MERRIMACK

The Biography of a Steam Frigate

Stephen Chapin Kinnaman

Series in American History
To my father, William Andrew Kinnaman
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ACKNOWLEDGEMENTS

I have long been fascinated by the tale of the U.S. Steam Frigate Merrimack. The first of a class of new, powerful propeller-driven frigates, she was the talk of the nation when launched in 1855. Over the next few years news of her activities gradually slipped down the columns; by 1859 she drew coverage for her port calls as Pacific Squadron flagship. Then nothing—until she was burned during the Union's traumatic loss of its navy yard at Norfolk. A year later, resurrected as the Confederate ironclad ram Virginia, the so-called 'Merrimac' rocked both the North and South by her destructive exploits on the first day of the Battle of Hampton Roads, and again during her epic engagement with the Ericsson battery Monitor. Ever since then, the 'Monitor and Merrimac' have been frozen in time as a Currier and Ives image of a fierce gunnery duel between two revolutionary ironclads. But in that process the steam frigate Merrimack faded from memory. Who can recall any of her exploits as a United States ship?

It is for this reason that this book has been created—to tell the magnificent story of the U.S. Steam Frigate Merrimack. Her history is irrevocably entwined with that of the antebellum Navy—a service that was radically transformed by the crucible of the Civil War. And so this book's scope embraces a world afloat that is gone forever, but which is very much alive in the words and deeds of those who have left us a record of their everyday achievements.

My initial curiosity about Merrimack took me to Washington, D.C. and the reading room of the National Archives. There, in November 2000, the Archives' able staff placed before me the four leather-bound volumes of her log books spanning the frigate's brief career as a commissioned warship of the U.S. Navy. Over several long days, I poured through hundreds of pages and their cursive entries, gradually piecing together the details of her active but short life. I had an even more satisfying experience twelve years later when I returned to the same institution and pulled copies of the masses of correspondence that guided Merrimack's career—letters to and from the secretary of the navy, her flag officers and her captains. My biggest regret is that, to keep this book to a reasonable length and avoid bogging down the reader, only a small fraction of the
wonderfully colorful details arising from both logs and letters could be faithfully transferred to these pages.

The inspiration to write the story of *Merrimack* came from my father, William Andrew Kinnaman, to whom I have dedicated this book. An Annapolis graduate (class of 1945), former Navy officer, and avid reader of history, he urged me on but, regrettably, did not live to see the culmination of my efforts. Many others have supported my drive to complete this book’s manuscript, but first and foremost was my dear wife, Maureen Carroll. I thank you both, from the bottom of my heart.

I have also received valuable assistance from the following persons. At the National Archives and Records Administration, Washington, D.C., from Rebecca Livingston, Charles Johnson and Kim McKeithan; at NASCC, Silver Spring, Maryland, from Michelle Pointon; at the Museum of the Confederacy (now The American Civil War Museum), Richmond, Virginia, from Sam Craghead and John Coski; at the Hampton Roads Naval Museum, Norfolk, Virginia, from Gordon Calhoun; at the Portsmouth Naval Shipyard Museum, Portsmouth, Virginia, from Corey Thornton; at the Mariners’ Museum, Newport News, Virginia, from Bill Barker, Claudia Jew and Lisa Williams; and at the Naval History and Heritage Command, from LT Mary Sanford. Across the pond I wish to acknowledge the inspiration generously given over many years by British maritime historian, Bob Thorp. Closer to home in Texas, unstinting support has come from Mark Lardas, fellow author and ship modeler, and Ira Gruber, professor emeritus of history at Rice University and ever-ready sounding board for a writer seeking historical veracity.

Many thanks to each of you. Your help made my work writing this book that much easier. But any errors of concept, fact or interpretation, however, are mine alone for which I accept full responsibility.

Stephen Chapin Kinnaman
Chappell Hill, Texas
September, 2018
PROLOGUE

For never before was anything like it dreamed of by the greatest enthusiast in maritime warfare.¹

The 8th of March 1862 found the nation that was the United States of America divided into an unhappy amalgam of states, some owing allegiance to the federal Republic and others to a new southern Confederacy. The American Civil War, now entering its twelfth month, had already pitted brother against brother and state against state. It had also created new geographic boundaries determined by military strength. Nowhere was this national fracture more vividly etched that Saturday morning than on the waters of Hampton Roads, a large natural harbor lying entirely within the state of Virginia, at the juncture of the James River estuary and the mouth of the Chesapeake Bay. For while a fleet of over sixty vessels, both merchant and naval, lay on the calm waters of Hampton Roads that mild, bright and clear spring morning, the harmony of the old Union was visibly dislocated. In April of the previous year, the United States Navy had been forcibly evicted by forces loyal to the rebellion from its premier Atlantic base at Gosport, near Norfolk, Virginia. So while a formidable assemblage of U.S. Navy warships was present in its accustomed anchorage of Hampton Roads, it was cast in the unenviable position of blockading the approaches to its former base, a facility now in enemy hands. Even worse, rumors had been verified that the Confederates were hard at work converting the hulk of the steam frigate Merrimack, formerly the pride of the U.S. Navy and thought to have been burned beyond repair by federal forces fleeing Norfolk, into a powerful warship of an altogether novel form—a steam-powered ironclad ram.² What sort of adversary the resurrected Merrimack—now appropriately rechristened as the C.S.S. Virginia—might possibly be, when she might appear, and what the Confederacy ultimately planned to do with such a terrible monster, was anyone's guess. The Union's belated response to the Southern challenge, the new and untested Ericsson steam battery, U.S.S. Monitor, was still in transit to Hampton Roads and expected any day. Meanwhile the Union warships went about their Saturday morning routines with an air of practiced familiarity.
The Union Navy's blockading force at Hampton Roads on that fateful day consisted of a number of well-known and formidable warships of the antebellum U.S. Navy. The large steam frigates *Minnesota* and *Roanoke*, sisters to the unfortunate *Merrimack* and currently the most powerful vessels in the U.S. Navy, gave strength to the squadron, with the former acting as flagship. *Roanoke*, however, was hobbled that morning by the recent removal of her propeller shaft. The old sailing frigate *St. Lawrence* was also moored nearby. All of these ships, together with the French steam paddle sloop-of-war *Gassendi* and a small fleet of navy and army storeships, transports, tugs and miscellaneous craft were at anchor close to the Union-held Fort Monroe, situated on Old Point Comfort at the northeast corner of Hampton Roads. Anchored several miles further to the west, off of Newport News and the mouth of the James River, were the 50-gun sailing frigate *Congress* and the sloop-of-war *Cumberland*. Both ships had been placed in that exposed location to protect federal troops on the adjacent shore at Camp Butler and to block access to the Gosport Navy Yard by Confederate ships lying further up the James River. *Congress*, a frigate with a direct pedigree to 'Old Ironsides', had earned the reputation of being a favorite ship of the bygone sailing navy, while *Cumberland*, a former frigate, had been recently 'razeed' into a 24-gun spar deck sloop-of-war.

** * * *

Certain ironies and coincidences have a way of asserting themselves, and on that early March morning, they were present in abundance. Chief among them was the genesis of the ironclad threat facing the Hampton Roads squadron and the subject of this book, the U.S.S. *Merrimack*. The first of a series of six screw-propelled steam frigates authorized by Congress in 1854, *Merrimack* had enjoyed the reputation of being the most powerful and advanced warship in the U.S. Navy. An enormous vessel, bigger than any frigate built before, she equaled the fire power of many ships-of-the-line that had preceded her. The new class of steam frigates floated at a fully-laden draft of nearly 24 ft, which at the time was harshly noted to be great enough to “shut them out of nine-tenths of the harbors of the nation’s entire sea-coast.”\(^3\) This prognostication was proven to be all too true during the remaining hours of 8 March 1862 and on the following day … but then we are getting ahead of the story.

Sails constituted *Merrimack’s* main source of propulsion. The new frigates’ design philosophy intended their engines for only auxiliary service—entering and leaving ports and for maneuvering when fighting other ships. In consequence, *Merrimack* was relatively under-powered for a warship of her size, her machinery producing less than 1,000
horsepower. Her engines also suffered from poor design and gave frequent problems during the frigate's earlier commissions. The need to refit the ship and repair her defective machinery accounted for *Merrimack*'s presence at the Gosport Navy Yard during spring of the year before, when secessionist forces seized the navy base. *Merrimack*'s greatest weakness inadvertently contributed to her being recast as one of the Confederacy's most powerful threats, the ironclad ram C.S.S. *Virginia*.

The assignment of *Virginia*'s officers provided more irony. Nearly a quarter of the old U.S. Navy's officers resigned their commissions at the beginning of the Civil War and had 'gone South', resulting in stark divisions, even at the family level. First among the connections between the two naval services that were to face each other at Hampton Roads was that of *Virginia*'s commander and flag officer, Captain Franklin Buchanan. A former U.S. Navy officer nicknamed 'Old Buck', Buchanan had a brother, McKeen Buchanan, who remained in the U.S. Navy. McKeen Buchanan was the paymaster on board the U.S.S. *Congress*, anchored that March morning off Newport News, and well aware that his brother was in command of the rumored Confederate ironclad.

*Virginia*'s first lieutenant or executive officer was a former U.S. Navy lieutenant and gunnery specialist by the name of Catesby ap Roger Jones. During *Merrimack*'s first commission, Jones was attached to the ship at the behest of Commander John Dahlgren, the U.S. Navy's assistant inspector of ordnance, who wanted to ensure the frigate's battery of new Dahlgren-designed cannons were efficiently handled, and to note any areas for improvement. As fate would have it, following the wounding of Captain Buchanan, Jones was to command *Virginia* during her second day's action at Hampton Roads.

Another old ex-*Merrimack* hand also showed up on the list of *Virginia*'s officers, H. Ashton Ramsay. Ramsay, formerly the steam frigate *Merrimack*'s second assistant engineer during her stint as Pacific squadron flagship from 1857 to 1860, had been appointed the C.S.S. *Virginia*'s acting chief engineer. Through Ramsay's presence, *Virginia*'s new masters gained first-hand knowledge of the ironclad's inherited machinery idiosyncrasies.

And then there was Chief Engineer Alban Stimers, who had served on *Merrimack* during both of her commissions. On that fateful day in March, when the C.S.S. *Virginia* met her match in the first combat between ironclads, Stimers would be on board the U.S.S. *Monitor*.

We now have the basic contours of what a previous author aptly dubbed a ‘Ship of Destiny’: the former pride of the U.S. Navy, the steam frigate *Merrimack*, currently manned by enemies of the Republic—some of whom
had served in her as U.S. Navy officers—and now converted into a novel engine of war, an ironclad ram renamed by her new masters as the Confederate States Ship *Virginia*.  

***

Late in the morning of 8 March, Union army lookouts at Newport News sighted smoke arising from the direction of the Elizabeth River, the entrance to the Gosport Navy Yard. Shortly before 1 p.m., the nascent activity prompted *Cumberland*’s watchful officers to dispatch her tender, the steam tug *Zouave*, to investigate. Soon *Zouave*’s captain sighted “what to all appearances looked like the roof of a very big barn belching forth smoke as from a chimney fire.”* Zouave* fired a number of long range shots from her single gun, then turned tail and headed back to Newport News. *Virginia* had finally sortied.

The ironclad’s sudden appearance caught the U.S. Navy off guard. *Cumberland*’s crew’s laundry was strung up between her masts, and her captain, William Radford, had left to attend a court-martial on board the nearby *Roanoke*. The ship nearest to *Cumberland*, *Congress*, was undermanned. A detachment of the 99th New York Infantry had come on board to make up some of the deficiency. Even more inimical to prompt action, her former captain, Commander W. B. Smith, having just handed over command to Lieutenant Joseph B. Smith, remained on board, awaiting a boat to take him to his new assignment. The other U.S ships lying closer to Fort Monroe exhibited varying degrees of readiness, but as events transpired, most were poorly placed to affect the outcome that day at Hampton Roads.

While Captain Franklin Buchanan couldn’t have known of the inefficiencies of the federal fleet that lay sprawled before him that morning, he did know that he was headed into harm’s way, commanding an entirely untested warship, without the benefit of the sea trials and rigorous crew training so necessary to gain a captain’s confidence. During the passage down the Elizabeth River, *Virginia*’s steering proved erratic but fortunately her machinery performed well enough to give her a speed of five knots. Her deep draft—an undesirable legacy of *Merrimack*’s frigate hull form—limited Buchanan’s tactical options which were further curtailed by the ship’s cumbersome maneuvering characteristics. But as great as the risks, the stakes were greater still. If the Union blockade of Hampton Roads could be lifted, or even significantly disrupted, McClellan’s advance up the Yorktown Peninsula toward Richmond would be stopped in its tracks. On an even larger scale, a Confederate victory over Union naval forces might even yield the greatest prize of all: recognition of...
the Confederate States by Great Britain and France. Buchanan’s day of destiny had arrived, and he eagerly grasped it for all it was worth.

Now into the open expanse of Hampton Roads, Buchanan steered *Virginia* increasingly to the west, toward Newport News and the two isolated U.S. warships, *Congress* and *Cumberland*. Accompanied by the armed tugs *Beaufort* and *Raleigh*, *Virginia*’s officers and crew witnessed the frantic exertions of the U.S. Navy to prepare for what appeared to be imminent action: *Minnesota* was observed rapidly raising steam, while Union tugs moved to take *Roanoke* and *St. Lawrence* under tow. Laundry was hurriedly struck from *Cumberland*’s rigging as both she and *Congress* beat to quarters. The sun shone brightly over the still waters of Hampton Roads; a light wind blew from the west-south-west.

*Virginia* inexorably steamed on toward Newport News. It became clear to those watching that the Confederate plan was to attack both *Congress* and *Cumberland* before the other ships of the Union squadron could come to their aid. At about 2:20 p.m., when *Virginia* was within 1,500 yards of *Cumberland*, she finally opened fire with a ranging shot from her bow rifle. *Cumberland* replied in kind with her forward pivot gun, opening the general action. *Congress* had also begun firing on *Virginia*, and when the ironclad leviathan drew abreast, she blasted the Confederate ship with a full twenty-five gun broadside. But her shot simply glanced off *Virginia*’s armored sides with no visible effect. Now in a position to bring her own broadside to bear, *Virginia* loosed a devastating hail of fire into the wooden frigate, some of the balls ‘hot shot’ from her furnaces. A second broadside soon followed the first. The effect on *Congress* was immediate: her once immaculate decks ran red with her crew’s blood, while smoke and flame erupted from where the heated balls lodged.9

Rather than turning to press her attack on *Congress*, the Confederate ironclad steamed west, toward *Cumberland*. Unlike her consort, *Cumberland* had deployed a system of spring cables which allowed the unpowered sailing vessel to swing her broadside battery to best advantage. After being raked by several punishing rounds from *Virginia*, *Cumberland* maneuvered on her springs, swung herself to present her broadside to the oncoming monster, and commenced firing. Union shore batteries at Newport News also opened up on the Confederate warship. Meanwhile, Buchanan steered *Virginia* straight toward *Cumberland*, firing from his bow rifle while his starboard guns engaged the Union shore batteries. Both sides’ cannonade became so intense that the roads’ still surface was constantly swept in all directions by the shot. It soon dawned on *Cumberland*’s crew that the Confederates planned to do more than just pummel their ship with cannon fire—they were going to ram!
Then Virginia struck: the clearly audible sound of Cumberland's bursting timbers was accompanied by a jolt that unsteadied a number of the Confederates. The ironclad's crew, safe in their armored casemate, realized they had driven their bow deep into the hapless sloop-of-war. Virginia's engines raced full astern. Her propeller lashed the sea, struggling to pull her free from Cumberland's side. Virginia's bow dipped ever lower as the rapidly filling Cumberland began to list, still blasting broadsides into her ironclad tormenter. Finally wrenching herself from her prey, Virginia swung alongside the wounded sloop, both ships hammering one another with furious cannonades. Cumberland began heeling further, her lower decks already under water; but her guns still returned fire, her crew bravely steadfast. At this point, one of Virginia's officers demanded Cumberland's surrender, only to hear the response, “Never! We will sink with our colors flying.” Her end came soon after, with one observer describing the scene, “then she went down like a bar of iron, but her flag still flew at her mast head; all was lost except honor.”

Virginia now began the laborious process of turning around in the restricted waters of the James River as a prelude to refocusing her attention on Congress. Meanwhile, the other vessels of the Union fleet struggled to provide relief to their two stricken consorts, but to little avail: Minnesota had run aground almost two miles from Newport News (the deep draft criticism of Merrimack and her sister steam frigates was demonstrated beyond doubt), and the disabled Roanoke together with St. Lawrence were got under tow but soon grounded, little closer to the action. Congress, in the meantime, had managed to beach herself on the Newport News foreshore and was struggling to staunch her leaks, extinguish fires, and prepare for further action. She did not have long to wait.

Within an hour, Virginia had turned and maneuvered into position across Congress' stern. She proceeded to pour a withering raking fire into the immobilized frigate, killing her captain, Lieutenant Joseph Smith, and many more of her crew. With their ship in flames and her decks swept by murderous cannon fire which could not be returned, Congress' officers hauled down their flag. Virginia ceased firing; it was just 5 p.m. The Confederates attempted to board the stricken frigate, but the U.S. Army units lining the shore would not stand for it and rained musket balls on every Southern movement. The Army's intransigence unwittingly sealed the fate of Congress' officers and crew.

The Confederates had no choice but to break off their attempt to board Congress. 'Old Buck', standing on Virginia's spar deck, became so enraged by the continued Union fire in spite of a flag of surrender that he shouted, “Destroy that ______ ship! She's firing on our white flag!” He was then
struck in the groin by a musket ball, forcing him to relinquish command to Lieutenant Catesby ap Roger Jones. Buchanan's order stood. Hot shot smashed into the burning frigate as her crew sought to escape from the hopeless charnel house.

*Congress* was clearly doomed. Jones, a former U.S. Navy officer, was probably relieved to be able to report to Buchanan that his directive had been carried out, and have an excuse to stop the slaughter. And as the Confederates could plainly see, there were other fish to fry; Jones decided to attack the steam frigate *Minnesota*. She was the biggest and best target: close by, hard aground, and one of the most valuable U.S. Navy assets still afloat in Hampton Roads. However, as *Virginia* moved in for the kill, her crew discovered that the fading light was making it difficult to hit their prey. Even worse, the tide was on the ebb, and *Virginia*'s pilots cautioned Jones that to move any closer would cause the deep-draft *Virginia* to run aground. With some hesitation, Jones heeded the pilots' advice and steered for Sewell's point, at the mouth of the Elizabeth River. After all, it would be easy enough to finish off *Minnesota* the following morning, once *Virginia*'s crew had been rested and her battle damage repaired. By 8:00 p.m. the battered ironclad was at anchor, safe under the guns of a nearby Confederate shore battery. Soon boats came out to take away the ship's wounded and the bodies of her only fatalities, two men who died during the fight with *Cumberland*.

***

It had been a stunning day for both the United States and Confederate navies, although for entirely different reasons. Single ship actions which resulted in the capture or even the destruction of the antagonist were the expected outcome of early nineteenth century naval encounters. For a single ship to challenge an entire squadron and utterly destroy two of its finest vessels—while remaining fit for combat—was simply breath-taking.

In addition to its material loss, on 8 March 1862 the U.S. Navy suffered nearly 280 men dead or wounded against 27 for the Confederates. Panic greeted the news of the Union catastrophe. At an emergency meeting of Lincoln's cabinet, War Secretary Stanton voiced his fears that “the Merrimac would ... come up the Potomac and disperse Congress, destroy the Capitol and public buildings; or she might go to Boston or New York and destroy those cities.” It was the most humiliating defeat the U.S. Navy had suffered since the War of 1812, or would experience until Pearl Harbor. For the Confederates, *Virginia*'s success was a tonic to a fledgling nation fighting a defensive war at sea against the might of the U.S. Navy's blockading squadrons. Could her accomplishment be repeated?

***
By 6 the next morning, *Virginia* was under way and after a pause due to fog, was standing for Hampton Roads. During the night before, the Confederates had hastily surveyed their battle damage and repaired what they could. *Virginia*’s funnel was shredded, her spar deck’s stanchions, davits and fittings had been swept away, her bow was leaking in way of its fractured ram and some ninety-eight indentations from heavy shot were visible in her armor plating. With the glow provided by the still-burning *Congress*—which finally exploded just after midnight—one of the Southern pilots thought he saw a strange craft near *Minnesota*, possibly the rumored ‘Ericsson battery’. Jones was skeptical and, hoping for a repeat of the previous day’s success, prepared his ship for the job of destroying *Minnesota*. As *Virginia* drew closer to the still stationary steam frigate, an observer on board one of her gunboat consorts recorded his incredulous sighting: “Close alongside of her there lay such a craft as the eyes of a seaman does not delight in—an immense shingle floating on the water, with a gigantic cheesebox rising from its centre; no sails, no wheels, no smokestacks, no guns … What could it be?”

![Image](image_url_1)

They were soon to find out.

When she had closed to within a mile of her prey, *Virginia* opened fire. Then, as Engineer Ramsay observed, “suddenly, to our astonishment, a black object that looked like … ‘a barrel-head afloat with a cheesebox on top of it,’ moved slowly out from under the *Minnesota* and boldly confronted us.” The U.S.S. *Monitor* had engaged the C.S.S. *Virginia*, and naval warfare would forever be changed. As *Minnesota*’s captain noted, “the contrast was of a pygmy to a giant,” and in time, as combat between the two ironclads progressed, he recorded the prescient observation that introduced this prologue.

*Monitor* and *Virginia* then began one of the most famous warship duels in history: the second day of the Battle of Hampton Roads. Closing at times to mere yards apart, the two antagonists exchanged fierce gunfire for the next three hours. Her easy kill of *Minnesota* thwarted, *Virginia* struggled to swat away her tormenter. And *Monitor*, whose crew like *Virginia*’s the day before, were fighting for the first time on a novel and untested warship, gave as good as they got despite having had a sleepless night. As the struggle carried on, it became increasingly apparent to all that the Confederate colossus had finally met her match. *Monitor*’s nimbleness, aided by her shallow draft, enabled her to run circles around her much larger adversary, and her single turret proved to be a difficult target for *Virginia*’s heavy guns. At about 11:30 a.m., while trying to close on *Minnesota* during a lull in the combat, *Virginia* ran hard aground. *Monitor* was quick to take advantage of the mishap, and blasted her rival at close range, severely punishing her armor plating.
The fate of Virginia was in the hands of Engineer Ramsay. Reacting in a way that would horrify modern safety managers, Ramsay “lashed down the safety valves, heaped quick-burning combustibles into the already raging fires, and brought the boilers to a pressure that would have been unsafe under ordinary circumstances.”¹⁸ Her propeller thrashing wildly in reverse, Virginia’s crew tensely awaited the outcome. Nothing. Even more oiled cotton wastes and splits of wood were heaved into the fires. Still nothing. The crew began to despair—then imperceptibly at first the huge ship shuddered, and slowly pulled herself free. They were saved!

A frustrated Captain Jones then attempted to ram the little Monitor, and for all his trouble succeeded in merely dishing in her side armor but no more. Monitor continued to hound Virginia and the Southerners gamely fired back, although it was beginning to dawn on them that their gunnery was having little effect on the Union ironclad. Armed with only explosive shells for the anticipated engagement with wooden warships, Virginia’s gunners had not been supplied with the armor-piercing bolts which might have enabled her powerful Brooke rifles to penetrate Monitor’s armor. When asked by Captain Jones why the guns of his division had fallen silent, Lieutenant Eggleston replied that “I find I can do the Monitor about as much damage by snapping my finger at her every five minutes.”¹⁹ As the inconclusive engagement wore on, the Confederates determined they must board the Monitor, cover her pilot house with an old coat, and jam the turret with steel wedges. Unable to close on Minnesota or visibly damage their ironclad adversary, the ancient tactic seemed the only way to break the stalemate. Then, after over three hours of combat, Virginia made a lucky shot: her stern rifle, commanded by Lieutenant John Taylor Wood, swung into a direct bead on Monitor’s stubby pilot house. Wood jerked the lanyard and the shell hit true, blasting the iron structure just as Monitor’s Captain John Worden was peering out. Miraculously Worden was not killed, but he was temporarily blinded by the shell’s explosion and fell to the deck. While her executive officer scrambled to take control of the ship, Monitor broke off action and retired into shallows where Virginia could not follow.

It didn’t take long before Virginia’s officers realized something was amiss. With Monitor seemingly running from the fight, the way was clear to resume the attack on Minnesota. But now the tide was beginning to ebb, and the ever-cautious Southern pilots refused to place the ironclad any closer than a mile from the grounded steam frigate. Virginia’s crew was exhausted from hours of sustained, close-in combat; unable to effectively fight either Monitor or Minnesota, Jones called together his fellow officers. After presenting his synopsis of the situation, Jones proposed they return
to their base at Gosport. While some protests were voiced, the decision to retire was grudgingly accepted. It was now about 12:10 p.m. After firing a closing round from her stern rifle—the final shot of the first duel of ironclads—Virginia set a course for the Elizabeth River, leaving the Union squadron to lick their wounds. It was the last time the two ships would engage in close combat.

***

The second day of the Battle of Hampton Roads ended in a curious denouement. Neither the North or South could claim victory, yet both celebrated the defeat of its enemy. Apart from Captain Worden, no other casualties were suffered by either side, and Worden eventually recovered his eyesight and went on to become an admiral. Each of the ironclads was still battle-worthy at the time of disengagement and, in fact, had sustained surprisingly few hits: Monitor was struck twenty times and Virginia not much more. Save for the loss of a Union tug, no other ships had been sunk or significantly injured. The difference in outcomes between the first and second days’ battle was striking. Only upon taking a closer look at the balance of naval power at Hampton Roads on the evening of 9 March 1862, can it be grasped why both sides claimed a victory.

The Confederates had, in two days of fierce combat, badly shaken the Union blockading squadron that still lay under the guns of Fort Monroe. Two of the U.S. Navy’s finest ships had been destroyed and their fleet’s savior, Monitor, had been fought to a draw. Virginia remained a viable threat to any Union ship in Hampton Roads—and in the weeks to come would capture several transports. In the strategic sense, Virginia’s very presence at Hampton Roads was a victory. Union General McClellan was forced to divert his Peninsula Campaign’s base of operations from the James to the York River, and the U.S. Navy followed suit, adjusting the disposition of its ships to deal with the continuing presence of the South’s powerful ironclad ram.

Yet the North had reason, too, for celebration. Its warships at Hampton Roads had been spared further destruction; after the events of 8 March, Minnesota’s demise had been taken for granted by even the most optimistic U.S. naval officer. The novel threat of the C.S.S. Virginia had been met and checked on the battle’s second day. The little Monitor was a success, and its name henceforth applied to that class of heavily armed warships distinguished by their shallow draft.

Beyond the simple calculus of the North and the South, the Battle of Hampton Roads exerted a profound and irreversible influence on the navies of the mid nineteenth century. The frigate Congress and the sloop-
of-war *Cumberland*, each hitherto regarded as the epitome of an efficient man-of-war, had been swept from the surface of the sea in mere hours by the studied actions of a single attacker mounting but a fraction of their broadside throw weight. Steam power, of course, played a vital part, but *Virginia*’s ironclad casemate sealed the Union ships’ fate. The second day of the battle merely underscored the conclusions of the first, namely that only an ironclad vessel could survive the assault from another ironclad. The ‘wooden walls’ that had defined naval power for centuries were now obsolete; they had been unceremoniously shoved aside by the march of technology.

***

The Battle of Hampton Roads became not only a seminal event in naval history, but also in the national psyche of the United States. It grew beyond a naval engagement that marked a turning point in McClellan’s Peninsula Campaign; it exemplified the triumph of Yankee ingenuity. Doughty little *Monitor*, a technical marvel of its time, had met the Southern menace and fought her until she withdrew from the field of combat—or at least that’s how the victors saw it. The Union fleet had been saved, and even if *Virginia* still lurked in her den, she had been contained. The duel between the two ironclads has become a favorite, oft told story of the American Civil War. But curiously enough, the Battle of Hampton Roads is usually described as the fight between the *Monitor* and *Merrimack*. This is most certainly true of the more popular accounts of the battle. Contemporary Southern accounts reliably refer to their ironclad by the name she bore during her historic engagement, *Virginia*. Confederate Colonel William Norris aggressively justified their rationale:

And *Virginia* was her name, not *Merrimac* … which meannly compares with the sonorous sweetness of “*Virginia*.” She fought under Confederate colors, and her fame belongs to all of us; but there was a peculiar fitness in the name we gave her. *In Virginia, of Virginia iron and wood, and by Virginians was she built, and in Virginia’s waters … she made a record which shall live forever.*

However, the vast majority of writers insist on calling the Southern ironclad *Merrimack*, the name of the old steam frigate from which she was converted. The reasons for this solecism are deeply embedded, for it is said that the victor writes the history. This might explain the constant use of the name *Merrimack* (or even more often, *Merrimac*) in the first-hand accounts of the U.S. Navy officers and crew who either participated in or witnessed the Battle of Hampton Roads. Reading the official report of the battle written by the U.S.S. *Minnesota*’s Captain Van Brunt—who was literally in the middle of the action for two days—not once does the name
Virginia appear in his otherwise well-written and keenly observed account. Other reports and writings by Union naval officers show the same phenomenon. Even the Confederate naval officer, Lieutenant William H. Parker, who had cruised in the steam frigate Merrimack during her spell as flagship of the U.S. Navy’s Pacific Squadron in the late 1850s and as captain of the gunboat Beaufort, accompanied Virginia during the Battle of Hampton Roads, clung to the appellation Merrimac in his memoirs. What could cause knowledgeable observers, who most certainly knew that the ironclad attacking them was the C.S.S. Virginia, to consistently call the ship Merrimack? The answer must lie, in large part, to the writers’ unwillingness to forget that the warship they now faced was once the U.S. Steam Frigate Merrimack. Little over a year before, Merrimack was one of the most powerful ships of the U.S. Navy; now the frigate’s burned hulk, transformed by rebel forces into a grotesquely shaped ironclad monster, was stalking the ships of the Navy’s Hampton Roads squadron. To them, it was Merrimack they were facing those days in early March, and Merrimack she would always be. But by adapting such a mentality, the image of the steam frigate Merrimack soon faded. In time the myth of the Merrimack—the C.S.S. Virginia at Hampton Roads—eventually displaced the memory of the magnificent antebellum U.S. Navy warship. The steam frigate Merrimack lost her identity. To this day, one can peruse the shelves of a library (or surf the internet) and find numerous references to the fight between the Monitor and Merrimack, works on Union and Confederate ironclads, books detailing the ships and organization of the United States and Confederate navies, tales of the Southern commerce raiders, excellent histories of the naval campaigns that shaped the Civil War, and so on. But try and find a book about the career of the U.S.S. Merrimack. This work, in the author’s humble opinion, represents a long overdue need to fill this missing gap of United States naval history.

Merrimack is the biography of a warship, the U.S. Steam Frigate Merrimack. One of the principal sources for telling her story was the ship’s deck logs. See Appendix 1 for an in-depth treatment of that subject. The official life of Merrimack, according to her log, started at the Charlestown Navy Yard (near Boston) on 20 February 1856, at the beginning of her first commission, and finished on 16 February 1860, at the end of her second commission, when she was laid up at the Gosport Navy Yard. Her first commission took her on a ‘special service’ cruise in the North Atlantic and, following repairs at Boston, her second commission saw her undertake a much longer voyage as the flagship of the Pacific Squadron. The career of the U.S.S. Merrimack was relatively uneventful—at least until April 1861,
when she fell into the hands of the Confederates. She never fired her guns in anger, nor was she the instrument of discovery or conquest. On the other hand, she steered clear of the accidents and disasters that so populated the marine world of the nineteenth century. Her qualities as a ship were decidedly ordinary as well. If anything she was under-powered as a steamer and turned in only average passages as a sailing ship. While not the last big wooden frigate built by the U.S. Navy with broadside guns on two decks—that honor belongs to the relatively obscure U.S.S. *Franklin*—she was the lead ship of a new class that epitomized the U.S. Navy’s preference for frigates significantly larger than their foreign contemporaries. Two of her sisters—*Minnesota* and *Wabash*—survived into the twentieth century, albeit as a gunnery hulk and a receiving ship, respectively.

So then if the life of *Merrimack* as a steam frigate was unremarkable, why tell it? Beyond being the ‘ship of destiny’ that struck fear into the North at Hampton Roads, *Merrimack’s* career in the U.S. Navy serves as a vehicle to illustrate the world of American maritime commerce and naval activity on the eve of the American Civil War. Within the musty pages of her deck logs and other contemporary documents arises a fascinating picture of a bygone age. Hidden between drowsy accounts of weather, courses made good, gun drills, and endless salutes are brilliant gems which throw light onto the routine of naval life during the years before a war that so altered the nation. It was a period that saw the ascension of steam over sail, albeit imperfectly, with *Merrimack* being in the vanguard of change. Shell guns had largely replaced solid shot cannon, and the naval rifle was rapidly coming to the fore. The ascent of the ironclad, scarcely noticed during the campaigns of the British and French fleets during the Crimean War, was dramatically demonstrated at Hampton Roads. *Merrimack’s* brief career encapsulated an accelerating revolution of naval technology.

The late 1850s also marked the high water of the American merchant marine, a dominance it was to never again experience after being gutted by depredations suffered during four long years of conflict. Swift clippers, ubiquitous merchantmen, paddle wheel steam packets, and scores of smoky whale ships—all flying the stars and stripes—ceaselessly cruised the oceans of the world in search of profit. The period encompassed by *Merrimack’s* short life was one of seemingly boundless American expansion, both geographically and metaphorically. The optimism of a growing young nation and its physical manifestations, unchecked as of yet by a bitter internecine struggle, were witnessed by the officers and men of the U.S. Steam Frigate *Merrimack*. Her career was then a microcosm of the antebellum United States of America during a vibrant but largely forgotten
time of national expansion. Yes, Merrimack's tale is indeed worth telling. 

* Bon voyage! *

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Steam frigates and the smaller steam corvettes were steam-powered warships. The first vessel that can be considered a steam frigate was the Demologos which was launched in 1815 for the United States Navy.[1]. By the 1830s many navies were experimenting with steam-powered warships. From 1859, armour was added to ships based on existing frigate and ship of the line designs. The additional weight of the armour on these first ironclad warships meant that they could have only one gun deck, and they were technically frigates, even though they were more powerful than existing ships-of-the-line and occupied the same strategic role. The phrase 'armoured frigate' remained in use for some time to denote a sail-equipped, broadside-firing type of ironclad. Steam frigates, also known as screw frigates and the smaller steam corvettes and steam sloops were steam-powered warships that were not meant to stand in the line of battle. The first such ships were paddle steamers. Later on the invention of screw propulsion enabled construction of steam-powered versions of the traditional frigates, corvettes, and sloops.