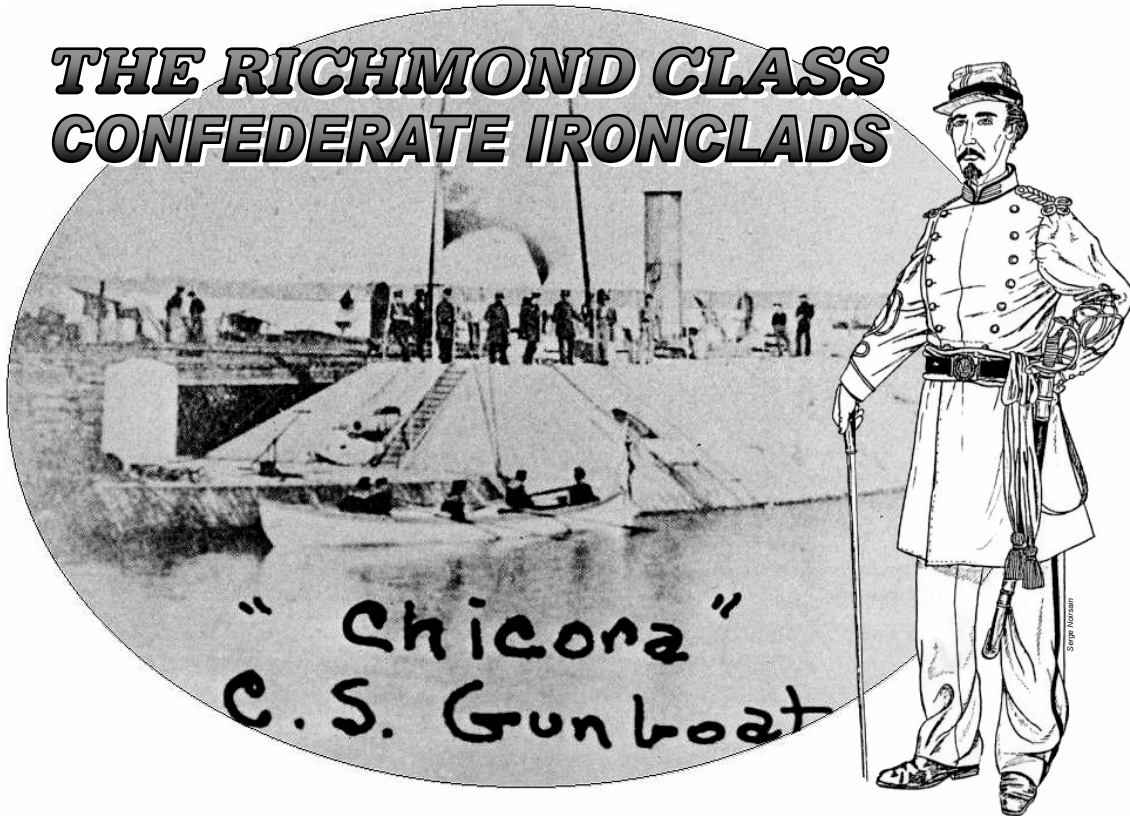


THE RICHMOND CLASS CONFEDERATE IRONCLADS



by **Robert Holcombe**

Curator of the Confederate Naval Museum of Columbus, Georgia

It is not generally realized, even among the more knowledgeable Civil War enthusiasts, that the Confederate Navy attempted to build approximately 50 ironclad warships during the course of the war, about 25 of which were commissioned and saw service. The *Virginia* (*Merrimack*), *Albemarle* and *Tennessee* are well known because of the significant battles they took part in ; but what about the *Richmond*, *Chicora*, *Savannah* and others that served the South admirably ? This article, then, deals with six of those lesser known Confederate ironclads : the *Chicora*, *North Carolina*, *Palmetto State*, *Raleigh*, *Richmond* and *Savannah*. Known collectively as the *Richmond Class*, this rather obscure group of vessels played a prominent part in the development of the Confederate Navy's ironclad building program.

The design for the *Richmond Class* evolved from the Confederate Navy's defensive strategy for its "home-built" ironclads that became policy in late 1861 - early 1862. This defensive strategy originated when the Confederate Navy Department realized that it would be unable to construct large sea-going ironclads warships capable of breaking the Union blockade of Southern ports and would have to depend on European shipyards to furnish these vessels. Until they could be constructed, however, shipyards within the Confederacy would have to build smaller ironclads or simplified design capable of defending its harbors and coastal waters.

Prior to the adoption of this defensive strategy there had been little, if any, standardization in the design of the Confederacy's first ironclads. This resulted in many rather large and unusual, if not overly ambitious vessels, none of which were well suited to harbor and coastal defense. To meet these defensive requirements, John L. Porter, Naval Constructor, CSN, designed a 150 ft. long, 34 ft. beam, 13 ft. draft ironclad

capable of operating within relatively shallow waters. This design, which apparently was adapted from a design Porter had submitted to the U.S. Navy in 1846, was characterized by a U-bottomed, keeled hull with only a slight amount of deadrise. A built-on knuckle of heavy timbers protected the hull from damage by ramming and waterline hits. The gun shield, or casemate, was protected by 21 inches of wood and two layers of 2 inch rolled iron plates. One layer of 2 inch plate covered the shield deck, the short fore and aft flush decks, and overlapped the knuckle and extended several feet below the waterline. The sides and ends of the casemate were angled at 35 degrees. Four guns were carried within the casemate - one at each end and pivot-mounted to fire along the centerline of the vessel or to either broadside. A single 10 foot diameter screw propelled the ship.

This basic hull type, with minor modifications, became the standardized design for most of the ironclads laid down during the remainder of the war by the Confederate Navy. The *Charleston*, *Nashville* and *Tennessee Classes* were shallow draft versions that incorporated a number of refinements based on operational experience with the preceding classes.¹

The six *Richmond Class* ironclads for the most part served the South credibly during the war. Although not as technologically advanced as the *Monitor Class* of Union ironclads, they adequately fulfilled the original requirements set forth by the Confederate Navy for a small, maneuverable ironclad ram capable of defensive operations in coastal harbors and waters. Their one serious shortcoming was their relatively moderate draft of 13 ft. that was often too great for the waters they were designed to operate in. It was, in fact, the direct cause of the loss of one of the class.

CSS Richmond

The *CSS Richmond* was laid down in late March 1862 at Gosport Navy Yard near Norfolk (Virginia). Financed largely by contributions of money and scrap metal from private citizens, work progressed quickly and she was launched May 6, 1862. That same day, with the imminent evacuation of Norfolk by Confederate forces, she was towed up the James River to Richmond and completed there, apparently becoming operational in the fall of 1862. The *Richmond* remained inactive to the quiet James River front until the summer of 1864 when, with the advance of General Ulysses S. Grant's armies in the vicinity, she was involved in numerous skirmishes with Federal land and river forces.

On January 23-24, the *Richmond* was engaged in the battle of Trent's Reach, an unsuccessful attempt by the Confederate vessels on the James River Squadron to pass obstructions in the James River and attack Grant's supply base at City Point (Virginia). The *Richmond* thereafter remained relatively inactive until the evacuation of the city of Richmond on April 3^d, when the vessels of the James River Squadron were destroyed to prevent their capture.

Although records differ, the *Richmond* was apparently armed with one 7 inch Brooke rifle, one 10 inch smoothbore aft and one 6.4 inch Brooke rifle on each broadside. She carried a spar torpedo mounted on her bow. Her steam machinery was reportedly taken from the C.S.S. Receiving Ship *Artic*.

¹ A second standardization design was also adopted in early 1862. This design was characterized by a flat bottom and a much shallower draft than the Standard Hull types, and ironclads built to this plan were intended for use on the South's many shallow, inland rivers. The famous *Albermarle* is an excellent example of this type.

CSS Raleigh

Records relating to the construction of the *Raleigh* at Wilmington (North Carolina) are vague, but indicate that she was laid down by the Confederate Navy in the spring of 1862, at the foot of Church Street. After launching she was supposedly turned over to the firm of J.L. Cassidy & Sons for completion. Work progressed slowly and the *Raleigh* did not become operational until April 30, 1864. Information regarding the *Raleigh's* armament is equally scarce, most sources saying only that she carried two rifles and two smoothbores.

On the evening of May 6, 1864, the *Raleigh* emerged from the Cape Fear River near Fort Fisher and engaged the Federal blockading fleet, exchanging a desultory fire with them throughout the night and driving them from their stations. The following morning the *Raleigh* started to withdraw up the Cape Fear River and promptly grounded in the shallows off Fort Fisher, the weight of her armor plate breaking her back and rendering her unfit for further use. Although her valuable guns, steam machinery and armor plate were salvaged by the Confederates, the promising career of the *Raleigh* ended only a week after it began - the shortest operational career of any of the *Richmond Class* ironclads.

CSS North Carolina

The service records of the *North Carolina* were the most disappointing of any of the *Richmond Class* ironclads. Like the *Raleigh*, details of her building are scarce but she was apparently laid down by the firm of Berry & Brothers at Wilmington in the spring of 1862. Construction proceeded at a slow pace and it wasn't until late 1863 that *North Carolina* became operational. Unfortunately her steam machinery, which had been taken from the tug *Uncle Ben*, proved too weak to give any speed and she had to be used as a floating battery. She remained anchored at Smithville, opposite the mouth of the Cape Fear River from Fort Fisher, until September 1864 when she unexpectedly sank at her moorings, portions of her unprotected bottom eaten away by shipworms. No reference has been located giving the composition of *North Carolina's* armament, most sources saying only that it was similar to *Raleigh's*.

CSS Palmetto State

Initially financed by the South Carolina Executive Council, with contributions from the women of South Carolina, the keel of the *Palmetto State* was laid in March of 1862, at Charleston, by the firm Marsh & Son. Soon after construction began the Confederate Navy assumed financial responsibilities, freeing the Executive Council's money for construction of another ironclad which became the *Chicora*. The *Palmetto State* was commissioned on October 11, 1862 and was operational by late December 1862. Her armament was apparently composed of an 80 pounder rifle forward, a 60 pounder rifle aft and one 8 inch smoothbore on each broadside. A spar torpedo containing 60 pounds of powder was attached to the bow in 1863. Her pilot's hatch was located abaft the smokestack, an oddity shared by at least one other of the class, the *Savannah*. She was powered by steam machinery taken from the tug *Lady Davis*, which gave her a top speed of about seven knots.

Before daybreak January 31, 1863, the ironclads *Palmetto State* and *Chicora* sortied from Charleston Harbor and attacked vessels of the Union blockading Squadron. Several Union ships were damaged in the ensuing fight and the remainder temporarily scattered. The *Palmetto State* thereafter played an active and prominent part in the defense of Charleston until she was destroyed by the Confederates when the city was evacuated in 1865. According to some sources, the *Palmetto State's* casemate was pierced for additional guns later in her career, and she was reportedly carrying ten 7 inch rifles at the time of her destruction.

CSS *Chicora*

The history of the *Chicora* closely parallels that of her sister ironclad *Palmetto State*. Her construction was financed by the South Carolina Executive Council and her keel was laid in March 1862 by the firm of J.M. Eason Brothers of Charleston. She was launched in August of 1862 and soon turned over to the Confederate Navy, becoming operational by December 1862. The *Chicora's* armament reportedly consisted of two rifles and two smoothbores - probably two rifled 32 pounders pivot mounted fore and aft, and two 9 inch smoothbores in broadside. Like the *Palmetto State*, she was fitted with a spar torpedo in early 1863. In one of the earliest attempts at chip camouflage, the *Chicora* and *Palmetto State* were painted a pale bluish-gray. The *Chicora* served actively in the defense of Charleston Harbor until the evacuation of the city in February 1865 when, like the other vessels of the Charleston Squadron, she was destroyed to prevent capture.

CSS *Savannah*

The *Savannah* was constructed under contract by H.F. Willink at Savannah (Georgia). She was apparently laid down in April of 1862, launched February 4, 1863 and became operational in July 1863. She was armed with two 7 inch Brooke rifles pivot mounted fore and aft, two 6.4 inch Brooke rifles on the broadside and a 12 pounder coast howitzer carried on the shield deck. The Confederate Naval Iron Works in Columbus (Georgia) furnished her engines and boilers. Like the *Palmetto State*, *Savannah's* pilot's hatch was located abaft the smokestack.

After becoming operational, the *Savannah* served as flagship of the Savannah Squadron, her normal duty spent guarding the water approaches to the city of Savannah. During the siege of Savannah, December 1864, she operated in support of Confederate land forces, and with the evacuation of the city on the night of December 20-21 she acted as the rear-guard until Confederate forces had safely withdrawn. The following day the *Savannah* exchanged fire with Federal artillery units in the city. Later that night she was fired and destroyed by her crew to prevent her capture. The size of the *Savannah's* crew varied, but her normal complement usually included about 25 Navy officers and 150 sailors, one Marine officer and 20 marines. This was the typical crew for the other *Richmond Class* ironclads.



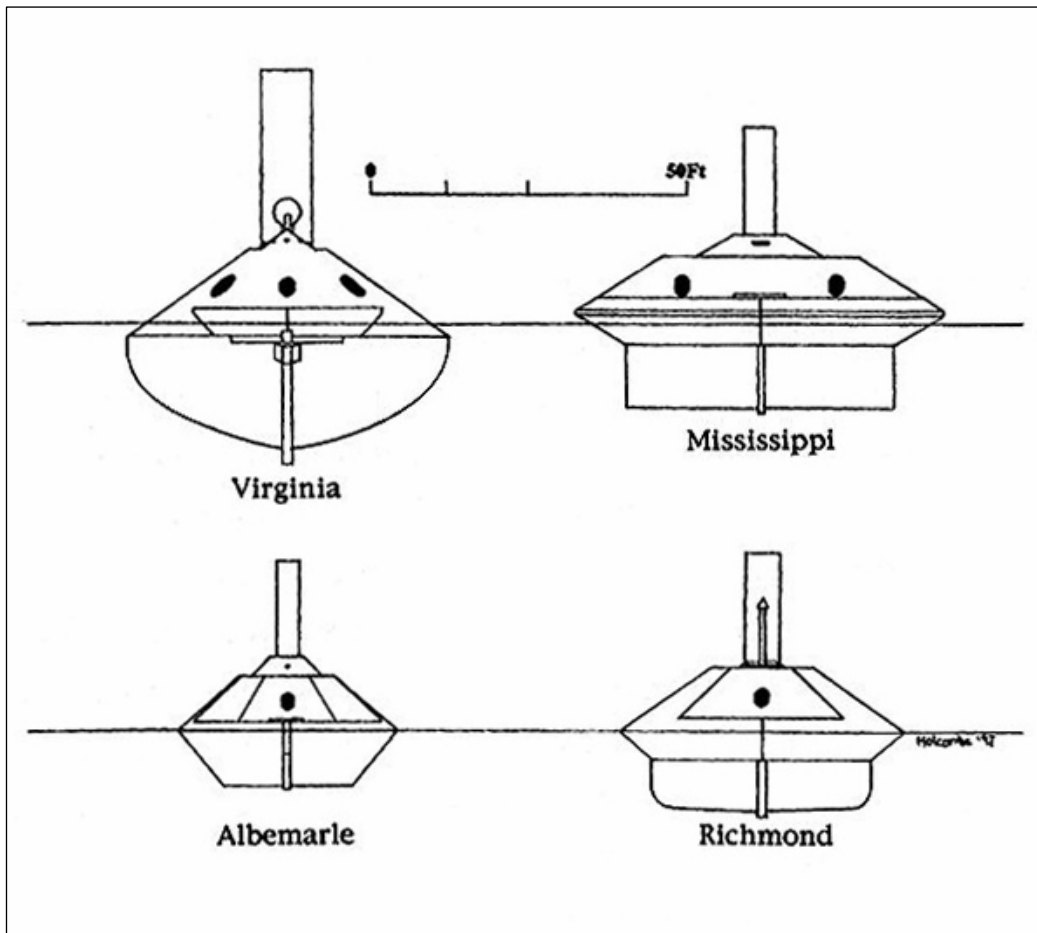
SELECTED BIBLIOGRAPHY

Manuscript material

- *Confederate Naval Museum, Columbus (Georgia)*
- *Emory University, Atlanta (Georgia)*
- *National Archives, Washington D.C.*
- *Smithsonian Institution, Washington D.C.*

Published Works

- Baxter J.P. III : *The Introduction of the Ironclad Warship, 1933.*
- Burton E.M. : *The Siege of Charleston, Columbia, 1970.*
- Melton M. : *The Confederate Ironclads, New York, 1969.*
- *Official Records of the Union & Confederate Navies in the War of the Rebellion, Washington, US Government Printing Office, 1894-1927, 31 vols.*
- Parker W.H. : *Recollections of a Naval Officer 1841-1865, New York, 1883.*
- Still W.N. Jr. : *Confederate Naval Strategy : the Ironclad in " Journal of Southern History, XXVII (August 1961).*
The Story of the Confederate Armorclads, Nashville, 1971.
- U.S. Navy Department : *Civil War Naval Chronology, Washington D.C., 1971.*



A comparison of Confederate ironclad hull types (Drawing R. Holcombe)