it is CLUE's opinion that this is the wreck of the sidewheel steamboat "Anthony Wayne."

History of the "Anthony Wayne"

The Steamboat "Anthony Wayne" disaster resulted in one of the most significant loss of life in early steamboat history, estimated at 38 passengers and crew. Built only 19 years after the very first steamboat on Lake Erie, the "Walk-in-the-Water," and rebuilt in 1849, the "Anthony Wayne" is believed to be the oldest steamboat shipwreck in Lake Erie. Important for its historical and archeological value, the "Anthony Wayne" is truly a treasure ship of Lake Erie.