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To the Graduate Council:

I am submitting herewith a thesis written by Colin E. Babb entitled "A long way from home: the West Gulf Blockading Squadron and Union naval logistics in the Civil War." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in History.

Stephen Ash, Major Professor

We have read this thesis and recommend its acceptance:

Accepted for the Council: Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

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Stephen Ash, Major Professor

We have read this thesis and recommend its acceptance:

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Accepted for the Council:

Associate Vice Chancellor and Dean of The Graduate School

# A LONG WAY FROM HOME: THE WEST GULF BLOCKADING SQUADRON AND UNION NAVAL LOGISTICS IN THE CIVIL WAR

A Thesis
Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Colin E. Babb May 1998

#### **ABSTRACT**

The Western Gulf Blockading Squadron, the most distant of all the blockading squadrons from the industrial centers of the North during the Civil War, did not suffer significantly more supply shortages than the other three squadrons. This study presents a general picture of the operations of the Union Navy in the western Gulf of Mexico during the American Civil War, as well as a specific discussion of the logistical system created to supply the navy in that region and the ways in which this system was effective at accomplishing its tasks. The United States Navy's supply needs from 1861 to 1865 were unprecedented, and the efforts mounted to meet those needs were initially haphazard and unsatisfactory. By the end of the war, however, a sophisticated supply organization had been created that satisfied much of the navy's demands, despite problems arising from emergent new technologies--such as steam propulsion, larger weaponry, and iron armor-that strained logistical planning and implementation. On the whole, naval supplies sent to the Gulf were adequate for the tasks expected of the Western Gulf Blockading Squadron. The coast of Texas was an exception; Confederate forces exploited the weaknesses of Union forces there, and achieved a number of spectacular victories at sea as a result. The deficiencies in Union supply efforts, however, were offset by the Union's ability to maintain the strategic initiative in the region.

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<sup>\*</sup> All maps taken from Official Records of Union and Confederate Navies, 31 vols. (Washington: Government Printing Office, 1894-1922).

#### CHAPTER I: INTRODUCTION

The USS *Pensacola* was one of the Union Navy's most powerful ships when she was finished in 1861. She was more than 230 feet long and 44 feet abeam and displaced 3,000 tons. Her armament consisted of sixteen 9-inch Dahlgrens and one 11-inch rifle, a powerful battery in her day. Even greater than her size or armament were the expectations placed on her as one of the Navy's premier oceangoing vessels, designed to cruise the Atlantic and defend American shores from European navies. When rebellion broke out in the South as she was being finished in Pensacola, Florida, her value suddenly increased for a Navy starved of steam-driven vessels.

When the *Pensacola* arrived in the Gulf of Mexico in February 1862, she was expected to play an important part in the impending attack on New Orleans. Almost immediately, however, she ran into problems. Stuck on a reef for four days and her engines performing poorly, the *Pensacola* arrived at the fleet base of Ship Island on March 1, long after the rest of the fleet had arrived.<sup>2</sup> While her deep draft presented a significant problem--the squadron had to get over the sand bars at the mouth of the Mississippi River to attack the city--it was her engines that elicited even greater concern. "They represent the engines as perfectly worthless," Flag Officer David G. Farragut said of the *Pensacola*. "The engineer is afraid of the lives of his men, and said it would not last an hour longer;

<sup>&</sup>lt;sup>1</sup> Donald L. Canney, The Old Steam Navy. Volume One: Frigates, Sloops, and Gunboats, 1815-1885 (Annapolis: United States Naval Institute Press, 1990), 67.

<sup>&</sup>lt;sup>2</sup> John Hawkins, Memorandum Book, 1861-1864, New York Historical Society, 242; Official Records of the Union and Confederate Navies, 31 vols. (Washington: Government Printing Office, 1894-1922), Ser. I, 18: 43-44; hereafter referred to as ORN.

that I will test."3

While she did indeed have difficulty getting into the Mississippi as predicted, when the squadron finally passed Forts Jackson and St. Philip early on the morning of April 24 the *Pensacola* and her crew performed well. Attacked by the ram C.S.S. *Manassas* as she came in close to the guns at Fort St. Philip, the *Pensacola* managed to survive the morning's fight with only thirty-seven killed and wounded. The fight did not, however, tax the *Pensacola* much beyond the courage of her men. "The only bells I rang," the officer at the wheel wrote afterwards, "were 'slow' and 'stop her." Her greatest victory had been getting to the battle in the first place.

While the Official Records reveals a real concern over the ability of the Pensacola to perform her duties before the Battle of New Orleans, modern historians have largely chosen to pass over this part of the ship's history. Early histories of the war only briefly mention the ship. As one says, "The Pensacola, with her heavy batteries, drove the men from the guns at Fort St. Philip, and made it easier for the ships astern to get by." Modern general histories of the naval war make little or no mention of the Pensacola's problems, but shying away from this level of detail is understandable for works of that nature. Even

<sup>&</sup>lt;sup>3</sup> ORN, Ser. I. 18: 47.

<sup>&</sup>lt;sup>4</sup> Ibid., 177-78,

<sup>&</sup>lt;sup>5</sup> Ibid., 768.

<sup>&</sup>lt;sup>6</sup> David D. Porter, "The Opening of the Lower Mississipi," in Battles and Leaders of the Civil War (New York: Thomas Yoseloff, 1956[1887]), 2: 43.

<sup>&</sup>lt;sup>7</sup> See Virgil C. Jones, The Civil War at Sea (New York: Holt, Rinehart, Wilson, 1961), Vol. 2, and William M. Fowler, Jr., Under Two Flags: The American Navy in the Civil War (New York: W.W. Norton & Co., 1990).

a modern study of the Battle of New Orleans, however, gives the reader only a hint of the problems encountered by the *Pensacola*.<sup>8</sup>

What even the Official Records does not show is the fact that the Pensacola spent much of the rest of the war after April 1862 sitting at anchor undergoing constant repairs and several congressional investigations into her seemingly permanent immobility. At the root of all of this were her unique, and chronically defective, engines. Designed by the New York lawyer/inventor E.N. Dickerson and his associate F.E. Sickels, the Pensacola's massive machinery was several times the weight of that of her sister ships (among them the more famous Hartford). The engines had smaller boilers than the standard engines then in use, and they supplied steam to cylinders made extra large; the theory was that a smaller amount of steam could power a larger engine than normally thought at the time.9 The theory, condemned by most reputable engineers at the time of her construction in 1859, found a ready audience in Dickerson's friends in the U.S. Senate, Stephen Mallory and David Yulee of Florida--both on the Naval Affairs Committee. "Neither of the contractors had ever designed a steam-engine," Chief Engineer of the Navy Benjamin Isherwood wrote of Dickerson and Sickels in 1863. "What they proposed as novelties had long since been discussed and condemned by the great tribunal of engineering skill."10

See Chester G. Hearn, *The Capture of New Orleans*, 1862 (Baton Rouge: Louisiana State University Press, 1995). Hearn deals at several points with the problem of Pensacola's deep draft, but makes only brief mention of her engines (p. 131).

<sup>&</sup>lt;sup>9</sup> "Report on Marine Engines," 38th Congress, 2nd sess., H. doc. 8, p. 26.

<sup>&</sup>lt;sup>10</sup> "Letter of the Secretary of the Navy in relation to the war steamers Ossipee and Pensacola," 37th Congress, 3rd sess., S. exdoc. 45, p. 4.

The engineers aboard the *Pensacola* were the first ones to be blamed for all the problems her machinery encountered. In testimony before a congressional committee, Second Assistant Engineer John Hawkins explained in excruciating detail the nearly constant problems suffered by the *Pensacola*'s machinery. Chafing under the accusation that the ship's condition was due to faulty treatment and upkeep, Hawkins described an engineering section constantly at work to maintain even the five or six knots that the ship rarely exceeded. Despite countless repairs through her abbreviated combat career, the *Pensacola* still got underway most often using her sails. "Whenever this ship met the particular kind of obstacles that a steamship of all other kind of vessels should be able to overcome," Hawkins wrote, "she, so far as her steaming powers were concerned, became useless." Even her one moment of glory was not beyond reproach—if anything it was a miracle that she entered combat at all. "I fear," Hawkins wrote of his ship's participation in the Battle of New Orleans, "that if the success of the attack had depended upon the speed of the *Pensacola*, it would have been a sad failure."

The *Pensacola* was only one ship of the West Gulf Blockading Squadron, the force assigned by President Abraham Lincoln to enforce the Union blockade in the Gulf of Mexico from Brownsville, Texas to the panhandle of Florida from 1861 to 1865. Though perhaps an extreme example of the ways in which logistics can affect naval forces, the case of the *Pensacola* is a good illustration of the kinds of problems confronted by naval planners, officers, and enlisted men in the Civil War era on a day to day basis--the kinds

<sup>11</sup> Hawkins Memorandum Book, 249.

<sup>&</sup>lt;sup>12</sup> Ibid., 245.

of problems that do not easily make their way into the history books. The purpose of this study is to discover the ways in which the logistical efforts of the Union affected the maintenance of the blockade in the Gulf of Mexico, the most distant station from the industrial and supply centers in the North.

The word "logistics," as used here, is defined as more than simply the supply of food, ammunition and fuel, and the effort to get it there. Logistics also involve the technology that supported the fleet in its assigned task--to sweep the seas of Southern vessels and strangle the economy of the Confederacy. Lastly, logistics include the ongoing maintenance that kept the fleet at sea. This composite meaning of supply, technology, and maintenance encompasses the daily tasks and obstacles that affected the way the fleet fought and performed.

There are several reasons for studying the logistical apparatus of the Western Gulf Blockade Squadron. While the blockade in the Gulf has received some historical analysis, the squadron itself as an organization has not been studied in any depth. The actual battles that took place in the Gulf theater have, like nearly all other Civil War battles, been dealt with exhaustively by several generations of historians; but this kind of history is disjointed and fails to reveal the activities of officers, crew, and vessels during the far lengthier periods of time when the guns were silent and boredom was the fiercest enemy.

<sup>&</sup>lt;sup>13</sup> See Robert W. Glover, "The West Gulf Blockade, 1861-1865: An Evaluation" (Ph.D. Dissertation, North Texas University, 1974). This concentrates on the diplomatic and economic consequences of the blockade in the Gulf, especially the blockade of Galveston.

Naval logistics in the machine age barely receive mention by historians, <sup>14</sup> perhaps mostly because the term encompasses the most menial, backbreaking, and exhausting tasks that "Jack" is asked to carry out. Keeping every ship supplied is also one of the most essential tasks any navy faces. Without ammunition ships could not fight, without food crews would starve, without fuel ships would rust and rot at their moorings. It is not enough simply to know that these activities go on behind the scenes; they can and must be subject to historical analysis.

Describing the dynamics of such labors lacks the dash and flair of traditional naval history, so driven is it by the excitement of l'événement. But if naval history is to make any claim to being "complete" it must begin to include analyses of events beyond the heat of battle. The effort of Assistant Engineer John Hawkins to keep the engines of the *Pensacola* running was a scenario of a sort played out at one time or another on every ship in the squadron, every day of the year, for four long years of war. We cannot understand the lives of the crews who served the ships of the West Gulf Squadron without examining these frustrating, but vital, labors that kept those ships at sea.

Some fifty years later, at the beginning of World War I, Great Britain possessed the world's largest navy. It was composed entirely of steam driven vessels, the most complex machines of their age. The army on the other hand still mainly went into battle on foot. "Britain began the First World War," one historian concludes, "with an

World War II has received most of the attention of existing studies. W.R. Carter and E.E. Duvall, Ships, Salvage, and Sinews of War (Washington: Department of the Navy, 1954) and Duncan Ballantine, U.S. Naval Logistics in the Second World War (Princeton: Princeton University Press, 1947) are the most notable of the limited literature on the subject. A more technical study is Henry E. Eccles, Logistics in the National Defense (Harrisburg: Stackpole Company, 1959).

essentially unmechanized army and a highly mechanized navy."<sup>15</sup> A very similar conclusion could be reached about the relationship between the United States Army and Navy in the Civil War; by the end of the war the relative mechanization of the navy had only grown greater. And as most have forgotten all the energies and effort put into administering the Royal Navy's blockade of Germany, so too have historians forgotten the herculean efforts made to blockade the Confederacy.

The purpose of this study is not to provide a total picture of the blockade, but to highlight those aspects of it which have remained neglected: the technology, supply, and maintenance involved in carrying out the blockade. There were major problems for the squadron in the Western Gulf, but in the end it managed to capture important objectives such as New Orleans and Mobile, and hinder blockade runners heading for Gulf ports; this study will also assess the relative success of these achievements. Most of all this study will show that the most overlooked achievement was the very fact that the blockade worked at all in the Gulf. For all the problems of radical new technologies, inadequate shipbuilding facilities, sluggish industry, distant supply lines, and chronic manpower problems, the United States Navy managed to achieve a logistical feat without precedent: keeping a fleet of steam vessels at sea for four years of war. Less than to leadership and heroics, the implementation of the blockade was due to the perseverance and sweat of the

Jon Tetsuro Sumida, "Forging the Trident: British Naval Industrial Logistics, 1914-1918," in John A. Lynn, ed., Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present (Boulder: Westview Press, 1993), 217.

thousands of men who spent most of their days battling their own machines and the sea itself--enemies at times more menacing than the Confederacy.

#### CHAPTER II: THE WAR IN THE WESTERN GULF

Although President Lincoln had declared a blockade of the secessionist states forty days before, the blockade of the Mississippi River and of the south's largest port, New Orleans, was only three days old. The U.S.S. *Brooklyn* took station off Pass à l' Outre on May 26, 1861, and found numerous vessels waiting to cross the bar and leave for the open sea. Pass à l' Outre was only one of several passes that allowed large vessels over the bar, and were three other entrances to the Mississippi that vessels could traverse, all completely unguarded. The *Brooklyn* was alone on May 29 when she captured her first prize, the barkentine H.E. Spearing. Bound from Brazil with a cargo of coffee, the crewmen of the Spearing were probably surprised to find themselves prisoners and their country in the midst of a civil war. The Spearing had the distinction of being one of the blockade's first victims in the Gulf of Mexico, though it would be four years before the last blockade runner was captured.<sup>1</sup>

The blockade in the Gulf began, as it did elsewhere, more with a whimper than with a bang. It would be many months before Union efforts to stop the Confederacy's maritime trade would have even a moderate effect on the war. What would be called the Gulf Blockading Squadron was officially established with the appointment of Flag-Officer William Mervine to command in the Gulf on May 7, 1861, by order of Secretary of the Navy Gideon Welles.<sup>2</sup> When Mervine arrived in the Gulf on June 7, United States forces

<sup>&</sup>lt;sup>1</sup> ORN, Ser. I, 4: 187-88, 190-91. The *Powhatan*, off Mobile, captured a schooner on the same day that the *Brooklyn* took the *Spearing*.

<sup>&</sup>lt;sup>2</sup> Ibid., 16: 519-20.

controlled only three points in the region: Key West at the southern extremity of Florida, Fort Jefferson in the Dry Tortugas, and Fort Pickens at the entrance to Pensacola harbor. The naval squadron consisted of fifteen warships and two supply ships.<sup>3</sup>

While vessels had blockaded Mobile and the mouths of the Mississippi for some weeks, it was not until June 11 that a vessel was dispatched to Apalachicola, Florida, and not until July 2 that a ship arrived off Galveston, Texas. Although by the beginning of July the main ports in the region were covered, hundreds of miles of coastline, harbors, and inlets remained unwatched by the blockaders. With few ships and, what is more important, no ground troops, the men of the Gulf Blockading Squadron spent most of their first year wishing they could do more than simply watch as most Confederate vessels slipped in and out of Gulf ports with impunity.

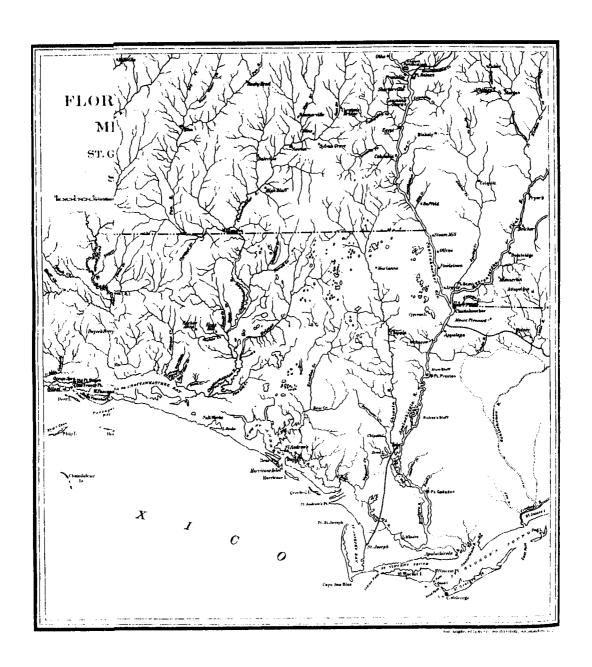
Even before Mervine left Boston for his command in the Gulf he complained to the Navy Department that little provision was made for the supply of his ships. "For the present coal will be shipped to Key West," Secretary Welles replied. "With regard to fresh water, the Department has no information. That, and the obtaining of fresh meat and vegetables, will engage your earliest attention."

Despite this almost nonchalant attitude toward the requirements of the blockade, and despite the few ships the Gulf Squadron was given to carry out its tasks, Secretary

<sup>&</sup>lt;sup>3</sup> Ibid., 523.

<sup>&</sup>lt;sup>4</sup> Ibid., 544, 575-77.

<sup>&</sup>lt;sup>5</sup> Ibid., 523-24.



Welles nonetheless found Mervine's leadership unsatisfactory.<sup>6</sup> To be successful, the squadron needed bases farther west than Fort Pickens; specifically, it needed bases closer to New Orleans. The escape of the C.S.S. Sumter on June 30 and an embarrassing defeat at the Head of the Passes on October 12 underscored the fact that merely patrolling the mouths of the Mississippi would not prevent the ingress or egress of vessels from the South's largest port. The taking of New Orleans itself was naturally the first great objective of the squadron in the closing months of 1861. The single most important event preparatory to the capture of the city would be the seizure of Ship Island, just a few miles from Biloxi, Mississippi, and less than seventy miles from the mouths of the Mississippi. Mervine's seeming unwillingness to take the island was a major factor in Welles's decision to replace the fifty-year veteran in early September. Ironically, the Confederate evacuation of Fort Massachusetts on the island several days later meant that an assault was unnecessary.<sup>7</sup>

Although Welles was probably correct in his assessment of Mervine as lacking in aggressiveness, the correspondence between the two men is very instructive, as it shows the conditions under which the squadron operated in the first year of the war, and Washington's misunderstanding of these conditions. The Secretary of the Navy was disturbed at the lack of any action by the squadron:

At this distance it is difficult to understand the reasons for the apparent inactivity and indifference that have governed in this matter. If the force under your command is not all that we wish or all that we intend it shall be, still it is sufficient for some demonstration,

<sup>&</sup>lt;sup>6</sup> Diary of Gideon Welles, Howard K. Beale, ed. (New York: W.W. Norton & Company, 1960), 1: 76.

<sup>&</sup>lt;sup>7</sup> ORN, Ser. I, 16: 677-78.

and it would be well to make up in activity and extra exertion for the want of numbers. You have large ships, heavy batteries, and young and willing officers, with men sufficient to dispossess the insurgents from Ship Island.<sup>8</sup>

In response, Mervine stated that assaulting the island would prove too difficult without vessels of shallower draft. More convincing is his argument that no ships could be spared for the effort:

In a recent dispatch I gave you the disposition of the vessels under my command, from which it appears that but a single vessel, the *Water Witch*, was not on blockading duty. Even then, all ports which should have been, were not, blockaded, and in one case, in compliance with intimated wishes of the Department, I made the blockade of one port (Apalachicola) effective only by raising that of another.<sup>9</sup>

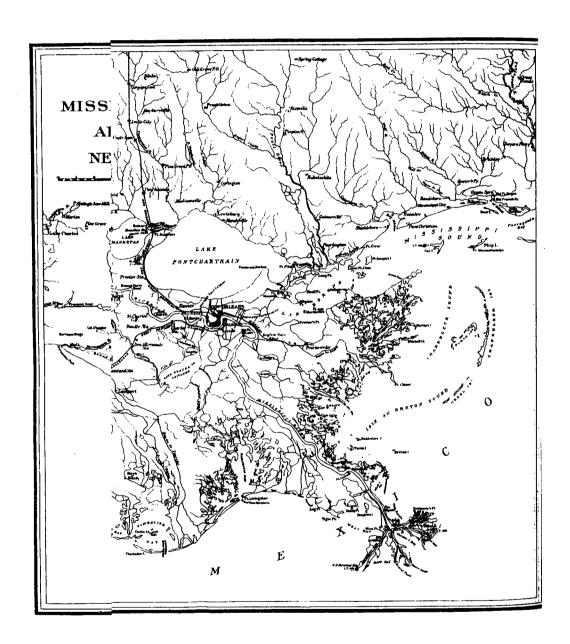
Even new ships that arrived in the squadron served only to replace vessels heading north for repairs. Ground troops available basically consisted of the small army garrison of Fort Pickens and the sailors of the fleet; perhaps this was sufficient for "some demonstration," but little else. Welles had his way, however, and Flag-Officer William McKean took over command of the squadron. Nevertheless, the problem of meeting high expectations with too little resources would continue to plague the blockaders in the Gulf throughout the war.<sup>10</sup>

By the end of 1861 the task of taking New Orleans consumed the creative and productive energies of the Navy Department as well as those of the Gulf Squadron. Even as the Twenty-Sixth Massachusetts and Ninth Connecticut Regiments landed on Ship Island in December, preparations were already well along in making the place a base for

<sup>&</sup>lt;sup>8</sup> Ibid., 644.

<sup>&</sup>lt;sup>9</sup> Ibid., 663.

<sup>10</sup> Ibid.



operations in the western Gulf.<sup>11</sup> It was also at this time that the Gulf Squadron was divided into the East and West Gulf Blockading Squadrons, the former to remain under McKean and the latter given to Flag-Officer David Glasgow Farragut. This division reflected the problem of maintaining a coherent command and communication structure over the entire Gulf under a single headquarters. The East Gulf Squadron's assigned zone, from St. Andrews Bay to Cape Canaveral, would become essentially a backwater in the war;<sup>12</sup> the Western Gulf Squadron would receive the lion's share of reinforcements and supplies for the rest of the war.

The decision-making process behind the appointment of David Farragut to command of the upcoming expedition has been covered at length elsewhere. High hopes were placed on Farragut to achieve great things with his new command, and certainly the historical record has been almost universally kind to the admiral and his part in leading Union forces to victory. It is easy to forget, however, that the victory at New Orleans was not due just to the aggressiveness of one man. The efforts of Northern shipbuilding and industry, growing to a wartime footing in the early months of 1862, gave Farragut ships and resources that his predecessors lacked. The West Gulf Squadron was given several new, powerful steam sloops, such as the *Hartford*, *Richmond*, and *Oneida*,

<sup>&</sup>lt;sup>11</sup> The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, 128 vols. (Washington: Government Printing Office, 1880-1901), Ser. I, 6: 465. Hereafter referred to as ORA.

<sup>&</sup>lt;sup>12</sup> David J. Coles, "Unpretending Service: The James L. Davis, the Tahoma, and the East Gulf Blockading Squadron," Florida Historical Quarterly 71 (1992): 41-42.

<sup>&</sup>lt;sup>13</sup> See Hearn, The Capture of New Orleans; Jones, The Civil War at Sea, Volume II; and Charles Dufour, The Night the War Was Lost (Garden City: Doubleday, 1960).

half a dozen "ninety-day" gunboats, and a fleet of twenty-some schooners armed with thirteen-inch mortars under the command of David Dixon Porter. 14

Yet even with all this, the battle was not an easy victory for the Squadron.

Farragut was forced to leave most of the Gulf ports blockaded by sailing vessels while he advanced up the Mississippi with his fleet; if battle had claimed any of the steam sloops, his expedition and the blockade would have been reduced to technological inferiority. 

The lengthy bombardment of Fort Jackson by the mortar flotilla left Farragut wondering whether the fleet would have any shells or fuses for the passing of the forts. The timely arrival of supply ships for Porter's schooners and the requisition of supplies from General Benjamin Butler's army transports assuaged some of Farragut's fears, but hardly inspired his full confidence in the probability of victory. 

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In the event, the passing of Forts St. Philip and Jackson in the early morning of April 24, 1862, was immensely successful. The fears surrounding the Confederate ironclads *Manassas* and *Louisiana* proved to be unfounded; the former could make little headway in the swift current of the river, and the latter lacked engines. Losing only the *Varuna* to enemy action, the Squadron suffered more from the small flotilla of Confederate gunboats than from the guns of either fort or of the ironclads. Union casualties were relatively light: thirty-seven killed and one hundred forty-seven

<sup>&</sup>lt;sup>14</sup> "Opposing Forces in the Operations at New Orleans, LA," Battles and Leaders, 2: 73-74.

<sup>&</sup>lt;sup>15</sup> ORN, Ser. I, 18: 31-32.

<sup>&</sup>lt;sup>16</sup> Ibid., 135-37.

wounded.17

Farragut's victory on the Mississippi was the first successful offensive operation in the Gulf. It was also a logistical triumph, showing what could be accomplished when adequate (if perhaps not abundant) ships, men, and supplies were provided to an aggressive commander. This logistical support, however, would not remain constant. When New Orleans was taken the ground troops assigned to take the city remained as a garrison, ships and supplies were reassigned to operations above the city against Vicksburg or elsewhere, and the old problem of keeping the Gulf ports closed remained much as before.

In the months after the capture of New Orleans many of the larger vessels in the Squadron shifted to operations on the Mississippi. Throughout the rest of 1862 an unsuccessful effort was made to breach the barrier at Vicksburg and link up with the Mississippi River Flotilla coming down from the north. The WGBS did, however, have the city of New Orleans and all its industrial and ship repair facilities in its possession. This would alleviate many of the logistical problems of the WGBS for the rest of the war, and of course made the blockade of the Mississippi unnecessary. At least as important to the Squadron was the evacuation of Pensacola on May 10, 1862. The retreating Confederate forces set fire to the navy yard, causing widespread damage. Soon after arriving at Pensacola with his mortar flotilla, however, Commander Porter evaluated the condition of the yard and found it in usable condition. "The climate and position of this

<sup>&</sup>lt;sup>17</sup> Ibid., 180.

place is so far superior to Ship Island," Porter wrote enthusiastically to Welles, "that I would respectfully recommend a removal of all naval property to this place." 18

With New Orleans in Northern hands, the Confederacy's remaining large port in the Gulf was Mobile. The presence of repair and supply facilities at Pensacola and Ship Island (both within less than a day's steam from the entrance to Mobile Bay), as well as at New Orleans, meant that ships off Mobile could leave their station and return quickly. Blockade runners of large size (steamships with significant carrying capacity) made few forays into or out of Mobile in 1862, and the Gulf in general was avoided in favor of the Atlantic ports. Duty for blockaders, however, did not become any easier. The spectacular entrance of the unarmed *Oreto* into Mobile on September 4, literally under the guns of the U.S.S. *Oneida*, highlighted the fact that the blockade was far from an iron curtain. The episode was so embarrassing to the government that George Preble, commander of the *Oneida* and a member of a distinguished naval family, was dismissed from the service. Description of the Service.

Galveston was the only other port that received significant attention from the Western Gulf Blockading Squadron. In the first year and a half of the war the port was little used by blockade runners, Galveston being too isolated from the rest of the Confederacy to be a useful entrepôt. Once supplies were taken by train to Houston, it was

<sup>&</sup>lt;sup>18</sup> Ibid., 481-82.

<sup>&</sup>lt;sup>19</sup> Stephen R. Wise, Lifeline of the Confederacy: Blockade Running During the Civil War (Columbia: University of South Carolina Press, 1988), 265-68.

<sup>&</sup>lt;sup>20</sup> ORN, Ser. I, 19:236-37.

a difficult journey just to get them to other points in the trans-Mississippi theater, much less to points further east. "Galveston will be looked to at my earliest convenience," Farragut wrote in March 1862, soon after taking command in the Gulf, "but I have not at this moment the vessels to spare from more important duties enjoined upon me by the Government." Yet even after New Orleans was taken a month later, no ships could be spared for operations in Texas.

Throughout the spring and summer Galveston and the rest of the Texas coast were largely ignored by the Squadron. The largest vessel there, the Santee, was a forty-four-gun sail frigate soon to be relegated to duty as a training ship at the Naval Academy. Throughout the summer there were a number of engagements, most of which involved the shelling of shore positions or raiding expeditions to capture Confederate batteries. All of this changed in September when Admiral Farragut ordered a portion of the mortar flotilla to Texas with the aim of scouring the extensive protected waterways along the coast and interdicting the apparently significant traffic coming up from the Mexican port of Matamoros. <sup>23</sup>

When this fleet of five vessels arrived off Galveston on October 5, the small garrison determined that any defense was hopeless and abandoned the city without a fight. Menacing as it was, the fleet had no ground troops; the occupation of the largest port in Texas was accomplished with little more than the raising and lowering of the flag

<sup>&</sup>lt;sup>21</sup> Ibid., 18: 60.

<sup>&</sup>lt;sup>22</sup> ORA, Ser. I, 9: 603, 607, 609-10, 618-23. ORN, Ser. I, 18: 448-49; 19: 160-61.

<sup>&</sup>lt;sup>23</sup> ORN, Ser. I, 19: 213-14.

over the customs house, while the landing party returned to the safety of the fleet.<sup>24</sup> After the capture of Galveston nearly every important point in the Gulf of Mexico was either under the direct occupation or the effective blockade of the Union. As the year ended it appeared as if the Gulf was quickly turning into a Northern lake.

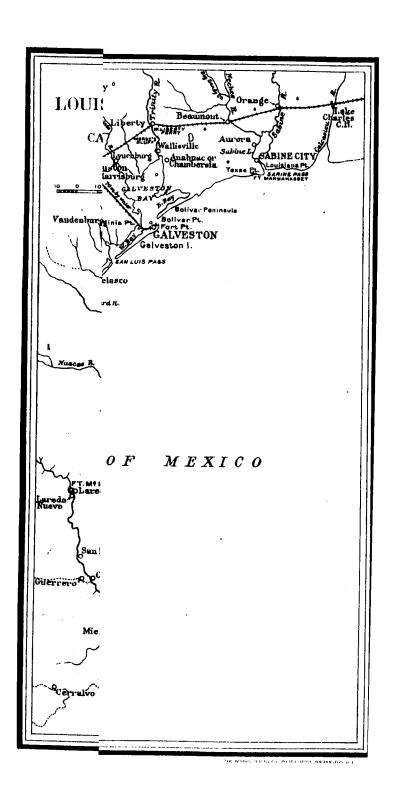
The new year opened with a series of spectacular disasters for the West Gulf Squadron, and 1863 would prove to be a frustrating time for Admiral Farragut and his temporary replacement, Henry H. Bell. A small Confederate force composed of General Henry Sibley's brigade, the remnant of an abortive attack on New Mexico, and four steamers was assembled by General John Magruder for an attack on Galveston. It was hoped that retaking the port would be the first step in regaining the entire coast of Texas and breaking the blockade. Striking on the morning of January 1, 1863, Magruder entered the city and forced the small garrison consisting of the 42nd Massachusetts to surrender. In the harbor the Confederate flotilla managed to capture the *Harriet Lane*, and the U.S.S. Westfield was blown up to prevent her capture; the remaining Union vessels sailed for New Orleans.

Farragut was furious at the loss of the *Lane*, thinking she would make a "formidable cruiser" in the hands of the enemy, and he dispatched a force to retake Galveston. This force, while managing to reestablish the blockade at that port, failed to

<sup>&</sup>lt;sup>24</sup> Ibid., 260.

Donald S. Frazier, "Sibley's Texans and the Battle of Galveston," Southwestern Historical Quarterly 99 (1995): 176-78.

<sup>&</sup>lt;sup>26</sup> ORN, Ser. I, 19: 481.



displace Magruder's well-entrenched force. One of the ships sent to take Galveston, the U.S.S. Hatteras, had the misfortune to encounter the infamous Alabama and was dispatched in a matter of minutes by the Confederate cruiser. Ten days later, on January 21, the U.S.S. Morning Light and Velocity were captured while blockading Sabine Pass, some sixty miles northeast of Galveston. Perhaps most embarrassing about this episode was the fact that the Confederate vessels accomplished their feat by drawing close enough to the two Union schooners to sweep their decks with rifle fire.<sup>27</sup>

Even as these events in the western Gulf taxed the resources of the Squadron,
Farragut himself was beset by problems with his flotilla on the Mississippi. The Admiral
assigned command of the blockade off Mobile to Commodore Henry Bell in October, and
concentrated his efforts on the developing Vicksburg campaign. The repulse of
Farragut's river flotilla at Port Hudson on March 14, 1863, signaled the fact that the drive
to open the Mississippi was nowhere near completion. The Admiral would not return to
the Gulf until the end of July.

In the meantime, blockade runners discovered that the Gulf was worth the risk for larger vessels. Mobile became an attractive port for more and more ships coming out of Havana. This increase in runs was noticeable only in steamers; the trade plied by small sailing vessels remained fairly constant throughout the war. Much more than on the Atlantic coast, the typical blockade runner in the Gulf was the two-masted schooner, of

<sup>&</sup>lt;sup>27</sup> Ibid., 571.

<sup>&</sup>lt;sup>28</sup> Ibid., 253.

shallow draft and highly adaptable to the harbors and inlets of the southern coast.<sup>29</sup>

Mobile was an ideal destination for these schooners because they could bypass the main ship channel and sail behind Dauphin Island and into the bay, a path denied the deeperdrafted blockaders that pursued them. Schooners and other small sailing vessels such as sloops and brigs also constituted the vast majority of blockade runners captured in the Gulf.

Throughout 1863 and into 1864 the blockade of Mobile settled into a steady routine for the ships on station. For most the routine was no more exciting, and no more threatening to their lives, than the daily rhythms of naval service in peacetime. With fires in the boilers banked just in case a strange sail was sighted, blockaders would spend most days at anchor, cleaning the ship, effecting repairs, and passing the time as best they could. Journals and logbooks kept on vessels at Mobile at the time, as with vessels on every other blockade station, are rife with the proceedings of courts-martial, most for petty offenses. Officers lamented the fact that little could be done to keep crews from getting into mischief, but they were careful not to take discipline too far. On one ship, returning to New Orleans after many months off Mobile, the captain punished a drunken sailor by simply forcing him to do his required work:

Repeated admonitions in relation to his habits of intoxication and absence without leave has [sic] failed to influence him, and suspension from duty would doubtless be agreeable, consequently no restriction has been placed upon him other than prohibition to

Linda and John Pelzer, "Running the Gulf Blockade: A Different Sort of Trade, A Different Sort of Sport," Civil War Times Illustrated 21 (1982): 12.

leave the ship.<sup>30</sup>

In an age of primitive communications, a good deal of time was spent tracking down what later turned out to be friendly vessels or neutral warships. Determining who was friendly, enemy, or neutral was a problem that plagued the Union Navy from the beginning of the war. Ships under British registry continued to be seized, and their seizure protested, up to the very end.<sup>31</sup> None of this made the work of blockaders any easier.

When distant smoke or a strange sail was sighted, the flagship would be signaled for permission to chase. If it was received, the pursuer would slip its cable, get steam up and raise sail. There was always a danger at this point that the blockade runner or strange vessel would simply outrun its pursuer, especially if full steam could not be raised quickly, or poorly rigged auxiliary sail could not provide enough headway. Sometimes the chase would go on through the night or in poor weather, and often it would be many hours before weapons were in range to fire at fleeing vessels. The swiftest of blockade runners could make fifteen knots, while most Union gunboats and sloops hardly made more than ten knots except for short periods of time--usually with the help of rosin, animal fats, or anything else that could burn thrown into the firebox to keep the boilers hot. Invariably cargo would be tossed overboard to lighten the runner if the pursuer managed to draw close, leaving a wake of boxes or cotton bales miles in length. In the end a shot across the bow would generally bring the runner to a stop. Even though the ship would become a

<sup>&</sup>lt;sup>30</sup> John B. Marchand, Letterbook of Naval Letters, U.S. Naval War College Manuscript Collection, December 28, 1863. Discipline in the navy had remained a problem since the abolition of flogging in 1850; see James E. Valle, *Rocks and Shoals* (Annapolis: Naval Institute Press, 1980).

<sup>&</sup>lt;sup>31</sup> ORN, Ser. I, 20: 119, 21: 90.

prize of war upon the discovery of contraband, some captains were careful as to which port they took their captures. Authorities in Key West were apparently notorious for allowing vessels to be repurchased and sent back to blockade running.<sup>32</sup>

With Admiral Farragut on an extended leave from August to December 1863, major offensive operations in the Gulf nearly ceased. There was an unsuccessful attack at Sabine Pass in September and Brownsville, Texas was occupied on November 3, but there were simply too few ground troops available for an attack on Mobile. As early as August 1862 Farragut had complained that he had too few ships to attack the forts guarding Mobile; this was a problem that would not be solved until Vicksburg was taken and vessels could be freed from duty in the Mississippi.<sup>33</sup>

Even more pressing and intractable was the problem of finding enough officers to properly man the fleet. "We are now generally reduced to one lieutenant on board of each ship," Farragut reported to Secretary Welles in 1862, "and two or three of the gunboats have none." The following year the problem was as intractable as ever: the admiral tried to persuade the Navy Department to increase the number of officers under his command by telling of his experiences in the War of 1812. He related stories of British officers who had told him that American warships had triumphed so often in no

John B. Marchand, Journal of Blockade of Mobile, 3:108-109. U.S. Naval War College Manuscript Collection.

<sup>&</sup>lt;sup>33</sup> ORN, Ser. I, 19: 110.

<sup>&</sup>lt;sup>34</sup> Ibid., 146.

small measure because of the large number of officers they had on board.<sup>35</sup>

The squadron never completely solved its manpower problems, but by January 1864, when Farragut returned to the Gulf and took command back from Commodore Bell, resources were being pooled to gather a large fleet for the impending assault on Mobile. A major impediment to immediate action was the ever-present problem of securing a suitable ground force. In early 1864 the only force with troops available was General Nathaniel Banks's command in Louisiana, but his lengthy Red River campaign kept him occupied throughout the spring. Only in July did troops arrive in the Gulf for Farragut's use, when General Edward Canby dispatched Robert Granger's division from Mississippi. 36

The other impediment was Farragut's insistence that ironclads be used in the assault. The presence of Confederate vessels in the bay, especially the ironclad C.S.S. *Tennessee*, had the admiral worried from the moment he arrived back in the Gulf. The only remedy was to have a fleet of his own ironclads to support the wooden vessels of the Squadron. "The experience I had of the fight between the *Arkansas* [in July 1862] and Admiral [Charles] Davis's vessels on the Mississippi," Farragut confided to Welles, "showed plainly how unequal the contest is between ironclads and wooden vessels in loss of life, unless you succeed in destroying the ironclad." Unfortunately, ironclads were in

<sup>&</sup>lt;sup>35</sup> Ibid., 586.

<sup>&</sup>lt;sup>36</sup> John C. Kinney, "Farragut at Mobile Bay," Battles and Leaders of the Civil War, 3:380-81.

<sup>&</sup>lt;sup>37</sup> ORN, Ser. I, 21: 39, 267. On July 15, 1862 the C.S.S. Arkansas disabled two Union river monitors and then sped past Farragut's entire fleet to safety under the guns of Vicksburg. The Arkansas was abandoned and blown up less than a month later.

short supply, and Farragut had to wait for newly completed ships. Of the four that were eventually assigned to the Western Gulf Blockading Squadron, two were commissioned in April, the Chickasaw was completed in May, and the Manhattan in June.<sup>38</sup>

When the WGBS assembled outside of Mobile Bay at the end of July 1864, the main objective was not to take the city of Mobile which was many miles up the bay, but instead the series of fortresses that guarded the bay's entrance. Forts Powell and Gaines guarded the western approaches on Dauphin Island, while Fort Morgan guarded the main ship channel. Morgan was by far the most fearsome of the three fortifications, and it was here that the Confederates placed their small flotilla and here that the main attack would come.

On August 5, fourteen steam sloops were lashed together in pairs while each of the four foremost groupings was given a monitor on the starboard side, the side that would see the most action.<sup>39</sup> With the *Brooklyn* in the lead and the flagship *Hartford* just behind, the fleet passed through the channel at dawn and received the spectacular fire of Fort Morgan. These two ships were the hardest hit of any in the fleet, suffering more than a hundred casualties between them. The *Brooklyn* was hit more than seventy times and sustained significant damage to her engine room; the other gunboats suffered considerable damage but little loss in life.<sup>40</sup> Even though the guns of Fort Morgan fired almost five hundred times, the worst loss to the Squadron was the monitor *Tecumseh*, which exploded

<sup>&</sup>lt;sup>38</sup> Paul H. Silverstone, Warships of the Civil War Navies (Annapolis: Naval Institute Press, 1989), 10-11, 149.

<sup>&</sup>lt;sup>39</sup> E.H. Hults, "Aboard the Galena at Mobile, Part II," Civil War Times Illustrated 10 (1971): 31.

<sup>&</sup>lt;sup>40</sup> ORN, Ser. I, 21: 838-39.

when it hit a torpedo (underwater mine). Fort Morgan itself was hardly injured, but the battle line had safely entered the bay.<sup>41</sup>

The final engagement occurred when the *Tennessee* came out of her berth and took on seven of the squadron's ships in the middle of the bay. Farragut's earlier fears proved groundless, as six of the ships were wooden-hulled and yet still managed to neutralize the powerful Confederate ironclad. One ship, the *Lackawanna*, furiously rammed the *Tennessee* and the two vessels began firing at one another at point blank range. The ships were so close, the *Lackawanna*'s captain John Marchand wrote, that his marines were able to keep the enemy's gunners at bay with rifle fire:

All the time I was standing on the bridge and whilst alongside looking into the ports of the Tennessee one of her crew looking out but standing at a distance from the port hollered out to me, "you d\_\_\_d yankee son of b\_h" which being heard by the crew of the Lackawanna redoubled their discharge of small arms into the rebel ports and as some of them had not small arms in their possession one of them threw a spitbox and another a hand holystone at the fellow.

Soon the two vessels parted, but as the *Tennessee* drifted off she saw several other gunboats bearing down on her and struck her colors. In just three hours the battle was over and the Union fleet safely at anchor in the middle of the bay.<sup>42</sup>

Within the day Fort Powell was abandoned and Fort Gaines surrendered, followed seventeen days later by Fort Morgan. While Mobile itself would not be taken until April 12, 1865, blockade running came to end with the closing of the bay. Significant offensive operations involving the Western Gulf Blockading Squadron also came to an end.

<sup>&</sup>lt;sup>41</sup> R.L. Page, "The Defense of Fort Morgan," Battles and Leaders, 4: 408-09.

<sup>&</sup>lt;sup>42</sup> Marchand, Journal of Blockade of Mobile, 4:151-52.

Galveston would remain the sole open Southern port west of Florida in the final months of the war, and yet even with the end of the blockade of Mobile major Union naval units were not transferred to the Texas coast. A sure sign of the difficulties in delivering proper provisions and maintenance even at the end of the war, was the complaint of officers off Galveston that their vessels were poorly taken care of. "It is forty-five days since we had a supply steamer," one captain wrote in the summer of 1864, "the 'Admiral' being the last and she brought but two days supply."

Galveston would see a dramatic rise in the number of blockade runners using the port. This was especially true after Fort Fisher fell in January 1865, closing off Wilmington, the last major Atlantic port. Most of these vessels running into Galveston managed to pass in and out with impunity. The cargoes they carried, however, did little except provide an abundance of arms to the dwindling armies of the trans-Mississippi; they certainly did nothing to prevent the fall of the Confederacy. <sup>45</sup>

While on blockade the Western Gulf Blockading Squadron was reasonably successful; when challenged in battle the Squadron aquitted itself well when superior numbers were brought to bear. The Squadron's greatest successes came when Southern ports could be taken with ground troops and neutralized. As experiences in Texas showed these successes were often tenuous, but at no point did defeat come as a result of a

Glover, "West Gulf Blockade," 72-73. Most of the Squadron was kept near Mobile or at New Orleans in the last months of the war.

<sup>&</sup>lt;sup>44</sup> Richard W. Meade, Meade to Woolsey, September 2, 1864, Letters, New York Historical Society.

<sup>45</sup> Wise, Lifeline of the Confederacy, 219.

lack of proper shot, shell, powder, or provisions. Complaints about a lack of supplies, poor food, and low morale abounded on the Texas station especially; these problems did contribute to the many setbacks at Galveston and elsewhere. But the decisive reason was this part of the Squadron rarely had enough ships to satisfy its commanders or its needs. Even though well supplied and at times consisting of overwhelming numbers, the West Gulf Blockading Squadron was never invincible; had the Confederacy made a more spirited effort to counter the Union on land and on sea in the Gulf, the Squadron might have paid a much higher price for its victories.

## CHAPTER III: TECHNOLOGY AND LOGISTICS

The middle of the nineteenth century was a time of tremendous technological changes that were dramatically demonstrated during the Civil War: the railroad, rifled muskets, repeating firearms, the telegraph, ironclads, and steamships. None of these technologies was developed during or in response to the war, but the exigencies of battle compelled governments both North and South to exploit these existing inventions in new and bold ways. For both navies the most important developments were steam machinery, armored ships, and improved shipborne artillery and ammunition. Much has been written on how new technologies affected naval combat; little discussion has taken place on how these technologies created new logistical challenges for ships on the blockade, exacerbating the constant problems of long distances and limited resources.

The navy had been vigorously building steam-powered vessels for about a decade prior to 1861, and when hostilities commenced there were twenty-four in commission. 

The fact that all had drafts exceeding sixteen feet, and most had with drafts over twenty, meant that these vessels were inadequate for blockading the shallow southern coast. A less obvious but equally important problem was the diversity of machinery throughout the fleet. About a fourth of these ships were side-wheelers and the rest screw-propelled, while there were eight different kinds of engines, four kinds of valve gear, two kinds of boilers, and two kinds of condensers. Under the leadership of Benjamin Isherwood, chief of the

<sup>&</sup>lt;sup>1</sup> Canney, Old Steam Navy, 1: 91. The Michigan, the navy's only iron-hulled ship at the time, was on the Great Lakes and the five large Merrimac-class sloops were out of commission.

Bureau of Steam Engineering, the vessels built by the navy during the war achieved a certain amount of uniformity in design and equipment. Even in 1865, however, there were still significant disagreements over which engines worked best.<sup>2</sup> When it is considered that the navy acquired two-thirds of its vessels (over four hundred ships) from the merchant service, with no consistency in class, size, or machinery, the enormity of the logistical problem confronting the navy during the war becomes clear.

Though all engines of the time ran on the same fuel (coal), they were not all alike in their components or operation. This made on-the-job training an essential part of the duties of new engineers. Moreover, unlike today there were no schools in the navy devoted to training engineers before they were posted to their vessels (such training began at the Naval Academy only in 1864); engineers were expected to have gained their experience on merchant ships, or perhaps through working on the railroad.<sup>3</sup> The result was a corps of mechanics who were unevenly instructed and mistrusted by suspicious line officers.

In July 1863, Admiral Farragut complained that six new vessels had arrived at New Orleans from the north, but not one of them would be ready for sea in forty-eight hours:

It is not surprising that the gunboats which have been long cruising should be in this condition, but there is no difference between them and the new vessels. This state of affairs is owing to the rapid increase in the engineer corps. The majority of them know very little of their duties, and their engines are cut up and ruined by neglect and want of proper

<sup>&</sup>lt;sup>2</sup> "Report on Marine Engines," 4-10.

<sup>&</sup>lt;sup>3</sup> Edward W. Sloan, Benjamin Franklin Isherwood, Naval Engineer (Annapolis: Naval Institute Press, 1965), 7-9.

care.4

This was not simply the grumbling of an old sea dog secretly longing for a return to sail power, but was indicative of a real problem within the fleet. Though poor training was partly responsible, the Navy Department aggravated the difficulties for its engineers by encouraging experimentation and, especially late in the war, competition among designers to create faster, more powerful ships.

Throughout the war the basic marine steam plant consisted of one or more cylinders where steam was directed into each cylinder independently and then exhausted. The practice of compounding, by which steam is sent first into a high-pressure cylinder and then through a low-pressure one before being directed to exhaust, did not come into general use in merchant and naval vessels until the late 1860s. The latter system is far more efficient and consumes coal at a significantly lower rate than simple single-cylinder expansion engines. Though the technology was available during the war to produce compound engines, ship-builders shied away from them because of their complexity and the danger of boiler explosions from the extremely high pressure necessary to drive the pistons.

Most of the ships built and designed by the navy that served in the West Gulf Blockading Squadron had either back-acting or direct-acting engines; these were

<sup>&</sup>lt;sup>4</sup> ORN, Ser. I, 20: 429.

<sup>&</sup>lt;sup>5</sup> Steam, Steel & Shellfire, Robert Gardiner, ed.(Annapolis: Naval Institute Press, 1992), 174.

<sup>&</sup>lt;sup>6</sup> Denis Griffiths, Steam at Sea: Two Centuries of Steam-Powered Ships (London: Conway Maritime Press, 1997), 43.

distinguished by having their piston rods connected directly to the screw shaft (or the paddle wheel shaft in the case of side-wheelers). Isherwood, who preferred back-acting engines for screw vessels and direct-acting for side-wheelers, lamented the fact that different types of marine engines were so numerous. In terms of performance, however, there were few differences between engines of different construction or between engines made in the U.S. or in Europe. "The results are so equal," Isherwood wrote, "that the average common sense of the engineering community has not been able to decide which is the best arrangement." Uniformity in performance, however, did not translate into uniformity in maintenance.

On the whole the powerplants designed by Isherwood were durable and dependable, their distinctive characteristics being oversized boilers and higher pressure than other engines, making them relatively heavy. They were placed in most of the *Unadilla* class gunboats (the "90-day gunboats"), fifteen of which served in the WGBS; in the screw-sloops *Lackawanna*, *Ossipee*, and *Monongehela*; and in the double-enders *Miami*, *Octorara*, *Genesee*, *Conemaugh*, and *Metacomet*. This represented only a fraction of the vessels that comprised the WGBS, and there were great discrepancies in design, machinery, and performance among the rest of the fleet. The *Pensacola* and the *Richmond* had perhaps the most notorious reputations for their poor engines and slow speed. The

<sup>&</sup>lt;sup>7</sup> "Letter in relation to war steamers Ossipee and Pensacola," 2.

<sup>&</sup>lt;sup>8</sup> "Report on Marine Engines," 17-18.

<sup>&</sup>lt;sup>9</sup> Silverstone, Warships of the Civil War Navies, 21-67. The Pensacola was re-engined in 1864-66 with Isherwood engines.

Seminole, which joined the squadron in the summer of 1863, was beset with problems from the time she sailed for the Gulf. "After leaving New York," Commander Henry Rolando complained, "I discovered that her pumps were not in order, engine not in line, and everything so heating that it was necessary to keep a constant flow of water on the journals [a portion of the piston shaft] to keep them cool."

The maintenance record of acquired vessels is less clear; most of these ships, converted from the merchant service, do not appear as often as their regular navy counterparts in the Official Records. This is partly because they had neither large batteries nor large crews, and hence their duties were often ancillary to those of the larger sloops and frigates. Even so many acquired ships, such as the De Soto and Hatteras, had very successful careers on the blockade. There is no evidence that acquired vessels broke down or needed shoreside maintenance at a higher rate than navy vessels. But the plethora of steam machinery throughout the West Gulf Blockading Squadron, including old "walking beam" engines that were exposed to the elements and enemy fire, undoubtedly caused endless headaches for the unfortunates who had to maintain and repair them.

Despite the ease of locomotion under steam power, sail was still the primary means of propulsion for Union blockaders. Nearly all the vessels in the WGBS had a rig of some

<sup>&</sup>lt;sup>10</sup> ORN, Ser. I, 20: 703.

<sup>&</sup>lt;sup>11</sup> Ibid., 18: 486-88; Ser. I, 20: 373. The *De Soto* had the distinction of capturing more vessels (twenty-one) than any other in the WGBS. The *Hatteras*, successful against blockade-runners, received a watery grave from the cruiser *Alabama* on January 11, 1863.

kind, exceptions being several ironclads and a few converted ferryboats like the *John P*. *Jackson* and *Westfield*.<sup>12</sup> Much time was spent at anchor with fires banked and sails furled to conserve fuel for the chase. When ships of the WGBS did go after prey under steam, they consumed coal at a tremendous pace. A typical rate of consumption for engines of the 1860s was about three pounds of coal per hour per horsepower (though some boilers needed as much as seven or more pounds of coal to develop sufficient motive power).<sup>13</sup>

This could mean two or three tons a day consumed while idling at anchor off Galveston, or perhaps twenty-six tons a day at full steam chasing a blockade runner off Mobile.<sup>14</sup>

It is often overlooked that a considerable number of the West Gulf Blockading Squadron's ships were barks, schooners, and other sailing vessels. While most were guard, stores, or coal ships, they nonetheless made an important contribution to the blockade. Many claimed prizes, and a few even managed to capture steamers, though mostly under unusual circumstances. The frigate *Portsmouth* captured the English steamer *Labuan* while the latter was at anchor near the Rio Grande, and the bark *Arthur* destroyed a steamer that had run aground and abandoned. Perhaps the most daring exploit was the seizure of the *Bloomer* on the Choctawhatchee River in Alabama by the crew of the schooner *Charlotte*. The poor *Charlotte*, of course, was left behind while the men went

<sup>&</sup>lt;sup>12</sup> Silverstone, Warships of the Civil War Navies, 101-102.

Lance C. Buhl, "Mariners and Machines: Resistance to Technological Change in the American Navy, 1865-1869," Journal of American History 61 (December 1974), 708, 714.

<sup>&</sup>lt;sup>14</sup> Meade to Commander M. Woolsey, August 1, 1864, Meade Letters; Marchand to Captain T. Jenkins, February 9, 1864, Marchand Letterbook.

<sup>&</sup>lt;sup>15</sup> ORN, Ser. I, 17: 99-115; Ser. I, 19: 302, 424-29.

overland.

Just as steam and sail were used side by side in the Civil War, radical changes in ordnance likewise failed to whisk away old but still useful technology. The primary weapons of the Union navy were muzzle-loaders conceptually and physically little different from their eighteenth-century counterparts. Just prior to the outbreak of the war, however, the navy finally adopted rifled cannon as part of the standard batteries of the fleet. The first rifles were designed in 1860 by Robert Parrott, who also made guns for the army; the Parrott Gun's most distinctive feature was the band of iron that was shrunk around the breech to give the gun greater strength during discharge. It was this peculiarity that revealed the greatest problem associated with rifles: with far less windage (the space between the projectile and the bore) than their smoothbore cousins, and thus greater pressure generated within the tube, rifled guns had a tendency to burst.

Naval rifles, as opposed to those in the army, were not distinctly more accurate than smoothbores. When fired from rifles, shells were prone to ricocheting in strange directions due to the conical shape of the projectile and the flatter tragectory caused by rifling. "I have seen a rifled shot turn off at right angles after touching the water," Commodore John Rodgers reported to a congressional committee in 1864. "The round shot rolls over and goes on, and is not deflected by the same cause." This limited strength and accuracy prevented the total adoption of the Parrott even in the face of its

<sup>&</sup>lt;sup>16</sup> Spencer Tucker, Arming the Fleet: U.S. Navy Ordnance in the Muzzle-Loading Era (Annapolis: Naval Institute Press, 1989), 228-29.

<sup>&</sup>lt;sup>17</sup> "Report on Heavy Ordnance," 38th Congress, 2nd sess., S. repcom. 121, p. 74. Rifles of this era also suffered, as did all weapons aimed without sighting devices, from the movement of the gun platform on the sea.

most positive attribute: greater range. The 4.2-inch Parrott, a common gun on many of the smaller ships of the WGBS, had a range of 4,800 yards, or almost 2,000 more than the maximum effective range of a smoothbore.<sup>18</sup>

By far the most common weapons in the navy's arsenal were smoothbore cannons; the most numerous and modern of them were designed by Rear Admiral John Dahlgren. Ranging in size from IX-inch to XV-inch (a XX-inch was developed but never used at sea), Dahlgren Guns could fire either solid shot or shell with devastating effect at short range. The chief difference between this new gun and earlier smoothbores was the distinctive molding process that placed the greatest amount of iron at the breach, giving the gun its soda-bottle appearance. This trend toward larger guns, represented by the Dahlgren as well as the Parrott and numerous English-built guns used by the Confederacy, meant that fewer men could operate the armament of a ship without sacrificing the "throw-weight" of its battery.

Despite the advancement of rifled ordnance, the navy continued to used smoothbores throughout the war. Rifles were mainly used as "chase-guns," placed in pivot mounts on the bow or stern of a vessel; they made up about a fifth of all heavy ordnance in the fleet by the middle of the war. <sup>20</sup> The main argument in favor of smoothbores was their smashing ability at short range. Projectiles fired from them had a

<sup>&</sup>lt;sup>18</sup> Tucker, Arming the Fleet, 230.

<sup>19</sup> Ibid., 220-23. Roman numerals are typically used to identify the caliber of Dahlgren Guns.

<sup>&</sup>lt;sup>20</sup> "Heavy Ordnance," 22.

greater initial velocity than those fired from rifles. This made all the difference in fighting against ironclads, which were almost always engaged at a range within a few hundred yards or less. Many officers were convinced that smoothbores were the only weapons that could defeat armored vessels, but felt rifles had their "sphere of influence" as well. Rear Admiral Samuel Du Pont, recalling his varied experience in the South Atlantic Squadron, argued that "the ponderous effect of the 15-inch gun was exemplified in a wonderful manner in the action with the [ironclad C.S.S.] Atlanta, where the distance was very short; at long range the Parrott rifle would have greatly the advantage, as exemplified on [Fort] Pulaski, and later on [Fort] Sumter." Even the solid shot gained renewed life in the face of the exploding shell; only solid or non-explosive hollow shot could put a dent in the side of iron plating. "No one form or mode can be said to be superior to all others for *all* purposes," Du Pont concluded. "We should not confine ourselves to one kind of gun on shipboard."<sup>21</sup>

Just as no single ship was developed during the war that could fight in any depth of water or against any adversary, no single gun was capable of performing well in every situation. What in hindsight appears as technological confusion was in many ways the result of conscious and rational decisions to adapt new but still limited inventions to a changing world. The price paid for this adaptation, however, was what amounted to a logistical nightmare. There was no standardization of weapons within the categories of rifle and smoothbore; there were four main types of Dahlgren Guns and three of Parrott

<sup>&</sup>lt;sup>21</sup> Ibid., 92, 94.

Guns, each with its own ammunition. There were also numerous older 24- and 32pounder cannon that still equipped many vessels. On April 21, 1862, three days before
the battle at Forts St. Philip and Jackson, a requisition was sent that reveals the problems
of such diverse armament. Ammunition was requested for no less than ten different types
of guns, each requiring shell, shrapnel, grape, and solid shot plus attendant cartridges of
powder weighted for different distances.<sup>22</sup>

Much of this concern over armament was in response to the different targets

Union vessels faced, from fortresses to wooden ships. No adversary was more fearsome,
however, than the ironclad. Units of the West Gulf Blockading Squadron faced

Confederate armored ships on only four occasions: the Manassas at the Head of the Passes
in October 1861; the Manassas and Louisiana at Forts St. Philip and Jackson six months
later; the Arkansas in July and August 1862; and the Tennessee at the Battle of Mobile

Bay in August 1864. This experience was brief compared to that of the North and South

Atlantic Blockading Squadrons, and the lessons learned were somewhat different. Unlike
the Atlantic Squadrons and the Mississippi Flotilla, the WGBS was never provided any
ironclads of its own until late in the war. Farragut was forced to fight most of his battles
entirely with wooden vessels.

The Arkansas in particular made a distinct impression on the aggressive admiral.

After the initial engagement with the ironclad on July 15, 1862, Farragut kept his fleet near Vicksburg with the aim of eliminating the Arkansas despite the threat it posed to his

<sup>&</sup>lt;sup>22</sup> ORN, Ser. I, 18: 139.

ships. "Although we have great power to destroy her," Farragut wrote, "we have not great powers of endurance against an ironclad ram, should we be caught in a position unable to move at pleasure either for want of room, steam, or other cause." The *Arkansas* was eventually destroyed on August 6 by Captain William Porter in the river ironclad *Essex*--a point not lost on Farragut, who would later come to the conclusion that one needed armor to fight armor.

When the Confederates were completing four ironclads at Mobile in the spring of 1864 (the *Tennessee*, *Huntsville*, *Nashville*, and *Baltic*; only the *Tennessee* was ever made battle worthy), Farragut was deeply concerned that his impending attack would fail without armored ships of his own. Indeed, there was even the rumor that Admiral Franklin Buchanan, who had commanded the *Virginia* in its fight against the *Monitor*, would lead his ships out and attack the blockading fleet.<sup>24</sup> Though this never happened, Farragut was still convinced that ironclads were necessary to his intended attack on Mobile, and four were eventually sent to the Gulf. The *Tennessee* was captured in the battle of August 5; the three other vessels, though never completed, remained berthed up the bay until the end of the war. This compelled the admiral to request that his own ironclads remain in the Gulf for the duration of the war.<sup>25</sup>

The armored ship was a formidable new technology that demanded other new technologies in order to fight it. Advances in steam machinery, defensive measures, and

<sup>&</sup>lt;sup>23</sup> Ibid., 19: 13.

<sup>&</sup>lt;sup>24</sup> Ibid., 21: 267, 298.

<sup>&</sup>lt;sup>25</sup> Ibid., 769.

seaborne ordnance and ammunition were used to combat the seeming invulnerability of iron plating. All of this required unprecedented efforts by the Navy Department to supply its fleets with adequate material and weapons. Even so, more traditional "adversaries" such as enemy ground troops, wooden vessels, fortresses, and the vagaries of the sea could still be engaged with older technology. The array of weapons and vessels they used was not the result of confusion in the service or the government. Naval officers came to justify that diversity because of the diverse combat situations they encountered. Old survived side by side with the new as the navy underwent change not only in the way it fought, but in the way it was supplied.

## CHAPTER IV: SUPPLYING THE WESTERN GULF

Napoleon famously remarked that an army marches on its stomach; it is no less true that a navy sails in much the same way. Naval leaders of the Civil War, however, were confronted with the novel problem of discovering ways of feeding two ravenous appetites at the same time: that of their men as well as that of the iron boilers that powered their ships. Surprisingly, though the size of the navy and its needs grew enormously during the war, the Union was largely successful in satisfying these appetites; its vessels generally steamed into battle well prepared.

When the blockade of the South was declared in April 1861 the Navy was presented with a logistical challenge it had never faced, and scarcely contemplated, in sixty-some years of existence. Warships had long been stationed in African, South American, and European waters, nominally receiving supplies from America two to four times a year. The great distances and dangers involved, however, necessitated that squadrons overseas requisition supplies (especially coal) locally in the harbors of friendly countries, such as at Port Mahon on the Spanish island of Minorca or at Rio de Janeiro. The blockade of the Mexican Pacific and Gulf coasts in 1846-48 was a largely haphazard affair logistically, and did not last long enough for the navy to develop a coherent supply

<sup>&</sup>lt;sup>1</sup> Stanley J. Adamiak, "The Development of American Naval Logistics, 1794-1842" (Ph.D. Dissertation, University of Nebraska, 1974), 256-57.

William N. Still, Jr., American Sea Power in the Old World: The United States Navy in European and Near Eastern Waters, 1865-1917 (Westport: Greenwood Press, 1980), 4.

system.<sup>3</sup> None of this previous experience foreshadowed the logistical efforts necessary to supply even a small fleet several thousand miles by water from the nearest navy yard, which was the peculiar situation confronting the officers and men of the Gulf Squadron as they headed for the Gulf of Mexico throughout the spring of 1861.

When supply steamers appeared from behind Padre Island, anchored off the mouth of the Rio Grande, and began unloading provisions for the few vessels (often only one) watching over the hot and dusty outposts of Brownsville and Matanzas, the casual observer might not have noticed that he was witnessing a marvel of the age. The mundane act of getting barrels of beef and vegetables to hungry men at sea was the culmination of a long and tortuous system, bringing material from the factories, shops, mines and farms of the North to every Union ship and port along the Southern coast. What began very tentatively in 1861 was by the end of the war an efficient system for delivering the basic wants of not only the West Gulf Blockading Squadron, but it and three other squadrons simultaneously.

The supply line to the Gulf began with planning within the Navy Department and the appropriations process in Congress. From March 1861 to June 1865 the Navy Department spent more than \$314,000,000 to build and maintain its massive new fleet, an average of over \$72,500,000 spent each year of the war.<sup>4</sup> While this represented only

<sup>&</sup>lt;sup>3</sup> K. Jack Bauer, *The Mexican War*, 1846-48 (New York: Macmillan, 1974), 107-10. The navy of the 1840s was mainly sail-powered, and not as dependent on coal as it would be fifteen years later. Commodore Robert Stockton's isolated squadron in the Pacific was largely able to supply itself due to its speedy conquest of California in the summer of 1846.

<sup>&</sup>lt;sup>4</sup> "Report of the Secretary of the Navy," Message from the President of the United States to the Two Houses of Congress at the Commencement of the First Session of the Thirty-Ninth Congress (Washington: Government

9.3 percent of all government expenditures during this period, it was nonetheless an unprecedented level of activity for a navy that in the year before the war had spent only \$11,500,000 for all of its operations.<sup>5</sup>

Much of the navy's budget went toward the purchase of new vessels and the chartering or purchase of existing vessels. A high point was reached with the appropriations for the year 1863-64, when vessel purchases represented 40 percent of the navy's budget.<sup>6</sup> The amount allocated to the purchase of supplies and equipment was nonetheless considerable and grew steeply throughout the war; by the final year more than \$22,500,000 was allocated for supplies. This sum was exceeded, however, by what was deemed necessary for the construction and "wear and tear" of steam machinery--\$28,312,000, far outstripping any other single category.<sup>7</sup> The need for repairs and spare parts was indicative of a growing problem of maintenance that was plaguing each of the four squadrons. This problem that was never really solved until the navy simply shed itself of its ships at the end of the war, selling off many of its purchased vessels to private interests.

Actual expenditures were invariably less than appropriations throughout the war and this difference could often be quite large, sometimes as much as thirty million dollars

Printing Office, 1865), 90.

<sup>&</sup>lt;sup>5</sup> Aubrey H. Polser, Jr., "The Administration of the United States Navy, 1861-1865" (Ph. D. Dissertation, University of Nebraska, 1975), 268.

<sup>&</sup>lt;sup>6</sup> Congressional Globe, Appendix, 37th Congress, 3rd sess., 235-36. A further 8 percent of the budget went toward the "construction and repair of machinery," a cost that could fall either under new vessels or supplies.

<sup>&</sup>lt;sup>7</sup> Ibid., Appendix, 38th Congress, 1st sess., 163-65.

less than anticipated.<sup>8</sup> While Gideon Welles was notorious for cost-cutting and running a "tight ship," this can be accounted for more by an overestimation of expenses in the final years of the war than by any real cost-cutting by the Navy Department.<sup>9</sup>

At the beginning of the war the navy was administered much as it had been since the replacement of the old Board of Navy Commissioners with the Bureau system in 1842. Under this system, the Secretary presided over five bureaus: Navy-Yards and Docks; Construction, Equipment and Repairs; Provisions and Clothing; Ordnance and Hydrography; and Medicine and Surgery. In July 1862 Welles reorganized and expanded these bureaus into eight: Ordnance and Hydrography was split into the Bureau of Ordnance and the Bureau of Navigation; Construction was split into the Bureau of Equipment and Recruiting and the Bureau of Construction and Repair; and the new Bureau of Steam Navigation was created. The rest remained unchanged. 10

Once supplies were purchased for the navy, each of these bureaus used and dispensed them according to their needs. The responsibility for actually purchasing supplies, however, rested with the commandants of the various navy yards and the navy agents under them who handled any transactions. Throughout the war the navy officially maintained, with few changes, the prewar procurement system of publicly advertising for

<sup>&</sup>lt;sup>8</sup> "Report of the Secretary of Navy," Message from the President of the United States to the Two Houses of Congress at the Commencement of the Second Session of the Thirty-Eighth Congress (Washington: Government Printing Office, 1864), 100-01.

<sup>&</sup>lt;sup>9</sup> Polser, "Administration of the US Navy,"271-72. While Welles put strictures on his commanders to keep costs down, it is not clear how this worked out into real dollars saved.

<sup>&</sup>lt;sup>10</sup> Charles O. Paullin, Paullin's History of Naval Administration, 1775-1911 (Annapolis: Naval Institute Press, 1968), 260.

necessary materials and awarding contracts to the lowest bidder. This system, always susceptible to exploitation by deceitful merchants, was neither universally followed in practice nor completely discarded until after the war.

Two years before the war the Navy Department undertook an investigation of all the principal navy yards, and instituted a number of changes in how they were run. A major problem was the lack of power commandants of the yard had over master workmen, who could select the men under them without consulting the commandant. The policing of the yards was found to be deficient, and other problems were found that revolved largely around the lack of military order and the civilian character of the yards' workforce.

The office of storekeeper was especially faulted. This position, held by a civilian, oversaw the storage and disbursement of all the supplies at the yard, except for provisions and clothing (handled by the purser), and ordnance. The storekeeper was responsible for canvas, rope, tools, timber, coal, and the like; in peacetime his duties were rather light. The storekeeper at the Brooklyn Navy Yard in particular was criticized for his indifferent work habits. "He seldom visits the yard, and then only when it suits his convenience, and does not seem to recognize the military rules of the yard," a board of navy officers reported. "The storekeeper gives as a reason for his non-attendance, that the duties are so

<sup>&</sup>quot;Board of Navy Officers Preliminary Report on Investigation of Condition of Navy Yards," 36th Congress, 1st sess., H. exdoc. 34, p. 3. Because of their special authority to select their own workers, the master workmen were seen as susceptible to "outside influence," a reference perhaps to the fomenting of labor unrest among the civilian workers at the yards.

simple that they can be carried on by a clerk."<sup>12</sup> The board suggested that the office of storekeeper was largely redundant and its duties could be filled by the purser. In the final report, however, Secretary Isaac Toucey's new instructions for the administration of all the yards did not abolish storekeepers, nor were any new rules established for the purchasing of supplies.<sup>13</sup>

The new instructions acknowledged an important practice that was meant to be kept to a minimum, but which during the war became a vital part of the navy's procurement process: open market purchasing. The navy's official policy was to purchase supplies through contracts with private merchants, under the assumption that such purchases would reduce the cost to the government. During the war, however, this policy was strained by controversy. Contracts were advertised in major cities for a period of four weeks, describing the needs of the five major navy yards: Kittery (Portsmouth);

Charlestown (Boston); Brooklyn (New York); Philadelphia; and Washington. By listing the needs of all five in newspapers throughout the country, the navy presumably ensured that bidders far from inland cities could compete with merchants in the larger coastal cities. In practice, however, the system favored a handful of "middle men," especially in New York and Boston, who purchased supplies from manufacturers and then sold them in bulk to the navy. In November 1862 Horatio Bridge, the Chief of the Bureau of

<sup>&</sup>lt;sup>12</sup> Ibid., 22.

<sup>&</sup>lt;sup>13</sup> "Board of Navy Officers Investigating the Condition of Navy Yards," 36th Congress, 1st sess., H. exdoc. 71, pp. 23-27.

<sup>&</sup>lt;sup>14</sup> Proposals for Materials for the Navy, September 22, 1862, US Navy Subject File XS, box 733, Record Group 45, National Archives.

Provisions and Clothing, complained that "there are men whose principal business for many years has been that of government contractors, who manufacture nothing, and can only claim to be 'regular dealers' by reason of supplying the government and by occasional speculations with outside parties." While the activity of these dealers was not against the letter of the law, it was certainly perceived as a violation of its spirit.

Beyond the problems encountered with shady contractors and the occasionally sub-par goods they provided, the time consumed in the contract process often made open purchases necessary when supplies were needed immediately. For most of the war the various Bureaus and yards simply circumvented the contract system and bought on the market. Purchases for the year 1862-1863 were typical: in the Bureau of Yards and Docks material paid for under contract came to \$512,244, while purchases by navy agents in open market came to \$378,937, or about 43 percent of the total. In the Bureau of Equipment and Recruiting (responsible for the handling of most of the navy's coal), contract purchases amounted to \$1,582,045, and open purchases came to \$1,032,481, roughly 40 percent of the bureau's expenses. The Bureaus of Navigation and Medicine and Surgery operated almost entirely without contracts, due to the very specialized nature of the supplies they required, which included sextants, optical glass, surgical instruments, and medicine. The Bureau of Ordnance made few contract purchases as there were only

<sup>&</sup>lt;sup>15</sup> "Letter from the Secretary of the Navy in Relation to Supplies for the Navy," 38th Congress, 1st sess., H. exdoc. 40, p. 13.

<sup>&</sup>lt;sup>16</sup> Ibid., 2.

<sup>&</sup>lt;sup>17</sup> Ibid., 7.

a few manufacturers of naval cannon, and because most of the material it purchased was needed so quickly the delays caused by contracting were unacceptable.<sup>18</sup>

Aside from the need to circumvent improper or poorly carried-out contracts, the navy found it necessary to "stretch" regulations in order to meet the quickly expanding needs of the fleet. Contracts did allow supplies to be delivered in bulk by being advertised in "classes" (advertisements would simply list, for example, "class no. 7: yellow pine beams"; it would be up to the bidder to contact the commandant of the yard to discover the quantity and size of the beams needed). Many classes had so many subcategories, sizes, or varieties that market purchases simply weren't convenient. Nonetheless, the high tempo of operations, and the unpredictability of supply requirements, meant that the navy had to buy much of what it needed as the need arose.

The fact that both systems had certain merits in part explains why many in the Navy Department defended their purchasing practices when allegations appeared in 1863 and 1864 that the contract system was unfair and corrupt. The most vocal allegations came, ironically, from a contractor, Franklin Smith, the head of a large trading house in Boston. His correspondence with Congress, detailing possible collusion between bidders in New York and Philadelphia to keep prices high, persuaded the Senate Committee on Naval Supplies to open an investigation. Smith asserted that the three largest contractors

<sup>&</sup>lt;sup>18</sup> Ibid., 31.

<sup>&</sup>lt;sup>19</sup> Proposals for Timber and Materials for the Navy, September 22, 1862, US Navy Subject File XS, box 733, Record Group 45, National Archives.

for the navy, Joseph Savage, H.J. Collins, and C.W. Scofield, constituted "the ring." These men and others, Smith said, conspired to fix prices and shut out competitors. One of these competitors of course was Mr. Smith of Smith Brothers and Company.

It was true that certain irregularities were occasionally found in contracts, such as the adding of a "one" to the left of a price for a single item, and then not adding the additional sum into the final tabulation; ten thousand items at 40 cents, for instance, suddenly became a dollar more each. Because contractors were forced to bid on all items in a class (even though at any given moment the navy might not need some of the items within that class), some bid ridiculously low on certain items they knew the navy would want little of, and bid high on items in great demand; the resulting total bid would fall somewhere in between and appear lower than it actually was. This was a major reason for Smith's other principal allegation, that there were employees in the navy yards who would have knowledge of the needs of each bureau in collusion with "the ring." 21

While all of this was compelling to some outsiders, those in the navy were more skeptical. In the end the navy was proven correct: even as Franklin Smith was bringing his weight to bear in Congress, Secretary Welles had launched his own investigation into illicit contract activities by Smith Brothers and Co. Smith and his associates were eventually found guilty of illegal activities of their own not unlike those so recently described in the senate. Smith had used his contact in the Boston Navy Yard, navy agent

<sup>&</sup>lt;sup>20</sup> "Report of Select Committee on Naval Supplies." 38th Congress, 1st sess., S. repcom. 99, p. 15.

<sup>&</sup>lt;sup>21</sup> Ibid., 3.

E.L. Norton, to ensure that all business in the yard was conducted through Smith Brothers. Smith was tried and convicted early in 1865. The evidence against Smith, however, was apparently not very strong; this combined with powerful friends in Washington resulted in a Presidential pardon on March 18, 1865.<sup>22</sup>

Despite the misfeasance of Smith and others, navy planners were convinced that little was wrong with the law concerning contracts after several minor modifications were made to existing statutes in 1863. Enforcement was a problem, but for the bureau chiefs the contract system was of only limited use anyway; the rarity of contracts would minimize the problem. "My opinion is, from long experience," wrote Joseph Smith, Chief of the Bureau of Yards and Docks, "that the best way to procure the thousands of miscellaneous articles required at the navy yards will be to purchase them in open market at the lowest market price."

Once supplies were purchased and delivered to the various navy yards, suitable transport was required to get the squadron's necessities to the Gulf. At the beginning of the war the navy possessed only three supply vessels, the *Release* and the appropriately named *Supply* and *Relief*. None of these ships was steam-powered and all were too small for anything more than the undemanding tasks they had performed before the war.<sup>24</sup>

Because supply vessels did not need large batteries or structural reinforcement to

<sup>&</sup>lt;sup>22</sup> Polser, "Administration of the US Navy," 257-64.

<sup>&</sup>lt;sup>23</sup> "Report of Select Committee on Naval Supplies," 5.

The Supply and Release began the war running supplies to Pensacola, while the Relief was the storeship for the African Squadron. All three would serve a short time in the Gulf of Mexico.

withstand battle damage, the navy did not bother building any specialized vessels for supply purposes. Instead vessels were chartered and purchased as the need arose, minor alterations being made to most of them to suit the navy's needs. Secretary Welles placed his brother-in-law, George D. Morgan, in charge of purchases in New York. Despite outcries of nepotism by Welles's opponents in the government, Morgan managed to purchase over two hundred vessels by the end of 1861--each vessel personally inspected by the naval constructor and ordnance officer at the navy yard.<sup>25</sup>

In the early months of the war vessels were chartered by the month and sometimes even by the day. Often steamship companies were persuaded to part with large portions of their line at once. On April 29, 1861 the American Atlantic Screw Steamship Company of New York rented out three of its ships, the *Huntsville* and *Montgomery* at \$10,000 a month, and the *R.R. Cuyler* at \$12,500 a month. Most of these contracts had options to purchase the vessels outright whenever the government so chose; the navy took advantage of this opportunity especially during the late summer of 1861 when it became apparent the war would last longer than a few months. Some acquired vessels were relatively expensive, such as the *Connecticut* and *Rhode Island*, the first supply steamers purchased to service the Gulf. The prices for these large ships, \$200,000 and \$185,000 respectively, were at the high end of a range that went as low as \$1,250 for a

<sup>&</sup>lt;sup>25</sup> "Report of the Secretary of Navy," Message from the President of the United States to the Two Houses of Congress at the Commencement of the Second Session of the Thirty-Seventh Congress (Washington: Government Printing Office, 1861), 736-37; Robert M. Browning, Jr., From Cape Charles to Cape Fear (Tuscaloosa: University of Alabama Press, 1993), 144-45.

<sup>&</sup>lt;sup>26</sup> Vessels chartered by the Navy Department, US Navy Subject File OX, Box 485, Record Group 45, National Archives. All three of these ships served throughout the war in the WGBS.

small schooner.<sup>27</sup> These costs, however, were far less than those for navy-built vessels. Few perhaps could be entirely happy with the performance of those vessels bought to be warships,<sup>28</sup> but as for those ships used as supply vessels, the navy could hardly have done any better.

Of the 194 vessels that served in the West Gulf Blockading Squadron at some point during the war, 137 of them were "acquired." Representing over 70 percent of the squadron's strength, these ships included the six large supply steamers that would provide the great bulk of provisions to the Gulf: the Admiral (later renamed the Fort Morgan), Bermuda, Circassian, Connecticut, Rhode Island, and Union. Other ships were occasionally ordered to carry supplies or provisions on an individual basis, but these six were the only ones with regular schedules. This handful of ships provided the food, ammunition, ordnance, and other stores that the West Gulf Blockading Squadron received during the war, as well as providing useful service as mail carriers, prison and passenger ships, and ad hoc blockaders as the need arose.

The first efforts to send supplies to the Gulf of Mexico came in the winter of 1861 when it became imperative to maintain Fort Pickens after the surrender of the Pensacola Navy Yard on January 12. When the war began in April the Supply and Release were the only ships in the Gulf carrying supplies; with travel time from New York to Pensacola

<sup>&</sup>lt;sup>27</sup> "Report of the Secretary of the Navy" (1861), 724-30.

<sup>&</sup>lt;sup>28</sup> "Report of the Secretary of Navy," Message from the President of the United States to the Two Houses of Congress at the Commencement of the Third Session of the Thirty-Seventh Congress (Washington: Government Printing Office, 1862), 179.

being up to twenty-two days one-way, it was clear a better solution was necessary.<sup>29</sup> In July Flag-Officer William Mervine was informed that not only would his squadron receive three ships loaded with coal, but also he would gain the services of two new vessels, the Connecticut and Rhode Island, which would run regularly and alternatively from New York to Texas. These ships would carry men, fresh supplies, stores, and take prisoners north on set schedules.<sup>30</sup> An important aspect of these ships was the fact that they would act independently of the various squadrons. The tight timetables the supply steamers kept necessitated that they operate without interference while at sea, so they could carry out their duties quickly. The captains of the supply steamers were in fact ordered to disregard any orders from superior officers except squadron commanders, who were asked to excercise this right only in emergency situations.<sup>31</sup>

Another important, and novel, feature of these ships was their specially-built ice rooms intended to store fresh beef, the mainstay of the Civil War sailor's diet.

Commander Maxwell Woodhull, the captain of the Connecticut, was doubtful whether the ice rooms would accomplish their tasks when subjected to the Gulf heat. "I saw nothing but a great consumer of ice," he complained, "without the corresponding amount of cold element promised from it." His ship could carry 59,000 pounds of beef and 125 tons of ice, a ratio of four pounds of ice to one of beef. Initially the beef was hung on racks and the ice packed around it; the very motion of the ship and the beef inside could generate

<sup>&</sup>lt;sup>29</sup> ORN, Ser. I, 27: 353.

<sup>&</sup>lt;sup>30</sup> Ibid., 356.

<sup>&</sup>lt;sup>31</sup> Ibid., 365.

enough heat to melt the ice. Everything was usually fine until the ship passed Fort Pickens, when decay would start to appear; "by the time I got to Galveston I gave up the chill room in despair," Woodhull reported. He suggested that the beef be packed in layers with ice in between, and this improvement was eventually adopted.<sup>32</sup>

Despite these innovations, preserving perishables was always difficult in the perpetually hot climate of the western Gulf along the shores of Louisiana and Texas. Traditional salted provisions were still used in addition to iced beef; in either case the food was rarely appetizing when unloaded from supply steamers. Sometimes the ice houses lost much of their ice before even reaching the Gulf: on one voyage the *Bermuda* started in Philadelphia with 175 tons of ice; by the time it reached Key West it was down to ten tons.<sup>33</sup> Alfred Thayer Mahan, who spent a short time on blockade in the Gulf, had little good to say about the food served there:

The primitive methods then still in vogue, for preserving meats and vegetables fresh, accomplished chiefly the making them perfectly tasteless, and to the eye uninviting; the palate, accustomed to the constant stimulant of salt, turned from "bully" (bouilli) beef and "desecrated" (dessicated) potatoes, jaded before exercise. Like liquor, salt, long used in large measures, at last becomes a craving.<sup>34</sup>

The Connecticut and Rhode Island initially serviced all vessels south of Cape

Hatteras in the Atlantic and Gulf Squadrons; this changed in May 1862, when they began supplying only the Gulf.<sup>35</sup> By the end of the year both ships were replaced; the former by

<sup>&</sup>lt;sup>32</sup> Ibid., 367-68.

<sup>&</sup>lt;sup>33</sup> Ibid., 504.

<sup>&</sup>lt;sup>34</sup> Alfred T. Mahan, From Sail to Steam: Recollections of a Naval Life (New York: Harper & Brothers, 1907 [1906]), 177.

<sup>&</sup>lt;sup>35</sup> Ibid., 435, 445.

the Circassian in December 1862, and the latter by the Union in January 1863. In the first two years of the war the supply steamers achieved a certain reputation for efficiency, despite there being only two in operation at that time. Captain Stephen D. Trenchard of the Rhode Island in particular received accolades from sailors and the Northern press for his invaluable service. But this positive opinion of the supply steamers was not always universal. Complaints were made that they often missed ships, especially along the Texas coast and at Apalachicola, resulting in high rates of scurvy among crews from a lack of fresh provisions. Some captains were even admonished from time to time for their zeal in trying to make their voyages too quickly, and were asked to go more slowly.<sup>37</sup>

It was not always easy for ships on blockade duty to remain in one place or to be where the supply steamers expected them. Being late for a rendezvous was no doubt a common experience for many captains. Rarely, however, would such a mishap end with disastrous results; more often it would mean simply the difference between plenty and a degree of hardship. The following scene was probably played out many times along the Gulf coast:

[Captain Hill]: "Just as I thought! Confound it, why couldn't we have been a couple of hours earlier! Well, Mr. Bailey, it seems pretty certain that we have lost the supply steamer, as we did our blockade runner last night, by being a little too late!"

[Mr. Bailey]: "That will make it a very dismal Christmas for us, sir."38

<sup>&</sup>lt;sup>36</sup> Edgar S. Maclay, Reminiscences of the Old Navy (New York: G.P. Putnam's Sons, 1898), 105, 207. This is one of the few published accounts of the experiences of an officer on a supply steamer during the war (based on the private papers of the Trenchard family), but it is unfortunately little more revealing than a logbook.

<sup>&</sup>lt;sup>37</sup> ORN, Ser. I, 19: 156-157; Ser. I, 27: 469, 529.

<sup>&</sup>lt;sup>38</sup> Frederick S. Hill, Twenty Years at Sea, or Leaves from my Old Log-Books (Boston: Houghton Mifflin, 1893), 206.

Mr. Bailey's lament notwithstanding, anyone who examines the logbooks of any of the supply steamers must be impressed with their diligent work habits. Operating out of Philadelphia, New York, or Boston, they made good time down the coast even with occasional stops at Hampton Roads. When leaving from Philadelphia or New York, a steamer could make Port Royal in the Sea Islands in four days or less; from Boston the same trip was normally made in five days.<sup>39</sup> After the town was taken in November of 1861, Port Royal became the headquarters of the South Atlantic Blockading Squadron and an important anchorage. After the spring of 1862 supply steamers heading south stopped there mainly to pick up and drop off mail and personnel.

Port Royal was often the first stop on the way to the Gulf, and usually the last on the way home. Admiral Samuel F. Du Pont, the commander of the SABS, was not particularly impressed with the services of the supply steamers; apparently he had a very poor relationship with the *Circassian* in particular. Besides being in his eyes dirty, crowded, and "very unfit," this ship had a habit of losing the personal items of the admiral and other officers. "We expected stores--got none," Du Pont wrote in December 1862, "looked of all things for our cabin carpets--they have left in some sailing ship--then my trunk." Two weeks after this Du Pont assured his wife it was all right that a letter she sent was late in coming: "You need not regret its not going by the *Circassian*, for it would have been lost there with the trunk." Several weeks later it was discovered the unfortunate

<sup>&</sup>lt;sup>39</sup> Logbooks of USS Admiral and USS Bermuda, passim, Record Group 24, National Archives; ORN, Ser. I, 27:684-86.

trunk was on another vessel that came and went without leaving it.<sup>40</sup>

Once steamers headed down the eastern coast of Florida, there were few diversions until reaching Key West. With few habitations or anchorages for blockade runners south of the mouth of the St. Johns River, few blockaders patrolled there. A supply steamer could make the passage from Port Royal to Key West in two to three days. Key West, the headquarters of the East Gulf Blockading Squadron, was also the first stop of every ship entering the Gulf. The garrison at Fort Taylor had helped maintain control of the island at the beginning of the war; this made the port friendly, but it was rarely safe for Union sailors. Yellow fever was a constant enemy everywhere in the Gulf, but it was especially dangerous at Key West, where ships leaving their stations could spread disease to ships leaving for the north. Often supply steamers received orders to bypass Key West when epidemics broke out. Leave the stations of the supply steamers received orders to

The naval base at Key West had some capacity for repairing ships, but this was utilized mostly by the East Gulf Squadron once the Pensacola Yard was recaptured and Ship Island became available. After the beginning of 1862 few ships of the West Gulf Blockading Squadron frequented Key West except as a coaling stop. With few amenities for sailors on liberty and with lingering secessionist sentiment among its few thousand inhabitants, Key West offered little more than a respite from the monotony of the

<sup>&</sup>lt;sup>40</sup> Samuel Francis Du Pont: A Selection from His Civil War Letters, John D. Hayes, ed. (2 vols., Ithaca: Cornell University Press, 1969), 2: 309, 341, 386. The captain of the Circassian was apparently not in agreement with Du Ponts's assessment; see ORN, Ser. I, 27: 491.

<sup>&</sup>lt;sup>41</sup> Logbooks of USS Admiral and USS Bermuda, passim.

<sup>&</sup>lt;sup>42</sup> ORN, Ser. I, 27: 459.

## blockade.43

The first major units of the WGBS were encountered at Pensacola. Though capable of making the journey from Key West to Pensacola in a few days time, supply steamers might take up to seven days depending on how many ships they supplied on the west coast of Florida. Even when the navy yard at Warrington (across from Fort Pickens) was under Confederate control in the first year of the war, there were always numerous ships anchored in the protected waters of the bay. Here the supply steamers unloaded their first major cargoes, and often filled their own coal bunkers simultaneously.

For new recruits and officers destined for ships in the WGBS, Pensacola also offered the first glimpse of their new "homes." Even though the trip down to the Gulf was usually not long by the standards of the day, the crowded and stuffy conditions on the steamers made the men eager to get off. "Our trip south in the *Bermuda*," one officer wrote, "was chiefly remarkable for its discomfort, as we were packed into her about as tightly as sardines." This ship had but four staterooms for twenty officers. <sup>45</sup> Conditions for enlisted men were even worse. The number of men shipped on each voyage varied, but as the WGBS steamers would carry men for the South Atlantic, East Gulf, and the West Gulf Blockading Squadrons passenger lists of up to 650 were fairly common. <sup>46</sup>

<sup>&</sup>lt;sup>43</sup> Jefferson B. Browne, Key West: The Old and The New (Gainesville: University of Florida Press, 1973 [1912]), 90-98.

<sup>44</sup> Logbooks of USS Circassian and USS Union, passim, Record Group 24, National Archives.

<sup>&</sup>lt;sup>45</sup> Charles E. Clark, My Fifty Years in the Navy (Boston: Little, Brown and Company, 1917), 39-40.

<sup>&</sup>lt;sup>46</sup> ORN, Ser. I, 27: 436, 447, 604, 612-13.

Another important cargo was mail, including official dispatches, private packages, and trunks, as well as money for the paymasters of the squadrons. It was nearly impossible to predict how much space had to be set aside for mail on each voyage. Early in the war 60,000 letters and 2,500 packages were considered an enormous amount of freight; later as many as 400,000 letters were being shipped south and 300,000 were coming north on a regular basis.<sup>47</sup> Apparently there were no complaints that such masses of mail would take precious space from other cargoes.

The most important cargo, of course, was food. In February 1862 the Bureau of Provisions and Clothing ordered that supply steamers provide an amount of fresh beef and vegetables "not exceeding a three days' supply going out." This did not mention what quantities of dry goods or preserved foods were to be allotted, for those were already well established by the beginning of the war. A three-day supply being rather meager, other items such as bread and salted beef were meant to provide the major portion of the sailors' diet. An examination of log entries can reveal a more definite picture of what was delivered on a daily basis; unfortunately only the officers of the Connecticut were diligent enough to record exact amounts of fresh beef unloaded. The log of this ship, however, provides a flavor of what was considered a regular ration. Large ships such as the old sail

<sup>&</sup>lt;sup>47</sup> Ibid., 417, 446, 595.

<sup>&</sup>lt;sup>48</sup> Ibid., 405. It is not clear whether this order was the acknowledgment of existing practices, or a major change in policy.

<sup>&</sup>lt;sup>49</sup> Browning, From Cape Charles to Cape Fear, 212-213. From early 1863 onward, bread was one of the few food stores the navy made itself. See "Letter from the Secretary of the Navy in Relation to Supplies for the Navy," 12.

sloops like the *Potomac*, with their big crews, might receive as much as 1,200 pounds of beef at a time. Flagships, or the ships of flotilla commanders at each blockading station, often received oversized portions, up to 2,300 to 2,500 pounds of beef; this was sometimes doled out among the flotilla after the steamers had left. Most blockaders ranged from about 200 to 600 pounds of beef received at a time, depending on size of crew and existing stockpiles.<sup>50</sup>

The supply steamers would discharge their cargoes either at sea or in port by receiving the boats of the ships being supplied, each boat receiving various barreled provisions. The steamer itself would simply anchor and unload cargo, not coming alongside any of the other ships. Any supplies not requisitioned or destined for a particular division of the ship (such as the carpenter, sailmaker, or boatswain) were sold to the crew by the paymaster, for a small profit.<sup>51</sup>

Sometimes the various warships of the squadrons brought each other small amounts of provisions or supplies. This was especially true of those vessels off Mobile, whose stations were only four and a half to five and a half hours' steaming from Pensacola. Usually these items consisted only of small things given from officer to officer or material such as firewood for galleys.<sup>52</sup> Another source of provisions appeared after the capture of New Orleans in April 1862: commercial merchants, coming in the form of

<sup>&</sup>lt;sup>50</sup> Logbook of USS Connecticut, November 24-29, 1861, Record Group 24, National Archives.

Monthly Expenditures of Stores on the Ossipee, Navy Subject File XN, Naval Stores Afloat, Box 716, Record Group 45, National Archives; Polser, "Administration of the US Navy," 284.

<sup>&</sup>lt;sup>52</sup> Marchand, Journal of Blockade of Mobile, 3: 56-57; ORN, Ser. I, 16: 734.

privately owned vessels selling their wares to the blockaders (sort of water-borne sutlers). It is not clear how common this form of supply was, but apparently it was only an occasional supplement to navy-issued goods. Marchand is one of the few to mention this practice in 1863.<sup>53</sup> The previous year Gideon Welles advised the Treasury Department to decline an offer made by Massachusetts and Maine interests to sell goods to the blockading squadrons, though he left it up to the Treasury to make the decision. Several months later the Treasury again forwarded a request by a New Orleans merchant to sell goods to the fleet; the Navy's reply is not known.<sup>54</sup> Whatever official stance the Navy Department had, the practice of supplying ships by private means was relatively rare and not a major source of provisions for the WGBS.

Another supplementary form of nourishment was occasional foraging onshore, including the barrier islands near Mobile. "I have been on shore hunting, and shot two beeves [cows]," one intrepid soul wrote. "This sport is rather dangerous, as guerrillas are said to be plentiful, but it serves to vary our diet and the dullness of blockade duty." Such foraging was perhaps not as common in the western Gulf as it was off the west coast of Florida, where cattle raids became an important part of the operations of the East Gulf Blockading Squadron. These were intended not only to strike at an important food source for the eastern Confederacy, but also to provide beef supplies to Union soldiers and

<sup>&</sup>lt;sup>53</sup> ORN, Ser. I, 16: 105-06.

<sup>&</sup>lt;sup>54</sup> Ibid., 27: 396-97, 432.

<sup>55</sup> Carroll S. Alden, George Hamilton Perkins: His Life and Letters (Boston: Houghton Mifflin, 1914), 142.

sailors, as well as to refugees.<sup>56</sup>

Within five to six hours' steaming of the blockade stations off Mobile was the low, sandy outpost of Ship Island, just off the coast of Mississippi. Supply steamers could and did make the trips from Pensacola to Mobile to Ship Island (or the reverse) in a single day, dispensing stores along the way. When Ship Island was captured in November 1861 there was little there except the unfinished walls of Fort Massachusetts, begun just a few years before the war.<sup>57</sup> The island did not have much of a harbor, but the sheltered waters of Mississippi Sound offered an adequate anchorage for large vessels. After 1862 Ship Island was perhaps more immediately useful to the army, who used it as a holding area for prisoners taken in Louisiana as well as a base of operations for raids into coastal towns such as Pascagoula.<sup>58</sup> Even after the capture of New Orleans and the recapture of the Pensacola Navy Yard, Ship Island was an important repair facility for vessels coming from Mobile. Its use as a supply depot, however, declined after mid-1862; by 1864 it was used mostly by the few ships operating in Lake Ponchartrain and Mississippi Sound.<sup>59</sup>

Beyond Ship Island were the passes of the Mississippi. The closest, Pass à l'

Outre, was only about seven hours away; the most used pass, Southwest, was a good half-

George E. Bukar, Blockaders, Refugees, and Contrabands: Civil War on Florida's Gulf Coast, 1861-65 (Tuscaloosa: University of Alabama, 1993), 144-60; John E. Johns, Florida During the Civil War (Gainesville: University of Florida, 1963), 71-76.

<sup>&</sup>lt;sup>57</sup> Zed H. Burns, Ship Island and the Confederacy (Hattiesburg: University and College Press of Mississippi, 1971), 5.

<sup>&</sup>lt;sup>58</sup> ORA, Ser. I, 34, part 4: 7, 278; ORN, Ser. I, 21: 758-59.

<sup>&</sup>lt;sup>59</sup> ORN, Ser. I, 20: 202; 21: 81-82; 27: 494.

day's steam away. In the first twelve months of the war vessels were stationed at every pass and had to be supplied in turn, but once New Orleans was captured this was no longer necessary. The *Pampero*, a storeship, was stationed permanently at the Head of the Passes to give supplies to passing vessels; she was also a common stop for supply steamers. This ship also was an important dispatch station for sending messages to and from New Orleans, and was charged with maintaining navigation buoys in the river. 60

Just down the river from the city was the quarantine station, and the frequency of yellow fever outbreaks kept many ships here. Sometimes supply steamers were stopped, upsetting their timetables and delaying the delivery of supplies. The *Bermuda*, for example, was quarantined for eight days for having recently stopped in Key West during a yellow fever outbreak. Once at New Orleans, ships of the West Gulf Blockading Squadron had considerable resources at their disposal. The largest city in the South, New Orleans boasted docks and ship-repair facilities that helped alleviate the squadron's maintenance problems. The city did not, however, provide much in the way of dry goods, food, and other equipment and stores until mid-1863, thanks to the Confederate blockade of the Mississippi river, which lasted until the capture of Vicksburg. During the fourteen months prior to that both the city and the U.S. military forces there were almost entirely dependent on the sea.

<sup>&</sup>lt;sup>60</sup> Ibid., 20: 195; 21: 93-94.

<sup>61</sup> Logbook of USS Bermuda, June 4-12, 1863.

<sup>&</sup>lt;sup>62</sup> Gerald M. Capers, Occupied City: New Orleans Under the Federals, 1862-1865 (Lexington: University of Kentucky Press, 1965), 115, 147-48.

For the Navy, the isolation from upriver resources was not a terrible problem.

Some supplies such as iced beef could never be shipped from anywhere except the northeast anyway, <sup>63</sup> and even after June 1863 supply steamers never ceased departing from the main ports in the northeast. Late in the war, however, support for the blockade off the coast of Texas was aided by several steamers sent directly from New Orleans, the *Arkansas* and the *Augusta Dinsmore*. <sup>64</sup> The main role of these ships was to dispatch messages and transport ordnance and ship's stores, not provisions. <sup>65</sup> Rather than creating a new direct supply line down the Mississippi into the Gulf, the navy instead used New Orleans in the last two years of the war to supplement the main supply line running from the north down the coast. By 1864 supply steamers from the north were picking up barrels of provisions in New Orleans on their way to Texas, though this never completely solved the problem of spoilage of food in that part of the Gulf. <sup>66</sup>

Texas was the worst drudge assignment of the West Gulf Blockading Squadron, perhaps even of the entire navy. Many of the men stationed there would no doubt have felt that time actually *did* pass more slowly off Galveston and the Rio Grande. This part of the Confederacy was unusual in that much of the coast was a sort of no-man's-land, where the blockade met the frontier. With little to do, some men even went on shore and

<sup>&</sup>lt;sup>63</sup> Both beef and ice could be secured in the upper Midwest, but they would needed to have been unloaded at New Orleans to a sea-going vessel; much of the ice would have melted during the offloading.

<sup>&</sup>lt;sup>64</sup> ORN, Ser. I, 27: 568-69.

<sup>65</sup> Ibid., 21: 33-34, 127.

<sup>66</sup> Ibid., 27: 564.

wandered about, such as the captain of the Sciota:

I do nothing but read and build castles in the air, for no sails appear within the lines of coast allotted to me. Once in three weeks the steamer comes along with our letters and provisions--fresh meat, potatoes and onions. Once or twice I have ventured on shore, but it is very risky, and the last time I was so nearly captured it is a wonder now that I am not either shot or a prisoner of war. I would go ashore, just for a change, and, being unknown, would venture into the towns and villages, buying something at the stores and looking about a little, and even make some friends who did not know my name. <sup>67</sup>

The station commander off Galveston rarely had enough ships to cover the numerous inlets and passes up and down the coast. Though there were few ports of significance, there were nonetheless many sheltered spots for ships to anchor and unload goods. There were nine positions that the navy felt compelled to blockade; of these, Calcasieu, Sabine Pass, and Galveston were the most important. Most of the other stations, essentially passes through the various barrier islands off the Texas coast, rarely had more than one ship watching over them, if that.<sup>68</sup>

At the beginning of the war Gideon Welles set up a committee to determine the blockade strategies for the various squadrons. In its report on the Gulf of Mexico, dated August 9, 1861, this committee (composed of Captain Samuel Du Pont, Alexander Bache of the U.S. Coast Survey, and Major John Barnard of the Army Corps of Engineers) assigned the lowest priority to the blockade of Texas. Concentrating on the problems of closing down the ports of New Orleans and Mobile, the report did not suggest even a rudimentary strategy for handling the ports west of Louisiana.<sup>69</sup> This early indifference

<sup>&</sup>lt;sup>67</sup> Alden, Life and Letters, 165.

<sup>68</sup> ORN, Ser. I, 21: 713-14.

<sup>&</sup>lt;sup>69</sup> Ibid., 16: 618-30.

toward Texas hardly changed throughout the war, and perhaps with good reason: most goods coming into Texas through the blockade rarely went beyond there. If fact, the number of ships off Texas actually decreased after November 1864, despite an abundance of vessels due to the closure of Mobile as a blockade running port. Even when transport was possible across the Mississippi the Confederacy could move material from Texas to the east only with great difficulty. When Vicksburg was taken on July 4, 1863, what had been a difficult task became nearly impossible.

The men on blockade off Galveston and neighboring stations felt the effects of the navy's indifference toward that sector of the Confederacy. Mahan, who served in both the South Atlantic and West Gulf squadrons, found the contrast between the two rather stark. "Charleston. . . was a blooming garden of social refreshment compared with the wilderness of the Texas coast," he grumbled. "Supply vessels, which came periodically, and at not very long intervals, arrived with papers not very late, and with fresh provisions not very long slaughtered; but by the time they reached Galveston or Sabine Pass, which was our station, their news was stale, and we got the bottom tier of fresh beef."

Some voices were even more critical of the efforts to supply the Texas blockade. Lieutenant Commander Richard Meade wrote angrily, "The Circassian has been 73 days on the round trip and as far as my experience goes, the supply system as now managed by the commanding officers of these vessels is a complete failure." The crew of Meade's ship,

<sup>&</sup>lt;sup>70</sup> See Appendix C.

<sup>71</sup> Mahan, From Sail to Steam, 174.

the *Chocura*, was beginning to show signs of scurvy--and this was after Mobile was taken and the fleet was supposedly free to concentrate its resources in the western Gulf.<sup>72</sup>

The actual time it took supply steamers to get to the stations off Texas once they left the mouths of the Mississippi was relatively brief. Ships often took three or four days to get to Galveston, stopping at various points along the way such as Atchafalaya Bay, Calcasieu, and Sabine Pass. Going directly, however, a steamer could make the passage in a day or less, and all of the points south of Galveston were within a two-day voyage. All this traveling about, of course, was always at the end of a long voyage of sometimes over a month--time enough for even the coldest ice room to be warmed, especially in the sweltering heat of the Gulf coast.

The Circassian was indeed the slowest of the supply steamers; on some of its trips it took up to forty days to reach Galveston from Boston. Usually, however, it commonly made the voyage in less than twenty-five days. Other vessels were generally speedier: the Bermuda and Admiral, for example, reached Texas after fifteen days at sea in May 1864; the former had left from Philadelphia, the latter from New York. The most common travel time for all steamers was from twenty to thirty days, but this was essentially a measure of how long it took the steamers to perform their duties, not necessarily of their speed. Doubling these times gives a good approximation of the length of the round trips

<sup>&</sup>lt;sup>72</sup> Meade to Woolsey, September 2, 1864, Meade Letters.

<sup>&</sup>lt;sup>73</sup> ORN, Ser. I, 27: 666-71, 681-84, 717.

<sup>&</sup>lt;sup>74</sup> Logbooks of USS Bermuda and USS Union.

<sup>&</sup>lt;sup>75</sup> ORN, Ser. I, 27: 666-84.

these ships made; voyages from the North to the Rio Grande and back could take as little as a month or as much as a month and a half.

Despite these problems sailors at the extremity of the squadron were never threatened with starvation, thanks to the stockpiles of salted and otherwise preserved-albeit less than fresh--provisions. The inconsistent supply of fresh meats and vegetables, however, was a contributing factor in the poor morale that often afflicted the crews of the vessels off Texas. No amount of research can precisely measure the resiliency of the human spirit, but it would seem likely that low morale was a contributing factor in the many disasters that beset the Union Navy off Texas after 1863.

In addition to all the duties attendant upon satisfying the material needs of the ships of the Gulf squadrons, supply steamers were tasked with chasing down any blockade runners they encountered, and with carrying prisoners north. Prisoners were just one more cargo that had to be carried on these overused ships. Often they consisted of people taken off prizes or soldiers seized in raids on the coast. A few were famous, such as Confederate Admiral Franklin Buchanan whom the *Fort Morgan* took north after his capture at Mobile. A more bothersome task (certainly to those who had to give up berth-space to the shackled passengers) was the transportation of paroled prisoners, sometimes numbering as many as 400 at a time. These would be deposited at Charleston or Hampton Roads, and then exchanged. Even though precautions had to be taken while carrying prisoners, such as sending them below decks and putting them in irons when near

<sup>&</sup>lt;sup>76</sup> Ibid., 27: 418, 639-41.

a shore, there were no major incidents of escape from supply steamers in the Gulf.<sup>77</sup>

Some of the supply steamers, such as the Connecticut, Rhode Island, and Union, were quite successful blockaders, capturing a number of prizes. In one of those episodes that revealed how old technology existed alongside the new, the sail ship Supply, built for the Mexican War, managed a capture of her own. 78 This was the exception, however, for most auxiliary and supply vessels of the WGBS were far too slow to give chase. The supply steamers, however, were given specific orders to hunt down strange sails if they came across them: "The unquestioned belligerent right of search is to be exercised," a typical order for a supply voyage read, "and you will be vigilant to detect, seize, and send into port for adjudication any vessels you may meet in your course engaged in carrying contraband of war to the insurgents or in violating the blockade."79 The effect of such orders on the supply duties of these vessels is difficult to determine; chasing a blockade runner could take a day or more, and more often than not resulted in a wild goose chase. All of this was time taken away from getting provisions to hungry crews. Nonetheless, no one advocated an end to this practice: if a supply steamer simply let blockade runners go by, there might never be another chance to capture them.

Whether as warships, mailmen, refrigerator ships, passenger ships, or ordnance carriers, the supply steamers in the Gulf of Mexico were the most versatile and busiest ships in the Union Navy. Their performance was hardly perfect: they were often late or

<sup>&</sup>lt;sup>77</sup> Logbook of USS Bermuda, June 25-July 12, 1863; ORN, Ser. I, 27: 610, 622, 626.

<sup>&</sup>lt;sup>78</sup> ORN, Ser. I, 27: 409-15.

<sup>&</sup>lt;sup>79</sup> Ibid., 582-83.

slow in arriving, they suffered mechanical breakdowns like other vessels, their provisions did not always stay fresh, their passengers found them crowded and uncomfortable, and sometimes they ran out of cargo space.80 None of the vessels was able to maintain a perfect schedule going back and forth between northern ports and the Gulf; transit times varied due to weather, fuel supply, engine performance, the variety of ships to be supplied, and other problems. This created many headaches (and no doubt stomach aches) for many officers and crewmen of the West Gulf Blockading Squadron, but the system did work. No crews starved, and no ships were put entirely out of action due to supply shortages. The Union had reason to be proud of its efforts to provision its ships in the Gulf; no nation had ever attempted to provide a fleet so far from home with such a sophisticated supply line. The WGBS did experience its share of logistical problems, as will be shown in the following chapter. Nonetheless, most of those thousands of hungry men who sweated through four long years of war floating on a watery desert were thankful each time a supply steamer appeared on the horizon, bringing news of home and a connection to the outside world. Many of them could probably have been persuaded to say, as Winston Churchill once said: never was so much owed by so many to so few.

<sup>&</sup>lt;sup>80</sup> Ibid., 423. On one voyage, the Connecticut was told it would receive 60 cubic feet of "articles for a telegraph." When the material arrived at the dock it proved to be 1,900 cubic feet and weighed 25 tons.

### CHAPTER V: THE LIMITS OF LOGISTICS

A number of factors beyond the vagaries of daily provisioning limited the effectiveness of the West Gulf Blockading Squadron to one degree or another: maintenance, the availability of coal and ammunition, and manpower. These factors affected all the squadrons, but the peculiar circumstances of the Gulf (distance from the North, climate, the capture of certain cities) served to modify some of their effects. In his recent study of the North Atlantic Blockading Squadron, Robert Browning examines the number of vessels absent for repairs throughout the war and concludes that from one-third to two-fifths of the squadron's ships were absent from their stations at any one time, either because of needed repairs or want of fuel. The lack of consistent maintenance was perhaps the most vexing problem for all ships of the Union Navy, and its effects were acutely felt in the Gulf of Mexico.

Table 1 shows the percentages of warships not on blockade at various times from March 1864 to April 1865, the year for which the best documentation of ship locations is available. The figures are based only on those ships actually present in the Gulf; ships being repaired in northern ports are not considered. The table reveals that the proportion of ships not on operations at any given time averaged around 35 percent, a number consistent with Browning's findings.

What this table does not reveal is that many of those ships on blockading station were in a less-than-perfect state of repair or were low on coal, and were only waiting for

<sup>&</sup>lt;sup>1</sup> Browning, From Cape Charles to Cape Fear, 199.

Table 1. Percentage of Warships in the West Gulf Blockading Squadron Not Engaged in Blockade or Combat Operations, 1864-65.\*2

Date	Percentage	e Date	Percentage
March 15, 1864	32%	November 1, 1864	33%
April 5, 1864	51%	November 30, 1864	39%
April 15, 1864	44%	January 1, 1865	40%
May 1, 1864	41%	January 15, 1865	40%
May 15, 1864	41%	February 1, 1865	30%
June 1, 1864	27%	February 15, 1865	34%
June 15, 1864	34%	March 1, 1865	38%
July 15, 1864	31%	March 15, 1865	29%
August 15, 1864	16%	April 1, 1865	25%
September 1, 1864	35%	April 15, 1865	24%
October 1, 1864	35%		

<sup>\*</sup> Does not include auxiliary or supply vessels.

vessels in port to return so that they might journey to a navy yard themselves. Captain John Marchand's journal kept while off Mobile in 1863 gives an indication of the movement of ships back and forth between there and Pensacola. On April 3, the "U.S. Gunboat *Kanawha* . . . returned from Pensacola and the *Pembina* started immediately afterwards for the same place for coal and provisions." On the following day the *Kennebec* left to coal, and on the 5th the *Pocahontas* arrived after having her boilers repaired. The *Kennebec* returned on the 8th and the *Aroostook* then left straight away. This alternation was a typical pattern off Mobile, while the turnaround time off Galveston was somewhat

<sup>&</sup>lt;sup>2</sup> Data derived from a compilation of fleet dispositions based on materiel in ORN, Ser. I, 21. The category "Not engaged in blockade or combat operations" is used here to describe any ship in port, regardless of the specific reason (i.e. coaling, repairing, taking on stores, etc.). While certain supply steamers were essentially considered "warships" while carrying out their supply duties, they were not subject to orders from the commander of the WGBS; therefore they are not included in these percentages.

<sup>&</sup>lt;sup>3</sup> Marchand, Journal of Blockade of Mobile, 3: 54-58.

longer.

The complaints from commanders in the squadron about various mechanical problems with their ships grew considerably as the war continued and the number of ships increased. In the early months of the war, repairs could be made only in the North. Few ships needing repairs actually made the journey north, however, because with often only one or two ships at each station, they were more useful staying in the Gulf in a disabled state than leaving there altogether. Moreover, some captains were unwilling to report their mechanical problems and head north, "lest it should be construed into a disposition on their part to avoid the service."

Upon arriving in the Gulf in February 1862, Farragut's first action was to write to the Navy Department complaining of the poor condition of his ships and the need for a storeship with "a few of the most useful tools, turning lathes, forges, etc." Later, during operations on the Mississippi above New Orleans, many of his ships were showing their wear from several months of continuous steaming. The guns of some ships were nearly useless from constant firing and battle damage; there was little that could be done, however, except "hope that they will hold out on the present service."

As the squadron increased in size from 1863 onward, its maintenance requirements grew immensely; ironically, the most common solution was simply to request

<sup>&</sup>lt;sup>4</sup> ORN, Ser. I, 16: 565-66, 592-94; 17: 10.

<sup>&</sup>lt;sup>5</sup> Ibid., 18: 27-28. The squadron would eventually have one or more storeships at every major port: the *Nightingale* and *J.C. Kuhn* at Pensacola, the *Fearnot* and *Pampero* at New Orleans, and the *Relief* at Ship Island.

<sup>&</sup>lt;sup>6</sup> Ibid., 540.

more ships. "More vessels are required in this division of the squadron," Commodore Robert Hitchcock wrote while repairing his vessel in Pensacola. "The gunboats off Mobile have been on such constant service that the repairs have been only such as were imperatively necessary." Commodore Henry Morris wrote several months later, in May 1863, that "the condition of nearly all the gunboats of this squadron is so dilapidated by reason of the giving out of their machinery and boilers as to incapacitate them for performing much more service on blockade duty." Farragut offered his own analysis of the recurrent problem of disabled machinery: "I can not but think that this is owing to bad engineering, as I find that when the engineer in charge is a man of ability the engines are generally in good order and ready for service."

The calls for greater numbers of ships and better repair facilities were made most passionately when discussing the possibility of a Confederate attack. Indeed, some commanders were more concerned with meeting this threat than with getting more ships simply to enforce the blockade. "Whatever may be the intention of the enemy inside of Mobile Bay or of their friends elsewhere who have threatened to come to their assistance at this point," Captain Thornton Jenkins wrote in January 1864, "it certainly is our duty to be well prepared to act, not only on the defensive, but to attack with the assurance of possible, if not probable, victory in case the opportunity is presented."

The WGBS did have a significant ability from 1862 onward to repair its vessels in

<sup>&</sup>lt;sup>7</sup> Ibid., 20: 100, 170.

<sup>&</sup>lt;sup>8</sup> Ibid., 179-80, 456.

<sup>&</sup>lt;sup>9</sup> Ibid., 700, 732, 738; 21: 30-31, 267-68, 298-99, 309-10.

the Gulf. The navy yard at Warrington near Pensacola was an important repair facility, especially for vessels off Mobile. It was hardly perfect, for retreating Confederate forces had laid much of it to ruin. "The Yard, however, still served some good purpose," the commander of the *Aroostook* remembered. "It was the coaling station for the blockading fleet off Mobile; slight tinkering could be done to our lame ducks when they came in after a long tour of duty on the blockade." Even in August 1862, five months after its recapture, the navy yard was in shambles except for a few buildings, but the site was far too useful and strategically placed to be abandoned. Equipment and personnel were moved from Ship Island to Pensacola and laborers worked furiously to put the yard back in order. "It

Even more useful as a depot for repairs was the port of New Orleans with its existing commercial docks, shops, and storage facilities. By the last year of the war this city was handling the majority of the squadron's disabled vessels. It was extremely expensive and often beyond the technical capacity of the New Orleans yards to do more involved repairs, however, and the navy did not have any facilities of its own. If a ship needed new boilers, for instance, it was more expedient to send her north. The yards at Pensacola and New Orleans were limited in what they could do, but their possession early on in the war by the Union was an immeasurable asset, allowing some vessels to remain in

<sup>&</sup>lt;sup>10</sup> S.R. Franklin, Memoirs of a Rear-Admiral (New York: Harper & Brothers, 1898), 191.

ORN, Ser. I, 19: 163-64; USS *Oneida* Journal, September 8, 1862, Southern Historical Collection, University of North Carolina, Chapel Hill.

<sup>&</sup>lt;sup>12</sup> ORN, Ser. I, 19: 211.

the Gulf that otherwise would have gone north for repairs. Without both stations the WGBS would have been far less effective than it was.

Farragut was an untiring advocate of his command, his ships, and his men--more so perhaps than his successors Henry Bell, James Palmer, and Henry Thatcher. In the hands of a commander who was less in touch with the needs of his crews, the squadron might not have fared as well as it did in its most trying moments. Luckily for Farragut and the men of the WGBS their calls for better supplies and facilities fell on receptive ears in Washington. Gideon Welles and his Assistant Secretary, Gustavus Vasa Fox, understood the problems facing the blockading squadrons and did the best they could to solve them. They experienced, however, a feeling of powerlessness at times when confronted with the capticiousness of the mechanical monstrosities they had conjured up for the Union. "We have our navy yards, filled with broken down vessels," Fox wrote to Farragut on September 9, 1862, "and we know your wants and will exert ourselves to help you, but the more we send, the more they seem to come back."

The lack of consistent maintenance had a major impact on the performance of the various ships of the West Gulf Blockading Squadron. Though the squadron often had more than seventy ships at its disposal, sometimes as many as half were in port at New Orleans, Pensacola, or elsewhere. Analyses of the weekly and monthly dispositions of the squadron's ships, as well as of the correspondence from personnel in the Gulf,

<sup>&</sup>lt;sup>13</sup> Confidential Correspondence of Gustavus Vasa Fox, Assistant Secretary of the Navy, 1861-1865, Robert M. Thompson, Richard Wainwright, eds. (New York: De Vinne, 1920), 317.

<sup>&</sup>lt;sup>14</sup> See Appendix C.

demonstrate that Browning's observations of the maintenance record of the North Atlantic Blockading Squadron hold true for the Gulf of Mexico as well. Future research may reveal which squadron actually "suffered" more in this respect, but it is clear that the closeness of facilities at New Orleans, Ship Island, and Pensacola in part compensated for the greater distance ships in the Gulf had to travel to get to northern ports than ships in the other squadrons.

It is important, however, not to exaggerate the effects of maintenance on operations. Blockade runners would not have been completely stopped even if more ships had been on blockade in good repair. Throughout much of the war the number of blockaders off the main ports was fairly constant. The most fervent calls for better ships and faster repairs came when offensive operations were contemplated, such as those against New Orleans, Vicksburg, and Mobile; they also came when attacks were expected from the enemy. For most of the WGBS this threat never materialized, and the Union never surrendered the strategic initiative; as Table 1 shows, in August 1864 the great majority of the squadron was out of port (and concentrated in Mobile Bay), but the next month and for the months thereafter the proportion of ships in port went up. To a degree the WGBS had the luxury of choosing where it would attack, and could afford to have some ships out of action.

The problem of getting enough coal to the WGBS was even more troubling than that of maintenance. No consistent system was ever set up for providing coal "rations" to any of the squadrons in the regular manner that food stuffs were supplied. No one really knew how much coal was necessary on a weekly basis, though some tried to make modest

estimates: Admiral Du Pont, for example, thought that 1,000 tons a week would be sufficient for his South Atlantic squadron in April 1862.<sup>15</sup> A month earlier Gideon Welles supposed that 10,000 tons a month could be shipped to the Gulf from Philadelphia, though it is highly unlikely that such a total was ever maintained.<sup>16</sup> Perhaps the most reasonable estimation was Farragut's of June 1864, when he reported that the ships off Mobile were using 2,000 tons a month.<sup>17</sup> Such calculations were dependent on many things: the number of ships in the squadron, the tempo of operations, and the rate of each ship's fuel consumption. The constantly changing composition of the navy, however, meant that coal ended up being dispatched haphazardly from the beginning of the war to the end.

The navy supplied its squadrons with coal by chartering vessels, usually schooners, on a monthly or voyage-by-voyage basis. A few of the early chartered ships, such as the *J.C. Kuhn* and *Fearnot*, were later purchased and used as stationary coal hulks and storeships in the Gulf. The practice of leaving coaling essentially in private hands was common in the mid-nineteenth century; during the Crimean War the British had

<sup>15</sup> Du Pont Letters, 1: 416. This calculation by Du Pont is often misquoted. He said that, "I took pains to state what should be immediately forwarded and then the weekly consumption--that is, 3,000 tons at once, and then 1,000 tons per week which the squadron requires." The editor of Du Pont's letters (John Hayes), however, states (referring to the same passage) that "Du Pont's letters indicate that the approximate requirements of anthracite coal for the four blockading squadrons were more than three thousand tons per week" (1: lxxvi). Subsequent historians have apparently echoed Hayes's comments rather than Du Pont's.

<sup>&</sup>lt;sup>16</sup> ORN, Ser. I, 18: 49-50, 58-59; Confidential Correspondence of Gustavus Vasa Fox, 1: 309.

<sup>&</sup>lt;sup>17</sup> ORN, Ser. I, 21: 314.

successfully used similar methods to supply their ships in the Baltic and Black Seas.<sup>18</sup> Experience in the Gulf of Mexico would prove, however, that the old ways of providing coal were simply inadequate for a large, steam-powered navy.

Even with abundant coal stockpiles, the very act of coaling a ship in the 1860s effectively took the vessel out of action, as it was a laborious and time-consuming process that could last up to several days. Coaling could be done at sea if the weather and sea conditions were relatively calm; even in a moderate sea re-coaling was risky, however. Furthermore, the amount of coal that could be distributed at sea was limited by the size of the colliers; often these were small vessels capable of carrying only 100 tons or less. Colliers also had to leave one-third of their cargo as ballast, which further reduced the amount that could be provided at sea. To properly refill its bunkers a warship had to return to an anchorage, where it had access to coal piles of hundreds or thousands of tons.

There were many moments during the war when the squadron's coal supplies were on the verge of giving out; even in the month before the attack on Mobile in July 1864, stockpiles were so low that there were only two or three hundred tons of coal at

<sup>&</sup>lt;sup>18</sup> Andrew Lambert, Battleships in Transition: The Creation of the Steam Battlefleet, 1815-1860 (Annapolis: Naval Institute, 1984), 61-63.

The small carrying capacity of coal schooners was helped to a degree by the Union's reliance on Pennsylvania anthracite, which burned two-thirds longer and had a smaller bulk than bituminous coal. The navy's voracious appetite for coal, however, meant the benefits from this advantage were rather small. See Frederick M. Binder, "Pennsylvania Coal and the Beginnings of American Steam Navigation," Pennsylvania Magazine of History and Biography 83 (Oct. 1959), 443.

Marchand, Journal of Blockade of Mobile, 3: 58-62; USS Oneida Journal, September 5-10, 1862; William Walker to William McKean, February 6, 1862, Navy Subject File OX, Transportation of Supplies and Passengers, Box 489, Record Group 45, National Archives; ORN, Ser. I, 16: 707.

Pensacola--hardly enough to fill a single warship.<sup>21</sup> The squadron was often only one late shipment away from having nothing at all. Though a lack of coal could not completely immobilize the majority of the ships in the squadron, it reduced an unlucky commander to a state little better than his antecedents in the war with Britain fifty years before. Despite constant shortages, however, no blockading stations were ever left completely uncovered because of coal deficiencies.<sup>22</sup> There were rare occasions when the squadron had a surplus, but this appears to have been confined to a brief period of a few months after the taking of New Orleans.<sup>23</sup>

Coal was one of the few things that the Union could never produce enough of, and coal supply was always a limiting factor on the operations of the WGBS. The precise effect of shortage on the squadron is difficult to gauge, however. There is no doubt that ships with an unlimited supply of coal could have stayed on their stations longer, but it is impossible to determine how much more effective they might have been in capturing blockade runners. A voyage that is never made due to a lack of fuel is also a voyage that never gets into the historical record. It is certain, though, that the coal problem was a fundamental hindrance to the performance of the WGBS.

Ammunition, for all of its complexities of manufacture and delivery as described earlier, was one important material that the WGBS had plenty of. Shot, shell, and

<sup>&</sup>lt;sup>21</sup> ORN, Ser. I, 21: 374-75.

<sup>&</sup>lt;sup>22</sup> Ibid., 20: 221, 408-11, 711, 713, 724; 21: 332, 341.

<sup>&</sup>lt;sup>23</sup> ORN, Ser. I, 18: 465-66; Confidential Correspondence of Gustavus Vasa Fox, 315-16.

powder came on the regular supply steamers and were also special-ordered when offensive operations were planned. The taking of blockade runners hardly necessitated the expenditure of any ammunition at all; a few shots across the bow were all that was normally necessary. Even in battle ammunition expenditure was often quite low, as weapons of this time were slow to load and operate. One ship, the *Katahdin*, recorded its use of shell and shrapnel in operations along the Mississippi from October to December 1862; in seven engagements it used less than 125 charges. In major engagements, however, such a total might be used in a few hours. At the Battle of Mobile Bay on August 5, 1864, for example, the *Brooklyn* and *Richmond* were typical: the former fired 183 times; the latter, having engaged the *Tennessee* in addition to Fort Morgan, fired 223 times. The normal usage of ammunition while on blockade was usually far less than this, and ships could easily carry in their own holds several months' supply.

The WGBS never suffered a major loss because a ship ran out of ammunition or because it was stocked with the wrong kind of ammunition. The most spectacular setbacks for the squadron--the defeat at Galveston on January 1, 1863, the loss of the Morning Light and Velocity twenty-two days later at Sabine Pass, and the capture of the Granite City and Wave at Calcasieu on May 6, 1864--were all due to surprise and the use of small arms by the Confederates. In all three cases the WGBS was overpowered because the enemy was able to swiftly close and shower the better-armed Union ships with rifle

<sup>&</sup>lt;sup>24</sup> ORN, Ser. I, 19: 436-37.

<sup>&</sup>lt;sup>25</sup> ORN, Ser. I, 21: 451, 456-57.

fire. The only time a lack of ammunition might have affected a Union engagement was just before the passing of Forts St. Philip and Jackson; Farragut expressed concern that shells for his mortars were quickly running out, and this may have contributed to his decision to run the forts when he did. In the end, though, his concerns proved groundless.<sup>26</sup>

Maintaining a proper amount of manpower in the squadron was a long-term problem that the WGBS shared with all the other squadrons, and it extended from officers down to landsmen. By 1863 the low rate of recruitment for the navy meant that many ships had far less than their required complements. "There are now in this port [Pensacola] seven vessels, not any of them fully manned," one captain complained, "one of them (the *Anderson*) has been here for months, not able to go to sea from want of men." In August 1863 Commodore Bell thought that the squadron was lacking about 500 men and officers; by October he had amended this number to almost 1,400. The problem was never effectively solved. Even in the closing days of the war, on April 8, 1865, Admiral Henry Thatcher (who had succeeded Farragut as commander of the squadron) reported to the Navy Department that there was a deficiency of 1,881 men. Having larger complements would most likely have had the biggest impact on morale: bigger crews could have divided labor tasks more evenly, and having more men could have prevented such mishaps as happened off Galveston and Sabine Pass.

<sup>&</sup>lt;sup>26</sup> Ibid., 18: 134-39; 19: 446-50; 21: 246-64.

<sup>&</sup>lt;sup>27</sup> Ibid., 20: 100.

<sup>&</sup>lt;sup>28</sup> Ibid., 20: 465, 612; 22: 123.

### CHAPTER VI: CONCLUSION

The logistical effort mounted to supply the West Gulf Blockading Squadron was unprecedented; it was also, at times, maddeningly unpredictable. Crews in the Gulf of Mexico could not expect with any regularity the largesse that the Northern armies often enjoyed. For all its faults, however, the supply system to the Gulf accomplished its task. For its time it was a rational, well-planned, and sometimes intelligently inventive operation. Though at the "end of the line," so to speak, the men and ships of the West Gulf Blockading Squadron were in many ways no worse off than their companions farther east and north.

Texas was the weak link, and it was exploited by the Confederacy. Lacking a permanent base on the coast, ships off Galveston or the Rio Grande had to return to New Orleans or Pensacola to coal or receive repairs. Provisions often arrived in a less than palatable condition, and coal had to be taken on at sea. Few ships were assigned to stations off Texas partly because the navy needed them elsewhere, and partly because blockade running into the state's dusty ports had little impact on the war. Left in small numbers, Union vessels off Texas were vulnerable to audacious attacks by well-manned (if poorly armed) Confederate ships. When engaged individually, the ships of the WGBS were hardly unstoppable, and the vagaries of supply in the Gulf must take at least some of the blame for these weaknesses. When gathered in numbers, however, and when time was taken to mass material and stores, the ships of the WGBS were nearly always victorious. The supply system worked best when the squadron was on the offensive and

when it was conducting operations against blockade runners; this is what the navy wanted and it is essentially what it got, and nothing more.

How effective was the blockade? In Why the South Lost the Civil War, the authors assert that defeat in the war came from the South's unwillingness to make the ultimate sacrifice: it lost the will to fight. The blockade's part in this destruction of Southern morale was relatively small, say the authors, and was not decisive; it was only important in as much as it affected the prices of goods, in turn causing economic and psychological discomforts. More recently, however, some researchers have argued that these price changes were indeed decisive in bringing about the loss of morale in the South. Without the dramatic rise in the prices of basic foodstuffs and other necessities, the South might have fought longer and harder than it did.<sup>2</sup>

The precise impact of the blockade can be debated by degrees, but it is undeniable that it affected the outcome of the war. It is difficult to say whether it could have been more effective had the squadrons been provided with greater numbers of ships, as is sometimes argued.<sup>3</sup> It is true that the Gulf ports saw more attempted violations of the blockade than those in the Atlantic, and more blockaders might have helped.<sup>4</sup> As was

<sup>&</sup>lt;sup>1</sup> Richard E. Berringer, et al., Why the South Lost the Civil War (Athens: University of Georgia, 1986), 53-63.

<sup>&</sup>lt;sup>2</sup> Robert B. Ekelund and Mark Thornton, "The Union Blockade and Demoralization of the South: Relative Prices in the Confederacy," Social Science Quarterly 73 (December 1992), 890-902.

<sup>&</sup>lt;sup>3</sup> Glover, "The West Gulf Blockade," 245.

<sup>&</sup>lt;sup>4</sup> Marcus W. Price, "Ships That Tested the Blockade of the Gulf Ports, 1861-1865," American Neptune 11 (Oct. 1951), 262-90. Most of these vessels were sailing (and consequently very small) ships, and may include some vessels that actually left before the blockade was implemented (see Wise, Lifeline of the Confederacy, 4-5). Price's calculation of 2,960 attempted violations of the blockade gives an idea of the labors of the blockaders; a strange sail had to be chased down regardless of the size or relative importance of the vessel.

shown in Chapter Two, however, there were inherent limitations to existing technology, especially with regard to steam machinery. A larger number of ships for the West Gulf Blockading Squadron might simply have added to the logistical headaches of its officers, rather than making the blockade more effective. The supply system to the Gulf just managed to maintain the fleet that was sent there. A more decisive influence on the effectiveness of the WGBS would have been a stronger supply system, especially if coal was sent in greater quantities and at consistent rates.

With more extensive repair facilities, larger stockpiles of fuel, more efficient preservation and distribution of provisions, and greater manpower, the WGBS might have achieved more success at interdicting Confederate commerce. This success would most likely have been only marginal, however, because so long as Southern ports remained open some blockade runners were able to get through regardless of the condition of the blockaders. The decisive element missing in the Gulf of Mexico was the presence of a permanent ground force at the disposal of the squadron commander. Had ground troops been with the WGBS from start to finish, all of the Gulf ports would most likely have been closed early in the war.

In the end it must be admitted that logistical problems did in fact limit what the West Gulf Blockading Squadron could accomplish: Texas, at times, literally had to be given up to the enemy; the full strength of the squadron could rarely be brought to bear against the enemy simultaneously; and morale often suffered from inconsistent provisioning. Despite these shortcomings, the squadron was able to do many things hitherto unheard of in naval history: field a battlefleet largely powered by steam; maintain

a blockade on a continental scale for four years; and inflict real hardship on the enemy at every level of the economy. That the West Gulf Blockading Squadron was able to do its job through four years of war is a tribute to its logistical system, which on the whole functioned well, despite its weaknesses. Almost from scratch, and with a minimum of planning, the United States Navy created a logistical operation that allowed its ships to carry out their missions.

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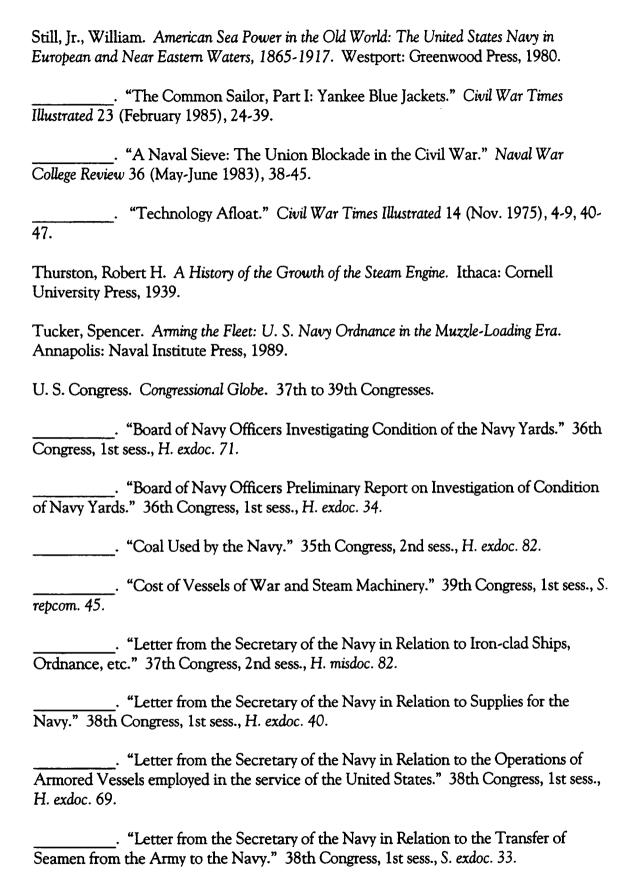
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**APPENDICES** 

## APPENDIX A

Auxiliary and Supply Vessels that Served in the Gulf Blockading and West Gulf Blockading Squadrons, 1861-1865<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Data compiled from ORN, Ser. I, 27, and Silverstone, Warships of the Civil War Navies.

Vessel	Tonnage	Armament	Propulsion or Sail Rig	Gulf Squadron	West Gulf Squadron	Notes
A. Houghton	326 tons	2 32pd SB	Sail (Bark)		62-63	Storeship (ex-warship)
Admiral*	1,248 tons burden		Screw Steamer		64	Supply ship
Althea	72 tons burden	1 12pd SB	Screw Steamer		64-65	Tug boat
Antelope	173 tons	2 30pd R, 4 24pd H	Sidewheel Steamer		62-64	River Tender
Arkansas	752 tons burden	1 20pd R, 1 12pd R, 4 32pd SB	Screw Steamer		63-65	Supply ship
Augusta Dinsmore	850 tons burden	1 20pd R, 1 12pd R, 2 24pd SB	Screw Steamer		64-65	Dispatch ship
	1,238 tons burden	2 30pd R, 1 9" SB	Screw Steamer		63-65	Supply ship
	197 tons	1 12pd R, 4 32pd SB, 1 12pd SB	Sail (Brig)		64-65	Coal ship (ex-warship)
Buckthom	128 tons burden	1 30pd R, 2 12pd SB	Screw Steamer		64-65	Tender and Dispatch ship
	1,750 tons burden	1 100pd R, 1 12pd R, 4 9" SB	Screw Steamer		63-65	Supply ship
Connecticut*	1,725 tons burden	1 50pd R, 1 30pd R, 10 32pd SB	Sidewheel Steamer	61-62	62-65	Supply ship
Feamot	1,012 tons	1861: 6 32pd SB; 1863: 1 8" SB	Sail (Ship)	61-62	62-65	Coal and Supply ship
Fort Morgan*		See Admiral			64-65	Ex-Admiral
Genesee	819 tons burden	1 100pd R, 1 10" SB, 4 9" SB	Sidewheel Steamer		64-65	Storeship (ex-warship)
	252 tons burden	1 12pd R, 1 12pd H	Sidewheel Steamer		63-65	Dispatch and Supply ship
Hollyhock	352 tons burden	1 20pd R, 2 12pd H	Sidewheel Steamer		63-65	Tender and Supply ship
	104 tons burden	1 gun (not specified)	Sidewheel Steamer		63-65	Tug boat
	122 tons	1 20pd R, 1 12pd H	Screw Steamer		63-65	Tug boat
J.C. Kuhn	888 tons	1861:2 32pd SB; 1864:6 32pd SB	Sail (Bark)	61-62	62-65	Coal and Supply ship
J.W. Wilder	Unknown	Unknown	Sail (Schooner)		62-63	Tender and Coal ship
	1,052 tons burden	1 30pd R, 2 32pd SB	Screw Steamer		62-64	Water and Supply ship
Maria A. Wood	344 tons	2 32pd SB	Sail (Schooner)		64-65	Ordnance and Coal ship
	115 tons burden		Screw Steamer		64	Tug boat
	1,046 tons	_	Sail (Ship)	61-62		Ordnance and Coal ship
	1,066 tons burden	1861: 4 32pd SB; 1864: 48" SB	Sail (Ship)	61-62	62-64	Ordnance and Storeship
	1,375 tons burden	1 20pd R, 4 32pd SB, 1 20pd R	Sail (Ship)	61-62	62-65	Storeship
Portsmouth		63: 188" SB, 120pd R, 112pd SB Sail (Ship)	Sail (Ship)		62-65	Station Ship
Potomac	1,726 tons burden	108" SB, 40 32pd SB, 2 12pd SB   Sail (Ship)	Sail (Ship)	61-62	62-65	Receiving ship, Pensacola
Tonnage. Tone his	rden is a meassereme	Tonnage. Tone hinden is a megistement of a vascelle carro, canadiru, if only "tone " method of measurement is unknown	witone "mathod of m	Pagelifamer	or ic unbrow	\$6

Tonnage: Tons burden is a meausrement of a vessel's cargo capacity; if only "tons," method of measurement is unknown. Armament: R=Rifle, SB=Smoothbore, H=Howitzer, pd=pound. Batteries often varied through the war; the most

typical armament is given for each vessel.

Propulsion or Sail Rig: While all of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given. \*=Supply vessels not under direct Squadron command.

Vessel	Tonnage	Armament	Propulsion	Gulf	Gulf West Gulf	Notes
			or Sail Rig	Squadron	Squadron Squadron	
Queen	618 tons burden	1 20pd R, 1 12pd SB, 4 32pd SB Screw Steamer	Screw Steamer		64-65	64-65 Transport and Supply ship
Release	327 tons	2 32pd SB	Sail (Bark)	61-62	62	Supply and Storeship
Relief	438 tons	1 30pd R, 2 32pd SB	Sail (Brig)		62-63	Storeship
Rhode Island*	1,517 tons burden	1 30pd R, 18" SB, 4 32pd SB	Sidewheel Steamer	61-62	62	Supply ship
Sam Houston	66 tons	1 12pd SB	Sail (Schooner)	61-62	62-65	Dispatch ship
Shark	87 tons	2 20pd R	Sail (Schooner)		62-64	Dispatch ship
Supply		4 32pd SB	Sail (Ship)		62-63	Supply ship
Trefoil	373 tons burden	1 30pd R, 1 12pd SB	Screw Steamer		65	Dispatch ship
Union*	1,114 tons burden	1 20pd R	Screw Steamer		63-65	Supply ship
Vincennes	703 tons	48" SB, 29" SB	Sail (Ship)		62-65	Station Ship

Tonnage: Tons burden is a meausrement of a vessel's cargo capacity; if only "tons," method of measurement is unknown. Armament: R=Rifle, SB=Smoothbore, H=Howitzer, pd=pound. Batteries often varied through the war; the most

typical armament is given for each vessel.

Propulsion or Sail Rig: While all of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given. \*=Supply vessels not under direct Squadron command.

### APPENDIX B

Warships that Served in the Gulf Blockading and West Gulf Blockading Squadrons, 1861-1865<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Data Compiled from ORN, Ser. I, 16-22, and Silverstone, Warships of the Civil War Navies.

Vessel	Tonnage	Armament	Propulsion, Rig, or Armor Class	Gulf West Gul Squadron Squadron	West Gulf Squadron	Notes
A. Houghton	326 tons	2 32pd SB	Sail (Bark)		79	Mortar Flotilla
Adolph Hugel	269 tons	1 13" M, 2 32pd SB	Sail (Schooner)		62	Mortar Flotilla
Albatross	378 tons B	4 32pd SB, 1 12pd R, 1 30pd R	Screw Steamer		62-64, 65	
Antona	549 tons B	2 32pd SB, 1 20pd R, 2 24pd SB	Screw Steamer		63-65	
Arizona	950 tons B	4 32pd SB, 130pd R, 1 12pd R	Sidewheel Steamer		63-65	
Arletta	199 tons	1 13" M, 2 32pd SB, 2 12pd SB	Sail (Schooner)		62	Mortar Flotilla
Aroostook	691 tons D	1 11" SB, 2 24pd SB, 1 20pd R	Screw Steamer		62-64	
Arthur	554 tons	Unknown	Sail (Bark)	79	62-65	
Barataria	400 tons	3 guns (Unspecified)	Sternwheel Ironclad		63	Ex-CSS Barataria
Bienville	1,558 tons B	1 100pd R, 1 30pd R, 8 32pd SB	Sidewheel Steamer		63-65	
Bloomer	130 tons	1 32pd SB, 1 12pd R	Sidewheel Steamer		63-65	
Bohio	197 tons	4 32pd SB, 1 12pd R, 1 12pd SB	Sail (Brig)		62-64	
	2,532 tons D	2,532 tons D 64: 2 100pd R, 20 9" SB, 2 60pd R	Screw Steamer	61-62	62-64	
C.P. Williams	210 tons	1 13" M, 2 32pd SB, 2 12pd SB	Sail (Schooner)		62	Mortar Flotilla
	508 tons B	1 30pd R, 2 32pd SB	Sidewheel Steamer		62-64	
Carrabassett	202 tons	2 32pd SB, 4 24pd SB	Sidewheel Tinclad		64-65	
Cayuga	691 tons D	1 11" R, 4 24pd SB, 1 20pd R,1 30pd R	Screw Steamer		62-65	
Charlotte	70 tons	Unknown	Sail (Schooner)		62-65	
Chickasaw	1,300 tons D	4 11" SB	Screw Ironclad		64-65	
Chocura	691 tons D   111" R,	1 11" R, 2 24pd SB, 1 20pd R	Screw Steamer		63-65	
Cincinnati	512 tons	2 100pd R, 3 9" SB, 2 30pd R,6 24pd R	Centerwheel Ironclad		92	
Clifton	892 tons B	2 9" SB, 4 32pd SB, 2 30pd R	Sidewheel Steamer		62-63	
Colorado	4,772 tons D	4,772 tons D 2 10" SB, 28 9" SB, 148" R	Screw Steamer	61-62	62-64	
Commodore	80 tons B	1 20pd R, 2 12pd R, 1 24pd SB	Sidewheel Steamer		63-64	
Conemaugh	1,105 tons D 1 100pd	1 100pd R, 6 9" SB, 2 24pd H	Sidewheel Steamer		64	
Constellation	1,278 tons	16 8" SB, 4 32pd SB, 1 30pd R	Sail (Ship)		64	
Comubia	589 tons B	1 30pd R, 2 24pd SB	Sidewheel Steamer		64-65	
Corypheus	82 tons	1 30pd R, 1 24pd H	Sail (Schooner)		62-64	
1	-	E	11	1	1	

Tonnage: B=burden, D=displacement. Tons burden is a measurement of a vessel's cargo capacity; tons diplacement is more accurate, but came use only in 1864. If only "tons," method of measurement is unknown.

Armament: R=Rifle, SB=Smoothbore, H=Howitzer, M=Mortar, pd=pound. Batteries often varied through the war; the most typical armamer is given for each vessel.

Propulsion or Sail Rig: While most of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given.

Vessel	Tonnage	Armament	Propulsion, Rig, or Armor Class	Gulf West Gull Squadron Squadron	West Gulf Squadron	Notes	
Cowslip	220 tons B	1 20pd R, 2 24pd SB	Sidewheel Steamer		64		
-	545 tons B	4 32pd SB, 1 12pd H	Screw Steamer	61	,	=	
45	149 tons	1 13" M, 2 12pd SB	Sail (Schooner)	,	79	Mortar Flotilla	
Dart	94 tons	Unknown	Sail (Schooner)	61	,		
oto	1,675 tons B	19" SB, 130pd R, 632pd SB	Sidewheel Steamer	61-62	62-65		
	239 tons	Unknown	Sidewheel Steamer		62-63		
	162 tons	2 32pd SB, 4 24pd SB	Sidewheel Tinclad		64-65		
X	355 tons	1 100pd R,4 9" SB,1 32pd SB,2 50pd R	Centerwheel Ironclad		62-63		
	438 tons B	1 30pd R. 2 32pd SB, 2 24pd H	Screw Steamer		62-65		
	150 tons	1 gun (Unspecified)	Sail (Schooner)		62-64		
Fort Gaines		See Commodore			64-65	Ex- Commodore	
Fort Jackson	1.850 tons B	1 100pd R, 2 30pd R, 8 9" SB	Sidewheel Steamer		65		
	950 tons D	1 100pd R,1 30pd R,8 9" SB, 1 12pd H	Screw Steamer		64		
	1.120 tons D	_	Sidewheel Steamer		63-64	:	
George Manghan 274 tons	274 tons	1 13" M, 2 32pd SB	Sail (Schooner)		62	Mortar Flotilla	
Gertrude	350 tons B	2 12pd R, 6 24pd H	Screw Steamer	-	63-65		
	232 tons	2 32pd SB, 4 24pd H	Sternwheel Tinclad		64-65		
d Gwlf	1.200 tons B		Screw Steamer		65		
Granite City	315 tons B		Sidewheel Steamer		63-64		
Hamiett Lane	750 tons	3 9" SB, 1 30pd R, 1 12pd R	Sidewheel Steamer		79		
Hartford	2,900 tons D	2,900 tons D 63: 24 9" SB, 1 45pd R, 2 30pd R	Screw Steamer	;	62-64		
Hatteras	1,126 tons B	,126 tons B   4 32pd SB, 1 20pd R	Sidewheel Steamer	61-62	62-63	Ę	
Henry Janes	261 tons	1 13" M, 2 32pd SB	Sail (Schooner)		62-64	Mortar Flotilla	
	296 tons	2 32pd SB, 1 30pd R	Sail (Schooner)		62-65	Mortar Flotilla	
	840 tons B	62: 1 9" SB, 1 30pd R, 2 32pd SB	Screw Steamer	61-62	62-64, 65		
Huron	691 rons D	1 11" SB. 2 24pd SB. 1 20pd R	Screw Steamer		62		
Iroduois	1.488 tons D	.488 tons D 2 11" SB, 4 32pd SB	Screw Steamer		62-63		
Isilda	Unknown	Unknown	Sail (Schooner)		62		
Itarca	691 rons D	1 11" SB. 2 32nd SB. 1 20pd R	Screw Steamer	62	62-65		
Itasea	- min + /2		-		Lalacement is	in the dialogment is more accurate but came	

Tonnage: B=burden, D=displacement. Tons burden is a measurement of a vessel's cargo capacity; tons diplacement is more accurate, but came

use only in 1864. If only "tons," method of measurement is unknown.

Armament: R=Rifle, SB=Smoothbore, H=Howitzer, M=Mortar, pd=pound. Batteries often varied through the war; the most typical armamen is given for each vessel.

Propulsion or Sail Rig: While most of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given.

Vessel	Tonnage	Armament	Propulsion, Rig, or Armor Class	Gulf Squadron	Gulf West Gulf Squadron Squadron	Notes
_	401 tons	4 32pd SB	Sail (Schooner)	62	62-64	
James L. Davis	461 tons	48"SB	Sail (Bark)		79	
John Griffith	246 tons	1 13" M, 2 32pd SB, 2 12pd H	Sail (Schooner)		62-64	Mortar Flotilla
m	750 tons B	4 32pd SB, 1 9" SB, 1 6" R	Sidewheel Steamer		62-65	
	691 tons D	1 11" SB, 2 24pd SB, 1 20pd R	Screw Steamer		62-65	
Katahdin	691 tons D	1 11" SB, 2 24pd SB, 2 20pd R	Screw Steamer		62-65	
Kennebec	691 tons D	1 11" SB, 2 24pd SB, 1 20pd R	Screw Steamer		62-65	
Kickapoo	1,300 tons D	4 1	Screw Ironclad		64-65	
	691 tons D	_	Screw Steamer		62-65	
Kingfisher	451 tons	48"SB	Sail (Bark)	62		
Kinsman	245 tons	Unknown	Sidewheel Steamer		63	
Kittatinny	421 tons	4 32pd SB	Sail (Schooner)	62	62-63	
na	2,526 tons D	2,526 tons D 1 150pd R, 2 11" SB, 4 9" SB,1 50pd R	Screw Steamer		63-65	
	2,100 tons D	2 15" SB	Screw Ironclad		64-65	
lood/	344 tons	2 32pd SB	Sail (Schooner)		62-63	Mortar Flotilla
Maria J. Carlton 178 tons	178 tons	1 13" M, 2 12pd R	Sail (Schooner)		62	Mortar Flotilla
Marion	566 tons	12 32pd SB, 2 32pd SB	Sail (Ship)	61-62		
Massachusetts	1,155 tons B	1 32pd SB, 48" SB	Screw Steamer	61-62		
Mathew Vassar	216 tons	1 13" M, 2 32pd SB, 2 12pd SB	Sail (Schooner)		62	Mortar Flotilla
	840 tons B	8 32pd SB, 1 20pd R	Screw Steamer	62	62, 65	
Metacomet	1,173 tons D	,173 tons D 2 100pd R, 49" SB, 2 20pd R	Sidewheel Steamer		64-65	
Meteor	221 tons	2 30pd SB, 4 24pd SB	Sternwheel Tinclad		64-65	
	730 tons B	2 9" SB, 1 80pd R, 4 24pd SB	Sidewheel Steamer		62	
Midnight	386 tons	4 32pd SB	Sail (Bark)	61-62	62	
Milwaukee	1,300 tons D		Screw Ironclad		64-65	
Mississippi	3,200 tons D	,200 tons D 62: 1 10" SB, 19 8" SB, 1 20pd R	Sidewheel Steamer	61-62	62-63	
Mobile		See Tennessee (1)			64-65	Ex-Tennessee (1)
Mohawk	459 tons B	1 30pd R, 2 32pd SB, 4 32pd SB	Screw Steamer	61-62	;	
Monongehela	2,078 tons D	$\Box$	Screw Steamer		63-65	

Tonnage: B=burden, D=displacement. Tons burden is a measurement of a vessel's cargo capacity; tons diplacement is more accurate, but came use only in 1864. If only "tons," method of measurement is unknown.

Armament: R=Rifle, SB=Smoothbore, H=Howitzer, M=Mortar, pd=pound. Batteries often varied through the war; the most typical armamen

Propulsion or Sail Rig: While most of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given. is given for each vessel.

Vessel	Tonnage	Armament	Propulsion, Rig, or Armor Class	Gulf West Guls	West Gulf Squadron	Notes
	D	1 0" CB 4 32 2 GB	Screw Steamer	61-62	62	
Montgomery Moming Light	767 tons D 937 tons	18 32, 7 32pd 32 8 32nd SB	Sail (Ship)		62-63	
	675 tone B	3 32nd SB	Screw Steamer	61		
	221 tons B	63: 1 20pd R, 18" SB, 3 32pd SB	Screw Steamer	61-62	62-65	
Nigagra	5.540 tons D		Screw Steamer	61-62	(	
Norfolk Packet	349 tons		Sail (Schooner)		79	Mortar Flotilla
Nyanza	203 tons	6 24pd H, 2 20pd R	Sidewheel Tinclad		64-65	Ī
Oliver H 1 00	199 rons	1 13" M. 2 32pd SB, 2 12pd R	Sail (Schooner)		62-65	Mortar Flotilla
Outer 11. Lee	981 tons D	1 100nd R.3 9" SB.2 32pd SB.4 24pd H	Sidewheel Steamer		62-65	
Octobala	1 488 tons D 64: 2, 11	64: 2 11"SB.6 8"SB.1 30pd R.2 24pd H	Screw Steamer		62-65	;
Orienta	1, 100 com 2 171 tons	1 13" M. 2 32pd SB	Sail (Schooner)		62-65	Mortar Flotilla
Creeka	7	1 100nd R.1 11" SB.3 30pd R.6 32pd SB	Screw Steamer		63-65	
Ossipee	573 tone B	7 11"SB	Sternwheel Ironclad		92	
Csage		1 11" SB 2 24nd SB. 1 20nd R	Screw Steamer		62-65	:
Cwasco Dang		1 13" M. 2 32nd SB	Sail (Schooner)		62	Mortar Flotilla
Fara		1 11" SR 2 24nd SB. 1 20nd R	Screw Steamer		63-65	
remonta		1 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Screw Steamer		63-65	
Fenguin	509 tons D	11 12 purity 1 3 purity 2 2 purity 1 11 "SB 2 2 4nd SB 1 20nd R	Screw Steamer		63-65	
remooscot	3 000 tons D	2 000 tons D (57: 1 42 nd R. 22 9" SB	Screw Steamer		62-64	
rensacou Dhillinni	311 fons	1 20nd R. 1 24nd H. 2 12pd R	Sidewheel Steamer		64	
I raimppi Pink	184 tons B	1 12pd SB, 1 12pd R	Screw Steamer		64-65	
Pinola	691 tons D	1 11" SB, 2 24pd SB, 1 20pd R	Screw Steamer		62-65	
Pocahontas	775 tons D	4 32pd SB, 1 100pd R, 1 20pd R	Screw Steamer		62-65	
Dort Royal	1 163 tons D		Sidewheel Steamer		64-65	
Portemouth	1.022 tons		Sail (Ship)		62	
Posibatan	3.765 tons D	1 11" SB, 10 9" SB, 5 12pd SB	Sidewheel Steamer	61	;	
Preble	566 tons	2 8" SB, 7 32pd SB, 1 12pd SB	Sail (Ship)	61-62	62-63	
Preston	428 tons B	1 30pd R, 2 24pd SB	Screw Steamer		60	
Deinges Bound	610 tons B	2 30nd R. 19" SB. 4 24pd H	Screw Steamer		63-63	
Thiness word	7	T. T. L. J. i. S. More accurate, but came capacity; tons diplacement is more accurate, but came	of a wesselle cargo car	nacity: tons	diplacement i	s more accurate, but came

Tonnage: B=burden, D=displacement. Tons burden is a measurement of a vessel's cargo capacity; tons diplacement is more accurate, but came use only in 1864. If only "tons," method of measurement is unknown.

Armament: R=Rifle, SB=Smoothbore, H=Howitzer, M=Mortar, pd=pound. Batteries often varied through the war; the most typical armamen

is given for each vessel. Propulsion or Sail Rig: While most of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given.

Vessei 10	Tonnage	Armament	Propulsion, Rig, or Armor Class	⊈	West Gulf Squadron	Notes
1,20	1,202 tons B 252 tons	1,202 tons B   62: 1 30pd R, 8 32pd SB, 1 12pd SB   125 tons   1 13" M, 2 32pd SB	Screw Steamer Sail (Schooner)	61-62	62-64 62	Mortar Flotilla
Rachel Seaman 212 tons	tons	61:2 32pd SB; 64:1 32pd SB, 1 12pd R	Sail (Schooner)	61-62	62-65	
212	212 tons	6 24pd SB	Sternwheel Tinclad		63	
2,70	0 tons D	2,700 tons D 62: 1 80pd R, 20 9" SB, 1 30pd R	Screw Steamer	61-62	62-65	
217	217 tons	2 30pd R, 4 24pd H	Sternwheel Tinclad		64-65	
96 tons		1 20pd R, 1 12pd SB, Spar Torpedo	Screw Steamer		64-65	Torpedo boat
1,72	ns	2 10" SB, 10 8" SB, 36 32pd SB	Sail (Ship)	61		
197		1 20pd R, 4 32pd SB	Screw Steamer		62-63	
691	_	1 11" SB, 2 24pd SB, 1 20pd R	Screw Steamer	79		
703		48"SB, 14 32pd SB	Sail (Ship)	61		
Samuel Rotan 212	212 tons	2 32pd SB, 1 24pd H	Sail (Schooner)	62		
	,726 tons	2 64pd SB, 10 8" SB, 36 32pd SB	Sail (Ship)	61-62		
Santiago de Cuba 1,56	1,567 tons B		Sidewheel Steamer	61		
	233 tons	1 13" M	Sail (Schooner)		62-64	Mortar Flotilla
691	691 tons D	1 11" SB, 2 24pd SB, 1 20pd R	Screw Steamer	79	62-65	
58 tons	suc	1 12pd H R	Sail (Schooner)		63-65	:
264	264 tons	1 13" M, 2 32pd SB	Sail (Brig)		62-63	Mortar Flotilla
1,07	,070 tons D 1 100pd	1 100pd R,5 9" SB,2 24pd H,2 12pd H	Sidewheel Steamer		64-65	
320	320 tons B	29"R, 18"R, 16"R	Sidewheel Steamer		64-65	Ex-CSS Selma
1,23	,235 tons D	Ξ	Screw Steamer		63-65	
7	245 tons	1	Sail (Schooner)		62	Mortar Flotilla
Sophronia 217	217 tons	1 13" M, 2 32pd SB, 2 12pd SB	Sail (Schooner)		79	Mortar Flotilla
_	5 tons B	,165 tons B   48" SB, 1 32pd SB	Screw Steamer	61-62		
188	88 tons	2 30pd R, 4 24pd H	Sternwheel Tinclad		64-65	
3,82	4 tons D	3,824 tons D   15 8" SB, 2 12pd H, 1 24pd H	Sidewheel Steamer	61		;
284	tons	1 13" M, 2 32pd SB, 2 12pd SB	Sail (Schooner)		79	Mortar Flotilla
	691 tons D	1 10" SB, 1 20pd R, 4 24pd H	Screw Steamer	62	,	
Tallahatchie 171	171 tons	2 32pd SB, 4 24pd SB	Sternwheel Tinclad		64-65	

Tonnage: B=burden, D=displacement. Tons burden is a measurement of a vessel's cargo capacity; tons diplacement is more accurate, but came in

use only in 1864. If only "tons," method of measurement is unknown.

Armament: R=Rifle, SB=Smoothbore, H=Howitzer, M=Mortar, pd=pound. Batteries often varied through the war; the most typical armament is given for each vessel. Propulsion or Sail Rig: While most of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given.

Vessel	Tonnage	Armament	Propulsion, Rig,	Gulf	West Gulf	Notes
	ı		or Armor Class	Squadron Squadron	Squadron	
Tecumseh	2,100 tons D 2 15" SB		Screw Ironclad		64	
Tennessee (1)	1,275 tons B	3, 1 30pd R, 1 12pd R	Sidewheel Steamer		62-64	
Tennessee (2)	1,273 tons		Side/Screw Ironclad		64	Ex-CSS Tennessee
Tritonia	202 tons B	202 tons B   1 30pd R, 1 12pd SB, 1 24pd SB	Sidewheel Steamer		64-65	
Uncas	192 tons B 1 20pd R,		Screw Steamer		62-63	
Varuna	1,247 tons B	30pd R	Screw Steamer		62	
Velocity	87 tons		Sail (Schooner)		62-63	
Vincennes	703 tons		Sail (Ship)	61-62	62	
Virginia	581 tons B	1 30pd R, 5 24pd H, 1 12pd R	Screw Steamer		63-65	
Wanderer	300 tons	•	Sail (Schooner)	61-62		
Water Witch	378 tons B	4 32pd SB, 1 24pd H	Sidewheel Steamer	61-62		
Wave	229 tons		Sternwheel Tinclad		64	
Westfield	891 tons B		Sidewheel Steamer		62	
William Bacon	183 tons		Sail (Schooner)		62	Mortar Flotilla
W.G. Anderson	593 tons	63:1 20pd R, 6 32pd SB, 1 12pd R	Sail (Bark)	61-62	62-65	
Winona	Ω		Screw Steamer	62	62-64	
Winnebago	1,300 tons D 4 11" SB	4 11" SB	Screw Ironclad		64-65	
Wissahickon	691 tons D	, 2 24pd SB, 1 20pd R	Screw Steamer	62	62	
Wvandotte	453 tons B		Screw Steamer	61		

Tonnage: B=burden, D=displacement. Tons burden is a measurement of a vessel's cargo capacity; tons diplacement is more accurate, but came in

use only in 1864. If only "tons," method of measurement is unknown.

Armament: R=Rifle, SB=Smoothbore, H=Howitzer, M=Mortar, pd=pound. Batteries often varied through the war; the most typical armament is given for each vessel. Propulsion or Sail Rig: While most of the above vessels had sail rigs of some kind, only the rigs of ships using sail exclusively are given.

## APPENDIX C

Periodic Dispositions of Vessels Comprising the Gulf Blockading and West Gulf Blockading Squadrons, 1861-1865<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Data compiled from ORN, Ser. I, 16-22.

		Normanhor 15 1861	
July 22, 1861		INOVERIDE 15) 1001	
	;		Flagshin
Crusader	Key West	Inagara	1 iagoint
N Constitutions	Applachicals	Colorado	Southwest Pass
INIOHURUMENY	1 paracticona	Mississiphi	Heading to Pass a l'Outre
Mohawk	St. Mark's	Wississippi	11 1: La Dielens
R R Camper	Tampa Bay	Richmond	Heading to Fort Fickens
Wagandotte	Fast Pass Santa Rosa	R.R. Cuyler	Mississippi Sound
w yanaoure	East Disland	Massachusetts	Ship Island
Colorado	Fort Fickers	TATAS CONTRACTOR	Analochicala
Mississibbi	Mobile	Montgomery	Apaiacincoia
Huntsville	Mobile	Mohawk	St. Marks
Massachusetts	Ship Island	South Carolina	Barataria
N. Commont	Handing to Southwest Pass	Water Witch	Mobile
Inagara	r in 16 million Box	Huntsuille	Key West, Repairing
St. Louis	East and Journeast Fass	1 Tours of the	Handing to Applachicals
Brooklyn	Pass a l'Outre	Hatteras	I leading to reparactineous
Doubatan	Southwest Pass	Santee	Galveston
Sant Carolina	Contractor Contractor	Potomac	Mobile
South Carouna	Visit Claim	Vincennes	SE Pass
Water Witch	Man July	Proble	Berwick
		Marion	Apalachicola
		Frhan Allen	Tampa Bay
		Kindisher	Pass a l'Outre
		D	Heading to Key West for Coal
		Fampero	i trading with most of the
		J.C. Kuhn	Heading to 1 ortugas for Coal
		National Guard	Storeship at Ship Island
		Wanderer	Key West

January 23, 1862				February 25, 1862	
Wanderer	Kev West	Portsmouth	Coast of Texas	Potomac	Vera Cruz
Tahoma	Key West*	Potomac	Heading to Veracruz	Santee	Galveston
Ethan Allen	Tampa bay	Chambers	Just Arrived	Rachel Seaman	Galveston
Mohawk	St. Marks	* =repairing		Portsmouth	Between Corpus Christi and Rio Grande
Sagamore	Apalachicola			Vincennes	South Pass
Marion	Apalachicola			Preble	Northeast Pass
M.A. Wood	East Pass, Santa Rosa			Arthur	Between Matagorda and Corpus Christi
Mississippi	Fort Pickens			Midnight	Between Matagorda and Corpus Christi
Brooklyn	Mobile			Kittatinny	Sabine Pass
Huntsville	Mobile			Maria A. Wood	East Pass, Santa Rosa
R.R. Cuyler	Mobile			Feamot	Supplying coal to Mobile
Wissahickon	Petit Bois Pass			Pampero	Storeship, Ship Island
Niagara	Ship Island			J.C. Kuhn	Key West, taking on coal
South Carolina	Ship Island*			Nightingale	Coalship, Ship Island
Itasca	Ship Island*			Bohio	Near Mississippi River
Sciota	Ship Island*			Mississippi	Fort Pickens
Massachusetts	Mississippi Sound			De Soto	Barataria
New London	Mississippi Sound			Hatteras	Berwick Bay
Water Witch	Mississippi Sound			Colorado	Southwest Pass
Mercedita	Pass a l'Outre			Hartford	Flagship
Winona	Pass a l'Outre			Brooklyn	Pass a l'Outre
Vincennes	NE Pass			Richmond	At Sea
Preble	South Pass			Pensacola	Key West
Colorado	Southwest Pass			Varuna	At Sea
Samuel Rotan	Southwest Pass			Montgomery	Mississippi Sound
De Soto	Barataria Bay			New London	Mississippi Sound
Montgomery	Atchafalaya			Sciota	Mississippi Sound
Hatteras	Heading to Berwick			Itasca	Mobile
Santee	Galveston			Wissahickon	Petit Bois and Horn Island Pass
Rachel Seaman	Galveston			Huron	At Sea
Kingfisher	Between Mississippi a	and Yucatan Bank		Winona	Southeast Pass
Kittatinny	Between Ship Isl. Shoal and Sabine Pass	al and Sabine Pass		Kanawha	Mobile
Midnight	Between Galveston a	and Matagorda		Kennebec	Near Mississippi River
Arthur	Between Matagorda and Corpus Christi	and Corpus Christi		Kineo	Near Mississippi River

TOOT (TT HINTE			
Hartford	Mississippi River	Maria A. Wood	East Pass, Santa Rosa
Pensacola	Mississippi River	Feamot	Storeship, Southwest Pass
Brooklyn	Mississippi River	Pampero	Heading to Key West
Richmond	Mississippi River	J.C. Kuhn	Coalship
Varuna	Mississippi River	Nightingale	Coalship, Pass a l'Outre
Mississippi	Mississippi River	Bohio	Petit Bois Pass
Oneida	Mississippi River		
Iroquois	Mississippi River		
Sciota	Mississippi River		
Katahdin	Mississippi River		
Winona	Mississippi River		
Wissahickon	Mississippi River		
Pinola	Mississippi River		
Kineo	Mississippi River		
Kennebec	Mississippi River		
Portsmouth	Southwest Pass		
Itasca	Barataria		
Cayuga	Atchafalaya		
Kanawha	Mobile		
Huron	With [Flag Officer] Du Pont		
Colorado	Southwest Pass		
De Soto	Key West		
Hatteras	Ship Island		
Montgomery	At Sea		
New London	Ship Island		
Calhoun	Ship Island		
Potomac	Vera Cruz		
Santee	Galveston		
Vincennes	Pensacola and Mobile		
Preble	Mobile		
Arthur	Matagorda and Corpus Christi		
Midnight	Matagorda		
Kittatinny	Heading to Barataria		
Rachel Seaman	Galveston		

January 1, 1863			
Hartford	New Orleans	W.G. Anderson	Pensacola, awaiting crew
Pensacola	New Orleans	A. Houghton	Pensacola
Brooklyn	New Orleans	Nightingale	Pensacola
Mississippi	New Orleans	Preble	Pensacola
Supply	New Orleans	West field	Galveston
Orvetta	New Orleans	Harriet Lane	Galveston
John Griffith	New Orleans	Clifton	Galveston
Horace Beals	New Orleans	Owasco	Galveston
J.C. Kuhn	New Orleans	Sachem	Galveston
Feamot	New Orleans	Vincennes	Ship Island
Sea Foam	New Orleans	Tennessee	Dispatch ship
Susquehanna	Mobile	J.P. Jackson	Grant's Pass, Alabama
Oneida	Mobile	Calhoun	Brashear City, Louisiana
R.R. Cuyler	Mobile	Estrella	Brashear City, Louisiana
Kanawha	Mobile	Kensington	Dispatch ship
Pembina	Mobile	Velocity	Coast of Texas
Clifton	Mobile	Rachel Seaman	Sabine Pass
Aroostook	Mobile	Henry Janes	Sabine Pass
Pocahontas	Mobile	Relief	Storeship, Ship Island
Kennebec	Mobile	Arthur	Coast of Texas
Pinola	Mobile	Kinsman	Brashear City, Louisiana
Portsmouth	Carrollton, Louisiana	Bohio	St. Andrews Bay
Richmond	Baton Rouge	Charlotte	East Pass, Santa Rosa, Santa Rosa
Cayuga	Mississippi River	M.A. Wood	Petit Bois Pass
Essex	Mississippi River	Morning Light	Coast of Texas
Kineo	Mississippi River	Diana	Brashear City, Louisiana
Hatteras	Mississippi River	Pampero	Storeship, Southwest Pass
Sciota	Mississippi River	Kittatinny	Coast of Texas
Katahdin	Mississippi River	Corypheus	Coast of Texas
Albatross	Mississippi River	Sam Houston	St. Andrews Bay
Itasca	Mississippi River		
Winoma	Mississippi River		
New London	Lake Pontchartrain		
Potomac	Pensacola		

lartford	New Orleans	Sciota	Galveston
ensacola	New Orleans	Itasca	Galveston
lenry Janes	New Orleans	Katahdin	Galveston
hn Griffith	New Orleans	Owasco	Galveston
arah Bruen	New Orleans	Oneida	Cruising after Oreto [CSS Florida]
liver H. Lee	New Orleans	R.R. Cuyler	Cruising after Oreto [CSS Florida]
Iorace Beals	New Orleans	Potomac	Pensacola
achem	New Orleans	Supply	Pensacola
J.C. Kuhn	New Orleans	Rachel Seaman	Pensacola
earnot	New Orleans	Bohio	Pensacola
orypheus	New Orleans	A. Houghton	Pensacola
ea Foam	New Orleans	Nightingale	Pensacola
rvetta	New Orleans	Preble	Pensacola
arataria	Building at New Orleans	Sam Houston	Pensacola
ichmond	Baton Rouge	W.G. Anderson	Pensacola, awaiting crew
Essex	Mississippi River	Kittatinny	Heading to Pensacola
ineo	Mississippi River	Charlotte	East Pass, Santa Rosa
lifton	Mississippi River	Susquehanna	Mobile
lbatross	Mississippi River	Kanawha	Mobile
/inoma	Mississippi River	Pembina	Mobile
fississippi	Southwest Pass	Aroostook	Mobile
Pampero	Southwest Pass	Pocahontas	Mobile
ortsmouth	Carrollton, Louisiana	Kennebec	Mobile
Estrella	Brashear City, Louisiana	Pinola	Mobile
Kinsman	Brashear City, Louisiana	Kensington	Dispatch Ship
<i>Siana</i>	Brashear City, Louisiana	Tennessee	Dispatch Ship
Calhoun	Brashear City, Louisiana		
Jew London	Sabine Pass		
\rthur	Aransas Pass		
Aaria A. Wood	Petit Bois Pass		
'incennes	Ship Island		
elief	Ship Island		
J.P. Jackson	Mississippi Sound		
mothen	Calveston		

March 1, 1863			
Hantford	New Orleans	Sciota	Galveston
Pensacola	New Orleans	Itasca	New Orleans*
Monongahala	New Orleans	Katahdin	Sabine Pass
Henry Janes	Mississippi River	Owasco	New Orleans*
John Griffith	Mississippi River	Cayuga	Galveston
Sarah Bruen	Mississippi River	Oneida	Cruising after Oreto [CSS Florida]
Oliver H. Lee	Mississippi River	R.R. Cuyler	Cruising after Oreto [CSS Florida]
Horace Beals	New Orleans	Potomac	Pensacola
Sachem	New Orleans*	Rachel Seaman	Pensacola
J.C. Kuhn	New Orleans	Bohio	Pensacola
Feamot	New Orleans	A. Houghton	Pensacola
Corypheus	Lake Pontchartrain	Nightingale	Pensacola
Sea Foam	Baton Rouge	Preble	Pensacola
Orvetta	Baton Rouge	Sam Houston	Pensacola
Barataria	New Orleans	W.G. Anderson	Pensacola
Richmond	New Orleans	Kittatinny	Port Lavaca
Essex	Mississippi River	Charlotte	East Pass, Santa Rosa
Kineo	Donaldsonville, Louisiana	Susquehanna	Mobile
Clifton	Mississippi Sound	Kanawha	Mobile
Albatross	Plaquemine, Louisiana	Pembina	Mobile
Winona	Baton Rouge	Aroostook	Mobile
Mississippi	Baton Rouge	Pocahontas	Mobile
Pampero	Southwest Pass	Kennebec	Mobile
Portsmouth	Carrollton, Louisiana	Pinola	Mobile
Estrella	Berwick Bay	Lackawanna	Mobile
Diana	Berwick Bay	Kensington	New Orleans*
Calhoun	Berwick Bay	Tennessee	Despatch Ship
New London	Sabine Pass	* =repairing	
Arthur	Aransas Pass		
Maria A. Wood	Petit Bois Pass		
Vincennes	Ship Island		
Relief	Ship Island		
J.P. Jackson	Mississippi Sound		
Brooklyn	Galveston		

June 1, 1863			
Monongahala	Flagship, Port Hudson	Aroostook	Mobile
Sam Howston	Despatch Ship	Pinola	Mobile
Pensacola	New Orleans	Lackawanna	Mobile
New London	New Orleans*	Brooklyn	Galveston
Clifton	New Orleans*	Sciota	Galveston
W.G. Anderson	New Orleans*	Bienville	Coast of Texas
Tennessee	New Orleans*	Owasco	Coast of Texas
Calhoun	New Orleans*	Cayuga	Coast of Texas
J.C. Kuhn	New Orleans	Arthur	Coast of Texas
Feamot	New Orleans	Potomac	Pensacola
Hantford	Above Port Hudson	Bohio	Pensacola
Albatross	Above Port Hudson	Charlotte	Pensacola
Anizona	Above Port Hudson	Nightingale	Pensacola
Richmond	Below Port Hudson	Oneida	Attached to West Indies Squadron
Genesee	Below Port Hudson	Rachel Seaman	~-
Essex	Below Port Hudson	Sachem	<b>.</b>
Kineo	Below Port Hudson	Antona	~-
Henry Janes	Below Port Hudson	Hollyhock	;
Orvetta	Below Port Hudson	Ida	
John Griffith	Below Port Hudson	Pembina	Ordered North
Sarah Bruen	Below Port Hudson	Pocahontas	Ordered North
Sea Foam	Below Port Hudson	Kanawha	Ordered North
O.H. Lee	Below Port Hudson	R.R. Cuyler	Ordered North
Horace Beals	Below Port Hudson	Kennebec	Ordered North
Portsmouth	Head of the Passes	Kensington	Ordered North*
Winona	River Patrol	* = repairing; ? = disposition not given	sition not given
Pampero	Southwest Pass		
Maria A. Wood	Petit Bois Pass		
Corrypheus	Lake Pontchartrain		
Estrella	Atchafalaya		
J.P. Jackson	Mississippi Sound		
Vincennes	Ship Island		
Relief	Ship Island		
Colorado	Mobile		

Bloomer Arthur Kittatinny Jasmine	Pensacola					
ym	CIMACOIA	Glide	New Orleans	Estrella	Coast of Texas	
ym Y	•		Mour Orloans	Granito City	Berwick Bay	
	Pensacola	Fortsmouth	New Officialis	Clarific City	Demich Bon	
	Pensacola	Conemaugh	New Orleans	Stockaale	Derwick Day	
	Pensacola	Hollyhock	New Orleans	Owasco	Pass Cavallo	
	Pensacola	Meteor	New Orleans	Sam Houston	Southwest Pass	
	Pensacola	Pembina	New Orleans	Pampero	Southwest Pass	
	Pensacola	Bohio	New Orleans			
	Pensacola	M.A. Wood	New Orleans			
- T	Pensacola	Cowslip	New Orleans			
	Pensacola	Aroostook	Sabine Pass			
	Mobile	Virginia	Sabine Pass			
	Mobile	Chocura	Sabine Pass			
	Mobile	Princess Royal	Sabine Pass	,		
	Mobile	Calhoun	Mississippi Sound	ים י		
	Mobile	Henry Janes	Mississippi Sound	70		
	Mobile	Sarah Bruen	Mississippi Sound	<b>.</b>		
Lackawanna	Mobile	O.H. Lee	Mississippi Sound	70		
	Mobile	John Griffith	Mississippi Sound	<b>.</b>		
-	Mobile	Orvetta	Mississippi Sound	· •		
	Mobile	Sea Foam	Mississippi Sound	<del>ا</del>		
a	Mobile	Glasgow	Ship Island			
hala	Mobile	Tennessee	Ship Island			
	Mobile	Hartford	Ship Island			
md	Mobile	Vincennes	Ship Island			
	New Orleans	J.P. Jackson	Ship Island			
	New Orleans	Antona	Galveston			
w London	New Orleans	Penobscot	Galveston			
	New Orleans	Kanawha	Galveston			
	New Orleans	Sciota	Galveston			
net	New Orleans	Ossipee	Galveston			
	New Orleans	Commodore	Lake Pontchartrain	ain		
	New Orleans	Nyanza	Lake Pontchartrain	ain		
	New Orleans	Corypheus	Lake Pontchartrain	rain		
1	New Orleans	Augusta Dinsmore	Off Rio Grande			- 1

March 15, 1864					
Rloomer	Fast Pass. Santa Rosa	Nyanza	Lake Pontchartrain	Jasmine	Dispatch Ship
Charlotte	East Pass, Santa Rosa	Commodore	Lake Pontchartrain	Arizona	Heading North
Harrford	Pensacola	Corypheus	Lake Pontchartrain		
Genesee	Pensacola	Pampero	Southwest Pass		
Pinola	Pensacola	Pensacola	New Orleans		
Arthur	Pensacola	Albatross	New Orleans		
Potomac	Pensacola	Cayuga	New Orleans		
W.G. Anderson	Pensacola	Gertrude	New Orleans		
I.C. Kuhn	Pensacola	Pembina	New Orleans		
Niohtingale	Pensacola	New London	New Orleans		
Cowslip	Pensacola	Seminole	New Orleans		
Bohio	Pensacola	Narcissus	New Orleans		
Richmond	Mobile	Hollyhock	New Orleans		
Monongahala	Mobile	Ida	New Orleans		
Oneida	Mobile	Meteor	New Orleans		
Conemaugh	Mobile	M.A. Wood	New Orleans		
Ossibee	Mobile	Granite City	Berwick Bay		
Metacomet	Mobile	Stockdale	Berwick Bay		
Sebago	Mobile	Glide	Berwick Bay		
Itasca	Mobile	Aroostook	Sabine Pass		
Port Royal	Mobile	Estrella	Sabine Pass		
Penguin	Mobile	Chocura	Sabine Pass		
Octorara	Mobile	Princess Royal	Sabine Pass		
Kennebec	Mobile	Virginia	Sabine Pass		
Tennessee	Mobile	Lackawanna	Galveston		
Calhoun	Ship Island	Kanawha	Galveston		
J.P. Jackson	Ship Island	Penobscot	Galveston		
Vincennes	Ship Island	Katahdin	Galveston		
O.H. Lee	Mississippi Sound	Antona	Pass Cavallo		
Orvetta	Mississippi Sound	Sciota	Pass Cavallo		
Sarah Bruen	Mississippi Sound	Owasco	Off Rio Grande	E	
Henry Janes	Mississippi Sound	Arkansas	Supply Ship between N.O. and I exas	and lexas	
John Griffith	Mississippi Sound	Augusta Dinsmore	Supply Ship between N.C. and 1 exas	and rexas	
Sea Foam	Mississippi Sound	Glasgow	Dispatch Ship		

April 5, 1864					
Charlotte	East Pass, Santa Rosa	Penscacola	New Orleans	Bohio	Galveston
Hartford	Pensacola	Octorara	New Orleans*	Kanawha	San Luis Pass
Tonnossop	Pensacola	Monongahela	New Orleans*	Penobscot	Velasco
Richmond	Pensacola~	Seminole	New Orleans*	Estrella	Pass Cavallo
Sebaso	Pensacola~	Ossipee	New Orleans*	Cayuga	Off Rio Grande
Itasca	Pensacola~	Aroostook	New Orleans*	Anizona	Heading North
Pembina	Pensacola*	J.P. Jackson	New Orleans*	Arkansas	Supply Ship to Texas
Bloomer	Pensacola*	New London	New Orleans*	Augusta Dinsmore	Supply Ship to Texas
Arthur	Pensacola	Gertrude	New Orleans*	Glasgow	Dispatch Ship
W.G. Anderson	Pensacola	Calhoun	New Orleans*	Jasmine	Dispatch Ship
Kittatinny	Pensacola	Elk	New Orleans	$* = repairing; \sim =$	coaling
Potomac	Pensacola	Wave	New Orleans		
J.C. Kuhn	Pensacola	Tallahatchie	New Orleans		
Nightingale	Pensacola	Rodolph	New Orleans		
O.H. Lee	Pensacola	Carrabassett	New Orleans		
Orvetta	Pensacola	Narcissus	New Orleans		
Sarah Bruen	Pensacola	Hollyhock	New Orleans		
John Griffith	Pensacola	Ida	New Orleans		
Sea Foam	Pensacola	Feamot	New Orleans		
Henry Janes	Pensacola	M.A. Wood	New Orleans		
Oneida	Mobile	Meteor	Head of the Passes		
Conemaugh	Mobile	Pampero	Southwest Pass		
Metacomet	Mobile	Nyanza	Berwick Bay		
Port Royal	Mobile	Glide	Berwick Bay		
Pinola	Mobile	Granite City	Berwick Bay		
Penguin	Mobile	Princess Royal	Sabine Pass		
Albatross	Mobile	Chocura	Sabine Pass		•
Kennebec	Mobile	Antona	Sabine Pass		•
Genesee	Mobile	Lackawanna	Galveston		
Vincennes	Ship Island	Owasco	Galveston		
Cowslip	Mississippi Sound	Katahdin	Galveston		
Commodore	Lake Pontchartrain	Sciota	Galveston		
Stockdale	Lake Pontchartrain	Kineo	Galveston		
Corypheus	Lake Pontchartrain	Virginia	Galveston		

April 15, 1864					
Bloomer	East Pass, Santa Rosa	Corypheus	Lake Pontchartrain	Owasco	Brazos River
Charlotte	East Pass, Santa Rosa	Octorara	New Orleans*	Estrella	Pass Cavallo
Hartford	Pensacola	Monongahala	New Orleans	Cayuga	Pass Cavallo
Richmond	Pensacola	Aroostook	New Orleans	Arkansas	Supply Ship to Texas
Arthur	Pensacola	J.P. Jackson	New Orleans	Augusta Dinsmore	Supply Ship to Texas
W.G. Anderson	Pensacola	New London	New Orleans	Glasgow	Dispatch Ship
Kittatinny	Pensacola	Gennude	New Orleans	Jasmine	Dispatch Ship
Potomac	Pensacola	Calhoun	New Orleans	Ida	New Orleans
J.C. Kuhn	Pensacola	Pembina	New Orleans	Hollyhock	New Orleans
Nightingale	Pensacola	Sciota	New Orleans	* = repairing	
O.H. Lee	Pensacola	Arizona	New Orleans		
Orvetta	Pensacola	Granite City	New Orleans*		
Sarah Bruen	Pensacola	民	New Orleans		
John Griffith	Pensacola	Wave	New Orleans		
Sea Foam	Pensacola	Tallahatchie	New Orleans	•	
Henry Janes	Pensacola	Rodolph	New Orleans		
Oneida	Mobile	Carrabassett	New Orleans		
Sebago	Mobile	Portsmouth	New Orleans		
Itasca	Mobile	Feamot	New Orleans		
Conemaugh	Mobile	M.A. Wood	New Orleans		
Metacomet	Mobile	Meteor	Head of the Passes		
Port Royal	Mobile	Pampero	Southwest Pass		
Pinola	Mobile	Nyanza	Berwick Bay		
Penguin	Mobile	Glide	Berwick Bay		
Albatross	Mobile	Princess Royal	Sabine Pass		
Kennebec	Mobile	Chocura	Sabine Pass		
Genesee	Mobile	Antona	Sabine Pass		
Seminole	Mobile	Lackawanna	Galveston		
Ossipee	Mobile	Kineo	Galveston		
Vincennes	Ship Island	Penobscot	Galveston		
Cowslip	Mississippi Sound	Kanawha	Galveston		
Narcissus	Mississippi Sound	Katahdin	Galveston	•	
Commodore	Lake Pontchartrain	Bohio	Galveston		
Stockdale	Lake Pontchartrain	Virginia	San Luis Pass		

May 1, 1864					
Rloomer	Fast Pass, Santa Rosa	Nyanza	Berwick Bay	Portsmouth	New Orleans
Ol all the	Last Deer Sonto Rosa	- Price	Berwick Bay	Feamot	New Orleans
Charlotte	East I ass, Jailta Mosa	IV and	Coloneian	M A Wood	New Orleans
Hartjora	Fensacola	wave ()	Calcasieu	Matacr	New Orleans
Richmond	Pensacola	Grante City	Calcasieu	Wieteur A 1	Ivew Circums
Arthur	Pensacola	Princess Royal	Sabine Pass	Arkansas	Supply Snip to Texas
W.G. Anderson	Pensacola	Cayuga	Sabine Pass	Augusta Dinsmore	Supply Ship to 1 exas
Kittatinny	Pensacola	New London	Sabine Pass	Glasgow	Dispatch Ship
Potomac	Pensacola	Lackawanna	Galveston	Jasmine	Dispatch Ship
I.C. Kuhn	Pensacola	Owasco	Galveston	Ida	New Orleans
Nightingale	Pensacola	Katahdin	Galveston	Hollyhock	New Orleans
O.H. Lee	Pensacola	Kineo	Galveston	* = repairing	
Orvetta	Pensacola	Arizona	Galveston		
Sarah Bruen	Pensacola	Bohio	Galveston		
John Griffith	Pensacola	Virginia	San Luis Pass		
Sea Foam	Pensacola	Chocura	Brazos River		
Henry Janes	Pensacola	Estrella	Pass Cavallo		
Ossipee	Mobile	Kanawha	Along Coast to Rio Grande		
Oneida	Mobile	Commodore	Lake Pontchartrain		
Sebago	Mobile	Stockdale	Lake Pontchartrain		
Itasca	Mobile	Corypheus	Lake Pontchartrain		
Conemaugh	Mobile	Monongahala	New Orleans*		
Metacomet	Mobile	Octorara	New Orleans*		
Pinola	Mobile	Aroostook	New Orleans*		
Penguin	Mobile	J.P. Jackson	New Orleans*		
Albatross	Mobile	Gertrude	New Orleans*		
Kennebec	Mobile	Calhoun	New Orleans*		
Genesee	Mobile	Pembina	New Orleans*		
Seminole	Mobile	Sciota	New Orleans*		
Tennessee	Mobile	Antona	New Orleans*		
Vincennes	Ship Island	<b>Penobscot</b>	New Orleans*		
Port Royal	Mississippi Sound	Tallahatchie	New Orleans*		
Cowslip	Mississippi Sound	EIK	New Orleans*		
Narcissus	Mississippi Sound	Rodolph	New Orleans*		
Pampero	Southwest Pass	Carrabassett	New Orleans*		

May 15, 1864					
Bloomer	East Pass, Santa Rosa	J.P. Jackson	New Orleans*	Glasgow	Dispatch Ship
Charlotte	East Pass, Santa Rosa	Calhoun	New Orleans*	Jasmine	Dispatch Ship
Hartford	Pensacola	Antona	New Orleans*	Ida	New Orleans
Seminole	Pensacola	Penobscot	New Orleans*	Hollyhock	New Orleans
Kennebec	Pensacola	Virginia	New Orleans*	* = repairing	
Pinola	Pensacola	Comubia	New Orleans*		
Penguin	Pensacola	Tallahatchie	New Orleans*		
Albatross	Pensacola	田米	New Orleans*		
Tennessee	Pensacola	Rodolph	New Orleans*		
Buckthorn	Pensacola	Carrabassett	New Orleans*		
Arthur	Pensacola	Portsmouth	New Orleans		
W.G. Anderson	Pensacola	M.A. Wood	New Orleans		
Kittatinny	Pensacola	Fearnot	New Orleans		
Potomac	Pensacola	Meteor	Head of the Passes		
J.C. Kuhn	Pensacola	Pampero	Southwest Pass		
Nightingale	Pensacola	Nyanza	Berwick Bay		
Conemaugh	Mobile	Glide	Berwick Bay		
Genesee	Mobile	Pocahontas	Calcasieu		
Itasca	Mobile	Aroostook	Calcasieu		
Metacomet	Mobile	Princess Royal	Sabine Pass		
Oneida	Mobile	Cayuga	Sabine Pass		
Ossibee	Mobile	Lackawanna	Galveston		
Pembina	Mobile	Owasco	Galveston		
Port Royal	Mobile	Katahdin	Galveston		
Richmond	Mobile	Chocura	Galveston		
Vincennes	Ship Island	Sciota	Galveston		
Sebago	Mississippi Sound	Gertrude	Galveston		
Cowslip	Mississippi Sound	New London	Galveston		
Nacissus	Mississippi Sound	Arizona	San Luis Pass		
Commodore	Lake Pontchartrain	Kineo	Brazos River and Velasco		
Stockdale	Lake Pontchartrain	Estrella	Pass Cavallo	•	
Corypheus	Lake Pontchartrain	Kanawha	Coast of Texas to Rio Grande	nde	
Monongahala		Arkansas	Supply Ship to Texas	•	
Octorara	New Orleans*	Augusta Dinsmore	Supply Ship to 1 exas		

Inne 1, 1864					
June 1) 1001					
Rloomer	East Pass. Santa Rosa	Commodore	Lake Pontchartrain	Arizona	Pass Cavallo
Charlotte	East Pass, Santa Rosa	Stockdale	Lake Pontchartrain	Chocura	Coast of Texas
Itasea	Densacola	Compleus	Lake Pontchartrain	Arkansas	Supply Ship to Texas
Italia 1 · ·	Dangeola	Dortsmouth	New Orleans	Augusta Dinsmore	Supply Ship to Texas
Comunia	relisacola	Definite	Now Orleans	Glasom	Dispatch Ship
Arthur	Pensacola	rearmot	ivew Citedia	1	Diameter Shin
W.G. Anderson	Pensacola	M.A. Wood	New Orleans	Jasmine	Uspatch omp
Kittatinny	Pensacola	Octorara	New Orleans	Hollyhock	New Orleans
Potomac	Pensacola	J.P. Jackson	New Orleans	Ida	New Orleans
I.C. Kuhn	Pensacola	Calhoun	New Orleans		
Hartford	Mobile	Antona	New Orleans		
Richmond	Mobile	Penobscot	New Orleans		
Lackawanna	Mobile	Virginia	New Orleans		
Brooklyn	Mobile	Pocahontas	New Orleans		
Seminole	Mobile	Philippi	New Orleans		
Monomanhala	Mobile	EK:	New Orleans		
Galena	Mobile	Rodolph	New Orleans		
Ossithee	Mobile	Tallahatchie	New Orleans		
Omeida	Mobile	Meteor	Head of the Passes		
Pembina	Mobile	Pampero	Southwest Pass		
Metacomet	Mobile	Nyanza	Berwick Bay		
General	Mobile	Glide	Berwick Bay		
Port Royal	Mobile	Carrabassett	Berwick Bay		
Tennessee	Mobile	Princess Royal	Galveston		
Kennebec	Mobile	Kineo	Galveston		
Pinola	Mobile	Cayuga	Galveston		
Penovin	Mobile	Katahdin	Galveston		
Comemanah	Mobile	Aroostook	Galveston		
Sebago	Mississippi Sound	Estrella	Galveston		
Cowslip	Mississippi Sound	Gertrude	Galveston		
Buckthorn		Kanawha	Velasco		
Narcissus		New London	Calcasieu		
Vincennes	Ship Island	Owasco	Sabine Pass		
Bohio	Ship Island	Sciota	Sabine Pass		

June 15, 1864					
Bloomer	Fact Pass, Santa Rosa	Vincennes	Ship Island	Augusta Dinsmore	Supply Ship to Texas
Disolite		Rohio	Ship Island	Glasgow	Dispatch Ship
Charlotte		Commodore	Lake Pontchartrain	Iasmine	Dispatch Ship
Owasco	rensacola r	Commoder	I ake Pontchartrain	Hollwhock	New Orleans
Tennessee	Fensacola*	Stockaale	r 1 D f - marin	140	New Orleans
Metacomet	Pensacola*	Corypheus	Lake Fontchartfain	iuu *	ister Circuit
Lackawanna	Pensacola*	Octorara	New Orleans	* = repairing and coaling	oanng
Seminole	Pensacola*	J.P. Jackson	New Orleans		
Conemaugh	Pensacola*	Antona	New Orleans		
Pembina	Pensacola*	Virginia	New Orleans		
Cowslip	Pensacola*	Tallahatchie	New Orleans		
Narcissus	Pensacola*	Meteor	New Orleans		
Comubia	Pensacola*	Portsmouth	New Orleans		
Arthur	Pensacola	Feamot	New Orleans		
W.G. Anderson	Pensacola	Rodolph	Pass a l'Outre		
Kittatinny	Pensacola	Pampero	Southwest Pass		
I.C. Kuhn	Pensacola	Nyanza	Berwick Bay		
Potomac	Pensacola	Glide	Berwick Bay		
Maria A. Wood	Pensacola	Carrabassett	Berwick Bay		
Hartford	Mobile	New London	Calcasieu		
Richmond	Mobile	Sciota	Sabine Pass		
Brooklyn	Mobile	Kineo	Sabine Pass		
Monongahala	Mobile	Princess Royal	Galveston		
Ossibee	Mobile	Katahdin	Galveston		
Galena	Mobile	Pocahontas	Galveston		
Oneida	Mobile	Kanawha	Galveston		
Genesee	Mobile	Penobscot	Galveston		
Port Royal	Mobile	Cayuga	Galveston		
Kennehec	Mobile	Penguin	Galveston		
Pinola	Mobile	Gentrude	San Luis Pass		
Itasca	Mobile	Aroostook	Velasco		
Philippi	Mobile	Chocura	Pass Cavallo		
Sebago	Mississippi Sound	Arizona	Pass Cavallo		
Buckthorn	Mississippi Sound	Estrella	Pass Cavallo		
Elk	Mississippi Sound	Arkansas	Supply Ship to Texas		

July 15, 1864					
Bloomer	East Pass, Santa Rosa	Buckthorn	Mississippi Sound	Sciota	Pass Cavallo
Charlotte	East Pass, Santa Rosa	Narcissus	Mississippi Sound	Arkansas	Supply Ship to Texas
Hartford	Pensacola*	Elk	Mississippi Sound	Augusta Dinsmore	Supply Ship to Texas
Estrella	Pensacola*	Vincennes	Ship Island	Glasgow	Dispatch Ship
Kennebec	Pensacola*	Commodore	Lake Pontchartrain	Jasmine	Dispatch Ship
Owasco	Pensacola*	Stockdale	Lake Pontchartrain	Hollyhock	New Orleans
Pembina	Pensacola*	Corypheus	Lake Pontchartrain	Ida	New Orleans
Port Royal	Pensacola*	Antona	New Orleans	* = some repairing and coaling	and coaling
Seminole	Pensacola*	J.P. Jackson	New Orleans		
Bienville	Pensacola*	Octorara	New Orleans		
Manhattan	Pensacola*	Virginia	New Orleans		
Potomac	Pensacola	Meteor	New Orleans		
Arthur	Pensacola	Rodolph	New Orleans		
W.G. Anderson	Pensacola	Tallahatchie	New Orleans		
J.C. Kuhn	Pensacola	Portsmouth	New Orleans		
Kittatinny	Pensacola	Feamot	New Orleans		
M.A. Wood	Pensacola	Pampero	Southwest Pass		
Bohio	Pensacola	Carrabassett	Berwick Bay		
Galena	Mobile	Glide	Berwick Bay		
Genesee	Mobile	Nyanza	Berwick Bay		
Itasca	Mobile	Cayuga	Calcasieu		
Lackawanna	Mobile	New London	Calcasieu		
Metacomet	Mobile	Pocahontas	Sabine Pass		
Monongahala	Mobile	Arizona	Sabine Pass		
Oneida	Mobile	Princess Royal	Galveston		
Ossipee	Mobile	Penobscot	Galveston		
Pinola	Mobile	Gentrude	Galveston		
Richmond	Mobile	Chocura	Galveston		
Brooklyn	Mobile	Kanawha	Galveston		
Sebago	Mobile	Katahdin	Galveston		
Tennessee	Mobile	Aroostook	Galveston		
Philippi	Mobile	Kineo	Galveston		
Conemaugh	Mississippi Sound	Comubia	Galveston		
Cowslip	Mississippi Sound	Penguin	San Luis Pass		

August 15, 1864					
Rloomer	Fact Dass Santa Bass	Twievenia	Mobile Barr	M 1 1	
Charlotta	Foot Dog Conto Dog	A labor	Mobile Day	New London	Calcasieu
Determine	Danie 1	היווירי	Mobile bay	Focanontas	Sabine Fass
Fotomac	Fensacola	Kose	Mobile Bay	Arizona	Sabine Pass
W.G. Anderson	Pensacola	Pink	Mobile Bay	Princess Royal	Galveston
Arthur	Pensacola	Buckthorn	Mobile Bay	Katahdin	Galveston
J.C. Kuhn	Pensacola	Manhattan	Mobile Bay	Aroostook	Galveston
Jasmine	Pensacola	Winnebago	Mobile Bay	Sciota	Galveston
Kittatinny	Pensacola	Chickasaw	Mobile Bay	Kanawha	Galveston
Owasco	Pensacola*	CSS Tennessee	Mobile Bay	Chocura	Galveston :
Glasgow	Pensacola*	CSS Selma	Mobile Bay	Comubia	Galveston
Genesee	Mobile	Conemaugh	Mississippi Sound	Penguin	Galveston
Sebago	Mobile	Estrella	Mississippi Sound	Kineo	Aransas Pass
Pembina	Mobile	J.P. Jackson	Mississippi Sound	Penobscot	Velasco
Pinola	Mobile	Vincennes	Ship Island	* = repairing	
Tennessee	Mobile	Bohio	Ship Island	•	
Bienville	Mobile	Commodore	Lake Pontchartrain		
M.A. Wood	Mobile	Corypheus	Lake Pontchartrain		
Hartford	Mobile Bay	Arkansas	New Orleans		
Brooklyn	Mobile Bay	Virginia	New Orleans		
Richmond	Mobile Bay	Antona	New Orleans		
Lackawanna	Mobile Bay	A. Dinsmore	New Orleans		
Monongahala	Mobile Bay	Hollyhock	New Orleans		
Oneida	Mobile Bay	Ida	New Orleans		
Ossipee	Mobile Bay	Portsmouth	New Orleans		
Galena	Mobile Bay	Feamot	New Orleans		
Seminole	Mobile Bay	Antelope	New Orleans		
Port Royal	Mobile Bay	民	New Orleans		
Itasca	Mobile Bay	Pampero	Southwest Pass		
Metacomet	Mobile Bay	Tallahatchie	Southwest Pass		
Kennebec	Mobile Bay	Meteor	Pass a'L'outre		
Octorara	Mobile Bay	Nyanza	Berwick Bay		
Rodolph	Mobile Bay	Glide	Berwick Bay		
Stockdale	le Bay	Carrabassett	Berwick Bay		
Cowslip	Mobile Bay	Cayuga	Calcasieu		

September 1, 1864					
Blomer	Fast Pass, Santa Rosa	Bienville	Mobile Bay	Katahdin	Galveston
Charlotta	Fast Pass, Santa Rosa	Rodolph	Mobile Bay	Aroostook	Galveston
Brooklyn	Pensacola%	Stockdale	Mobile Bay	Sciota	Galveston
Monomanhala	Pensacola%	Cowslip	Mobile Bay	Kanawha	Galveston
Seminole	Pensacola%	Glasgow	Mobile Bay	Chocura	Galveston
Ossibee	Pensacola%	Althea	Mobile Bay	Comubia	Galveston
Galena	Pensacola%	Pink	Mobile Bay	Penguin	Galveston
Itasca	Pensacola%	Rose	Mobile Bay	Kineo	Aransas Pass
Самива	Pensacola%	Maria A. Wood	Mobile Bay	Penobscot	Velasco
Owasco	Pensacola%	J.P. Jackson	Mississippi Sound	Arkansas	Supply Ship to Lexas
Tennessee	Pensacola%	Narcissus	Mississippi Sound	Augusta Dinsmore	Supply Ship to Lexas
Buckthorn	Pensacola%	Vincennes	Ship Island	Hollyhock	New Orleans
Jasmine	Pensacola%	Commodore	Lake Pontchartrain	Ida	New Orleans
Potomac	Pensacola	Tallahatchie	Lake Pontchartrain	Tritonia	Supply Ship to Mobile
Arthur	Pensacola	Corypheus	Lake Pontchartrain		
I.C. Kuhn	Pensacola	Oneida	New Orleans		
Kittatinny	Pensacola	CSS Tennessee	New Orleans		
W.G. Anderson	Pensacola	Conemaugh	New Orleans		
Bohio	Pensacola	Estrella	New Orleans		
Hartford	Mobile Bay	Antona	New Orleans		
Richmond	Mobile Bay	Arizona	New Orleans		
Lackawanna	Mobile Bay	Virginia	New Orleans		
Manhattan	Mobile Bay	Meteor	New Orleans		
Chickasaw	Mobile Bay	EIK	New Orleans		
Winnebago	Mobile Bay	Portsmouth	New Orleans		
Metacomet	Mobile Bay	Feamot	New Orleans		
Octorara	Mobile Bay	Pampero	Southwest Pass		
Port Royal	Mobile Bay	Antelope	Pass a'L'outre		
Genesee	Mobile Bay	Nyanza	Berwick Bay		
Sebago	Mobile Bay	Glide	Berwick Bay		
Kennebec	Mobile Bay	Carrabassett	Berwick Bay		
Pembina	Mobile Bay	New London	Calcasieu		
Pinola	Mobile Bay	Pocahontas	Sabine Pass		
Selma	Mobile Bay	Princess Royal	Galveston		

October 1, 1864					
Bloomer	East Pass, Santa Rosa	J.P. Jackson	Mississippi Sound	Katahdin	Galveston
Charlotte	East Pass, Santa Rosa	Rose	Mississippi Sound	New London	Galveston
Richmond	Pensacola*	Bohio	Mississippi Sound	Seminole	Galveston
Cayuga	Pensacola*	Vincennes	Ship Island	Bienville	Galveston
Genesee	Pensacola*	Tallahatchie	Lake Pontchartrain	Sciota	Velasco
Jasmine	Pensacola*	Fort Gaines	Lake Pontchartrain	Itasca	Rio Grande
Kanawha	Pensacola*	Corypheus	Lake Pontchartrain	Kineo	Rio Grande
Lackawanna	Pensacola*	Antona	New Orleans*	Arkansas	Supply Ship to I exas
Metacomet	Pensacola*	Arizona	New Orleans*	Augusta Dinsmore	Supply Ship to Lexas
Pembina	Pensacola*	Conemaugh	New Orleans*	Hollyhock	New Orleans
Buckthorn	Pensacola	Elk	New Orleans*	Ida	New Orleans
Cowslip	Pensacola	Estrella	New Orleans*	Glasgow	Supply Ship to Mobile
Potomác	Pensacola	Meteor	New Orleans*	Galena	Heading to Key West
W.G. Anderson	Pensacola	Mobile	New Orleans*	* = some repairing and coaling	and coaling
Arthur	Pensacola	Oneida	New Orleans*		
Kittatinny	Pensacola	Princess Royal	New Orleans*		
J.C. Kuhn	Pensacola	Selma	New Orleans*		
Hartford	Mobile Bay	Tennessee	New Orleans*		
Kennebec	Mobile Bay	Virginia	New Orleans*		
Monongahala	Mobile Bay	Feamot	New Orleans		
Octorara	Mobile Bay	Portsmouth	New Orleans		
Pinola	Mobile Bay	Pampero	Southwest Pass		
Port Royal	Mobile Bay	Antelope	Pass a'L'outre		
Rodolph	Mobile Bay	Nyanza	Berwick Bay		
Stockdale	Mobile Bay	Glide	Berwick Bay		
Sebago	Mobile Bay	Carrabassett	Berwick Bay		
Chickasaw	Mobile Bay	Owasco	Calcasieu		
Winnebago	Mobile Bay	Penguin	Calcasieu		
Manhattan	Mobile Bay	Gertrude	Sabine Pass		
Althea	Mobile Bay	Pocahontas	Sabine Pass		
Narcissus	Mobile Bay	Ossipee	Galveston		
Pink	Mobile Bay	Aroostook	Galveston		
Tritonia	Mobile Bay	Chocura	Galveston		
Maria A. Wood	Mobile Bay	Comubia	Galveston		

November 1, 1864					
Bloomer	East Pass, Santa Rosa	J.P. Jackson	Mississippi Sound	Pembina	Galveston
Charlotte	East Pass, Santa Rosa	Rose	Mississippi Sound	Sciota	Galveston
Cayuga	Pensacola*	Vincennes	Ship Island	Seminole	Galveston
Genesee	Pensacola*	EIK	Lake Pontchartrain	Itasca	Rio Grande
Kanawha	Pensacola*	Fort Gaines	Lake Pontchartrain	Penobscot	Brazos Santiago
Kennebec	Pensacola*	Corypheus	Lake Pontchartrain	Arkansas	Supply Ship to Texas
Octorara	Pensacola*	Antona	New Orleans∼	Augusta Dinsmore	Supply Ship to Texas
Pinola	Pensacola*	Arizona	New Orleans∼	Hollyhock	New Orleans
Sebago	Pensacola*	Conemaugh	New Orleans∼	Ida	New Orleans
Jasmine	Pensacola	Estrella	New Orleans∼	Glasgow	Supply Ship to Mobile
Pink	Pensacola	Meteor	New Orleans∼	Galena	Transferred to East Gulf
Potomac	Pensacola	Mobile	New Orleans∼	* = some repairing and coaling	and coaling
W.G. Anderson	Pensacola	Milwaukee	New Orleans∼	$\sim$ = some at quarantine station	ntine station
Kittatinny	Pensacola	Oneida	New Orleans∼		
J.C. Kuhn	Pensacola	Princess Royal	New Orleans∼		
Hantford	Mobile Bay	Tennessee	New Orleans∼		
Chickasaw	Mobile Bay	Virginia	New Orleans∼		
Lackawanna	Mobile Bay	Fearnot	New Orleans		
Manhattan	Mobile Bay	Portsmouth	New Orleans		
Metacomet	Mobile Bay	Pampero	Southwest Pass		
Monongahala	Mobile Bay	Carrabassett	Berwick Bay		
Owasco	Mobile Bay	Glide	Berwick Bay		
Port Royal	Mobile Bay	Nyanza	Berwick Bay		
Richmond	Mobile Bay	Aroostook	Calcasieu		
Rodolph	Mobile Bay	Penguin	Calcasieu		
Selma	Mobile Bay	Gertrude	Sabine Pass		
Stockdale	Mobile Bay	New London	Sabine Pass		
Winnebago	Mobile Bay	Pocahontas	Sabine Pass		
M.A. Wood	Mobile Bay	Ossipee	Galveston		
Althea	Mobile Bay	Bienville	Galveston		
Buckthom	Mobile Bay	Chocura	Galveston		
Cowslip	Mobile Bay	Comubia	Galveston		
Narcissus	Mobile Bay	Katahdin	Galveston		
Tritonia	Mobile Bay	Kineo	Galveston		

November 30, 1864	364				
Bloomer	East Pass, Santa Rosa	Pink	Mobile Bay	Comubia	Galveston
Charlotte	East Pass, Santa Rosa	Tritonia	Mobile Bay	Pembina	Galveston
Hartford	Pensacola*	Maria A. Wood	Mobile Bay	Chocura	Velasco
Kanawha	Pensacola**	J.P. Jackson	Mississippi Sound	Seminole	Rio Grande
Kennebec	Pensacola*	Rose	Mississippi Sound	Metacomet	Coast of Texas
Kineo	Pensacola*	Bohio	Mississippi Sound	Monongahala	Coast of Texas
Ossipee	Pensacola*	Vincennes	Ship Island	Princess Royal	Coast of Texas
Owasco	Pensacola*	Elk	Lake Pontchartrain	Arkansas	Supply Ship to Texas
Penguin	Pensacola*	Fort Gaines	Lake Pontchartrain	Augusta Dinsmore	Supply Ship to Texas
Pinola	Pensacola*	Tallahatchie	Lake Pontchartrain	Hollyhock	New Orleans
Sciota	Pensacola*	Antona	New Orleans	Ida	New Orleans
Constellation	Pensacola	Arizona	New Orleans	Glasgow	Supply Ship to Mobile
W.G. Anderson	Pensacola	Estrella	New Orleans	Manhattan	Transferred to Mississippi
Arthur	Pensacola	Katahdin	New Orleans	Tennessee	Transferred to Mississippi
Corypheus	Pensacola	Manhattan	New Orleans	* = repairing	
J.C. Kuhn	Pensacola	Milwaukee	New Orleans		
Kittatinny	Pensacola	Oneida	New Orleans		
Potomac	Pensacola	Tennessee	New Orleans		
Buckthom	Pensacola	Virginia	New Orleans		
Jasmine	Pensacola	Feamot	New Orleans		
Narcissus	Pensacola	Pampero	Southwest Pass		
Richmond	Mobile Bay	Meteor	Head of the Passes		
Genesee	Mobile Bay	Carrabassett	Berwick Bay		
Octorara	Mobile Bay	Glide	Berwick Bay		
Port Royal	Mobile Bay	Nyanza	Berwick Bay		
Rodolph	Mobile Bay	Penobscot	Calcasieu		
Sebago	Mobile Bay	New London	Calcasieu		
Selma	Mobile Bay	Gertrude	Sabine Pass		
Stockdale	Mobile Bay	Itasca	Sabine Pass		
Chickasaw	Mobile Bay	Pocahontas	Sabine Pass		
Kickapoo	Mobile Bay	Lackawanna	Galveston		
Winnebago	Mobile Bay	Aroostook	Galveston		
Althea	Mobile Bay	Bienville	Galveston		
Cowslip	Mobile Bay	Cayuga	Galveston		

January 1, 1865					
Arthur	Pensacola	Stockdale	Mississippi Sound	Monongahala	Galveston
W.G. Anderson	Pensacola	Tallahatchie	Mississippi Sound	Princess Koyal	Calveston
Bohio	Pensacola	Fort Gaines	Lake Pontchartrain	Virginia	Caiveston
Charlotte	Pensacola	Meteor	Pass a l'Outre	Kanawha	Fass Cavallo
Tasmine	Pensacola	Pampero	Southwest Pass	Penobscot	San Luis Fass
Kennebec	Pensacola	Vincennes	Ship Island	Semmole	No Orande
I.C. Kuhn	Pensacola	Anizona	New Orleans	Metacomet	Cruising
Ossibee	Pensacola	Aroostook	New Orleans		
Owasco	Pensacola	Arkansas	New Orleans		
Penguin	Pensacola	Augusta Dinsmore	New Orleans		
Pinola	Pensacola	Bienville	New Orleans		
Potomac	Pensacola	Comubia	New Orleans		
Sciota	Pensacola	Estrella	New Orleans		
Bloomer	East Pass, Santa Rosa	Feamot	New Orleans		
Antona	Mobile Bay	Glide	New Orleans		
Buckthom	Mobile Bay	Glasgow	New Orleans		
Chickasaw	Mobile Bay	Hollyhock	New Orleans		
Correbeus	Mobile Bay	Itasca	New Orleans		
Genesee	Mobile Bay	Ida	New Orleans		
Kickaboo	Mobile Bay	Katahdin	New Orleans		
Milwankee	Mobile Bay	Kineo	New Orleans		
Maria A. Wood	Mobile Bay	Oneida	New Orleans		
Narcissus	Mobile Bay, Disabled	Port Royal	New Orleans		
Octorara	Mobile Bay	Pocahontas	New Orleans		
Richmond	Mobile Bay	Portsmouth	New Orleans		
Sebago	Mobile Bay	Selma	New Orleans		
Sam Houston	Mobile Bay	Carrabassett	Berwick Bay		
Tritonia	Mobile Bay	Nyanza	Berwick Bay		
Winnebago	Mobile Bay	Chocura	Calcasieu		
Althea	Mississippi Sound	New London	Calcasieu		
Cowslip	Mississippi Sound	Pembina	Sabine Pass		
J.P. Jackson	Mississippi Sound	Cayuga	Galveston		
Rodolph	Mississippi Sound	Gertrude	Galveston		
Rose	Mississippi Sound	Lackawanna	Galveston		

January 15, 1865					
Arthur	Pensacola	Rose	Mississippi Sound	Lackawanna	Galveston
W.G. Anderson	Pensacola	Tallahatchie	Mississippi Sound	Monongahala	Galveston
Buckthom	Pensacola	田水	Lake Pontchartrain	Princess Royal	Galveston
Jasmine	Pensacola	Fort Gaines	Lake Pontchartrain	Virginia	Galveston
Kennebec	Pensacola	Vincennes	Ship Island	Kanawha	Pass Cavallo
I.C. Kuhn	Pensacola	Pampero	Southwest Pass	Seminole	Rio Crande
Kittatinny	Pensacola	Meteor	Pass a l'Outre	Penobscot	San Luis Pass
Metacomet	Pensacola	Arizona	New Orleans	Bienville	Coast of lexas
Narcissus	Pensacola, Disabled	Aroostook	New Orleans	Penguin	Coast of 1exas
Ossibee	Pensacola	Arkansas	New Orleans		
Owasco	Pensacola	Augusta Dinsmore	New Orleans		
Pinola	Pensacola	Comubia	New Orleans		
Potomac	Pensacola	Cowslip	New Orleans		
Sciota	Pensacola	Estrella	New Orleans		
Sam Houston	Pensacola	Feamot	New Orleans		
Bloomer	East Pass, Santa Rosa	Glasgow	New Orleans		
Charlotte	East Pass, Santa Rosa	Glide	New Orleans		
Antona	Mobile Bay	Hollyhock	New Orleans		
Althea	Mobile Bay	Ida	New Orleans		
Corrobeus	Mobile Bay	Itasca	New Orleans		
Genesee	Mobile Bay	Katahdin	New Orleans		
Kickaboo	Mobile Bay	Kineo	New Orleans		
Maria A. Wood	Mobile Bay	Oneida	New Orleans		
Milwaukee	Mobile Bay	Port Royal	New Orleans		
Octorara	Mobile Bay	Pocahontas	New Orleans		
Pink	Mobile Bay	Selma	New Orleans		
Richmond	Mobile Bay	Portsmouth	New Orleans		
Sebaro	Mobile Bay	Carrabassett	Berwick Bay		
Stockdale	Mobile Bay	Nyanza	Berwick Bay		
Tritonia	Mobile Bay	Chocura	Calcasieu		
Winnebago	Mobile Bay	New London	Calcasieu		
Bohio	Mississippi Sound	Pembina	Sabine Pass		
J.P. Jackson	Mississippi Sound	Cayuga	Galveston		
Rodolph	Mississippi Sound	Gertrude	Galveston		

February 1, 1865					
Charlotto	Fact Pace Santa Rosa	Rose	Mississippi Sound	Virginia	Galveston
Diamer	Fast Pass Santa Rosa	Vincennes	Ship Island	Kanawha	Pass Cavallo
IW G Anderson	Pencacola	日本	Lake Pontchartrain	Penguin	Velasco
Author	Pensacola	Fort Gaines	Lake Pontchartrain	Penobscot	San Luis Pass
Buckhow	Pensacola	Tallahatchie	Lake Pontchartrain	Seminole	Rio Grande
Jasmine	Pensacola	Meteor	Pass a l'Outre	Antona	Coast of Texas
Konnohec	Pensacola	Pampero	Southwest Pass	Augusta Dinsmore	Coast of Texas
I.C. Kuhn	Pensacola	Arkansas	New Orleans	Bienville	Coast of Texas
Narcissus	Pensacola, Disabled	Arizona	New Orleans	Pinola	Coast of Texas
Owasco	Pensacola	Aroostook	New Orleans	Princess Royal	Coast of Texas
Potomac	Pensacola	Comubia	New Orleans		
Sam Houston	Pensacola	Estrella	New Orleans		
Kittatinny	Pensacola	Feamot	New Orleans		
Althea	Mobile Bay	Glasgow	New Orleans		
Chickasaw	Mobile Bay	Itasca	New Orleans		
Cowslip	Mobile Bay	Ida	New Orleans		
Corrpheus	Mobile Bay	Katahdin	New Orleans		
Genesee	Mobile Bay	Kineo	New Orleans		
Ida	Mobile Bay	Oneida	New Orleans		
Kickapoo	Mobile Bay	Port Royal	New Orleans		
Metacomet	Mobile Bay	Pocahontas	New Orleans		
Maria A. Wood	Mobile Bay	Portsmouth	New Orleans		
Milwaukee	Mobile Bay	Selma	New Orleans		
Octorara	Mobile Bay	Carrabassett	Berwick Bay		
Pink	Mobile Bay	Glide	Berwick Bay		
Richmond	Mobile Bay	Nyanza	Berwick Bay		
Sciota	Mobile Bay	Chocura	Calcasieu		
Sebago	Mobile Bay	New London	Calcasieu		
Stockdale	Mobile Bay	Pembina	Sabine Pass		
Tritonia	Mobile Bay	Cayuga	Galveston		
Winnebago	Mobile Bay	Gertrude	Galveston		
Bohio	Mississippi Sound	Lackawanna	Galveston		
J.P. Jackson	Mississippi Sound	Monongahala	Galveston		
Rodolph	Mississippi Sound	Ossipee	Galveston		

February 15, 1865					
Bloomer	East Pass, Santa Rosa	Vincennes	Ship Island	Kanawha	Coast of Texas
Charlotte	East Pass, Santa Rosa	Bohio	Mississippi Sound	Ossipee	Coast of Texas
Arthur	Pensacola	J.P. Jackson	Mississippi Sound	Pembina	Coast of Texas
W.G. Anderson	Pensacola	Corypheus	Mississippi Sound	Penguin	Coast of Texas
Jasmine	Pensacola	Fort Gaines	Lake Pontchartrain	Penobscot	Coast of Texas
Kennebec	Pensacola	Pampero	Southwest Pass	Pinola	Coast of Texas
Kittatinny	Pensacola	Arizona	New Orleans	Princess Royal	Coast of Texas
I.C. Kuhn	Pensacola	Aroostook	New Orleans	Virginia	Coast of Texas
Narcissus	Pensacola, Disabled	Comubia	New Orleans	Seminole	Rio Grande
Owasco	Pensacola	Cowslip	New Orleans		
Potomac	Pensacola	Estrella	New Orleans		
Althea	Mobile Bay	Feamot	New Orleans		
Arkansas	Mobile Bay	Glasgow	New Orleans		
Buckthorn	Mobile Bay	Hollyhock	New Orleans		
Chickasaw	Mobile Bay	Itasca	New Orleans		
Correheus	Mobile Bay	Katahdin	New Orleans		
一一	Mobile Bay	Kineo	New Orleans		
Genesee	Mobile Bay	Metacomet	New Orleans		
Ida	Mobile Bay	Monongahela	New Orleans		
Kickaboo	Mobile Bay	New London	New Orleans		
Meteor	Mobile Bay	Oneida	New Orleans		
Maria A. Wood	Mobile Bay	Port Royal	New Orleans		
Milwaukee	Mobile Bay	Pocahontas	New Orleans		
Pink	Mobile Bay	Portsmouth	New Orleans		
Richmond	Mobile Bay	Selma	New Orleans		
Sciota	Mobile Bay	Carrabassett	Berwick Bay		
Sebago	Mobile Bay	Glide	Berwick Bay		
Stockdale	Mobile Bay	Chocura	Calcasieu Pass		
Sam Houston	Mobile Bay	Cayuga	Galveston		
Tallahatchie	Mobile Bay	Gertrude	Galveston		
Tritonia	Mobile Bay	Lackawanna	Galveston		
Winnebago	Mobile Bay	Antona	Coast of Texas		
Octorara	Mobile Bay	Augusta Dinsmore	Coast of Texas		
Nyanza	Mobile Bay	Bienville	Coast of Texas		

March 1, 1865					_,
Bloomer	East Pass, Santa Rosa	Rodolph	Mobile Bay	Cayuga	Galveston
Arthur	Pensacola	Vincennes	Ship Island	Gertrude	Galveston
W.G. Anderson	Pensacola	Arkansas	Mississippi Sound	Kanawha	Galveston
Bohio	Pensacola	J.P. Jackson	Mississippi Sound	Lackawanna	Galveston
Charlotte	Pensacola	Jasmine	Mississippi Sound	Penguin	Galveston
J.C. Kuhn	Pensacola	Fort Gaines	Lake Pontchartrain	Penobscot	Galveston
Kennebec	Pensacola	Pampero	Southwest Pass	Princess Royal	Cavallo and Aransas Passes
Narcissus	Pensacola, Disabled	Aroostook	New Orleans	Virginia	San Luis Pass and Velasco
Owasco	Pensacola	Bienville	New Orleans	Seminole	Rio Grande
Potomac	Pensacola	Chocura	New Orleans	Augusta Dinsmore	Coast of Texas
Kittatinny	Pensacola	Cincinnati	New Orleans	Fort Jackson	Coast of Texas
Althea	Mobile Bay	Comubia	New Orleans	Ossipee	Coast of Texas
Buckthorn	Mobile Bay	Corypheus	New Orleans	Quaker City	Coast of Texas
Chickasaw	Mobile Bay	Cowslip	New Orleans		
臣除	Mobile Bay	Estrella	New Orleans		
Genesee	Mobile Bay	Feamot	New Orleans		-
Ida	Mobile Bay	Glasgow	New Orleans		
Itasca	Mobile Bay	Hollyhock	New Orleans		
Kickapoo	Mobile Bay	Katahdin	New Orleans		
Metacomet	Mobile Bay	Kineo	New Orleans		
Meteor	Mobile Bay	Monongahala	New Orleans		
Milwaukee	Mobile Bay	New London	New Orleans		
Maria A. Wood	Mobile Bay	Oneida	New Orleans		
Nyanza	Mobile Bay	Osage	New Orleans		
Octorara	Mobile Bay	Pocahontas	New Orleans		
Pink	Mobile Bay	Port Royal	New Orleans		
Richmond	Mobile Bay	Portsmouth	New Orleans		
Sciota	Mobile Bay	Rose	New Orleans		
Sebago	Mobile Bay	Selma	New Orleans		
Stockdale	Mobile Bay	Carrabassett	Berwick Bay		
Sam Houston	Mobile Bay	Glide	Berwick Bay		
Tallahatchie	Mobile Bay	Pinola	Calcasieu Pass		
Tritonia	Mobile Bay	Pembina	Sabine Pass		
Winnebago	Mobile Bay	Antona	Galveston		

March 15, 1865					
Blomer	East Pass, Santa Rosa	Stockdale	Mobile Bay	Gertrude	Galveston
Charlotte	East Pass, Santa Rosa	Tallahatchie	Mobile Bay	Pinola	Calveston
Althen	Pensacola	Tritonia	Mobile Bay	Princess Royal	Calveston
Arthur	Pensacola	Winnebago	Mobile Bay	Kanawha	Pass Cavallo
W.G. Anderson	Pensacola	J.P. Jackson	Mississippi Sound	Penobscot	Velasco
I.C. Kuhn	Pensacola	Vincennes	Ship Island	Seminole	No Grande
lasmine	Pensacola	Fort Gaines	Lake Pontchartrain	Antona	Coast of Texas
Kittatinn	Pensacola	Pampero	Northwest Pass	Fort Jackson	Coast of Texas
Narcissus	Pensacola, Disabled	Bohio	Mississippi River	Kennebec	Coast of 1 exas
Potomac	Pensacola	Augusta Dinsmore	New Orleans	Ossipee	Coast of Texas
Albatross	Mobile Bay	Aroostook	New Orleans	Owasco	Coast of Texas
Buckthorn	Mobile Bay	Arkansas	New Orleans	Pembina	Coast of Texas
Chickasaw	Mobile Bay	Bienville	New Orleans	Penguin	Coast of Texas
Cincinnati	Mobile Bay	Chocura	New Orleans	Quaker City	Coast of 1exas
Comphens	Mobile Bay	Comubia	New Orleans	Virginia	Coast of 1 exas
Cowslib	Mobile Bay	Estrella	New Orleans		
FIR	Mobile Bay	Feamot	New Orleans		
Gonesee	Mobile Bay	Glasgow	New Orleans		
Ida	Mobile Bay	Hollyhock	New Orleans		
Itaca	Mobile Bay	Katahdin	New Orleans		
Kickatoo	Mobile Bay	Kineo	New Orleans		
Metacomet	Mobile Bay	Lackawanna	New Orleans		
Meteor	Mobile Bay	Monongahela	New Orleans		
M.A. Wood	Mobile Bay	New London	New Orleans		
Milwaukee	Mobile Bay	Oneida	New Orleans		
Nyanza	Mobile Bay	Pocahontas	New Orleans		
Octorara	Mobile Bay	Port Royal	New Orleans		
Osage	Mobile Bay	Portsmouth	New Orleans		
Pink	Mobile Bay	Preston	New Orleans		
Richmond	Mobile Bay	Rose	New Orleans		
Rodolph	Mobile Bay	Selma	New Orleans		
Sam Houston	Mobile Bay	Carrabassett	Berwick Bay		
Sciota	Mobile Bay	Glide	Berwick Bay		
Sebago	Mobile Bay	Cayuga	Galveston		

April 1, 1865					
Bloomar	Fast Pass, Santa Rosa	Sciota	Mobile Bay	Antona	Coast of Texas
Discontier Of analysis	Fact Dage Santa Rosa	Stockdale	Mobile Bay	Cayuga	Coast of Texas
Charlotte	East I ass, Jainta Mosa	Tallahatchia	Mobile Bay	Comubia	Coast of Texas
W.G. Anderson	Fensacola	1 allanuterue	Mobile Bar	Portmide	Coast of Texas
Arthur	Pensacola	I rejou	MODIIC Day	7	Coast of Texas
J.C. Kuhn	Pensacola	Tritonia	Mobile Bay	Nanawita 17	Coast of Toxos
Jasmine	Pensacola	Winnebago	Mobile Bay	Kennebec	Coast of Texas
Narcissus	Pensacola, Disabled	M.A. Wood	Mobile Bay	Oneida	Coast of Texas
Potomac	Pensacola	Bohio	Mississippi Sound	Owasco	Coast of 1 exas
Sehago	Pensacola	J.P. Jackson	Mississippi Sound	Penguin	Coast of lexas
Albatross	Mobile Bay	Vincennes	Ship Island	Penobscot	Coast of I exas
Althea	Mobile Bay	Pampero	Southwest Pass	Pinola	Coast of 1 exas
Buckthom	Mobile Bay	Fort Gaines	Lake Pontchartrain	Preston	Coast of Lexas
Chickasaw	Mobile Bay	Hollyhock	Mississippi River	Princess Royal	Coast of I exas
Cincinnati	Mobile Bay	Arkansas	New Orleans	Quaker City	Coast of Texas
Comphene	Mobile Bay	Aroostook	New Orleans	Virginia	Coast of Texas
Countlin	Mohile Bay	Bienville	New Orleans		
FIL	Mohile Bay	Chocura	New Orleans		
Genesee	Mohile Bay	Augusta Dinsmore	New Orleans		
Glasom	Mobile Bay	Estrella	New Orleans		
Ida	Mobile Bay	Fearnot	New Orleans		
Itasca	Mobile Bay	Katahdin	New Orleans		
Kickatoo	Mobile Bay	Kineo	New Orleans		
Kittatinny	Mobile Bay	Lackawanna	New Orleans		
Metacomet	Mobile Bay	Ossipee	New Orleans		
Meteor	Mobile Bay	Pembina	New Orleans		
Milwaukee	Mobile Bay	Pocahontas	New Orleans		
New London	Mobile Bay	Port Royal	New Orleans		
Nyanza	Mobile Bay	Portsmouth	New Orleans		
Octonara	Mobile Bay	Rose	New Orleans		
Osdor	Mobile Bay	Selma	New Orleans		
Pink	Mobile Bay	Carrabassett	Berwick Bay		
Richmond	Mobile Bay	Glide	Berwick Bay		
Rodolph	Mobile Bay	Fort Jackson	Galveston		
Sam Houston	Mobile Bay	Seminole	Rio Grande		

April 15, 1865					
Bloomer	East Pass, Santa Rosa	Sebago	Off Mobile City	Preston	Coast of Texas
Charlotte	East Pass, Santa Rosa	J.P. Jackson	Mississippi Sound	Princess Royal	Coast of Texas
Arthur	Pensacola	Vincennes	Ship Island	Quaker City	Coast of Texas
Robio	Pensacola	Fort Gaines	Lake Pontchartrain	Virginia	Coast of lexas
lasmine	Pensacola	Hollyhock	Mississippi River	Augusta Dinsmore	Supply Ship to Lexas
I.C. Kuhn	Pensacola	Pampero	Southwest Pass	Seminole	Kio Grande
Narcissus	Pensacola, Disabled	Arkansas	New Orleans	Bienville	Gone North
Potomac	Pensacola	Aroostook	New Orleans	Kineo	Cone North
Albatross	Mobile Bay	Chocura	New Orleans	Althea	Sunk by Torpedo
W.G. Anderson	Mobile Bay	Estrella	New Orleans	Ida	Sunk by Torpedo
Buckthom	Mobile Bay	Feamot	New Orleans	Milwaukee	Sunk by Torpedo
Cincinnati	Mobile Bay	Katahdin	New Orleans	Osage	Sunk by Torpedo
Corrbheus	Mobile Bay	Lackawanna	New Orleans	Kodolph	Sunk by 10tpedo
Cowslib	Mobile Bay	Ossipee	New Orleans	Sciota	Sunk by 1 orpedo
臣	Mobile Bay	Pembina	New Orleans		
Genesee	Mobile Bay	Pocahontas	New Orleans		
Glasgow	Mobile Bay	Port Royal	New Orleans		
Kittatinny	Mobile Bay	Portsmouth	New Orleans		
Metacomet	Mobile Bay	Rose	New Orleans		
Meteor	Mobile Bay	Selma	New Orleans		
New London	Mobile Bay	Carrabassett	Berwick Bay		
Nyanza	Mobile Bay	Glide	Berwick Bay		
Pink	Mobile Bay	Fort Jackson	Galveston		
Richmond	Mobile Bay	Antona	Coast of Texas		
Sam Houston	Mobile Bay	Cayuga	Coast of Texas		
Stockdale	Mobile Bay	Comubia	Coast of Texas		
Tallahatchie	Mobile Bay	Genrude	Coast of Texas		
Trefoil	Mobile Bay	Grand Gulf	Coast of Texas		
Tritonia	Mobile Bay	Kanawha	Coast of Texas		
M.A. Wood	Mobile Bay	Kennebec	Coast of Texas		
Chickasaw	Off Mobile City	Oneida	Coast of Texas		
Kickapoo	Off Mobile City	Owasco	Coast of Texas		
Octorara	Off Mobile City	Penguin	Coast of Texas		
Winnebago	Off Mobile City	Pinola	Coast of 1exas		

## **VITA**

Colin Babb was born in Flemington, New Jersey, on July 12, 1971. He attended schools in Eugene, Oregon, and graduated from South Eugene High School with honors in June 1989. He entered Colgate University, Hamilton, New York, in August 1989 and graduated in May 1993 with a Bachelor of Arts in History. After working for several years he entered the Master's program in History at the University of Tennessee, Knoxville, in August 1996. He received the Master of Arts degree in American History in May 1998.