

## The Confederate Naval Buildup

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The Union navy's control of the American waters was a decisive element in the outcome of the Civil War. The Federal government's naval superiority allowed it to project power along thousands of miles of coastline and rivers, subsist large armies in Virginia, and slowly strangle the southern economy by stymieing imports of European and northern manufactures and foodstuffs, as well as of exports of southern staples, primarily raw cotton.

The infant Confederate government quickly established a naval organization. Jefferson Davis chose Stephen Mallory as Secretary of the Navy. Mr. Mallory confronted an unenviable task. The seceding states possessed no vessels capable of fighting against the best frigates in the Federal navy, nor did those states possess most of the necessary raw materials and industries needed to build modern warships.

Despite the Confederacy's handicaps in creating a navy, its embryonic fleet came tantalizingly close to upsetting the Federal navy's superiority in March and April of 1862. The Confederate ironclad Virginia temporarily terrorized a formidable Union fleet in Hampton Roads during March. The Virginia's success panicked some of Lincoln's cabinet members; fortunately for the North, the USS Monitor arrived before the Virginia could wreak further havoc upon the fleet. The Monitor neutralized the Virginia, and the Federal fleet in the Chesapeake was never again seriously challenged. A month later, despite fears that the Confederates would have three ironclads waiting for then-Captain David Farragut's fleet, the Federal fleet captured New Orleans before the two largest Confederate ironclads became fully operational. Had the two large ironclads, the Louisiana and the Mississippi, been ready, the attack on New Orleans might have had a different ending. Even the Arkansas, an uncompleted warship, created consternation in two Union fleets on the Mississippi in mid-1862. Thereafter, Confederate naval efforts would continue to be insufficient and too late.

Could the Confederate government have fielded an even stronger navy, a navy strong enough to at least break the blockade? Did the Confederate navy make the best use of its time and resources? What were the important issues facing Mallory and the Confederacy in creating their navy? Did Mallory and the Confederate government make decisions that retarded the buildup of the Confederate navy?

## THE CONFEDERATE NAVAL BUILDUP: TOO LITTLE, TOO LATE

In April 1861, the North had forty-two commissioned warships; the Confederacy had none. [1] Although the South began the war without a navy, the initial disparity in naval forces was not necessarily decisive. With only forty-two warships, the northern navy was not large enough to implement an effective blockade of every significant

Confederate port. Nor did the North possess warships to control the western rivers. The Confederacy's initial lack of a navy was further mitigated by three other factors. First, Union naval superiority would take time to manifest itself; the North would have to recall its existing naval warships from distant stations, and to implement its blockade, it would need to buy and build blockading vessels. Second, naval technology had been changing rapidly during the late antebellum period. Contemporary advances, particularly the idea of protecting warships with iron armor, could have rendered most of the Union vessels obsolete in the face of a Confederate navy built from scratch and immediately exploiting the latest technology. Secretary Mallory understood the opportunity presented by the new technology, especially the importance of ironclad vessels. He realized that the South could not compete in building standard wooden vessels, so he opted for a southern navy based upon ironclad vessels.

I regard the possession of an iron-armored ship as a matter of the first necessity. Such a vessel at this time could traverse the entire coast of the United States, prevent all blockades, and encounter, with a fair prospect of success, their entire Navy ... If to cope with them upon the sea we follow their example and build wooden ships, we shall have to construct several at one time; for one or two ships would fall an easy prey to her comparatively numerous steam frigates. But inequality of numbers may be compensated by invulnerability; and thus not only does economy but naval success dictate the wisdom and expediency of fighting with iron against wood, without regard to first cost. [2]

Finally, Mallory's hopes for gaining naval superiority via ironclad vessels received a boost from the initial hesitance of his opposite number, Secretary of the Navy Gideon Welles, to build ironclads. Welles obtained funding to build ironclads for the Union navy only in the summer of 1861. After appointing a board of naval officers to examine the various plans for ironclads, he settled on three designs; the actual construction of the famous Monitor started only in late October. Welles's hesitation in beginning an ironclad construction program may now seem unfathomable, but in fact the navy's experiences with ironclads urged caution; the United States had commissioned the

building of an iron-armored vessel in 1852, but after a \$500,000 expenditure it had had nothing to show for the money. Thus, Welles decided to let Congress make the initial push for ironclads. Welles was also motivated by the knowledge that many radical Republicans disliked him and would be eager to expose any mistakes. Even after a panel of naval architects approved some prototype vessels, including John Ericsson's Monitor, Welles moved cautiously. Naval officer David Dixon Porter explained Welles's hesitation: "It would have been a bold man, indeed, who, as Secretary of the Navy, would have taken the responsibility of building any number of untried 'Monitors' without something to justify him in doing so." [3]

With the various delays facing the Union in assembling its naval might, the Confederacy was granted a grace period of several months in which to build its own navy. If the Confederacy had acted quickly to build several ironclads, its navy might have seized control of large expanses of American waters.

The South possessed at least a limited shipbuilding capacity. Although the antebellum southern shipbuilding efforts were dwarfed by northern shipbuilding, the South was not starting from scratch: the eighth U.S. census listed thirty-three southern "Ship and Boat Building" establishments, with 546 workers. [4] The Confederacy was blessed with two major shipbuilding facilities: Norfolk and New Orleans. When the Federals abandoned Norfolk in 1861, they failed to destroy the large Gosport Navy Yard completely, making possible the resurrection and transformation of the frigate USS Merrimack into the CSS Virginia. Norfolk contained a large amount of ordnance and was also fairly close to the Tredegar Iron Works in Richmond (a firm with a history of building naval guns and that would now produce iron plating). The naval ordnance at Norfolk was critical. The Confederates distributed it among various ports; the guns enabled the Confederates to hold some of the ports against the wooden vessels blockading them.

New Orleans had facilities to build ships, too; unfortunately for the nascent Confederate navy, the vessels produced in antebellum New Orleans had been primarily river craft, and it is unlikely that any warships or ocean steamers had been constructed there.[5] Despite the city's inexperience at building warships, the fact that it nearly completed two ironclads before Farragut's fleet captured the city was testimony to its shipbuilding potential. Memphis was another early site of ironclad building. Two ironclads were laid down there, but these were unfinished when the Federal fleet took the city. One of the ironclads was destroyed, but the other, the Arkansas, was moved

to the Yazoo River.

For all these reasons, Mallory did not believe that the South could immediately build a warship capable of sailing along the coast and engaging the Federal warships, but he was hopeful that it would eventually be able to construct high-quality steam frigates. [6]

Besides its limited shipbuilding facilities, the Confederate navy faced other difficulties. Domestically manufactured iron products were destined to be in short supply. While there were considerable pig-iron deposits in the South, many of them were located in remote areas; the few southern iron mills had typically received their ore from Pennsylvania. The South possessed some large iron mills (notably Tredegar in Richmond), but the region had always imported much of its railroad iron. P. V. Daniel, an official of the Richmond, Fredericksburg & Potomac Railroad, estimated that almost fifty thousand tons of rails were needed annually just to maintain the southern railroads. He declared at the time that the existing iron mills in the South were capable of supplying less than half of that figure, let alone provide iron plate for armoring warships. According to the report of the secretary of the treasury for the year ending June 30, 1860, southern ports received sixty-five thousand tons of railroad iron; almost all of the imported rail iron was from Great Britain. [7] At the outset of the war, Mallory sent a naval officer to Tennessee and Georgia to see whether any rolling mills could roll iron plating; the officer reported that outside of Kentucky, none of the existing southern mills were capable of rolling the two-inch plates needed to armor warships. Mallory pressed the Confederate Congress to create incentives to get iron mills to adapt their machinery to produce such plates. [8]

Propulsion was also a problem, since the South's ability to produce boilers and machinery was limited. The eighth census listed 115 southern establishments that manufactured steam engines and associated goods; these establishments employed 4,570 workers. Southern steam engine manufacturers constituted about 10 percent of the total U.S. capacity, but most of these southern shops were capable of producing machinery only for small vessels. Even the machine shop at the Norfolk navy yard was inadequate; Mallory informed Jefferson Davis that this shop was incapable of producing heavy steam engines and that Tennessee possessed the only machine shop capable of doing such work. [9] However, there were several establishments in New Orleans equipped to produce machinery, if they were given time to adapt to the needs of warships.

These domestic sources were insufficient to meet the navy's needs. The production of iron plating was hampered by a shortage of iron ore, the need to adapt rolling mills for rolling two-inch plate, and competition for the iron from railroads and other military needs. So strapped were the rolling mills for raw iron that even with virtual monopolization by the military of southern output, the available ore was insufficient to meet the navy's needs for iron plating. The shortage of raw iron offset the efforts to convert rolling mills in Atlanta and Richmond to produce plating. During 1864, Mallory would report that the loss of Atlanta further exacerbated the shortage of iron plating and that although the remaining mills in Richmond were "capable of rolling any quantity,... the material [iron ore was] not on hand, and the amount now necessary to complete the vessels already built would be equal to 4,230 tons." Because of the paucity of iron to make two-inch plates, T-rails from railroad iron were used; the T-rails were not as protective as the two-inch plate. Even such humble items as nails and bolts were in short supply. [10]

Because of inadequate domestic production of shipboard machinery and equipment, Mallory struggled to obtain such commodities from other sources. Although some iron, steel, boilerplate, and machinery was smuggled through the blockade, the flow was meager and uncertain. The Navy Department in Richmond purchased existing steamers and stripped them of their machinery for use in warships. In addition, Mallory hoped that the Confederate commerce raiders would capture steamers and that their machinery, especially propellers, could be stripped. The shortages and the inability to transport rapidly iron and machinery within the Confederacy delayed construction of warships, and such delays were often decisive. [11] Completion of the Mississippi was to be delayed while a Richmond firm shipped a propeller shaft (recovered from a vessel that had been burned) across the Confederacy to New Orleans and while railroad iron was collected for the armor. The vessel was not completed in time to contest Farragut's attack on New Orleans and had to be destroyed to prevent its capture. [12]

The shortages of supplies were accompanied by shortages of skilled labor. Many of the skilled laborers in the South on the eve of the Civil War were transplanted northerners or foreigners; the outbreak of hostilities depleted the skilled labor pool, as most of the northerners and foreigners left the South. In addition, many of the indigenous skilled workers volunteered for the military, and others were later conscripted. A more benign conscription policy, coupled with better recruiting incentives, might have either kept more indigenous skilled workers in the necessary industries or attracted

foreign skilled labor. The loss of a competent ironmaster (who managed the furnaces) could reduce the efficiency of a plant by a third. [13]

Perhaps the most important scarcity impeding the Confederate naval buildup was that of time. Historian William Still, Jr. concludes, "One other factor cannot be ignored--time. Materials needed to complete vessels were delayed because facilities were destroyed or had to be moved in the face of advancing enemy forces. Time and time again uncompleted ironclads and wooden gunboats had to be destroyed to prevent their capture." The Confederates ran out of time at New Orleans and Memphis; the cities were captured before the ironclads necessary for their defense could be completed. The loss of these cities, as well as Norfolk, forced delays while craft under construction there were transferred to other, more remote, locations. Shortages of material and labor created other delays.

In addition, the southern shipbuilders needed time to learn how to construct warships and ordnance. Prior to the war, the builders of the Mississippi, the Tifts, had never constructed a ship, much less a warship. Confederate captain John K. Mitchell would later testify, "The facts show that the [war] vessels could be constructed [in New Orleans]. However, the work was unusual at that point [1861-62], and the mechanics engaged in it undertook to do what they were not accustomed to do, and the consequence was they took more time than they probably otherwise would." [14] Confederate naval construction would have produced better results if left unmolested; the Union forces, primarily through the blockade and the capture of key ports, denied the South the time it needed to build a strong navy.

The Confederacy, then, faced significant disadvantages in building a strong navy using domestic resources. Indeed, relying upon domestic resources was probably the worst way for the Confederates to obtain a strong navy.

Besides not producing enough ironclads to defend southern rivers and ports, the South also failed to build ironclads capable of offensive operations in coastal waters. Because of their deficient machinery and haphazard design, the Confederacy's domestically built ironclads were generally not seaworthy enough to operate in coastal waters, much less on "blue water." Mallory decided that only vessels purchased or built in Europe could attack northern blockaders.

To achieve his goal of ironclad superiority, Mallory immediately sent a Confederate agent to Europe to purchase armored vessels. Mallory

evinced an interest in a French armored vessel, Gloire, in the spring of 1861. Mallory reckoned that the Gloire had cost the French government less than two million dollars, and although that was double the cost of a similar wooden warship, he was convinced of the vessel's worth:

This certainly seems to be a large price to pay for a six-gun [rifled eighty-pounder Armstrongs] ship, when we reflect that the finest wooden screw frigates that float, carrying 40 guns of the heaviest caliber, cost but half this amount. But no comparison of their relative values can be instituted, inasmuch as the most formidable wooden frigate would be powerless in a contest with such a ship; and the employment of ironclad ships by one naval power must compel every other to have them, without regard to cost, or to occupy a position of known and admitted inferiority upon the sea. [15]

Mallory proved persuasive, and the Confederate government authorized two million dollars for purchasing ironclad warships. Unfortunately for the South, Europe did not immediately sell any iron-armored vessels. Indeed, one may marvel at Mallory's brazenness in presuming that France would relinquish a ship that promised to give it naval superiority over the British. [16] The Confederacy continued to attempt to obtain iron-armored vessels from Europe after the failure to purchase the Gloire. Agents were instructed to have iron warships built instead of attempting to buy existing ones. These vessels were to be built with their ownerships, as well as purposes, cloaked in ambiguity. Historian Warren Spencer described the procedures of one Confederate agent, Commander James Bulloch:

Bulloch contracted as an individual for an unarmed ship to be delivered in Liverpool. It was, in his words, a "purely commercial transaction" and the Lairds never knew from Bulloch that he was acting for the Confederate government.... Furthermore, Bulloch reserved the right to make changes in the structure "as experience during the progress of the work may suggest." This stipulation was a concession to the ever-changing technology of ironclad ship architecture and allowed Bulloch to take advantage of any new developments that might emerge within the next several months. [17]

Two rams and another iron warship were to form the nucleus of a Confederate fleet designed to sweep away the blockaders and challenge northern supremacy in American waters. At one point, the Confederacy had ten warships of varying size and armor under contract. [18] Two Confederate naval officers, Bulloch and Commodore Samuel Barron, hoped to engage the Union fleet with the vessels being built in

Europe.

Their hopes may have been overly optimistic. The two rams that were built under Bulloch's direct supervision (known as the "Laird rams") were originally intended to be able to navigate inland waters as well as the Atlantic. Therefore, they had shallow drafts and rode low in the water; while they were more seaworthy than many of the northern ironclads, their weatherly qualities were dubious. Indeed, after the rams were "sold" to the British in order to forestall outright confiscation, they were primarily used for harbor defense and not for cruising the high seas.

An ironclad built under Confederate commander James North's auspices was larger than the Laird rams, thereby rendering it unable to participate in shallow-water actions. [19] Moreover, even though the vessel was intended to be an oceangoing vessel, its seaworthiness was poor, as its eventual owner, the Danish navy, found in its maiden cruise. Spencer concludes,

Had James North managed by some miracle to get [the warship] to sea, his luck and the ship's undesirable qualities probably would have brought disaster to the Southern cause and probably would have covered his name not with glory but with ignominy. It was his good luck and the South's good fortune, then, to have been caught in the squeeze of the British-tightened neutrality...and to have sold the vessel to the Danes. In this way only the Danes were the losers. [20]

Spencer concludes that while the rams, in conjunction with the other vessels being constructed in Europe (had all successfully traversed the Atlantic), would have been "exceedingly troublesome" to the Federal navy, the likelihood of their controlling the American waters was small. [21]

Confederate efforts to obtain European-built warships were also plagued by financial difficulties. As early as July 1861, Mallory was complaining about the lack of funds. The Laird rams were priced at a little less than a hundred thousand pounds each, while North's larger warship was roughly double that. The depreciating Confederate currency made payment more difficult, and Commander North had to request ever-larger sums. [22]

However, the Confederate navy had never been given munificent funds to work with. During the first eighteen months of the war, the Confederate government spent \$347,272,958, of which only \$14,605,777 went to the navy. The Navy Department did not even have direct access



to what little money it was allocated; it had to apply to the Treasury Department for its funds, which incurred delay and inconvenience. [23] The generosity of Fraser, Trenholm & Company, a British financial firm, was vital to James Bulloch in his initial purchases in Britain; the firm extended credit to enable Bulloch to begin obtaining commerce cruisers and naval supplies in June 1861. While some British shipbuilders were also willing to grant the Confederacy credit, eventually the shortage of funds proved an embarrassment for Bulloch; James North, too, complained about the lack of funds. Despite the sympathy of certain British businessmen for the Confederacy, the lack of funds early in the war probably prevented the Confederacy from getting more commerce raiders and even some warships. [24]

The Confederate navy's attempts to get European-built warships, then, were largely futile. Aside from some commerce raiders and one ironclad warship, the CSS Stonewall (which never reached a Confederate port by the end of the war), the Confederacy was unable to augment its naval power with European-built warships.

The Confederacy failed, narrowly in several instances, to wrest even temporary control of important American waters, despite vigorous efforts to obtain a strong navy. For various reasons, the Confederacy was forced to rely upon domestic resources in building its navy during the crucial first year of the war. In many cases, the Confederate efforts simply ran out of time, as the lack of iron plating, machinery, skilled labor, and other resources delayed construction of what could have been formidable warships. Indeed, time may have been the key resource for the Confederacy. The autumn of 1861 was the best chance for the Confederacy to gain effective control of southern waters: only three Union "timberclads" patrolled the western rivers, and the blockade was only beginning to become effective. But early in 1862, a new factor emerged to suppress the Confederate chances of gaining maritime superiority: the Union navy.

The Union fleet helped stunt the embryonic Confederate force. By blockading the mouth of the Mississippi River, the Federals forced the New Orleans shipbuilders to transport iron and machinery from Virginia and the eastern Confederacy by rail; the rickety Confederate railroad proved inadequate for the task. Also, the blockade depressed southern revenue from exports of raw cotton and raised import costs, thereby stymieing purchases and imports of iron plating and machinery. Thus, the Federal navy's blockade became a form of self-preservation, as a weak effort would have eased the South's difficulties in constructing or obtaining a strong navy and then

sweeping away the blockaders. The stronger the Federal blockade, the more difficult for the Confederacy to contest Union sea power, specifically the blockade. In addition, the Federal navy's capture of New Orleans and Memphis eliminated two key Confederate shipbuilding centers.

Despite Mallory's strenuous efforts, which came close to succeeding, did the Confederates and Mallory make the best use of their resources, especially that of time? Could they have done better, and if so, why did they not?

#### WHY THE CONFEDERACY FAILED TO OBTAIN A STRONGER NAVY

The Confederacy ran out of time to build a stronger navy. It was also forced to rely upon inadequate domestic resources when its attempts to get warships from Europe failed. This section examines some of the crucial decisions that affected the Confederate naval buildup. It concludes with what might have been a solution to the fatal delay in obtaining warships.

Most of the deep South seceded in early 1861. Several weeks elapsed before the Fort Sumter episode triggered the war. Although the Confederate government was beginning to organize, the young country might have immediately started to acquire a navy. The Confederates could have claimed that acquiring warships was not a hostile action but simply the action of an independent country seeking to protect its ports and waters. [25] An early acquisition of European-built warships might also have avoided the neutrality issue raised after the war began, as prior to Fort Sumter the Confederates could have more freely contracted with European shipbuilders to construct warships than they could afterward. The Confederates might have opted to purchase and import naval supplies such as machinery and iron plating before the war and its attendant blockade. Did the Confederates make good use of the prewar period?

Mallory wasted little time in attempting to obtain steamers for the nascent Confederate navy. In March 1861, he submitted estimates of the cost of ten coastal defense steamers (\$1,100,000 for all ten vessels). In late March and early April, he dispatched agents to Canada, the northern states, and throughout the Confederacy to purchase steamers that could be converted to warships. In early May, Mallory dispatched James Bulloch to Great Britain; Bulloch's mission was to obtain six steam vessels for commerce raiding. At the same time, Mallory sent James North to Europe to purchase ironclad warships. The Confederate Congress accepted Mallory's estimate of

costs for the vessels and authorized a million dollars for the commerce raiders and two million dollars for the warships. North reported lack of success, but Mallory ordered him to redouble his efforts throughout the fall of 1861 and early 1862. Bulloch, too, was initially unsuccessful in purchasing any ironclads in England; [26] however, in February 1862, Mallory's hopes for obtaining European-built ironclads rose. He reported to Davis that

very recent information... induces the belief that one such vessel may now be contracted for in France and one in England, but I have not been able to ascertain at what cost or within what time they could be completed or whether we would be permitted to fit the vessels out in any European port. Upon this subject a special agent was sent to England recently. [27]

In early 1862, North reported to Mallory that "anything can be done here for money," but he continued to be slothful in obtaining warships. Finally, he reported that he had arranged for a large ironclad warship for [pound]200,000. Mallory and Davis requested funds for North and Bulloch's proposed ironclads; the Congress approved the money in April 1862. [28]

Clearly, then, Mallory displayed energy in attempting to obtain warships. Despite his energy, the results were disappointing. Were some of the Confederate government's efforts, and his own, misguided? [29] The decisions early in the war to launch privateers and commerce raiders, to enact a cotton embargo, and to rely upon European-built warships were crucial to Confederate naval success or failure. These decisions were fraught with uncertainty.

Privateering and commerce raiding were supposed to disrupt the northern economy and draw Federal warships from their blockading duties, weakening the blockade. Jefferson Davis's decision to rely upon privateering, and later commerce raiders, was based partly upon the Confederate belief that European powers would intervene. The Confederates thought that European intervention would come soon, reducing the need for a strong Confederate navy.

Privateering failed, because the European nations' interpretations of neutrality laws forbade bringing captured prizes to neutral ports. With the Federal blockade making it difficult to deliver prizes to southern ports, the privateers had nowhere to take their prizes and to reap the financial rewards. [30] When the privateering program collapsed, Mallory promoted a "Provisional Navy" comprising Confederate naval officers and warships, that would prey upon

northern shipping. Although privateering and commerce raiding succeeded in driving many northern shippers to transfer their registries, the northern economy was not unduly disrupted, nor did the Federals detach many ships from blockade duties in pursuit of the commerce raiders. The failure of the privateers and commerce raiders to draw off blockading vessels was due to a dichotomy between vessels suitable for blockading in the shallow coastal waters and those suitable for "blue water" endeavors, such as pursuing commerce raiders. The blue-water warships were generally unsuited for blockade duty, so the indirect approach represented by the privateers and commerce raiders failed to raise the blockade. [31]

Privateering and commerce raiding, however, had three deleterious effects upon Confederate naval strength. First, privateering and commerce raiding antagonized many Europeans, particularly members of commercial and shipping classes. Bulloch reported that "the feeling everywhere in Europe is strongly against the simple destruction of private property at sea ... and the cruise of the [cruiser] Sumter... has tended to incite some feeling against us among the commercial classes of Europe." [32]

The British, recalling the depredations of American raiders during the Revolutionary War and the War of 1812, were especially cool toward commerce raiding. Second, given the limited funds and time available to Confederate agents, expenditures upon the flamboyant commerce raiders meant less purchasing power and time for obtaining regular warships or naval supplies. Third, the northern outcry regarding the depredations of British-built commerce raiders eventually caused the British, and later the French, to tighten their interpretations of their responsibilities as neutrals. By the time the Confederates succeeded in making contracts for armored warships, the tightened neutrality enforcement prevented them from getting them to sea.

Though it boosted morale within the Confederacy and discomfited northern shippers, the policy of relying upon privateers and commerce raiders exacted a high price in terms of a Confederate naval buildup. The financial resources, time, and energy spent in obtaining raiders would have been better spent in obtaining naval construction supplies or European-built warships that could have engaged Union warships.

Another decision confronted the Confederacy in autumn 1861. The South considered its price-setting power in the market for raw cotton a strong strategic weapon. How best to use raw cotton to secure southern goals, however, was a daunting question. Southerners had

long boasted that by withholding "King Cotton" they could drive the European powers and the North to their knees; therefore, many believed an embargo was the best way to use raw cotton as a strategic weapon. However, the South might have been mistaken about King Cotton's real power. In retrospect, the unofficial embargo of late 1861 appears to have been the wrong choice, especially in that it did not inspire European intervention. In some ways, late 1861 proved decisive in this respect: the Confederacy needed to establish credit in Europe at that point, and cotton was the fledgling nation's best asset.

Although some historians believe that 1861-62 would have been a poor time for Southerners, staying in the world raw-cotton market, to have used their collective price-setting power (by continuing to export cotton, albeit in smaller quantities-but for higher prices), an examination of that market casts doubts on this thesis. [33] The Confederate government might have obtained cotton via purchase or loans and shipped as much as it could through the still-developing blockade. The Confederacy's enhanced purchasing power would have enabled it to purchase greater amounts of war materiel and to ship such supplies through the still relatively weak blockade, at lower transportation costs than were incurred later in the war. Thus, the Confederacy could have entered the second year of the war in a stronger position than it actually did, having embargoed exports of raw cotton. While this scenario presupposes that shipping would have become available to transport cotton, the loss of northern shipping might have been offset by foreign vessels responding to rising freights.

Moreover, encouraging foreign shippers to pick up raw cotton carried an extra benefit: constant harassment or detention by Union warships of foreign merchantmen might have created a pressure for those governments to act. Further, the export of large amounts of raw cotton would have undermined the Union's assertion that its blockade was effective, and an erosion in the perceived effectiveness of the Union blockade might have swayed the Europeans toward intervention, or at least repudiation of the blockade's legality. Another compelling reason for not implementing an embargo was that a potential shortage of raw cotton could be better used as a standing threat; as it was, the embargo gradually forced the British to learn to survive without southern raw cotton, and the value of any such potential threat dissipated. The Southerners might have been better off keeping the British and French manufacturers in a state of fearful ignorance of the ramifications of a possible cutoff. By shipping raw cotton, the Confederacy would have put the onus of any

shortage upon the North. The Confederates could have pointed to the Union's blockade as the cause of European economic dislocation. Finally, a free trade policy would have created better feelings between the Confederacy and the Europeans.

Therefore, the informal embargo on the export of raw cotton hobbled the southern economy, incurred the anger of Europeans, and did not induce intervention. Once the northern blockade became stringent, the Southerners' opportunity to exploit price-setting power in the world market for King Cotton slipped away. The Confederacy and its naval buildup would have been better off without the embargo.

As we have briefly noted, shifting European interpretations of neutrality laws confounded the Confederates. Aside from some commerce raiders, only one of the European-built warships earmarked for the Confederacy ever sailed under the Stars and Bars, because the Europeans developed a narrow interpretation of their neutrality responsibilities. [34] Mallory had instructed his agents to be scrupulous in observing European neutrality. International law seemingly allowed neutrals to build seagoing vessels for belligerents as long as the vessels were not armed in the neutrals' ports; Mallory relied upon this interpretation. Unfortunately for his efforts to purchase warships, the British (and later the French) eventually decided to interpret their neutrality as covering any vessel that could reasonably be used as a warship, even if not armed in that country.

As early as April 1862, Bulloch warned Mallory about the changing British attitudes, but the Confederate authorities were slow in recognizing the shift. Bulloch wrote, "The British government seems to be more determined than ever to preserve its neutrality, and the chances of getting a vessel to sea in anything like fighting condition are next to impossible." [35] Mallory preferred to believe that the escape of the British-built commerce raiders was a truer indication of British interpretation of their neutrality obligations. Certainly, the Confederates received mixed signals from their diplomatic and naval personnel. Several expressed their belief in early 1862 that recognition or at least an easing of the neutrality laws was imminent. [36] Based on these reports, Mallory renewed the efforts to purchase European-built warships.

While Mallory's decision did not result in success, it was an understandable one. European-built warships promised to be better than any Confederate-built vessel. In addition, given Europe's comparative advantage in building warships, less time would probably

have been needed to acquire European vessels than to build them. Gambling upon European assistance may have been prudent, especially early in the war.

As the war continued, however, the prospects that the Europeans would recognize the Confederacy--or even connive at building warships for the Confederates--depended upon their estimations of eventual Confederate military success. By quickly acquiring European-built warships, the Confederacy might have forestalled Union naval victories, strengthened its bid for recognition, and increased the Europeans' willingness to supply additional warships. Because the Confederacy suffered major defeats in the western theater during early 1862, European enthusiasm for intervention and recognition diminished, and the Europeans were more willing to tighten their neutrality rules when pressed by Washington. Ultimately, European recognition of Confederate independence and tacit permission for warships to sail from their ports proved elusive.

Unfortunately for the Confederacy, the recurrent hopes of purchasing ironclads in Europe may have delayed the eventual decision to build ironclads domestically; the two ironclads at New Orleans were authorized only in September 1861, after the attempts to purchase European-built warships failed. [37] In retrospect, the Confederates might have been better off not basing their actions on the hope of European recognition and intervention. This view is borne out by the assessment by Judah Benjamin, the Confederate secretary of state, of the value of Louis Napoleon's professions of friendship with the Confederacy:

The Emperor of the French, after having himself suggested and promised acquiescence in the attempt of this Government to obtain vessels of war by purchase or contract in France, after encouraging us in the loss of invaluable time and of the service of some of our best naval officers, as well as in expenditure of large sums obtained at painful sacrifice, has broken his faith, has deprived us of our vessels when on the eve of completion, and has thus inflicted on us an injury and rendered to our enemies services which establish his claim to any concessions that he may desire from them. [38]

Given the difficulties faced by Confederate builders in the South and Confederate naval officers in Europe in securing sufficient warships for the Confederacy, was there another way to build Confederate naval strength? Bulloch advised that the shipbuilding efforts in Europe should be suspended in favor of domestic shipbuilding. He suggested that the South, with its ample timber resources, import iron plates

from Europe: "Vessels [should] be laid down at once, at the various ports in the Confederacy where timber is abundant, then by sending over scale drawings or working plans of their decks and sides, the iron plates, rivets, bolts, etc., could be made here, marked, and shipped to arrive as soon as the vessels would be ready to receive them." [39]

Europe, of course, possessed greater capabilities for manufacturing iron plates than did the South. In addition, Mallory knew as early as May 1861 that the Confederacy would have difficulty producing them. The imported iron plates would have enabled the Confederacy to quicken the pace of shipbuilding, while conserving the scarce iron held in the Confederacy. The Confederates could have also more easily imported shipboard machinery earlier in the war. Further, the plan would have eased the dilemma posed by British and French neutrality (inherent in obtaining warships from Europe), as the importation of iron and machinery was less controversial than the purchase of entire warships. The shipping of iron plates and machinery would have also avoided the difficulty of making European-built iron-armored vessels seaworthy enough to navigate the Atlantic and yet shallow enough in draft for coastal waters. [40] Finally, Bulloch's original plan would have precluded the disappointments suffered by the Confederacy when their ships were seized by British and French authorities under neutrality rulings.

Thus, even as late as fall 1861, given sufficient purchasing power and the ability to import rolled iron and machinery through the still-developing blockade, the Confederacy could have obtained more materials to alleviate the shortages and to build enough ships domestically to contest the Union navy's control of the American waters. The key would have been to obtain the iron plating and machinery both to speed construction of the Virginia and other ironclads and to improve these vessels' quality.

While, even with foreign help, the Confederacy was unlikely to win a prolonged ironclad arms race with the North, it could have hoped to gain at least some localized superiority by early 1862; such an advantage might have persisted through mid-1862 and have created sufficient consternation further to discomfit the fragile northern political coalition. In retrospect, Bulloch's plan to ship iron plates and machinery looks astute; it could have improved the Confederate navy, especially had the attempt been made early in the war before the Union navy's blockade became stringent.

FORESIGHT, SKILL, AND A LITTLE LUCK



The Confederate States of America failed to field a navy strong enough to gain superiority on the American waters; specifically, the South never completed enough ironclads to wrest control of the American waterways. The domestically built ironclad was not a total strategic failure: the presence of the ironclad Tennessee in Mobile Bay delayed Admiral Farragut's attack until northern ironclads could leave their posts in the Atlantic; the ironclads in Charleston, Wilmington (North Carolina), and Savannah--including the CSS Atlanta, Chicora, North Carolina, Palmetto State, and Raleigh--also helped delay Federal attacks, keeping these ports open for Confederate blockade runners. [41] Still, both the domestic building and foreign purchasing endeavors failed to net enough warships.

The reasons for the failures are not hard to discern: insufficient domestic resources; inadequate financial clout in Europe; tightening interpretations of neutrality by European powers; and perhaps a lack of vision by Confederate leaders. Many of these deficiencies can be traced to a set of decisions. First, the Confederate leaders' acquiescence in the informal embargo on raw cotton hurt southern purchasing power. Second, the initial reliance upon privateering and commerce raiding gave the Confederacy little advantage and diverted the Confederate navy's energy and resources from obtaining ironclad warships; also, the purchase of European-built commerce raiders contributed to the Europeans' tightening of neutrality rules so as to prevent the Confederacy from obtaining ironclad warships. Third, the early decision to rely upon European-built warships proved wasteful in terms of time, energy, and purchasing power, and the unrealized hopes for such warships may have delayed domestic construction of ironclads. Fourth, the delay in importing naval supplies during late 1861 before the blockade became fully effective forced the Confederate navy to rely upon the South's inadequate domestic resources.

The first three decisions certainly rested upon the perception that quick European recognition and intervention were likely. While this perception proved erroneous, it was not necessarily unreasonable. Some historians believe that the Confederates were on the verge of gaining European recognition or intervention (by mediation perhaps); if so, even a moderately stronger Confederate navy might have precluded certain key Federal victories in spring 1862 and triggered such intervention or recognition.

Nonetheless, there was an opportunity for the South during the fall and winter of 1861-62 to export more cotton before the blockade

became too effective. The South's increased purchasing power could have enabled it both to obtain sufficient iron plating and machinery to build rapidly several ironclads and to reduce the disruption to its economy caused by the Federal blockade. The purchase of European-built warships was more feasible earlier in the war as well, before the British and French governments tightened their policies on building vessels destined to become warships for belligerents. Concentrating upon regular warships, particularly ironclads, rather than commerce raiders early on might have been more fruitful too. The prospects for a strong Confederate navy depended upon correct divinations by Davis and Mallory of European attitudes. Immediately and energetically pursuing ironclads or other warships in Europe, if such an opportunity arose, and promptly importing iron plating and machinery to bolster domestic construction, may have involved too much prescience to ask of any leader, much less those involved in creating a new country and navy.

Even had Davis and Mallory succeeded in their endeavors, we need to ask whether the Federals could have matched and forestalled them. Clearly, had Welles and Lincoln immediately implemented an ironclad construction program in early April or May 1861, the North might have rapidly built several and swamped the fledgling Confederate navy. As we have seen, though, Welles had reason to proceed cautiously. Indeed, although the Federals were aware in late 1861 of Confederate ironclad-building efforts at Memphis, New Orleans, and Norfolk, they reacted only belatedly and in a limited way: only three ironclads were begun by the Federal navy. The major buildup occurred after the Virginia and the Monitor showed their worth. If the Northerners lacked an immediate capacity to roll the requisite iron plating, they would have had an easier time purchasing and importing English-produced iron plating than the Confederates did. Certainly anything the Confederacy could do in the way of industry or over seas trade, the North could have done better. As it was, the North gave the Confederacy a head start, albeit a brief one, in procuring ironclads.

The Federal failure to destroy thoroughly the Gosport Navy Yard at Norfolk was another significant mistake. The naval ordnance enabled the Confederates to arm and defend their seacoast and inland ports, hindering the Federal navy's blockade and its attempts to capture those ports. The partially destroyed Merrimack at Norfolk, of course, was a godsend for the nascent Confederate navy, as was the shipyard's huge dry dock. Had the Confederates been denied these assets, their attempts to obtain a strong navy would have been further impaired.

Finally, the Union navy and army might have more aggressively

attempted to capture key Confederate ports earlier in the war. Such endeavors were some times delayed while troops were scraped together from parsimonious army commanders. As we have seen, the capture of New Orleans, Memphis, and Norfolk severely reduced the Confederacy's ability to build warships domestically or export staple products to Europe.

Union naval superiority proved decisive in the war, but the North came perilously close to forfeiting, at least temporarily, its advantage. Mallory reacted creditably, by attempting to build a strong Confederate navy, but Jefferson Davis might have been more aggressive in pushing the Confederate Congress to support his secretary's efforts. [42] Still, if Davis and Mallory depended too much upon the hope of European intervention or connivance in supplying warships for the Confederacy, their error was, as we have seen, based upon not-unreasonable foundations. The delay and ultimate failure in obtaining European-produced iron plating and machinery was a less excusable mistake, for Mallory knew early in the war that the Confederacy was deficient in its ability to produce such commodities. Still, while it is possible that Mallory and Davis could have done better in building the Confederate navy, it also seems possible that other leaders in their places could have done much worse. A strong Confederate navy was not a chimera, but it would have required extraordinary foresight and skill, and perhaps not a little luck, to transform into reality.

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Dr. Surdam is a visiting professor of economics at the University of Chicago and the University of Oregon. His Northern Naval Superiority and the Economics of the American Civil War is forthcoming from the University of South Carolina Press in July 2001. His "The Union Navy's Blockade Reconsidered," in the Autumn 1998 issue, won the Naval War College Review's Edward S. Miller History Prize.

## NOTES

(1.) After the war, Jefferson Davis expressed an interesting idea: he argued that the Confederacy had been entitled to some of the existing warships in the American fleet, since that navy had been the product of collective action by the states. Therefore, the naval officers who eventually cast their lot with the Confederacy should have brought their vessels with them. Jefferson Davis, *The Rise and Fall of the Confederate Government* (New York: D. Appleton, 1881), vol. 1, p. 313. Navy historian J. Thomas Scharf echoed Davis's complaint. J. Thomas

Scharf, *History of the Confederate States Navy* (New York: Rogers and Sherwood, 1887), pp. 17-8.

(2.) U.S. Navy Department, *Official Records of the War of Rebellion: Navy* [hereafter ORN], 30 vols. (Washington, D.C.: U.S. Govt. Print. Off. [hereafter GPO], 1894-1922), ser. 2, vol. 2, p. 67.

(3.) U.S. Naval History Division, *Civil War Chronology* (Washington, D.C.: GPO, 1971), vol. 1, p. 30; Paul H. Silverstone, *Warships of the Civil War Navies* (Annapolis, Md.: Naval Institute Press, 1989), p. 15; T. Harry Williams, *Lincoln and the Radicals* (Madison: Univ. of Wisconsin Press, [1941] 1969), pp. 359-60; and David D. Porter [Adm., USN], *Naval History of the Civil War* (New York: Sherman, 1886), p. 357. During the war, an entire class of ironclads (twenty vessels) proved defective, costing over ten million dollars; the fiasco was investigated by a congressional committee. U.S. Congress, "Light-Draught Monitors," *Report of the Joint Committee on the Conduct of the War*, vol. 3, 38th Cong., 2d sess. (Washington, D.C.: GPO, 1865), pt. 2, pp. 824-5.

(4.) U.S. Bureau of the Census, *Eighth Census: Manufacturing* (Washington, D.C.: GPO, 1865), p. 698.

(5.) ORN, ser. 2, vol. 1, pp. 503-4 and 507; and Louis C. Hunter, *Steamboats on the Western Rivers* (Cambridge, Mass.: Harvard Univ. Press, 1949), p. 107.

(6.) ORN, ser. 2, vol. 2, pp. 51 and 67-9; and William N. Still, Jr., *Iron Afloat: The Story of the Confederate Armorclads* (Nashville, Tenn.: Vanderbilt Univ. Press, 1971), p. 11.

(7.) U.S. War Department, *Official Records of the War of Rebellion*, 128 vols. (Washington, D.C.: GPO, 1880-1900), ser. 4, vol. 2, pp. 512-3; and U.S. Department of the Treasury, *Report of the Secretary of the Treasury: Commerce and Navigation, for the Year Ending June 30, 1860*, 36th Cong., 2d sess., Sen. Ex. Doc. 8 (Washington, D.C.: GPO, 1861), p. 461. Only two southern manufacturers were capable of rolling railroad iron--the Atlanta Rolling Mill and Etowah Iron Works. Robert C. Black III, *The Railroads of the Confederacy* (Chapel Hill: Univ. of North Carolina Press, 1952), p. 23. The rails normally lasted from ten to fifteen years, but the increased wartime traffic probably meant a shorter life. The increased rate of deterioration exacerbated the shortage of iron in the Confederacy.

(8.) ORN, ser. 2, vol. 1, p. 606, and vol. 2, pp. 72-3, 152, and 183;

and Still, *Iron Afloat*, p. 144. During the war, three southern rolling mills adapted their machinery to roll two-inch iron plate. ORN, ser. 2, vol. 1, pp. 581 and 599; and vol. 2, pp. 74 and 244. The North had difficulty in completing the Monitor because initially only one firm could roll even one-inch iron plates. Frank D. Moore, ed., *Rebellion Record* (New York: D. Van Nostrand, 1861-67), vol. 4, p. 59.

(9.) U.S. Bureau of the Census, *Eighth Census: Manufacturing*, pp. 716 and 738. Before the war, the shafts for the engines were produced in Baltimore and other northern cities. Mallory hoped that the purchase of a Nasmyth hammer would rectify the deficiency at Norfolk. ORN, ser. 2, vol. 2, pp. 77 and 151. See also James Bulloch, *The Secret Service of the Confederate States in Europe* (New York: G. P. Putnam's Sons, 1884), vol. 1, p.21.

(10.) ORN, ser. 1, vol. 21, p. 600; and Still, *Iron Afloat*, pp. 44 and 144. Naval officers tested armor plating and decided to cover the vessels with two two-inch-thick layers of iron (one layer running vertically and the other running horizontally across the hull). Secretary of the Navy Mallory had hoped to cover the vessels with three-inch plate, but the southern mills were unable to roll this thickness. ORN, ser. 2, vol. 1, pp. 785-6; and Still, *Iron Afloat*, pp. 97-8.

(11.) ORN, ser. 1, vol. 5, p. 821; and ser. 2, vol. 2, p. 151. Tredegar faced many difficulties in getting pig iron from New Orleans in late 1861. The railroads needed months to get the material to Richmond, and the freights were greater than the original cost of the pig iron. In addition, 120 tons were lost in transit. C. B. Dew, *Ironmaker to the Confederacy: Joseph R. Anderson and the Tredegar Iron Works* (New Haven, Conn.: Yale Univ. Press, 1966), p. 103.

(12.) ORN, ser. 2, vol. 1, pp. 461, 534-5, and 605-6.

(13.) William N. Still, Jr., *Confederate Shipbuilding* (Athens: Univ. of Georgia Press, 1969), p. 67; Dew, *Ironmaker to the Confederacy*, p. 154; and ORN, ser. 2, vol. 2, pp. 135 and 151. Many of the Irish puddlers (who converted pig iron to wrought iron by a process involving heat, stirring, and oxidization) left Richmond and went north when hostilities began. Dew, p. 90. Early in the war, Jefferson Davis sent a naval officer, then-Commander Raphael Semmes, to the North to recruit skilled mechanics. Raphael Semmes, *Memoirs of Service Afloat, during the War between the States* (Baltimore: Kelly, Piet, 1869), p. 83. Tredegar attempted to recruit skilled workers from Europe in 1862, but the effort failed. Driven by desperation,

Confederate officials began to scour prisoner-of-war camps for Union prisoners with skills. Usually the prisoners of war took oaths of allegiance to the Confederacy; to preclude escape attempts, the Confederate authorities then sent lists containing the names of these new Confederates to the Union army. Dew, p. 234.

(14.) ORN, ser. 2, vol. 1, pp. 461 and 527; and William N. Still, Jr., "Facilities for Construction of War Vessels in the Confederacy," *Journal of Southern History*, vol. 31, 1965, p. 304.

(15.) ORN, ser. 2, vol. 2, pp. 67-9. Mallory cited mitigating factors that would reduce the cost of the *Gloire* and other ironclad vessels-- that they carried fewer guns and required smaller crews than traditional sailing vessels. ORN, ser. 2, vol. 1, p. 742. Ironically, *Gloire* might have been a useless acquisition. Historian Warren Spencer details the dubious seaworthiness of *Gloire*. Warren Spencer, *The Confederate Navy in Europe* (Tuscaloosa: Univ. of Alabama Press, 1983), p. 66.

(16.) ORN, ser. 2, vol. 2, pp. 106, 122, and 168; and Still, *Iron Afloat*, p. 11. Mallory's thoughts on acquiring the *Gloire* are found in ORN, ser. 2, vol. 2, p. 70. However, his agent in Europe believed that such attempts were futile, "as both France and England are anxious to get all the ironclad ships they can." ORN, ser. 2, vol. 2, p. 87. This agent may have exaggerated the difficulty, as he subsequently contracted for a large ironclad vessel.

(17.) Spencer, *Confederate Navy in Europe*, p. 82.

(18.) *Ibid.*, p. 117.

(19.) Bulloch advised North that such a large vessel was impractical for the Confederacy's purpose. ORN, ser. 2, vol. 2, pp. 207-8; and Bulloch, *Secret Service*, vol. 1, pp. 384-5.

(20.) Spencer, *Confederate Navy in Europe*, p. 122.

(21.) *Ibid.*, p. 118. Spencer freely admits that no one really knows how formidable these European-built warships would have been, but he argues that the aura of "invincibility" attached to the vessels in later years was a myth. Naval historian Frank Merli believes that the ram aspect of these warships may have been overestimated, though the turrets would have proved useful. The vessels were often uncomfortable in the open seas and left their crews doubting their seaworthiness in rough seas. Frank J. Merli, *Great Britain and the*

Confederate Navy, 1861-1865 (Bloomington: Indiana Univ. Press, [1965] 1970), pp. 141-3, 155-6, 159, and 213-7. Silverstone, in contrast, claims that the Laird rams were "turret ships superior to any Federal warship." Silverstone, *Warships of the Civil War Navies*, p. 200.

(22.) Bulloch, *Secret Service*, vol. 1, pp. 385-6; ORN, ser. 2, vol. 2, pp. 79, 223-4, 226, and 269; and Richard Lester, *Confederate Finance and Purchasing in Great Britain* (Charlottesville: Univ. of Virginia Press, 1975), pp. 119 and 122. Bulloch received a volume discount of [pound]1,250 on each vessel's original price of [pound] 95,000. Bulloch's complaints about the shortage of funds are found in ORN, ser. 2, vol. 2, p. 167.

(23.) Scharf, *Confederate States Navy*, p. 32; and Joseph T. Durkin, Stephen Mallory: *Confederate Navy Chief* (Chapel Hill: Univ. of North Carolina Press, 1954), p. 145.

(24.) Bulloch, *Secret Service*, vol. 1, pp. 53-4, 85, 100-2, and 376; ORN, ser. 2, vol. 2, p. 87; and Semmes, *Memoirs of Service Afloat*, pp. 367-8.

(25.) During and after the war, there were allegations that the Confederates had conspired to obtain war materiel, including warships, prior to secession. For typical opinions regarding these allegations, see Porter, *Naval History*, p. 356; and Davis, *Rise and Fall*, vol. 1, pp. 311 and 314. If the North had tried to match the Confederate naval buildup before hostilities began, the action might have been seen as aggressive and provocative by Europeans and many northerners. If it was important, as Lincoln believed, to maneuver the Confederates into firing the first shot at Fort Sumter, it may have been foolhardy to counter aggressively a Confederate naval buildup. However, the U.S. Congress did authorize the construction of seven new steam sloops in February 1861, before Lincoln's inauguration. U.S. Naval History Department, *Civil War Chronology*, vol. 1, p. 26; ORN, ser. 2, vol. 2, pp. 44-50, 51, 64-6, 70-2, 95, 106, and 108-30; and Bulloch, *Secret Service*, vol. 1, p. 41.

(26.) ORN, ser. 2, vol. 2, pp. 44-50, 51, 64-6, 70-2, 95, 106, and 108-30; and Bulloch, *Secret Service*, vol. 1, p. 41.

(27.) ORN, ser. 2, vol. 2, p. 152.

(28.) *Ibid.*, pp. 168, 177, 181-2, and 185; and Jefferson Davis, *Messages and Papers of Jefferson Davis and the Confederacy*, ed. James D. Richardson (New York: Chelsea House-Robert Hector, 1966), vol. 1,

p. 211.

(29.) After the war, critics charged Davis with missing opportunities, including an offer made by the East India Company. The company had ten steam vessels designed to carry ordnance that it no longer needed and offered to sell them to the Confederacy at half price. General Pierre Beauregard (through his ghostwriter Alfred Roman) and R. Barnwell Rhett accused Davis of bungling this opportunity. Details are sketchy; historian William C. Davis has the best discussion of this tantalizing but vague offer. Alfred Roman, *The Military Operations of General Beauregard* (New York: Harper & Bros., 1884), vol. 1, p. 59; R. Barnwell Rhett, "The Confederate Government at Montgomery," *Battles and Leaders of the Civil War* (New York Century, 1884), vol. 1, p. 107; and William C. Davis, *A Government of Our Own: The Making of the Confederacy* (New York: Free Press, 1994), pp. 350-1. Davis did not hinder Mallory's efforts in building a navy, but he did not encourage the Confederate Congress to help Mallory. Davis apparently never understood the importance of the navy, aside from commerce raiding and keeping the ports open. For Davis's attitudes toward Mallory, see Josiah Gorgas, *The Civil War Diary of Josiah Gorgas*, ed. Frank E. Vandiver (Tuscaloosa: Univ. of Alabama Press, 1947), pp. 58-9.

(30.) Davis, *Messages and Papers*, vol. 2, pp. 179-80.

(31.) Stephen R. Wise, *Lifeline of the Confederacy: Blockade Running during the Civil War* (Columbia: Univ. of South Carolina Press, 1988), p. 121.

(32.) Davis, *Messages and Papers*, vol. 2, p. 180; and ORN, ser. 2, vol. 2, pp. 165 and 183-4. Naval historian Bern Anderson believes that Davis's decision to implement privateering was "the death warrant of the Confederacy, because it prompted Lincoln to proclaim a naval blockade against the southern ports." He may have overstated the case, as Lincoln probably would have implemented the blockade regardless of Davis's decision. Bern Anderson, *By Sea and By River: The Naval History of the Civil War* (New York: Knopf, 1962), p. 26.

(33.) See David Surdam, "King Cotton: Monarch or Pretender? The State of the Market for Raw Cotton on the Eve of the American Civil War," *Economic History Review*, vol. 51, 1998, pp. 113-32.

(34.) See ORN, ser. 2, vol. 2, pp. 83-4, 165, and 186-7; Davis, *Messages and Papers*, vol. 2, pp. 389-90, 459, 474, 516, 597, 624, 676, and 706; and Bulloch, *Secret Service*, vol. 1, pp. 23-4, 380-1,



and 383.

(35.) ORN, ser. 2, vol. 2, p. 183. Bulloch was still hopeful about getting unarmed vessels out of Britain. He believed that had he been supplied with enough cash, more warships might have been completed and sailed before the British tightened their policies regarding neutrality. ORN, set. 2, vol. 2, p. 167.

(36.) Davis, Messages and Papers, vol. 2, pp. 159 and 164; and Jefferson Davis, The Papers of Jefferson Davis, ed. Lynda Lasswell Crist and Mary Seaton Dix (Baton Rouge: Louisiana State Univ. Press, 1992), vol. 7, pp. 255, 308, 374-5, and 395; and ORN, ser. 2, vol. 2, p. 152.

(37.) ORN, ser. 2, vol. 2, p. 122.

(38.) Davis, Messages and Papers, vol. 2, p. 676.

(39.) ORN, ser. 2, vol. 2, p. 184. At least two historians of the Confederate navy believe that Bulloch's idea was feasible and astute; however, Raimondo Luraghi disagrees. Merli, Confederate Navy, pp. 178-9; Tom H. Wells, The Confederate Navy: A Study in Organization (Tuscaloosa: Univ. of Alabama Press, 1971), p. 136; and Raimondo Luraghi, A History of the Confederate Navy (Annapolis, Md.: Naval Institute Press, 1996), p. 203.

(40.) Spencer, Confederate Navy in Europe, pp. 67 and 117.

(41.) Still, Iron A float, pp. 203-4 and 231, and "Confederate Naval Policy and the Ironclad," Civil War History, June 1963, p. 156.

(42.) Historian Tom Wells presents a more critical assessment of Mallory's performance as Secretary of the Navy: "Unfortunately for the Confederacy, Mallory was a dreamer and a romantic. He kept hoping things would somehow work themselves out if left alone. A lover of innovation and a progressive thinker, he failed to take sufficient cognizance of the means by which some of his ideas were to be applied. Ever proud of his cabinet position, he refused to risk it in an all-out effort to obtain the men, money, and material essential to the navy's well-being" (Wells, Confederate Navy, p. 151).

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