

A CIVIL WAR ‘WHAT IF...?’

INTRODUCTION: Throughout history, seemingly insignificant events have often resulted in subsequent and profound happenings. The historic first battle of iron-clad warships in 1862 would not have taken place except for a remarkable, but little known set of decisions made the year before which defy logic, even today.

On April 20, 1861, the Union’s officer-in-charge at the Gosport Navy Yard in Portsmouth, Virginia, after being deceived into thinking capture of his command was imminent, ordered that installation and all of the vessels berthed there to be destroyed to prevent capture by the Confederates. That was bad enough. Even worse for the Union, those attempts were not entirely successful.

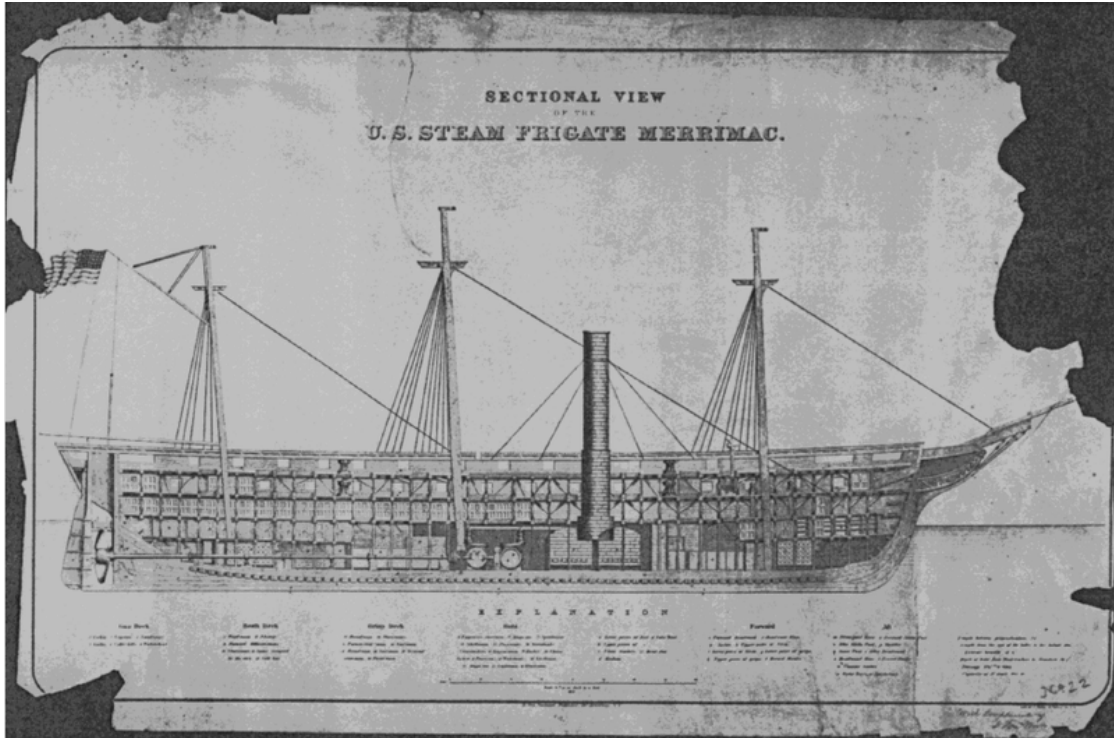


Confederate forces entered the yard the next day and were able to recover valuable military materials including the partly burned and scuttled USS MERRIMACK. Salvaged and radically rebuilt as the CSS VIRGINIA, this vessel forever changed naval strategy on March 8, 1862, when she demonstrated the superior capability of steam powered, iron-clad vessels vs. wooden sailing ships during the first day of the Battle of Hampton Roads.

But the MERRIMACK should not have even been at Gosport on April 20, 1861. This valuable naval asset could and should have steamed northward to safety before Gosport was set afire and then abandoned by the Union Navy. That possibility was not realized because of the incomprehensible inaction on the part of the yard’s commanding officer. But for his vacillations, the course of the Civil War might have been changed.

‘What if...?’ indeed.

USS MERRIMACK: Completed in 1856, the steam and sail-powered frigate MERRIMACK was state-of-the-art. Her engines, coupled to a single screw propeller could drive this 3,200-ton wooden vessel at a speed of twelve knots. Under only sail, her speed was somewhat less; hampered by the drag of her propeller when idled.



Named for the Merrimack River in New England, for some reason her name was often publicized as 'Merrimac'. As initially configured, she was 275 feet long, with a beam of 38.5 feet and had a draft, fully loaded, of 24 feet. Her armament consisted of forty cannons of varying sizes. Her main battery consisted of fourteen 8-inch guns.

Between her 1856 commissioning and mid-February, 1862, MERRIMACK 'showed the flag' in numerous ports in the Caribbean and Europe, then served as flagship of the US Navy's Pacific Squadron. Upon her return to America's east coast, she was placed in 'Ordinary' at Gosport [Ordinary was a form of temporary lay-up used in the 1800's].

Her engines, which had proven in service to be inefficient and unreliable were then dismantled and removed, with the intent to modify them. But that work proceeded slowly, if at all over the next several months. When the Civil War commenced the MERRIMACK's engines were still in pieces and the vessel herself was without a crew.

But, she was still the most valuable floating asset the Union Navy had at Gosport. Gideon Welles, Lincoln's Secretary of the Navy, expected her to become a vital part of what was then a relatively small navy, and set about to have her moved to Philadelphia.

APRIL 1861 SITUATION AT GOSPORT: A series of events that occurred in late 1860 and early 1861 had essentially resulted in the Gosport Navy Yard becoming a virtual Union Navy island in a surrounding sea of southern sympathy. Following Lincoln's election in November of 1860, South Carolina seceded from the Union the next month. Six other southern states soon followed, and the Confederate States of America was created in February of 1861.

In early April, Confederate forces fired upon, and then captured Fort Sumter; located in Charleston harbor and the threat of civil war became a reality. Gosport's commanding officer was Charles E. McCauley, a career line officer with fifty-two years of service in the Union Navy. In semi-retirement, he was soon faced with a difficult situation.

Most of his staff, plus a majority of the officers stationed onboard ships at the navy yard resigned their commissions and left Gosport to join the newly formed Confederate Navy. A Marine detachment of 250 men that was supposed to be sent from the Brooklyn Navy Yard to the Gosport Navy Yard to augment its defenses never arrived.

Many in the yard's work force simply didn't show up for work, and those that did were Virginians who were allowed to performed little productive work. McCauley thought they were all Southern spies. Local civilians displayed open animosity towards McCauley, including making some threats upon his person. Those who remained under his command found acquisition of provisions from local sources difficult.

Feeling under siege at Gosport, McCauley proceeded with extreme caution. Too much so, to suit Gideon Welles, who by April 12, 1861 had decided the MERRIMACK must be moved under her own power to Philadelphia as soon as possible. This became a high priority on April 17th, when Virginia seceded from the Union. But McCauley reported that reassembly of the MERRIMACK's engines would take at least four weeks. Unhappy with that report, Welles turned to Benjamin Franklin Isherwood, the Navy's top engineer.

BENJAMIN FRANKLIN ISHERWOOD: Born in New York City in 1822, Isherwood had become one of the first engineering officers in the Union Navy's Corps of Engineers when that organization was created in 1842. However, line officers in the navy, with sea-going experience under sail, considered engineers to be 'civilians in officers' dress' and little more than glorified mechanics.

But Isherwood was far more than a mechanic. He was an innovative and highly energetic engineer who not only became head of the Navy's Corps of Engineers, but who also contributed scholarly contributions to the advancement of marine engineering in the mid-1850s.



**Engineering
Precedents for
Steam Machinery
(1859)**

**Benjamin
Franklin
Isherwood**

In the late 1850's, Isherwood formalized his thoughts on naval engineering design that resulted in publication of this book. His ideas were not only adopted for use in the Union Navy, but by other navies and civilian ship designers as well.

In March of 1861, Welles picked 38-year old Isherwood to become the Navy's Engineer in Chief; bypassing others who were older and at least on paper more experienced. Criticized for that selection, Wells' wisdom was soon confirmed the very next month.

Isherwood rejected the four-week estimate for restoring MERRIMACK to service. He felt the engines could be reinstalled and made ready in a week and saw no immediate need to make her capable of moving under sail. Encouraged, Wells dispatched Isherwood to Gosport with written orders to expedite the engine repairs and move her northward.

Commander James Alden was also sent to the navy yard to take command of the vessel, once Isherwood had made it possible for her steam out of Hampton Roads. They left Washington, DC together on Friday, April 12th; coincidentally the same day the attacks on Fort Sumter commenced. It took them two days to get to Gosport.

INTENSE ACTIVITY 'REWARDED' BY FRUSTRATION: Isherwood met with McCauley on the morning of April 14th. McCauley promised full support for the task, and Isherwood left to find the MERRIMACK's chief engineer, who had remained loyal to the Union. Together, they surveyed the condition of the ship and her engines.

In an interim report telegraphed to Wells, Isherwood stated: "The engines are in a wretched state". But he also found that all the pieces were there; albeit scattered throughout the yard. Somehow, he found skilled machinists willing to help reassemble the engines; a task that local yard laborers had abandoned when they quit their jobs.

Organized into three gangs by Isherwood, the machinists worked eight shifts around the clock. Isherwood urged them on day and night. He may not have been a line officer, but Benjamin Franklin Isherwood led these men in a successful effort under trying circumstances to rebuild and reinstall the MERRIMACK's engines. They did so in the amazingly short period of time of just two and a half days.

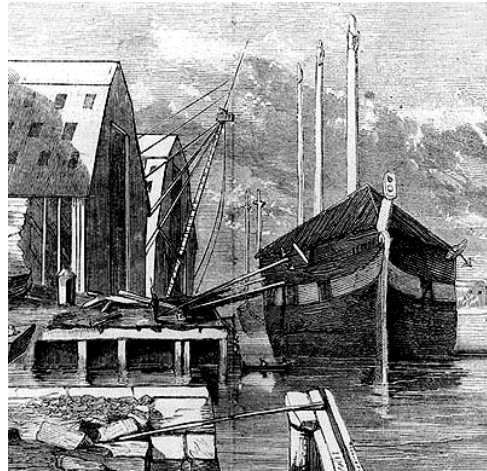
Isherwood also found and hired forty-four firemen and coal heavers to augment a deck crew that Alden had assembled. On the evening of Wednesday, April 17th, Isherwood set up an engine room watch, ordering them to fire the boilers and raise steam at midnight.

By nine o'clock the next morning, Isherwood reported to McCauley that he had steam up, the engines had been turned over, and all that remained was for permission to cast off and get underway. He even had the chains holding the ship at dockside replaced by rope hawsers and men stationed with axes to sever them, if necessary to get underway quickly.

To Isherwood's shock, McCauley stated that he had not yet decided to let MERRIMACK leave port! This in spite of the extensive efforts put forth with his prior support and in direct opposition to Welles' explicit orders. In addition there was a new peril; Virginia had seceded from the Union the day before, and there were reports...but no observable signs... of Confederate forces gathering nearby to attack the navy yard.

Dumbfounded by what he later called McCauley's 'moral paralysis', Isherwood returned to the ship and urged Alden to get underway in compliance with the Navy Secretary's orders. But Alden demurred. He was reluctant to override McCauley's authority.

Further frustrated, Isherwood returned to McCauley's office in hopes of a decision compatible with fulfilling Welles' orders. But the senior officer then claimed that it was not possible to move the ship, since he had heard rumors that the channel had been blocked by the Confederates. Never mind that there was no visible evidence of such. He ordered Isherwood to 'draw the fires' and shut down MERRIMACK's engines. Disregarding Isherwood's protests, he refused to discuss the matter any further.



Isherwood returned to the MERRIMACK "with great sorrow and chagrin" and did as ordered. He then prepared to return to Washington, DC to personally report on the situation. Isherwood also gave thought to what would have been an unprecedented action.

A CAREER DECISION: Some years later Isherwood wrote: "I was greatly tempted to cut the ropes that held her and to bring her out on my own responsibility". But to do so would have been, in the eyes of high-ranking naval authorities, a cardinal sin. No naval engineer, however he might feel justified by extenuating circumstances, could ignore a direct order from a line officer without serious repercussions. Court martial...or worse.

Yet, had he taken that risk and rescued the MERRIMACK, the consequences that followed her capture and conversion by the Confederates would not have happened...and the course of history would have been altered. But Isherwood could not have possibly predicted such an unlikely set of future circumstances.

Instead of following his instincts, Isherwood arranged for passage northward on an Old Bay Line paddlewheel steamer. Such commercial ship movements in the Chesapeake Bay did not stop until a week later, when a blockade of southern ports was extended to include Virginia. Isherwood left the Hampton Roads area on the evening of Thursday, April 18th and arrived in the nation's capital the next morning. He had to sneak onboard the bay steamer berthed in Norfolk to prevent capture by Confederate sympathizers who had learned from spies in the navy yard of his plans to leave and were looking for him.

CLEVER CONFEDERATE RUSE: As late as the morning of April 19th, McCauley held out hope for reinforcements from the North. When that expectation was dashed, he fell victim to an innovative ploy on the part of his adversaries.

Although rumored to be on the verge of capturing the navy yard, the Confederates did not have sufficient forces in position to do so. Instead, they ran several railroad trains towards the Norfolk/Portsmouth area from Richmond and Petersburg with a few soldiers in uniform visible. Otherwise, those trains were empty.

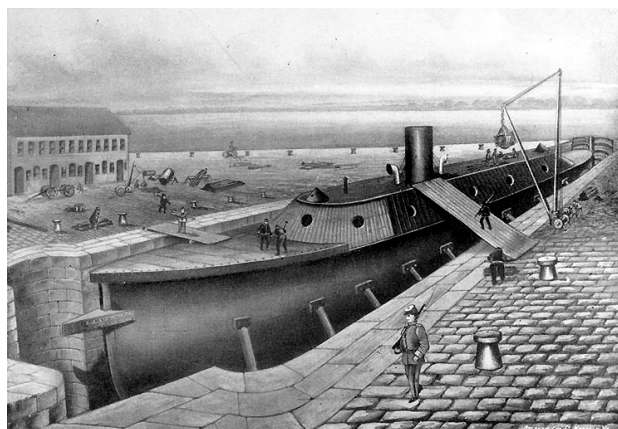
Thus tricked into thinking that the Confederates were going to overwhelm his command, McCauley gave orders on the evening of April 19th to destroy the navy yard and all vessels berthed there. He then fled across Hampton Roads to Fort Monroe.

Illogically, his chosen means of escape was not the MERRIMACK, which could have steamed to safety, but the USS CUMBERLAND, an older sailing vessel that had to be towed by a steam-powered vessel down the narrow, winding Elizabeth River channel from Gosport into Hampton Roads. Ironically, the Confederates had not blocked the river's mouth as previously rumored, which was one reason previously given by McCauley for not allowing Isherwood and Alden to move the MERRIMACK to safety.

INEPT DESTRUCTIVE EFFORTS: Union forces hastily tried to follow McCauley's orders and set fire to ships and shops. Also scuttling the vessels turned out not to be an easy thing to do. The burning ships sank in the relatively shallow waters of the Elizabeth River, which precluded their total destruction by fire and left them reusable.

Most of the hull of MERRIMACK thus survived. Far more significantly, no Union attempt was made to destroy the steam frigate's propulsion machinery. When the Confederates raised the MERRIMACK after a few weeks of immersion, they found the vessel's engines easily repairable. Of equal importance was the survival of the stone dry dock at Gosport.

Union forces had placed explosives in and around that vital facility. They lit lengthy fuzes to provide time to move to a safe distance away...but didn't watch to make sure the fuzes worked. All of the fuzes failed, so none of the explosives intended to destroy the dry dock were detonated. The failure to damage the MERRIMACK's engines or completely destroy her hull, as well as not ensuring the dry dock's destruction allowed the Confederates to utilize both to create the world's first iron-clad; the CSS VIRGINIA, shown here in the dry dock in early 1862.



WHAT IF...?: The South in the 1860's was largely an agrarian society with little manufacturing or shipbuilding capability. Without the fortuitous availability of the MERRIMACK's hull and machinery, and use of the Gosport dry dock; the Confederates likely would not have been able to create an iron-clad vessel for several months after the famous battle of 1862 took place.

Of course, the North was also working hard at the beginning of the Civil War to create their own concept of a revolutionary vessel, which resulted in the timely creation of the USS MONITOR. To speculate on what might have happened, had the MONITOR gone into service at a time when the South had nothing to oppose her is the kind of thing Hollywood and TV folks love to explore...and exploit.

Better, in this author's opinion, to accept history as-is and study the underlying events and decisions that resulted in such unlikely things as the creation of the CSS VIRGINIA.

What happened to the CSS VIRGINIA and the USS MONITOR is so well recorded that no recital of their short careers and sad endings needs be included here. What later happened to the other principals in this 'What if...?' drama is less well known.

Charles E. McCauley Days after what was dubbed by Northern newspapers as 'The Disaster at Gosport', he went to Washington, DC and was first subjected to the ire of Secretary Welles and even President Lincoln. Following a damning Congressional investigation, he was soon retired from the Union Navy and died a broken man a few years later.

James Alden He was criticized for his inactions publicly, but excused by naval officials who recognized that moving the MERRIMACK in defiance of McCauley's orders would have constituted insubordination, at best, and possibly even mutiny. He continued to serve throughout the Civil War and afterwards. Ironically, one of his post-war assignments was command of the Mare Island Naval Shipyard. He retired with the rank of Rear Admiral and died in 1877.

USS CUMBERLAND After being saved from destruction at Gosport, she became a part of the Union blockading force stationed at Hampton Roads. On March 9, 1862, she was guarding the mouth of the James River when a strange looking vessel approached her. Rammed and sunk off Newport News Point by CSS VIRGINIA; she became the first victim in history of an iron-clad warship.



Gosport Navy Yard Just two months after the Battle of Hampton Roads ended in a draw, the Confederates had to abandon Gosport. They did a more thorough job than their predecessors of destroying the installation before leaving, as this 1864 image graphically indicates.



Renamed Norfolk Navy Yard after the Civil War, although confusingly located in Portsmouth, Virginia, the facility was enlarged and modernized numerous times after the Civil War.

The Norfolk Navy Yard is still in service, but no longer builds ships. As the US Navy's largest maintenance and repair facility on the east coast, one of its oldest assets still in use is the early 1800's stone dry dock that escaped destruction in 1861 and again in 1862. It was placed on the National Historic Landmark list in 1971.

Benjamin Franklin Isherwood In spite of his frustration and disappointment in being prevented from saving the MERRIMACK, his remarkable efforts to try were lauded by Secretary Welles and President Lincoln. In addition, his refusal to circumvent naval protocol, however tempting and potentially beneficial, earned Isherwood the respect of many line officers in the Union Navy. At least for a time...

Given wide latitude by the Navy Secretary, Isherwood led the revolution in the Union Navy to transition from sail to steam. He also produced several standardized designs for ships' propulsion plants and a class of warships created for the express purpose of blockading Southern ports. By the end of the Civil War, the Union Navy could boast of a huge fleet that included over 600 steam-powered warships.

He was faced with, but brusquely overcame much opposition from line officers who clung to the obsolete notion that sail was the preferred form of propulsion for any navy. His insistence, approved by Secretary Welles that steam engineering be taught at the US Naval Academy was a particular sore point with the Navy's line officers. So were his successful efforts to attain equal status for engineering officers with line officers.

As a result, infighting raged throughout the Civil War. Political pressure resulted in his being replaced as Engineer in Chief of the Union Navy in 1869 at the zenith of his career. But he stayed in the Navy and continued the fight for advanced steam plant designs and equality for steam engineers until 1884, when he retired with the rank of Commodore. He later was promoted to Rear Admiral on the retired list. He died in June 1915 at age 93, but lived to see a Naval Academy building renamed Isherwood Hall just the month before. Appropriately, it was the center of the academy's engineering program.

POSTSCRIPT: I have often wondered if Admiral Rickover consciously emulated Isherwood's style. Rickover, a student of history who once studied in the classrooms and experimented in the laboratories of Isherwood Hall would have undoubtedly known about the accomplishments of that building's namesake, as well as the continuous conflicts with line officers with which Isherwood had to contend.



Both of these American naval engineers exhibited remarkable talent, resourcefulness and dedication...and a similar propensity to raise the ire of line officers. For a while, some years ago, I thought Rickover was Isherwood reincarnate...until I discovered a fifteen year overlap in their lives.

In any case, there are many parallels between Benjamin Franklin Isherwood, the Developer of the Steam Navy and Hyman George Rickover, the Father of the Nuclear Navy. In their respective times, both dragged the nation's naval establishment into the future...stern first.

I also wonder, what if he had been in Isherwood's place in 1862 and had been faced with a decision to obey McCauley's orders or not? Would Rickover have saved the MERRIMACK? After all, that would not have been uncharacteristic for him.

'What if...?' indeed.

Bill Lee
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