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GULF ISLANDS
FORT BARRANCAS

NATIONAL SEASHORE / FLORIDA

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HISTORIC STRUCTURE REPORT
AND
HISTORIC RESOURCE STUDY

FORT BARRANCAS
GULF ISLANDS NATIONAL SEASHORE
Florida

by
Edwin C. Bearss

U.S. Department of the Interior / National Park Service

FOREWORD

This report has been prepared to satisfy the research requirements for a document to serve management, interpretation, and preservationists as a combined Historical Data Section of the Historic Structure Report and a Resource Study for Fort Barrancas and its Water Battery. Guidelines for this project were developed in discussions with former Area Manager Art Graham of Gulf Islands National Seashore, Historical Architects Henry Judd and John Garner, and Team Manager John Luzader of the Denver Service Center (the last three now retired). To accomplish this mission, documents on file at the National Archives, Pensacola Historical Society, and the P.K. Yonge Library of Florida History were reviewed and pertinent data extracted. Published primary and secondary sources at the Library of Congress were consulted. Accompanied by Architects Judd and Garner, park personnel, and members of the Pensacola Historical Society, I reconnoitered the fortifications.

A number of people assisted in the preparation of this report. Particular thanks are due former Area Manager Art Graham, former Park Historians George D. Berndt and Ann Castellina-Dudley, and current Park Historian Suzanne Lewis of the Florida District, Gulf Islands National Seashore, for their on-site assistance and their cheerful willingness to answer numerous requests for data on the present condition of these structures. Pensacola and Florida Historians J. Earle Bowden (one of the fathers of the National Seashore, friend of more than 20 years, and distinguished editor of the Pensacola News-Journal) and Norman Simons volunteered and shared their vast knowledge of local lore and sources.

At the National Archives and Suitland Record Center, I, as heretofore, would have been at a loss without the assistance of such well informed and dedicated personnel as these archivists and technicians: Dale Floyd, Tim Ninninger, Mike Musick, Richard Cox, John Matias, Justin Dempsey, Tom Lipscomb, Fred Prennell, and Ralph Ehrenberg and his capable and efficient staff of the Archives' Cartographic Division.

Dr. Raymond E. Lewis, Librarian of the House of Representives, as in the past, shared with me his encyclopedic knowledge of American seacoast fortifications.

Historical Architects Judd and Garner, formerly of the National Park Service, spent a week with me in August 1973, reconnoitering the Pensacola forts, pointing out anomalies in the fabric, and discussing the restoration and preservation of Fort Barrancas and its Water Battery.

Colleagues Superintendent Frank Pridemore, and former Park Historian Ann Castellina-Dudley of Gulf Islands National Seashore, retired National Park Service Historical Architects Henry Judd and John Garner, former Chief Park Service Historian Harry Pfanz, and retired Manager, Historic Preservation, Denver Service Center, John Luzader, reviewed the manuscript and made valuable comments. I wish to commend Ms. Maggie Rylee who had the most challenging and unrewarding task of all--turning my scrawl into a typed manuscript--and, finally Historian Jerome Greene and the staff of the Southeast/Southwest Team, Denver Service Center for their dedication and good will in preparing the report for reproduction and distribution.

Edwin C. Bearss

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I. ADMINISTRATIVE DATA

A. Name and Number of Structures

Fort Barrancas consists of two integrated structures: Fort Barrancas, No. FB-1, and the Fort Barrancas Water Battery (Bateria de San Antonio), No. FB-2. These structures are of First Order of Significance.

B. Proposed Use of Structures

Fort Barrancas and its Water Battery will be stabilized and restored to their appearance, circa 1860. In conjunction with the Redoubt, they will be employed to interpret the Third System coastal fortifications and their armament at a time when these handsome masonry structures were the Nation's first line of defense.

C. Justification for Such Use

Public Law 91-660, enacted January 8, 1971, establishing Gulf Islands National Seashore, provides that "Fort Redoubt, Fort San Carlos, Fort Barrancas at Pensacola Naval Air Station, Fort Pickens on Santa Rosa Island, and Fort McRee on Perdido Key" shall be administered "so as to recognize, preserve, and interpret their national historical significance in accordance with the Act of August 21, 1935."

D. Provision for Operating Structures

The stabilized and restored structures will constitute an unsurpassed exhibit in place and historic structures museums for interpreting the role of masonry fortifications in the defense of harbors and naval bases from the late 1790s through the Civil War.

E. Cooperative Agreement, if any, Executed or Proposed for Operating Structures

No cooperative agreement(s) will be required to operate the structures.

F. Brief Description of Construction Activity

(1) Foundations--Where required, foundations will be stabilized with reinforced concrete underpinning below grade.

(2) Walls--Deteriorated mortar joints will be pointed with a lime-cement mortar matching the original in composition, strength, color, and tooling. Large cracks will be grouted. Missing or deteriorated brick will be replaced to match the existing work. The scarp wall of the Reduit of the Water Battery has fallen. This will be rebuilt to match original.

(3) Copings--Original expansion joints will be reestablished, joints repointed, and missing or deteriorated brick will be replaced; all to match the original work.

(4) Vaults--This work will be the same as for the walls with the possible exception of structural failures which may require rebuilding by "stitching" with brick and mortar to match existing work.

(5) Openings--Many door, ventilating and embrasure openings have been bricked-in in recent years to preclude unauthorized entry. These openings will be reestablished to their original condition.

(6) Brick Floors--The original casemate and gallery floors were brick, most of which is intact today. Missing and deteriorated portions will be repaired and rebuilt to match existing.

(7) Retaining Walls--The inner galleries of Fort Barrancas have brick retaining walls, some of which have cracked due to earth pressure. These will be repaired and reinforced where necessary to return them to their original structural integrity and appearance.

(8) Stucco--Masonry surfaces of the Water Battery were stuccoed in 1840. These will be renewed to match original conditions.

(9) The shot furnace will be reconstructed.

(10) Woodwork

(a) Magazines--The magazines and storerooms were originally framed and lined with wood. A great amount of this original woodwork

still exists. Missing or deteriorated elements will be replaced to match original. Doors, shutters, and hardware will be replaced to match original.

(b) Drawbridge and Postern Doors--These will be rebuilt to match original construction, including necessary hardware.

(c) Fence--Board-rail fences were originally erected around the foot of the glacis of these works. They will be rebuilt to provide added security to the property.

(11) Earthwork--Original contours, slopes and grades will be re-established. They will be sodded with grass and sprinkler systems will be installed. If required for waterproofing or structural repair, earth slopes may be removed for the duration of repair activities then restored.

(12) Finishes--Woodwork and hardware will be painted or refinished to match original. Masonry will be whitewashed to match original.

II. THE BARRANCAS FORTIFICATIONS AS A PAWN IN THE STRUGGLE FOR WEST FLORIDA: 1783-1821

A. Spanish Build Bateria de San Antonio and Fort San Carlos

As a result of the treaties by which Great Britain recognized the independence of the United States, Spain regained East and West Florida from His Majesty's government. During the American Revolution, a Spanish force led by Bernardo de Gálvez had laid siege to and had captured Pensacola from the British in 1781.

Pensacola, in 1783, occupied a rectangular area, measuring about a mile east to west and a quarter-mile north to south, along the bay. It was bounded on the east and west by curving arroyos. The central esplanade was protected on its three land fronts by a "cedar" stockade with demi-bastions. Within the palisade and fronting on Pensacola Bay were four batteries, all in need of repair.

On the commanding ridge, about 1,200 yards north of the plaza, there were three strong points. These had been built by the British to defend the land approaches to Pensacola. This ridge was about 300 yards in width as its southern extremity which overlooked the arroyo which discharged into the bay west of the town, and it became wider as it extended northward. On the ridge commanding the arroyo and town, the British had laid out Fort George, an enclosed four-bastioned defense, with a hornwork extending down the slope to the southwest to two blockhouses on the Mobile road. The Spanish, who knew the site as Mount San Miguel, renamed this work Fort Miguel.

On the ridge about 900 yards northwest of Fort George and commanding it, the British had erected the Queen's Redoubt, a five-faced battery, with a light parapet across its gorge. The redoubt was covered in front by a ditch and palisade and surrounded by an abatis. Its mission was to guard the approaches to Fort George (San Miguel) and to dominate the lower ground to the northwest. The Spanish, on capturing Pensacola, had renamed this redoubt Fort San Bernardo in honor of Gálvez.

On the ridge, midway between Fort George and the Queen's Redoubt, the British had raised the Prince of Wales Battery. An enclosed four-faced work, with a gorge, it was surrounded by a ditch and abatis. Like the Queen's Redoubt, it fronted to the north, and was redesignated Fort Sombrero by the Spanish.

To protect the entrance to Pensacola Bay, the British had utilized the Santa Rosa Island blockhouse they had inherited from the Spanish in 1763. On the Barrancas, the British had thrown up two batteries, an upper and lower, on the heights about 380 yards east of Cemetery Hill. The respective batteries had two fronts commanding the channel. The parapet of the lower battery was embrasured, and the terreplein provided with frame shades to protect the cannoneers from the fire of marines posted in the tops of men-of-war and the platforms and gun carriages from the elements. The batteries were protected by a ditch and enclosed by an irregular stockade with bastions for musketry and two blockhouses at the salient angles on the land fronts. There was a third blockhouse on Tartar Point. The Spanish renamed the Barrancas defenses Fort San Carlos.[1]

West Florida was administered in the years after 1783 as a part of Louisiana. The fortifications, built of sand and timber, were allowed to deteriorate. Soon Fort Sombrero was only a memory.

In 1788, Estevan Miró, who had succeeded Gálvez 2 years before as Governor-General, recommended the abandonment of the Pensacola defenses and establishment at the entrance to the bay of such

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1. Stanley Faye, "British and Spanish Fortifications of Pensacola, 1781-1821," The Florida Historical Quarterly, Vol. XX, No. 3, January 1942, pp. 277-83; "Plan of the Siege of Fort George and Works adjacent at Pensacola in West Florida, 1781," Clinton Papers, William L. Clements Library; "Plan and Section of the Upper and Lower Batteries. Laid out and begun building 5 March 1771; for Protecting the Harbor of Pensacola," Public Records Office, M.P.G. 11; Amos Stoddard, Sketches, Historical and Descriptive, of Louisiana (Philadelphia, 1812), p. 118; Thomas Hutchins, An Historical Narrative and Topographical Description of Louisiana and West Florida (Philadelphia, 1784), p. 77.

fortifications as would prevent a foreign naval power from taking possession of the bay and turning it into a base and haven for privateers. Carlos IV's ministers in Madrid approved the proposal, but they took no measures to implement it. The French Revolution signaled the end of the "family compact" on which Spain had relied for much of the 18th century in its policy of opposition to Great Britain, and involved Spain in a crusade on behalf of Louis XVI. After his execution in January 1793, Spain became an enthusiastic member of the first coalition against revolutionary France.

Before news that Spain had gone to war against her long-time ally reached Pensacola, Baron Francisco de Carondelet had replaced Miró as Governor-General. Satisfied that a clash was about to occur, Carondelet met with his aides to consider measures to be taken for defense of Louisiana and West Florida. It was estimated that the cost of the fortifications proposed by Miró for the Barrancas would cost half a million dollars. Carondelet, however, urged that $100,000 be spent instead to repair Fort San Miguel and to build a brick redoubt to be garrisoned by 40 men atop the Barrancas, with a water battery below. A double palisade on Santa Rosa Island for 80 men and ten 18-pounders would cost an additional $24,000, if enclosed and equipped. Repair of the town's stockade and governmental buildings added $6,000 to the estimates. If this program were implemented, Carondelet believed he could defend Pensacola Bay until reinforced from La Habana.

Events in Europe doomed this ambitious program. Spain's invasion of the Roussillion failed and, crossing the Pyrenees, counter-attacking French columns thrust deep into Catalonia. With the French approaching the Ebro, Spain, in 1795, made peace.

By the time the Treaty of Basle ended the first coalition, Spanish authorities at Pensacola had accomplished little more than to emplace guns on Sigüenza, the point of Santa Rosa Island, opposite the

Barrancas. A sand parapet was thrown up on the waterfront to protect the gunners manning the cannon.[2]

Soon thereafter, in October 1796, Spain declared war on Great Britain. At this time, the 18-pounders to be mounted on Sigüenza had not reached Pensacola Bay. On February 7, 1797, a council of war was held by Governor-General Carondelet in New Orleans to perfect measures for defense against British seapower. It was determined to enclose the 7-gun stockade on Sigüenza, and to push construction of a 7-gun masonry water battery or medialuna at the foot of the Barrancas. This defense, to be called Bateria de San Antonio, with the seven guns of Sigüenza, it was hoped, would prevent British warships from doing what Gálvez's fleet had done in 1781. In that year, British guns on the Barrancas had failed to stop the Spanish warships as they fought their way into the bay. It was the opinion of Spanish military engineers that the guns of San Antonio and Sigüenza could control the channel.

To defend San Antonio's rear, the Barrancas must be fortified. Juan Vicente Folch, the commandant at Pensacola, staked out a new Fort San Carlos on the site of the abandoned British defense on the bluff behind Bateria de San Antonio. Like its predecessor, it would be shielded on its land fronts by a ditch and stockade.

Commandant Folch, who had sat in on the February 1797 New Orleans council of war, had pointed out that the high ground at Cemetery Hill, 380 yards west of the site of the former British fort, would command Fort San Carlos, as would a ridge to the north. Before Folch returned to Pensacola, Governor-General Carondelet assured Folch that at a future date the ridge would be crowned with a hornwork and Cemetery Hill with an advance redoubt.[3]

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2. Faye, "British and Spanish Fortifications," p. 284.

3. Ibid., pp. 284-85.

A British squadron appeared off the coast in March 1797 and captured several vessels, one of which was ferrying cannon and supplies from New Orleans to Pensacola. Meanwhile, Commandant Folch had bolstered his force of masons and laborers. Construction was accelerated on Bateria de San Antonio.

Atop the Barrancas, a hurriedly raised parapet and stockade became Fort San Carlos. Over on Santa Rosa Island, the battery at Sigüenza was strengthened. Both fortifications were garrisoned by June 1798.[4]

A plan of the defenses prepared in 1796 by Francisco P. Gelabert depicted Bateria de San Antonio as presenting three curving faces on the fronts bearing on the channel, and a gorge with a straight alignment. The masonry bateria, according to a note on the plan, was not completed. Abutting against the gorge was a masonry bombproof or reduit, housing three casemates. In the ditch or moat, fronting the semi-circular scarp, there was a provisional battery, mounting seven guns. The provisional battery was protected by an earthen parapet, paralleling a 75-vara segment of the bateria's channel front. In the northeast corner of the bombproof was a well.

On the Barrancas in rear of and commanding Bateria de San Antonio was "Fuente Przovicional de San Carlos." In laying out this work, the Spanish engineers had utilized the parapets and moat of the British fort. San Carlos had five fronts and one bastion. The sea front paralleled Bateria de San Antonio's gorge and the bastion faced inland. On the terreplein were positioned 23 cannons, 4-, 6- and 9-pounders. The superior slope of the parapet of the fronts facing Cemetery Hill, to the west and northwest, were embrasured. A flight of steps leading down the Barrancas provided communications between San Carlos and San Antonio.

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4. Ibid.

A ditch and palisade fronted all the faces of San Carlos, except the one facing the channel. On the parade were several structures--an artillery park with a subterranean magazine, a guardhouse, and a platform mounting two mortars.[5]

Although war raged in Europe, Asia, and Africa, British warships soon disappeared from the Gulf of Mexico. On October 1, 1800, Napoleon Bonaparte, who had become first consul, prevailed on Spain by a second, and secret, treaty of San Ildefonso to cede Louisiana to France. The retrocession was kept secret for months, and the Spanish Governor-General in New Orleans continued to administer West Florida. Then, in the spring of 1803, France sold Louisiana to the United States. Spain, having retained West Florida, elevated Folch to Provincial Commandant. Hereinafter, his immediate superior would be the Governor-General of Cuba.

In October 1803, to cope with possible encroachment by the United States and its aggressive frontiersmen who were already advancing claims to that part of West Florida beyond the Perdido, Folch called on his engineer to prepare plans for bolstering the Pensacola defenses. Little, however, was accomplished beyond strengthening existing fortifications.

Designation of Pensacola as a provincial capital spurred an economic boom of sorts. By 1813, Pensacola boasted a population of more than 3,000, with more than 500 buildings. Despite this growth, the fortifications were allowed to deteriorate. In 1806, it was reported that the palisade, protecting the town on its land fronts, was in unsatisfactory condition. Stakes had rotted and fallen, while at various points, gateways had been opened through the stockade to provide egress and ingress for wagons.

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5. "Plano de la Bateria de San Antonio y Fuente Provicional de San Carlos en la entrada el puerto la Panzacola," files Pensacola Historical Society.

In the spring of 1812, the United States Congress enacted legislation annexing that part of West Florida south of the 31st parallel and between the Pearl and Perdido Rivers. Although President James Madison was anxious to acquire all of Florida, Congress thwarted his plans by refusing to support an overt invasion of the peninsula. Instead, it sanctioned a seizure by the administration of only that part of West Florida west of the Perdido. Orders were issued for Major General James Wilkinson to take Mobile. The Spanish, weak in numbers and short of supplies, withdrew in the face of Wilkinson's advance, and his troops occupied Mobile on April 15, 1813.[6]

Wilkinson's march caused the Pensacolians to look to their defenses. On April 9, it was decided to concentrate the troops at the Barrancas. Here at Bateria de San Antonio and Fort San Carlos, they might be able to hold out until reinforced from Cuba. The immediate crisis soon passed, when Wilkinson's troops halted at the Perdido.[7]

B. Pensacola's Role in Power Politics

1. British Employ Pensacola as a Base to Attack Fort Bowyer

In June 1812, the United States declared war on Great Britain. Taking advantage of this situation, the Creek Indians took the offensive against the Americans. After several initial successes, the Creeks were crushed by United States forces led by Major General Andrew Jackson. Many of the defeated Creeks sought safety in West Florida.

On August 23, 1814, a small British squadron sailed into Pensacola Bay and landed a force (three officers, a surgeon, four

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6. Faye, "British and Spanish Fortifications," pp. 286-87; Robert V. Haynes, "The Road to Statehood," found in A History of Mississippi, 2 volumes, edited by Richard A. McLamore (Hattiesburg, 1973), Vol. 1, pp. 227-28.

7. Faye, "British and Spanish Fortifications," pp. 287-88.

noncommissioned officers, and 97 enlisted men) led by Lt. Col. Edward Nicolls of the Royal Marines. Besides their arms, the British had three field pieces, 1,000 stands of arms, and 300 uniforms for Indian recruits. Colonel Nicolls established his headquarters ashore; sent emissaries to the Indians of Florida; issued a proclamation inviting restless Louisianians and Kentuckians to come enter the British service; and dispatched a mission to contact the Lafitte brothers and the Barataria pirates.

Indians, in large numbers, answered the British call to arms. Issued uniforms and small arms from the supplies the British had landed, the Indians were soon formed into companies and drilled in a manner incompatible with the fighting habits of their people.

The Spanish Commandant, Gonzales Manrrique, although his Captain-General in La Habana had refused his cooperation, permitted the British to occupy Fort San Miguel. Fatigue parties were soon hard at work strengthening the dilapidated defenses of Forts San Carlos and San Miguel.[8]

Although disappointed that the Lafitte Brothers and the Baratarians failed to rally to their cause, the British decided to capture Fort Bowyer, the defense on Mobile Point, guarding the entrance to Mobile Bay. More than one-half of the 20 cannons mounted in the fort were light Spanish pieces. The 130 defenders were commanded by Maj. William Lawrence, a veteran army officer.

On September 12, the British, having sailed from Pensacola the previous day, landed 130 Royal Marines and 600 Indians several miles east of the fort, and at dusk the Americans sighted four warships--two

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8. Ibid., p. 288; A. LaCarriere Latour, Historical Memoir of the War in West Florida and Louisiana in 1814-15 (Philadelphia, 1816), p. 11; John K. Mahon's "British Strategy and Southern Indians: The War of 1812," Florida Historical Quarterly, Vol. XLV, No. 4, April 1966, p. 293.

sloops and two brigs. Major Lawrence, paraphrasing naval officer James Lawrence, told his men, "Don't give up the fort."

The next day, the British advanced and established a battery within 700 yards of the fort and its 130-man garrison. On the afternoon of the 14th, the British attacked. The ships, Hermes leading, bore down against the fort in line of battle. At 4 P.M., Hermes having closed to within range, the Americans opened fire with their two heaviest cannons--24-pounders. By 4:30 P.M., Hermes came to anchor, within musket range of the fort. The other three ships (Caron, Sophia, and Anaconda) took stations behind the flagship, forming a battle line in the channel.

The bombardment raged in full fury, as the British vessels brought their broadsides to bear on Fort Bowyer and its defenders. The Americans replied with their two 24- and six 12-pounders, concentrating on the 28-gun flagship. Meanwhile, the Royal Marines opened fire with the breaching battery (one 12-pounder and a 6-inch howitzer) they had positioned among the sand hills 700 yards east of the fort. The defenders soon silenced this battery with the 8-pounders mounted on the gorge. The duel between fort and ships continued for an hour, with both "enveloped in a blaze of fire and smoke." At 5:30, the halyards of Hermes were cut away by a projectile, and her ensign fell. Major Lawrence, believing that Capt. William H. Percy had struck his colors, called for his men to cease fire. The British likewise held their fire for about five minutes, until the brig next to Hermes sent a broadside crashing into the fort, and Captain Percy hoisted a new flag. The battle was renewed. Hermes, her cables cut away, presented her bow to the defenders for about 20 minutes. This permitted them to sweep her decks fore to aft. A shell from one of the British ships ripped away the Americans' flagstaff. Major Lawrence had another flag, fixed to a sponge-staff, positioned on the parapet.

When the "stars and stripes" momentarily disappeared, the marines and their Indian allies, convinced the fort had surrendered, left the cover of the dunes and advanced to take possession. A few discharges of grape showed them their error and they retired. Hermes

now drifted aground on a bar, about one-half mile from the fort. The other three warships withdrew and put to sea. Captain Percy, unwilling to have his 28-gun ship fall into American hands, set her afire, and then abandoned her. Hermes burned until 11 P.M. when "she blew up with a tremendous explosion."[9]

The British and their Indian allies now retired to Pensacola, having lost one warship and 232 officers and men in the attempt to capture Fort Bowyer, a position Captain Percy had boasted he would reduce in 20 minutes. The defense of Mobile Point had cost the Americans four killed and an equal number wounded.[10]

2. General Jackson Drives the British from Pensacola

General Jackson, during the Creek War of 1813, had looked upon Pensacola as his ultimate goal. He was satisfied that American troubles on the Alabama frontier had been instigated there. Although the United States and Spain were at peace, Spain was allied with Britain in the war against Napoleon. This perhaps would have been an obsticle to most officers, but not to a man of General Jackson's temperment. He was angered when the defeated Creeks found a priviledged sanctuary in West Florida to recoup from their Horseshoe Bend debacle.

On June 17, 1814, Jackson had written Secretary of War John Armstrong, requesting orders to invade West Florida and to capture Pensacola. The Secretary ignored Jackson's letter. This did not stop Jackson; it merely made him look for an excuse to act on his own initiative. After making peace with the Creeks at Fort Jackson, Jackson, as commander of the Seventh Military District, established his headquarters at Mobile in mid-August.

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9. Latour, Historical Memoirs, pp. 30-42.

10. Ibid., pp. 39-40.

Although he lacked the force to take immediate action, Jackson undoubtedly welcomed the British landing at Pensacola. He, however, was unable to respond promptly, because most of the army with which he had defeated the Creeks had gone home to Tennessee. While waiting, Jackson wrote Commandant Manrrique accusing him of bad faith in permitting the British to land and use Pensacola as a base. Manrrique answered that he would protect, clothe, and arm his Indians--that in the ensuing autumn he would expatiate more largely on the subject. Jackson, in breaking off the correspondence, warned, "In future, I beg you to withhold your insulting charges against my government for one more inclined to listen to slander than I am; nor consider me any more a diplomatic character unless so proclaimed from the mouth of a cannon."

A messenger now reached Jackson's headquarters from Major Lawrence, describing the British attack on and repulse at Fort Bowyer. Jackson had his excuse to act, and he determined to invade West Florida, capture Pensacola, and thus deprieve the hostile Creeks and their British allies of their privileged sanctuary. A call for troops having gone out, Jackson by late October had assembled near Fort Montgomery, on the Alabama River, about 4,000 men consisting of detachments of the 3d U.S. Infantry, two companies of the 39th, and an equal number of the 44th U.S. Infantry, two regiments of John Coffee's Tennessee Brigade (Williamson's and Lauderdale's), Maj. Thomas Hinds' Battalion of Mississippi Dragoons, Lt. Col. Eli Hammond's West Tennessee drafted militia, and 750 Choctaw warriors led by Maj. Uriah Blue of the 39th Infantry.

On November 2, rations for 8 days issued, the column broke camp. Unencumbered by any baggage and screened by a cavalry detachment, Jackson's army invaded West Florida. The leader carried with him no orders from the War Department authorizing an incursion into Spanish territory and he assumed full responsibility. The cavalry surprised and captured a Spanish outpost at Boyle's as it thrust toward

Pensacola. An American officer, Lt. Alexander Murray, having ridden ahead, was killed by an Indian.[11]

Delayed by breakdowns of the ammunition wagons, Jackson's column finally reached the Pensacola area on the evening of the 6th. Forewarned of the American advance on November 2, Colonel Nicolls demanded that Commandant Manrrique turn over to the British command of Forts San Miguel and Barrancas and place the Spanish soldiers under his orders. Manrrique refused.[12]

The British, however, were in possession of Fort San Miguel when the American vanguard was sighted beyond the heights of San Bernardo. Halting his column, General Jackson sent Maj. Henry D. Peire with an escort and a message addressed to Commandant Manrrique, calling on him to surrender the "Barrancas and other fortifications with their munitions of war." If delivered peaceably, they would be "receipted for and become the subject of future" negotiations between our governments. If not, Jackson warned, the "blood of your subjects be upon your head."

Major Peire, as he rode forward with the flag of truce, was fired upon by a 12-pounder. He halted his escort and proceeded alone. The cannon continuing to fire, Major Peire retraced his steps and reported what had occurred. Whereupon, General Jackson determined to humble the Spaniards by taking the fort and town.

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11. Ibid., pp. 40-45; Glenn Tucker, Poltroons and Patriots: A Popular Account of the War of 1812, 2 vols. (Indianapolis, 1954), Vol. II, pp. 640, 646-48; Jackson to Monroe, Nov. 14, 1814, found in John S. Bassett, editor, Correspondence of Andrew Jackson, 4 volumes (Washington 1926-33), Vol. II, p. 96; James Parton, Life of Andrew Jackson, 3 volumes (Boston, 1870), Vol. I, p. 618.

12. Faye, "Spanish and British Fortifications," p. 288.

Accompanied by Col. Robert Butler, Major Peire, and a company of rangers, General Jackson advanced and reconnoitered Fort San Miguel. Although the Spanish flag floated over the fort, the general, through his glass, distinguished both British and Spanish troops behind the battlements. Jackson now retraced his steps and ordered his army to camp preparatory to storming the fort in the morning. Satisfied that it was the British who had fired on Major Peire, Jackson sent for the Spanish corporal who had been captured at Boyle's the previous day. He was handed a message for Commandant Manrrique demanding an explanation of the insult to the United States' flag.[13]

This time the message was received. Drafting a reply, Commandant Manrrique announced that he was prepared "to repel by force" any attempt Jackson made to take Pensacola, "holding you responsible for the blood which might be shed by your attempting to carry into affect your ill-grounded demand."[14]

It was nearly midnight when Major Morant, an aide to the commandant, delivered the message to Jackson, whereupon, Jackson addressed another note to the commandant. It, as well as his first letter of the day, was handed to Major Peire. The major, accompanied by Morant, rode into Pensacola. Peire returned at 7 A.M., on November 7, with Manrrique's reply. The Spaniard assured Jackson that any hostilities committed by the British "from this place" had been done "without my knowledge or commitment." The few British troops which had been in the area had embarked while their Indian allies had retired. He, in closing, preemptorily rejected Jackson's call for surrender of the Pensacola fortifications.[15]

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13. Jackson to Manrrique, Nov. 6, 1814, Bassett, Correspondence of Andrew Jackson, Vol. II, pp. 92-93.

14. Manrrique to Jackson, Nov. 6, 1814, found in ibid., p. 93.

15. Manrrique to Jackson, Nov. 7, 1814, found in ibid., p. 94.

General Jackson was not of the temperament to prolong negotiations, especially when he possessed overwhelming force. After reading Manrrique's reply, he turned out his army. The Americans marched from their camp west of town in three columns--the right, General Coffee and his Tennessee Volunteers; the center, the regular detachments (the 3d, 39th, and 44th U.S. Infantry), and a section of artillery led by Maj. Joseph Woodruff; and the left, the drafted Tennessee Militia and Choctaw Battalion commanded by Major Blue. Bringing up the rear was Major Hinds and his battalion of Mississippi Dragoons. Jackson's columns, to avoid the fire of the guns of San Miguel and the British fleet, detoured to the north and approached Pensacola from the east. To cover the march of the columns, the troops left to guard the camp under Colonel Butler made a forced reconnaissance toward the town. This caused the foe to focus their attention to the west.

On reaching the bay east of Pensacola, Jackson wheeled his columns to the right and pressed rapidly ahead, their line of march adjacent to and paralleling the beach. When within sight of the town, the sand became too heavy for the artillerists to drag their two guns. General Jackson now ordered Woodruff's regulars, spearheaded by Capt. William Laval's company of the 3d Infantry, to charge. Coffee's column was to enter the street on the right of the regulars; the drafted militia the street on their left; and the Choctaws by the avenue on the right of Coffee's Tennesseans.

As the head of Woodruff's column appeared on the main street, a two-gun Spanish battery roared into action while snipers positioned behind garden fences banged away. Swinging forward, Laval's company, employing the bayonet, captured the battery. Major Woodruff wheeled his regulars from column into line, and a few crashing volleys silenced the musketry. Reaching the plaza, Lieutenant Robertson of the

3d Infantry pulled down the Spanish colors. In this fighting, 11 Americans were killed or wounded, including Captain Laval who was cut down when struck in the thigh by a grape shot.[16]

Commandant Manrrique, convinced that all was lost, dashed out into the street, bearing a white flag. He encountered Cols. Thomas Williamson and David Smith of General Coffee's command. He asked them to spare the town. He said that he was surrendering Pensacola and Fort San Miguel. Jackson, who had stopped to comfort Captain Laval, now rode up and, learning what had occurred, proceeded to the intendent's house. There he found Commandant Manrrique who again announced his decision to surrender.

The British warships had opened fire on Jackson's troops as they crossed the plaza. To prevent unnecessary casualties, Jackson sent word for his officers to form their men in the cross streets where they would be shielded by the houses. Here, they were to remain while arrangements were perfected with Manrrique for taking possession of the town and fortifications.

Urged on by Jackson, the commandant sent an aide to call on Col. Joseph De Soto to surrender Fort San Miguel. De Soto asked to be allowed to first fire three cannons. Jackson agreed. But when his Mississippi Dragoons and Choctaws appeared near the fort, the Spanish gunners, instead of firing a salute, took aim on them and wounded two Indians and killed three horses.

Jackson fumed at this "Spanish treachery." But concluding that the commandant was not responsible, he sent Colonel De Soto another summons to yield the fort giving him 30 minutes to make up his mind. Jackson then returned to camp with his main force. Major Peire

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16. Latour, Historical Memoir, pp. 45-48; Jackson to Monroe, Nov. 14, 1814, found in Bassett, Correspondence of Andrew Jackson, Vol. II, p. 97.

remained in command of the town with 800 men and instructions to get possession of Fort San Miguel before nightfall either by negotiations or force. As Jackson's columns evacuated Pensacola, the British warships anchored in the bay (Seahorse, Sophia, and _____) harrassed them with a long-range but ineffective fire.

Major Peire, seeing that the ships had springs on their cables which would enable them to bring their guns to bear on Pensacola, knew it was vital that he occupy Fort San Miguel before morning. Otherwise, the British might open fire to burn the town or to cover a landing of reinforcements. He accordingly sent Capt. James E. Dinkins with two companies and three cannon to occupy the heights of San Bernardo which commanded Fort San Miguel, while he deployed 500 men near the beach to oppose a landing.

Captain Dinkins and his people, while en route to San Bernardo, were shelled by the fleet. To discourage the British, General Jackson had a captured 4-pounder emplaced near the beach which compelled the ships to keep their distance.

At 6 P.M., Colonel De Soto, although he had previously notified Major Peire that he would surrender Fort San Miguel, refused to turn it over to Captain Dinkins. He informed Major Peire that he could not carry out the evacuation before morning. Satisfied that this was a stall designed to give time for the British to act, Peire ordered Dinkins to begin the bombardment while he formed a storming column. De Soto now changed his mind and surrendered the fort, the Americans taking possession at 11 P.M. Earlier in the day, the Spaniards had destroyed by fire the battery at Sigüenza.

On the morning of November 8, General Jackson asked Commandant Manrrique for an order calling on the officer in charge of the Barrancas to surrender his post to the Americans. He refused, stating it would not be obeyed. Instructions were accordingly issued by General Jackson for his officers to have their men prepare to march against the Barrancas. As they were doing so, a tremendous explosion was heard to

the southwest, and soon flames were seen in that direction. A deserter now appeared and told General Jackson that the garrison had blown up and set fire to Castillo de San Carlos, had spiked the guns of Medialuna San Antonio, and had destroyed the adjoining hamlet. Whereupon, Jackson dispatched Maj. Thomas Gales and a 200-man flying column to the scene. Gales returned that evening to confirm that the fortifications at the Barrancas had been "blown up and all the combustible part consumed, the cannons, except two 18-pounders, spiked, three carriages burned, and that the British fleet lay within gun-shot of the ruins."

The disappearance from the bay of the British fleet with Colonel Nicolls' troops, on the evening of the 8th, plagued General Jackson. Where had they gone? Were, he reasoned, the British en route to renew the attack on Fort Bowyer and capture Mobile during the absence of his army? To trade Pensacola for Mobile would be madness. Moreover, he lacked the means to promptly repair the fortifications at the Barrancas and Sigüenza, the keys to Pensacola Bay. Sending off a courier to warn Major Lawrence at Fort Bowyer of the danger, Jackson prepared to evacuate Pensacola and make a forced march to Mobile.

On the morning of November 9, General Jackson restored Fort San Miguel and the Pensacola blockhouses to Commandant Manrrique and mustered his army. Leaving behind the seriously wounded Captain Laval, Jackson's column, marching by way of Fort Montgomery, reached Mobile on the evening of the 11th.[17]

General Jackson, in his lightning-like campaign, had routed the British from Pensacola Bay, scattered the dissident Creeks,

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17. Latour, Historical Memoir, pp. 48-51; Faye, "Spanish and British Fortifications," p. 288; Jackson to Monroe, Nov. 14, 1814, found in Bassett, Correspondence of Andrew Jackson, Vol. II, pp. 98-99; Parton, Life of Andrew Jackson, Vol. I, pp. 622-23.

and had punished the Spanish for their failure to honor their obligations as a neutral. Jackson waited in the Mobile area for 10 days in expectation of the appearance of the British fleet off Mobile Point. At length, reports came that Colonel Nicolls and his people had landed at and were fortifying Apalachicola. General Jackson, now satisfied that Mobile was in no immediate danger, could concentrate on the defense of New Orleans. On November 22, having ordered General Coffee to march his Tennesseans to Louisiana, Jackson started for New Orleans.[18]

C. The Privateers Threaten

Although Great Britain and the United States were again at peace, following the Treaty of Ghent, Spain's difficulties were far from over. Taking advantage of Napoleon's detention of Ferdinand VII and his invasion of Spain, juntas had been organized in various administrative capitals in South and Central America. These had assumed power first in the name of Ferdinand against Joseph Bonaparte, then in the name of the colonies themselves against Spain. Some of these, by 1810, had established their de facto independence. Upon the defeat of Napoleon, King Ferdinand and his government sought to reassert their authority in Latin America. A struggle destined to last nearly a decade began.

Beginning in 1816, the Liberal forces, in their struggle against the mother country, sought to capitalize upon the desire of the United States for Florida. In September, José Alvarez de Toledo, accompanied by Pedro Gual, visited Washington to explain to Secretary of State James Monroe their need for a port on the Gulf of Mexico and suggested that they might seize and use Pensacola and Fernandina as bases for expeditions against the king's Mexican bastion.

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18. Latour, Historical Memoir, pp. 50-51; Tucker, Poltroons and Patriots, Vol. II, p. 649; Parton, Life of Andrew Jackson, Vol. I, pp. 623-25.

At Pensacola, Colonel De Soto, who had succeeded Gonzalez Manrrique as commandant, had died that summer. The Captain-General of Cuba named Colonel José Masot to replace him as commandant of West Florida. On November 27, Colonel Masot, accompanied by his wife and one of their sons, Lieutenant José Jesus, reached Pensacola from La Habana. As their ship sailed into Pensacola Bay, passing between the heights of the Barrancas and Santa Rosa Island, they saw that little, if any, effort had been made to repair the fortifications wrecked two years before at the time of General Jackson's raid.

Fort San Carlos was no more:

> The sand had sifted out of the double palisade . . ., where the British had destroyed everything of military value both within and without the enclosure. The stakes of the palisade stood leaning so loosely in the sandy soil that the shock of gun-fire would complete their fall if the one gun there still capable of warfare should be fired.

Bateria de San Antonio was armed with two 12-inch mortars, both unserviceable, and six serviceable 24-pounders, two of which were brass culverins. But this armament could not guard the entrance to the bay without the cross-fire of the guns formerly emplaced at Sigüenza. All that remained there was one masonry fireplace and chimney rising above fire-blackened rubble. "On mounts of wooden piles driven into the sand of the ditch, the barrels of the battery's eleven cannons (rating from 12 to 24 pounds, nine of them still spiked) told of its former power."[19]

Nearer Pensacola, nothing stood on the crest of Gage Hill. Fort San Bernardo was a ruin. Fort San Miguel's timbers had rotted, its terreplein had washed behind the ruined ramparts. Positioned on the platforms were the cannon, but every one was unserviceable.[20] The

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19. Faye, "Spanish and British Fortifications," p. 289; Faye, "Privateersmen of the Gulf and Their Prizes," The Louisiana Historical Quarterly, Vol. 22, No. 2, Oct. 1939, p. 1056.

20. Faye, "Spanish and British Fortifications," p. 289.

population, for the most part French, Creoles, Scots, and Irish, was rapidly declining. To defend the area, there was a remnant of a battalion of the Regiment of Louisiana, reinforced by three companies of blacks and mulattoes from Cuba, and two 4-pounders.[21]

On Sunday, December 8, 1816, a schooner dropped anchor off Santa Rosa Island. The next day, the schooner was still there, and Colonel Masot, becoming suspicious, dispatched two officers and 20 men to assist the harbor pilot and his boat crew. Already, a message had reached the Barrancas from the stranger, relayed by the pilot boat. It identified the schooner as a United States warship out of New Orleans, with a message from Governor Jacques Villeré for Commandant Masot.

Next morning, the 10th, the lieutenant in charge of the Barrancas and a squad of dragoons boarded the pilot boat and went out to the schooner. On going aboard, they found, to their horror, that she was the Mexican privateer Independencia commanded by Captain John Northrup, a former United States naval officer and veteran of the War of 1812. Northrup informed the 14 Spaniards that he was holding them and the pilot boat for ransom.

One of the Spaniards was sent ashore in a small boat, with a message to Commandant Masot, signed by Captain Northrup, demanding $50,000 as the price for release of his 13 hostages. At a council of war held that night in Pensacola, Colonel Masot determined to reinforce the Barrancas and refused to pay one cent of ransom. To conceal his weakness from the privateers, Colonel Masot relied on bluff. He wrote Captain Northrup:

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21. Faye, "Privateersmen of the Gulf and Their Prizes," pp. 1086-87.

> I laugh at your threats. . . . If we are attacked, we shall know how to defend ourselves. . . . But I trust you will set free the officer and the other persons whom you hold in your power, since such proceedings will disgrace even savages if savages were capable of committing such acts.[22]

Commandant Masot next drafted a proclamation aimed at rallying his soldiers and the townspeople. With equal eloquence, he exhorted them to fight for defense of God, king, and country, while warning any recalcitrant mutineers or traitors of their certain fate.

On Wednesday morning, while Pensacolians were reflecting on the proclamation, Captain Northrup, aboard Independencia, read the commandant's reply. Captain Northrup and his crew did not know that the guns of Bateria de San Antonio could not command the entrance to Pensacola Bay. He, therefore, backed down, and before dusk released his 13 hostages, landing then on Santa Rosa Island.

Captain Northrup then returned to his base on Galveston Island to report that he had been unable to extort money from Commandant Masot to fund the war for liberation. All that he could show for his efforts was the Pensacola pilot boat.[23]

Captain Northrup's visit and subsequent rumors that it was but a precursor for an attack by all the Galveston privateers led by General Xavier Mera caused Pensacola's civilian population to shrink to less than 500. Taking cognizance of these stories, Colonel Masot saw that the town's defenses--the wall, "makeshift batteries" on the waterfront, and the four advance blockhouses (one in the cemetery at the northeast, and one at the mouth of San Miguel Creek, and two in between) were strengthened.

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22. Ibid., pp. 1057-58.

23. Ibid., pp. 1058-59.

In January 1817, before the bridges of Fernandina and Carlotta were finished across Bayou Chico and Bayou Grande, Commandant Masot rushed building materials, including bark for roofs, to the Barrancas. There, on the crest commanding Bateria de San Antonio, the Spaniards raised a new Fort San Carlos.[24]

D. Jackson Invades Florida, Hounds the Seminoles, and Captures Pensacola

After the War of 1812, when the United States Army was cut back to a peacetime establishment, it was organized into a Northern and Southern Division, with General Jackson in command of the latter. Trouble was not long in coming to the Florida frontier. It was triggered by the Seminole Indians on the boundary between Georgia and East Florida. All the Seminole villages, except Fowltown, were in Florida. The Fowltown residents were peacefully inclined, although Jackson's 1814 treaty with the Creeks had extinguished Indian claims to ownership of land in that part of Georgia.

Brig. Gen. Edmund P. Gaines, commanding United States troops on the border, in the autumn of 1817, decided that the Fowltown Seminoles, peaceful or not, must be removed. On November 20, General Gaines sent a patrol to bring in the chiefs for a talk. The Indians fired on the soldiers, and in reprisal, Gaines attacked and destroyed Fowltown. The Indians retaliated with an ambush on the Apalachicola River, attacking a supply boat, killing 37 soldiers, seven soldiers' wives, and four children. Gaines' troops scattered the Indians, but, undaunted, they returned for a second attack on the convoy, inflicting 59 casualties on the whites.

On being informed of these fights, Secretary of War John C. Calhoun, on December 6, ordered Gaines to proceed against the Seminoles, invading Florida, if necessary, to punish them. But he was

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24. Faye, "Spanish and British Fortifications," pp. 289-90.

not to assail any Spanish post. Hampered by this restriction, Gaines' hot pursuit of the Seminoles in the wilds of the Florida panhandle was doomed. When threatened, the Indians retired to Saint Marks or some other convenient Spanish fort.

On the day after Christmas, General Jackson was ordered south to take personal charge of the campaign against the Seminoles. A call was made for two regiments of Tennessee Volunteers. While these men, many of them veterans of the 1814 campaign and the battle of New Orleans, were being organized and mustered in, General Jackson wrote President James Monroe, explaining that the instructions given General Gaines about respecting Spanish rights made it impossible to win what has become known as the First Seminole War--United States forces would have to hound the Indians wherever they went. Jackson's solution was to seize the Floridas. All the President had to do was to give him some indication "that the possession of the Floridas would be desirable . . . and in sixty days it will be accomplished." When President Monroe did not answer his letter, Jackson assumed that silence meant approval.

General Jackson and his Tennessee Brigade reached Fort Scott, near the Florida line, in early March 1818. Reinforced by the Regulars and Georgia Volunteers awaiting him there, Jackson advanced into the swampy wilderness east of Florida's Apalachicola River. Word that the Seminoles had gone to Saint Marks to get firearms and powder from the Spanish caused Jackson to direct his attention there. Capturing Saint Marks, he accused the Spanish officer in charge of assisting the Indians in their war on the United States. No Seminoles were found, but one important prisoner was taken--Alexander Arbuthnot, a 70-year-old Scotch trader.

Arbuthnot was a long-time resident of the area, and in his trade with the Indians had treated them fairly. He had spoken out against the way they were cheated by both the Americans and British. This caused him to have few friends among the rugged frontiersmen of the southeast. General Jackson referred to Arbuthnot as "the noted Scotch villian," and ordered him held for trial.

Jackson now directed his column eastward to attack the village of the Seminole leader, Boleck. When the Americans arrived, they found that the Indians had fled on their approach. Jackson raged when he learned that the Seminoles had disappeared, after being warned by a message from Arbuthnot that Jackson's force was too powerful for them to risk battle.

That night, April 18, one of the army's sentries captured Robert Ambrister, an ex-lieutenant in the Royal Marines, who had come to Boleck's village, not suspecting that it was occupied by the Americans. Ambrister was accused of collaboration with the Seminoles in their war against the United States. When the column returned to Saint Marks, he was brought along to stand trial with Arbuthnot.

A military court was convened by Jackson to try the two British subjects. Arbuthnot stood accused of "exciting" the Indians to war and giving aid and comfort to the foe; and Ambrister of obtaining arms for the Seminoles and sending one party of warriors to oppose the Americans' advance. The defendants were judged guilty, and Arbuthnot sentenced to be hanged and Ambrister to be shot by a firing squad. The sentences, after being reviewed and approved by Jackson, were carried out.[25]

General Jackson was at Fort Gadsden on May 2d. While preparing to disband his militia, he received reports that 550 Seminoles had appeared at Pensacola, where they had been rationed and supplied by Commandant Masot. A war party had then sallied forth to slaughter 18 United States citizens in a savage raid. A second group of raiders had murdered a Mr. Stokes and his family, returning to Pensacola in "open

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25. Marquis James, The Life of Andrew Jackson (Indianapolis, 1938), pp. 280-90; John S. Bassett, The Life of Andrew Jackson (New York, 1931), pp. 243-61.

day" to sell Mrs. Stokes' clothing. Information had also been received that the provisions ordered to Fort Crawford aboard the schooner Amelia had been seized on their arrival in Pensacola.

This information caused General Jackson to change his mind; he would make a forced reconnaissance across the Apalachicola and threaten Pensacola. On May 7, after detaching a strong force of Regulars to garrison Forts Scott and Gadsden, Jackson marched west from Fort Gadsden with a small detachment of the 4th United States Infantry, Company D, 4th U.S. Artillery, and two regiments of Tennessee Volunteers, 1,200-strong.

Jackson's army, on May 10, crossed the Apalachicola at the Ochesee Village. The next 12 days were terribly fatiguing and arduous, as the column advanced westward, "exposed to the severest of privations."[26]

On the 23d, soon after the army crossed the Escambia, a courier was brought before General Jackson with a message from Colonel Masot. The commandant protested against Jackson's incursion into West Florida, "as an infringement and insult offered to his king and master." If Jackson and his troops refused to withdraw, Masot would employ force to repulse them. The result would be bloodshed which would "disturb the present harmony existing betwixt our nations." But as he would only "oppose the insult of your approach," Masot would not consider himself to be the aggressor.[27]

The effect of this communication on Jackson was easy to anticipate. He deemed it "so open an indication of a hostile feeling" on

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26. Parton, Life of Andrew Jackson, Vol. II, pp. 498-99; Jackson to Calhoun, June 2, 1818, found in Bassett, Correspondence of Andrew Jackson, Vol. II, p. 379.

27. Masot to Jackson, May 22, 1818, found in Bassett, Correspondence of Andrew Jackson, Vol. II, p. 371.

Masot's part that he "hesitated no longer on the measures to be adopted." Jackson turned his column toward Pensacola, which he entered on May 24, with only a show of resistence. Commandant Masot fled to the Barrancas, where he joined his 22 artillerists and 153 footsoldiers.

Before moving against the commandant and his soldiers, General Jackson called on him to surrender the Barrancas to the United States. Resistance, he warned, "would be a wanton sacrifice of blood for which you and your garrison will have to atone. You cannot expect to defend yourself successfully, and the first shot from your fort must draw down upon you the vengence of an irritated soldiery." Playing on Masot's vanity, Jackson closed:

> I applaud your feelings as a soldier in wishing to defend your Post but where resistance is ineffectual and the opposing force overwhelming, the sacrifice of a few brave men is an act of wantonness for which the commanding officer must be accountable to his Lord.[28]

Commandant Masot refusing to yield the Barrancas, General Jackson put his army in motion. By nightfall on the 25th, his troops had invested Fort San Carlos and Bateria de San Antonio. During the night, reconnoitering parties were pushed "under its very guns." The next morning, the foe's position was examined by Capt. James Gadsden, Jackson's chief engineer. On the evening of the 26th, Captain Gadsden, assisted by a detachment led by Capt. Richard K. Call and Hugh Young, although exposed to a heavy fire, occupied and fortified Cemetery Hill, 385 yards west of Fort San Carlos. During the night, American artillerists brought forward a 9-pounder and emplaced it on this commanding position. Simultaneously, other cannoneers were positioning a howitzer within 760 yards of the fort.

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28. Jackson to Masot, May 25, 1818, found in Bassett, Correspondence of Andrew Jackson, Vol. II, pp. 373-74.

At daybreak, on May 27, the Spanish artillerists sought to dislodge the Americans from their advance batteries with the fire of the iron cannon of San Carlos and two long-range brass guns of San Antonio. General Jackson, having gained a key position, had the call for a parley sounded. One of his aides went forward with a white flag to repeat the demand for the surrender of the Barrancas. Colonel Masot's attention was called to the Americans' batteries, but he again refused to yield.

As soon as the staff officer returned, General Jackson's artillerists opened "a spirited and well directed fire" on the fort and battery. The bombardment continued throughout the greater part of the morning and at intervals during the afternoon. The Americans having gained the upper hand, Jackson called for his officers to bring up scaling ladders so their men would be ready to go over the walls during the night. But before darkness fell, Colonel Masot dispatched one of his staff with an offer to capitulate. Jackson agreed to a suspension of hostilities until 8 A.M. on the 28th.

At the designated hour, terms of capitulation were signed. They called for surrender of the Barrancas; the garrison to march out with all honors of war, drums beating, with their arms and baggage, and to be transported to Cuba; persons and property to be respected; the Alabama chief and his family, currently in the fort, to be included in the capitulation; an inventory, in duplicate, to be made of the "artillery, powder, military stores, and other effects" belonging to the Spanish armed forces at the Barrancas and in Pensacola.

Jackson's troops now took possession of the fortifications, which were evacuated by the Spanish.[29]

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29. Jackson to Monroe and Jackson to Calhoun, June 2, 1818, found in Bassett, Correspondence of Andrew Jackson, Vol. II, pp. 377, 379-80; Parton, Life of Andrew Jackson, Vol. II, p. 500; Faye, "Spanish and British Fortifications," p. 290.

The next day, May 29, General Jackson issued a proclamation defending his actions in taking possession of those parts of East and West Florida in which Spain had been unable to control the Seminoles and prevent their warring on the United States. Pensacola, he warned, would be held until Spain could "furnish military strength sufficient to enforce existing treaties."

Col. William King was placed in command at Pensacola as military and civil governor. He would see that Spanish laws, so far as they affected personal rights and property, were enforced. Religious toleration and free trade were guaranteed. He would take possession of the West Florida archives, appointing a "confidential individual" to safe guard them. Claims to property within gunshot range of Fort San Carlos would be investigated, and should they be found valid, a rental would be allowed. As the Barrancas site was a strategic necessity for the United States, it would be held and an equivalent paid.

The revenue laws of the United States were extended to the area, and Captain Gadsden named to be collector, with power to nominate necessary subordinates. He would call on Colonel King for military aid if it became necessary to curtail illicit trade.[30]

After detaching his Regulars to support Colonel King and to garrison the Barrancas, General Jackson marched his Tennessee Volunteers to Fort Montgomery in Alabama Territory. From there, on June 2, he prepared and mailed reports to President Monroe and Secretary of War Calhoun, describing and justifying the campaign which had resulted in the capture and occupation of Pensacola and its defenses and the humiliation of Commandant Masot and the Spanish military.[31]

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30. Jackson's May 29, 1818, proclamation, found in Bassett, Correspondence of Andrew Jackson, Vol. II, pp. 374-75.

31. Jackson to Monroe and Jackson to Calhoun, June 2, 1818, found in Bassett, Correspondence of Andrew Jackson, Vol. II, pp. 377-78, 380-81; Parton, Life of Andrew Jackson, Vol. II, pp. 502-03.

While acting as collector, Captain Gadsden studied the captured fortifications. He found that the Fort San Carlos site was well selected and had an "imposing command on the entrance" into the bay and was "susceptible of being strongly fortified." Bateria de San Antonio was of masonry and with but "few improvements may be rendered permanent." Fort San Carlos, he reported, was "too contracted in its dimensions, its figure greatly diminishing the internal space," while the materials of which it was built were "perishable, the whole indicates its having been hastily created, and as a temporary defense." Its imposing site, overlooking San Antonio, made it mandatory that it be maintained by "a strong and suitable work."

Captain Gadsden recommended that a new work be erected on the Barrancas with masonry revetments. Indispensible to the defense of the bay would be a battery on the western end of Santa Rosa Island.[32]

News of General Jackson's activities caused consternation in Washington. An irate Spanish minister protested to President Monroe, who called his cabinet together. Secretary of State John Quincy Adams alone defended Jackson's Florida raid. The other members strongly disapproved, and Secretary of War Calhoun proposed that the general be censured. The President was at first inclined to agree with Calhoun, but Adams stood firm.

While the President and most of his advisors were fretting about the international implications of Jackson's venture, the majority of the American people rallied to Old Hickory's solution. More than anything else, the realization that the people were behind Jackson emboldened the President. Pensacola, Saint Marks, and the forts were returned to Spain, but the Spanish minister was warned that if his nation could not

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32. Gadsden to Jackson, Aug. 1, 1818, found in Florida Historical Quarterly, Vol. XV, April 1937, No. 4, pp. 242-43.

maintain order in the Floridas, she had better turn the provinces over to someone who could.

In the weeks following the surrender, the Spanish troops, in accordance with the terms of the capitulation, had been transported to La Habana.

When the United States returned the posts to Spain in February 1819, a new commandant, José Callara, was sent to West Florida. On his arrival, he found the Pensacola barracks and blockhouses to be uninhabitable by the troops who had accompanied him. Quarters had to be rented for the soldiers in unoccupied dwellings and outbuildings.

A reconnaissance revealed that the Barrancas was still defensible. Mortar and a few bricks would repair San Antonio. Fort San Carlos, Colonel Callara saw, had consisted of "pine stakes" positioned in parallel rows to form the exterior and interior slopes. Filled with sand, the stakes formed a parapet with a 6-foot superior slope. There were neither bastions nor a ditch. Much of the sand had sifted through interstices between the stakes, while dunes swept in from the esplande were banked against the landward scrap. Until the dunes were removed, an attacking force could enter the fort without scaling ladders.

So steep was the slope of the revetment, built to compensate for the absence of a ditch, that the erosion of sand had reduced the terreplein to a height of 8 feet. Many of the stakes were rotten, while others had toppled.

Whereas the fort had mounted 30 cannon in 1814, only ten, none heavier than 12-pounders, were now emplaced in San Carlos. Eight of the ten carriages were in such bad condition that the tubes would probably be dismounted if they were fired. Two more cannon lay on the ground dismounted. If more guns were to be emplaced in Fort San Carlos, it would have to be rebuilt and enlarged.

The battery on Santa Rosa Island, not having been rebuilt following its destruction in 1814, had all but disappeared.[33]

E. Americans Take Possession of Florida

1. Formal Transfer of Sovereignity

The United States moved to secure Florida by diplomacy rather than by military conquest. In February 1819, Secretary of State John Quincy Adams and the Spanish minister to Washington, Luis de Onís, signed an agreement providing for the cession of Florida. A number of problems now developed, and two years passed before the two countries ratified the treaty.

General Jackson, who had resigned from the Army, was named governor of Florida by President Monroe and commissioned to receive the province from the Spanish officials. Twice before, Jackson had gone to Pensacola as a soldier; now he would be returning as an administrator. This time, he would be accompanied by his wife, Rachel.

They left The Hermitage in Middle Tennessee in mid-April 1821. Traveling by steamboat, the Jackson party reached New Orleans in eight days from Nashville. Taking passage on another steamer, they crossed Lake Pontchartrain, navigated Mississippi Sound, and landed at Blakely, Alabama, on Mobile Bay from where they traveled to Montpelier. There, they were compelled to remain for five weeks, awaiting the arrival at Pensacola of Col. James G. Forbes. The colonel, who had been named a marshal for Florida, had left the Atlantic seacoast aboard the sloop-of-war Hornet. He was to stop in La Habana to receive orders for surrender of the province from the governor-general.

The wait at Montpelier was a trying experience for the Jacksons. Rachel was shocked to see that the locals did not observe the

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33. Faye, "Spanish and British Fortifications," pp. 291-92.

Sabbath, and Andrew considered it evidence of Spanish duplicity. There was a heated exchange of letters between Jackson and the West Florida Commandant, Don José Callara.

Finally, on June 9, Hornet docked at Pensacola, but there were additional delays because of the loss of a vessel designated to assist in the evacuation of the Spanish garrison and officials. Meanwhile, Governor Jackson, on June 17, had left Montpelier, crossed the Perdido into West Florida, and had established temporary headquarters at Manuel Gonzales', 15 miles from Pensacola. Here he waited with his troops--the 4th U.S. Infantry and Company D, 4th U.S. Artillery.[34]

On July 11, Governor Jackson had the commander of his troops, Lt. Col. George M. Brooke, advance his column to within two miles of Pensacola, halting at Gálvez Spring. The next week was spent perfecting arrangements for the formal transfer of West Florida.

Colonel Brooke detailed and organized the garrisons to occupy Pensacola and the Barrancas, the former to consist of not less than four companies of infantry. The officer assigned to command the force sent to the Barrancas was to hold in readiness a score of picked men, led by a trusted subaltern, to relieve a Spanish force of equal size. At a specified hour, to be announced, the detachment was to enter the Barrancas, where it would find the Spanish honor guard "formed at support arms fronting the" flagstaff. The United States troops were to form in front of the Spaniards, the flagstaff between them. The Spanish flag flying, the United States colors would be fastened to the same halyards. The United States' flag would then be hoisted, while His Catholic Majesty's was lowered, until they met at halfmast. They would remain in this position until a Spanish salute of 21 guns had been fired.

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34. Parton, Life of Andrew Jackson, Vol. II, pp. 582-599; Forbes to Adams, June 9, 1821, found in Territorial Papers of the United States, The Territory of Florida, 1821-1824, compiled and edited by Clarence E. Carter (Washington 1956), Vol. XXII, pp. 64-65; Ralph K. Andrist, Andrew Jackson: Soldier and Statesman (New York, 1963), p. 92.

As soon as the last gun was discharged, the United States flag was to be hoisted to the top of the staff, and the Spanish flag to be taken down by the Spanish officer. The United States and Spanish soldiers would then present arms, and continue to do so until the "Spanish Officer delivers to the Officer of the United States the order of Don Jose Callara the Spanish commandant for the delivery of the fortress of Barrancas, at which the troops will be ordered to shoulder arms." The Spanish soldiers would then be withdrawn; the United States troops remaining in possession of the Barrancas and prepared to salute their flag with 25 "rounds from the guns in battery" at the fort.

On hearing the last gun of the Spanish salute, Colonel Brooke would have the United States' flag raised in Pensacola. After it had reached halfmast, it, as it was hoisted the rest of the way, was to be saluted by 25 guns.[35]

Tuesday, July 17, 1821, was the day Governor Jackson had been eagerly awaiting. Commandant Callara's guard, a company of dismounted dragoons of the Tarragona Regiment, "elegantly clad and equipped," paraded at an early hour in front of the government house. About 8 A.M., Colonel Brooke, at the head of the battalion of the 4th U.S. Infantry and Company D, 4th U.S. Artillery, marched into Pensacola from their Gálvez Spring encampment. Brooke formed his troops on the plaza, opposite the Spanish honor guard. The soldiers then exchanged salutes.[36]

Major Dinkins (who as a captain had distinguished himself in 1814 at Pensacola) with a three-company (F, G, and H) battalion of the 4th U.S. Infantry, had marched for the Barrancas earlier in the day.

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35. "Orders Regarding the Exchange of Flags," July 10, 1821, found in Territorial Papers-Florida, Vol. XXII, pp. 108-09.

36. Niles' Weekly Register, August 25, 1821, p. 404.

The ceremony at the Barrancas, which went as scheduled, triggered the program at the plaza.

At 10 A.M., Governor Jackson, accompanied by his aides, secretary, and interpreter, crossed the plaza, passed between the double line formed by the troops of the two nations, who simultaneously presented arms, and entered the government house. There, he met Commandant Callara, and the two principals executed the formal transfer of sovereignity. The Spanish guard at the gate was relieved by a detachment from the 4th Infantry. After a few minutes, Governor Jackson and Colonel Callara, accompanied by their staffs, left the government house, and, passing through the double line of troops, walked to the house Jackson had rented as temporary accommodations for his family. His Catholic Majesty's colors were lowered, and the "stars and stripes" hoisted "high in the air, not less than one hundred feet." A grand salute was fired by Company D, 4th U.S. Artillery, from the cannons they had unlimbered, and by Hornet. A gun was discharged for "each state and territory of the Federal Union, not forgetting Florida." The regimental band and that of Hornet now struck up the "Star Spangled Banner."[37]

2. Bateria de San Antonio and Fort San Carlos in 1821

In August, an unidentified Army engineer visited the Barrancas and prepared a plan of Bateria de San Antonio and Fort San Carlos. Not only did he fail to label his plan, but he failed to sign his name to it. This plan, which is dated August 16, 1821, should be studied in conjunction with Gelabert's plan of 1797. On doing so, it is apparent that the configuration of Bateria de San Antonio is unchanged. There are some differences in detail. These include a short flight of steps on the east face of the bombproof; an enclosure or room on the south front of the bombproof; the disappearance of the wing walls from the gorge; an entrance into the ditch through the eastern extremity of the gorge; and the elimination of the provisional battery and parapet.

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37. Ibid.

As to be expected of a temporary work, the configuration of Fort San Carlos had undergone a major transformation. The sea front, paralleling San Antonio's gorge, is now shielded by a palisade, instead of an earthen parapet faced with logs. The earthen and log parapet on the land fronts has been rebuilt to present six faces to an investing force. The central bastion has disappeared. The superior slope of the parapet is pierced by ten embrasures. Fronting the parapet is a ditch. To protect communications between San Carlos and San Antonio, a palisade has been erected connecting the flanks of the respective gorges.

Sited on the San Carlos parade are four frame structures.[38]

38. Plan No. 1, Fort Barrancas, Aug. 16, 1821, NA, RG 77, Drawer 79, Sheet 1.

III. THE BARRANCAS AS A CANTONMENT AND STORAGE DEPOT

A. Board of Engineers Study the Situation

1. Organization of the Board of Engineers

The United States, following the War of 1812, commenced construction of a Third System of fortifications to guard its seacoasts. Unlike the works of the First and Second Systems, which were hastily erected in response to grave threats from abroad arising out of the French Revolution and the Napoleonic Wars, the Third System was begun in 1817, when Europe was at peace. "Immediacy," as Dr. E. Raymond Lewis has pointed out in his thought-provoking monograph, Seacoast Fortifications of the United States, "was no longer an overriding consideration and attention could be directed at last to the creation of a permanent and truly integrated system of harbor defenses."

Until 1817, specific plans and designs had been prepared by engineers working independently of each other under general instructions issued by the Secretary of War and the Chief Engineer. There was no professional board in the War Department during this period "to coordinate planning, to determine project standards, or to supervise actual construction."

The First System, as Dr. Lewis has written, was therefore not "a true system with regard to the nature of its components, which were neither uniform nor durable." The Second System, "though it included several substantial works, was marked by a dissimilarity among its elements." Neither of the first two systems were "viewed as systematic (in the sense of constituting a cohesive and mutually supporting body of defenses) by the special board of officers convened expressly to create a third, 'permanent,' and genuine system of defense under a long-term program of construction that was to continue until the Civil War."[1]

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1. E. Raymond Lewis, Seacoast Fortifications of the United States: An Introductory History (Washington, 1970), p. 37.

Organized in 1816, the Board of Engineers was delegated responsibility for identifying sites to be fortified, establishing priorities, determining design characteristics, and "reviewing the specific site selections and actual plans of the project engineer." For the first time," as Dr. Lewis observes, "a professionally competent authority had been established to direct virtually all aspects of seacoast fortification design and construction."

From 1816 until 1831, the Board was headed by a French military engineer, Simon Bernard, who had been a brigadier general in the armies of Napoleon Boneparte. Recommended by the Marquis de Lafayette, Bernard arrived in the United States, following Waterloo, and was commissioned a brevet brigadier general in the Corps of Engineers. This was done despite vigorous protests by Chief Engineer J.G. Swift, who complained against the employment of a foreign engineer to aid in arranging the Nation's defenses. But, as would be subsequently observed by a member of the Corps of Engineers, the general acquienscence of the officers of the Corps in Bernard's appointment, "if not amounting to approval, led Congress and the authorities to suppose that no serious disapproval of the measures adopted were entertained by them." Thus, negatively endorsed, "it was considered that a good arrangement had been made by the government, by which a lack of skill in the native officers, unfitting them for the task of designing the grand scheme of defense, might be supplied by an importation from abroad."[2]

Another member of the original Board was Maj. Joseph G. Totten, who was to devote the next 48 years of his life to the development and construction of seacoast fortifications.

The Board, as constituted, had as its responsibilities the comprehensive task of coping with seacoast defense in "its broadest

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2. Ibid., pp. 37-38; W.H. Chase, "National Defenses," May 7, 1851, a copy of which is found with Chase's letter to Totten, June 26, 1852, NA, RG 77, Ltrs. Recd., Chief Engineer.

terms, as an activity involving the efforts of several interrelated elements--a navy, fortifications, avenues of communication in the interior, and a regular army and well-organized militia." The members were employed from the beginning in reconnaissances and studies of the coasts, as well as overland communications and navigable waterways. Members traveled extensively, conferred with project engineers, and examined dozens of sites in detail. Projects were evolved for protection of the various coastal frontiers.[3]

The Board's first detailed report was made to Congress in February 1821. Taking cognizance of the importance of the Navy in the defense of the Nation, the Board identified locations to be utilized for naval bases, repair yards, and anchorages. Next, it focused on the fortifications needed to protect these facilities and the commercial harbors, river mouths, and other important coastal locations. Specific recommendations were modest: "only 18 defensive works were listed in the first class, 'of the most urgent necessity,' but an additional 32 were projected for future consideration under two further categories of lesser priority."

As Florida had not been acquired in February 1821, no consideration was given to fortifications required for protection of its 3,500 miles of coast line, scarred by numerous bays and inlets.[4]

2. Board Visits Pensacola Bay

The War and Navy Departments' attention was soon drawn to Pensacola Bay. A study of the area's potential as a naval depot, to support a squadron operating in the Gulf of Mexico and the Caribbean, commanded high priority in the troubled years during which Spain's

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3. Lewis, Seacoast Fortifications, pp. 37-38.

4. Ibid., p. 38.

Central and South American colonies struggled to establish their independence. With letters of marque and reprisal being issued, frequently indiscriminately, by the forces fighting to cast off the mother country's yoke, there was a rapid growth in piracy.

To protect a naval depot would require fortifications. In the autumn of 1821, Chief Engineer Alexander Macomb took action. The Board of Engineers for Fortifications at this time was making a survey of the Ohio and Mississippi Rivers. Rather than return to the Atlantic coast, on completion of this project, General Macomb directed the Board to proceed to Pensacola, West Florida, to undertake a reconnaissance of Pensacola Bay, "with a view to defend the bay and ascertain the facilities it would afford, in competition with other bays on the coast, to the establishment of a naval depot."[5]

Members of the Board reached New Orleans from up river on December 12, 1821. Advising his readers of this on the last day of the year, the editor of The Floridian reported that the Board could be expected in Pensacola in a few days. The Board, he reported, included two senior officers of the Army's elite Corps of Engineers--Brig. Gen. Simon G. Bernard and Maj. Joseph G. Totten--and Capt. Jesse D. Elliott of the Navy. When discussions involved establishment or protection of a naval depot, a senior Navy officer participated as a member of the Board. Accompanying the Board were Capts. Hugh Young and William T. Poussin and Lt. Stephen Tuttle, several of the Corps' better known junior officers. The well-deserved reputation of these people, the editor assured his readers, demonstrated the "United States government could not have made a better appointment."[6]

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5. American State Papers, Military Affairs, Documents Legislative and Executive of the Congress of the United States (Washington, 1860), Vol. III, p. 158.

6. The Floridian, Dec. 31, 1821.

The Board reached Pensacola from Mobile on January 12, 1822, aboard the revenue cutter Alabama.[7]

Reconnoitering Pensacola Bay, the Board found that Santa Rosa Island paralleled the coast for about 50 miles, commencing opposite San Carlos de Barrancas and extending eastward to Pass L'Este. It was "very barren," averaging one-half mile in width, and was uninhabited. The first settlement in West Florida, they were told, had been made on the north shore of Santa Rosa Island, about two miles from its western point, "where the ruins of Fort Montagorda are still conspicious." Fort Montagorda had been built of hard, dark sandstone, similar to that found in the interior, but not on the island.

The white sands of Santa Rosa Island were blown into "fanciful hills, and appear exactly like the snow drifts of 'the northern states.'" Small hummocks of live oaks and pine, enveloped in vines, afforded shelter to "numerous deer," while freshwater ponds attracted "vast flocks of waterfowl." The breakers which beat against the island's south shore were hazardous in stormy weather, and a number of vessels had foundered on the shoals.

Pensacola Bay, opening between the west end of Santa Rosa Island and the Barrancas, was considered by many to be the most "beautiful harbor on the Gulf of Mexico." The entrance to the bay was "narrow and crooked," with 21 feet of water over the bar. Within a short distance, the bay widened to seven miles. Eastward of Town Point, Pensacola Bay was separated from Santa Rosa Island by a 20-mile-long peninsula, connecting with the mainland near Choctawhatchee Bay.

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7. Ibid., Jan. 14. 1822. At Mobile, the Board had been joined by Captain René E. De Russy, project engineer of the fortifications under construction for defense of Mobile Bay.

Santa Rosa Sound, 30 miles in length, separated the island from the peninsula. The Sound, from one-half to two and one-half miles across, was navigable by vessels drawing up to six feet of water, and opened into Choctawhatchee Bay and then into the Gulf through Pass L'Este.

On the north shore of the peninsula were "several pleasant hummocks calculated for convenient country seats, on a most healthy coast."

Grass Point on the south side of the peninsula and Navy Cove on the north, opposite Pensacola, afforded good deepwater anchorages, where large frigates could lay close in-shore. They also provided good places at which ships could take aboard water.

Pensacola Bay extended for a distance of 30 miles into the hinterland, its general direction to the northeast. About two miles east of Pensacola, and 11 miles from the Barrancas, Escambia Bay extended to the north from the main sheet of water. Ten miles farther east, Yellowwater Bay broke off in a similar direction. Blackwater Bay opened into the latter at its northwest corner. East Bay was the name applied to the easternmost continuation of Pensacola Bay. Escambia Bay was from two to six miles in width and about 15 miles long; Yellowwater Bay was of similar length, but only one to two miles wide; Blackwater Bay was seven miles long and one to two miles wide; and East Bay was one and one-half miles long by three-fourths of a mile wide.[8]

Between Pensacola and the Barrancas on the bayside were several bayous of "considerable size." The soil was indifferent. Six miles southwest of Pensacola, Tartar Point hid the town from the Barrancas. On Tartar Point, a signal staff had been erected, which was visible from the town.

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8. Pensacola Gazette, Oct. 2 and 9, 1824.

Two miles west of the signal tower was San Carlos de Barrancas. Behind the fort, the ground was grown up in slash and pine wood. Nearer the fort, however, there was some fertile land where the gardens of the garrison thrived. The huge live oaks behind Barrancas village and the fort formed a "striking contrast to the apparently wretched soil" in which they grew.

San Carlos de Barrancas was commanded by two hills--one to the northwest and the other one-half mile from the bay. On the former, General Jackson, in 1818, had emplaced "a 9-pounder, and with this formidable battery, attacked the fort." The United States Regulars, which were garrisoning the area, were erecting barracks on the latter. The new barracks (Hospital Hill) were within "a short distance of one of the best springs for which Florida is celebrated."

The fort on the Barrancas was "small, by no means formidable," and when turned over to the United States, in "very bad repair." The water battery (San Antonio) was "a much more considerable work." With the exception of a few artillery pieces, the cannon were of no value, "the carriages so rotten as to be unfit for use." Projectiles from Bateria de San Antonio could be fired across the bay to Santa Rosa Island, a distance of one and one-fourth miles, with ease.

There was also need for a lighthouse because vessels, unacquainted with the coast and making for Pensacola Bay, were liable to pass without recognizing the passage across the bar.

From the heights of the Barrancas, there was a commanding view of the entrance to Pensacola Bay and of the surf beating on the southern shore of Santa Rosa Island. North of the Barrancas was Bayou Grande.[9]

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9. The Floridian, Oct. 22, 1821.

The Board, in the several weeks spent in and around Pensacola, agreed that the entrance to the bay "might easily be defended" by construction of two forts: one at the Barrancas and the other on Santa Rosa Island. But, before any advance planning took place, it would be necessary to secure an accurate survey of the bay, of the surrounding terrain, and a chart of the soundings.

Before making a decision on the desirability of Pensacola Bay as a naval depot, the Board had to investigate other possibilities. They soon learned that the only other site on the Gulf Coast that could "contend with Pensacola as a road of rendezvous and naval depot" was Tampa Bay. Captain Young was accordingly directed to make a survey and soundings of that area. His untimely death put a stop to that project.[10]

3. The Kearney Survey

The officer charged with executing the survey of Pensacola Bay and its approaches was Maj. James Kearney of the Topographical Engineers. Wrapping up a project on which he was employed, Major Kearney and his two assistants--Lts. Henry A. Thompson and William Turnbull--reached Pensacola from Massachusetts on Sunday, March 10, 1822. Next day, they began operations at the Barrancas. Commenting on this, the editor of The Floridian reported, "Their promptness in entering on the discharge of their important trust gives us additional assurance of our good fortune in having the survey of our seaboard assigned" to Major Kearney.[11]

After finishing the survey of Pensacola Bay, Major Kearney and his assistants reconnoitered Mobile Bay. Before Kearney

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10. American State Papers, Military Affairs, Vol. III, pp. 158-59.

11. The Floridian, March 16, 1822.

could plot his soundings and prepare his charts, he was ordered to Maryland to survey the St. Mary's River.[12]

B. The Barrancas as a Major West Florida Cantonment

1. Soldiering at the Barrancas: July 1821-August 1822

Governor Jackson's administration of Florida was brief but tempestuous. In October 1821, without awaiting the arrival of a successor, he wrote President Monroe, reporting that he had organized affairs in Florida and was resigning.

During Jackson's brief administration, the military presence in the Pensacola area was represented by two cantonments. Posted at the Barrancas in late July were three companies of the 4th U.S. Infantry (F, G, and H) and Company G, 4th U.S. Artillery. Major Dinkins commanded the post. In September, the garrison was reinforced by Companies D, I, and K, 4th U.S. Infantry, ordered to the Barrancas from Pensacola, following the destruction by fire on the 18th of the "old barracks" on the plaza. In October, Company D, 4th Infantry, was detached and sent to garrison the fort on Mobile Point.

There were 100 men on sick call in the early autumn with about one-half hospital cases. To provide for their comfort and quarantine, three buildings were appropriated by Assistant Surgeon A.P. Merrill as a hospital. These structures, however, were unsatisfactory for this purpose because, besides being too small for comfort, they were "so old and rotten as to render it impossible to keep such a state of police as is necessary to prevent the effect of contagion." The largest of the three was in "such a state of decay as to be considered in danger of being demolished by every storm."

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12. Totten to Macomb, Dec. 17, 1823, NA, RG 77, Ltrs. Recd., Chief Engineer.

As winter, with its cold and rainy weather, was approaching, Dr. Merrill feared that unless a "commodious 40-bed hospital was soon erected he would lose a number of his patients." Major Dinkins agreed with Dr. Merrill. But before the Quartermaster General could act on their request, the health of the command improved and construction of the hospital was deferred.[13]

In March 1822, Company I, 4th Infantry, was sent to Mobile Point and Company D returned to the Barrancas, after six months' absence. The following month Company K was transferred to Pensacola. This left the Barrancas garrisoned by four companies of the 4th Infantry (D, F, G, and H) and Company D, 4th U.S. Artillery. Also, in April 1822, the Barrancas received a new commander, when Colonel Brooks replaced Major Dinkins.[14]

Col. John R. Fenwick of the 4th U.S. Artillery, during the winter, had reached Pensacola. As it was a central location, he established regimental headquarters there for his command, whose ten companies were scattered at various posts on the southwestern maritime frontier.[15] Soon after his arrival, Fenwick called on the War Department to provide housing for Company D of his regiment at the Barrancas. The Quartermaster General accordingly issued orders for the Pensacola Quartermaster--Lt. Arthur W. Thornton--to furnish "such building materials" as were required that could not be provided by the troops for

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13. Stanton to Quartermaster General, Sept. 19, 1821, and Merrill to Dinkins, Oct. 1, 1821, NA, RG 92, Consolidated Correspondence.

14. Returns for Regular Army Infantry Regiments, June 1821-December 1916, NA, Microcopy M-665.

15. In March 1822, the Companies of the 4th Artillery were posted as follows: Companies A and F at St. Augustine; Company B at Fort St. Philip; Companies C and I at Fort Saint Marks; Company G at Petite Coquille; and Company H at Fort Wayne.

the "purpose of erecting quarters for the artillery stationed at the Barrancas." The work would be done by the military.[16]

A site was staked out on the high ground 600 yards east of Fort San Carlos. Fatigue details were organized and a cantonment took shape.

Six months later, in August 1822, the War Department, concerned about clashes between the citizens and members of the battalion of the 4th U.S. Infantry stationed in Pensacola, issued orders for their transfer to the Barrancas. But, before this could be effected, it would be necessary to enlarge the cantonment to accommodate a regiment.

Quartermaster Thornton was to furnish nails and necessary ironwork. As much of the area was forested, the troops would provide the labor. The barracks and quarters were to be framed or built of squared logs, but should conform to those already erected. An additional team or two could be purchased for hauling. Storehouses and a hospital were to be constructed, as soon as practicable after the troops had occupied the cantonment.[17]

Meanwhile, the troops at the Barrancas had taken steps to make it easier for mariners. On May 18, it was announced that henceforth, vessels seeking to enter Pensacola Bay at night could do so. When off the bar, they were to fire a gun and hoist a light to the masthead. An answering light would be shown at the head of the fort's flagstaff, and remain in position until the vessel had crossed the bar and had anchored in the bay.

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16. Quartermaster General to Thornton and Fenwick, Feb. 28, 1822, NA, RG 92, Ltrs. Sent, QMG, Microcopy M-745.

17. Quartermaster General to Thornton, Aug. 27, 1822, NA, RG 92, Ltrs. Sent, QMG, Microcopy M-745.

This facility had been introduced by Colonel Brooke, and was done at his personal expense. This contrasted, the editor of The Floridian wrote, with the actions of Congress which had not appropriated enough to pay for one box of candles for security of Florida harbors.[18]

In August, the strength of the Barrancas garrison was increased to two companies of artillery and four infantry companies, when Company F, 4th U.S. Artillery, arrived by ship from Petite Coquille.[19]

2. Yellow Fever Plague of 1822

Yellow jack made its dreaded appearance in mid-August 1822 at the village of Barrancas, in front of which a Boston schooner with a cargo of cod had anchored. From the village, the fever spread to the fort, and then to Pensacola, where it raged with terrible fury.[20]

On the 17th, the editor of The Floridian reported six cases. The newspaper then suspended publication for six weeks. News of the disaster was carried by Niles' Register. On October 12, Niles' reported that the latest accounts from Pensacola show the city nearly deserted and give long lists of deaths. Many "estimable and distinguished persons have found a grave." It was said that the people who remained in Pensacola were "hardly sufficient to inter the dead." Fugitives from the plague had suffered great hardships because of the sparse population of the hinterland.[21]

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18. The Floridian, May 18, 1822.

19. Returns from Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727.

20. McCall to H, Nov. 8, 1822, found in George A. McCall, Letters from the Frontiers (Philadelphia, 1868), p. 13.

21. The Floridian, Aug. 17, 1822; Niles' Weekly Register, Oct. 12, 1822, p. 81.

On October 19, Niles' Register reported that between August 15 and September 11, 120 persons had perished of yellow fever at Pensacola, "an amount of mortality without precedent . . . in the United States when that of the population to be acted upon is taken into consideration."[22]

On the appearance of yellow fever in Pensacola, Col. Duncan L. Clinch, commanding the 4th U.S. Infantry, to "preserve the health" of the battalion of the 4th Infantry (Companies A, B, C, E and K) stationed there, removed it to Gálvez Spring, two miles west of town. On advising the War Department of this, Colonel Clinch, on September 6, reported that his officers and soldiers, with the exception of Drs. J. Ponte Coulant McMahon and Moses H. Elliott, Lt. Arthur W. Thornton, and a few men, were in excellent health. But, he added, one-fourth of the Anglo-Saxon population of Pensacola had been felled, with 19 deaths during the last 24 hours.[23]

On October 4, Dr. McMahon urged Colonel Clinch to evacuate the Barrancas battalion to Camp Hope, as the Gálvez Spring encampment had been designated. The fever was becoming worse in the village, and it was impossible to prevent the soldiers from fraternizing with the civilians. When the Barrancas battalion arrived at Camp Hope, it should be segregated, the surgeon warned.[24]

During the next 72 hours, four soldiers and two civilians were striken at the Barrancas, with two dying of black vomit on the morning of the 7th. Reporting this to Colonel Clinch, Dr. McMahon

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22. Niles' Weekly Register, Oct. 19, 1822, p. 99.

23. Clinch to Adjutant General, Sept. 6, 1822, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

24. McMahon to Clinch, Oct. 7, 1822, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

urged that the battalion be pulled out of the Barrancas no later than tomorrow.[25]

Colonel Clinch now moved. On the 8th, he withdrew the battalion of his regiment from the Barrancas to Gálvez Spring. There, they established a separate encampment, Camp Brady, under "temporary sheds," as they did not have sufficient tents.

The Barrancas cantonment would henceforth "answer for quarters, a hospital and storehouse for two Companies of Artillery." The quarters were of little value, and would cost more to dismantle and to remove the materials to Camp Hope than they were worth.[26]

The move to Camp Brady came too late to save Major Dinkins and Lt. William W. Gaillard. The former died at the Barrancas on the 6th and the latter at Pensacola on the 11th.[27]

Eight days before, Capt. Benjamin K. Pierce, the artillery officer in charge of Fort San Carlos and Bateria de San Antonio, had complained to Colonel Fenwick, his immediate superior, of the difficulty of supplying the troops in the Bayou Grande cantonment from the fort. Unless a boat were made available for transporting rations, the artillerists would have to be recalled, with disasterous consequences. The casemates of San Antonio were unfit to occupy and there were no tents. He and his officers' struggle to "preserve the health and efficiency" of their men

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25. McMahon to Clinch, Oct. 7, 1821, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

26. Clinch to Adjutant General, Oct. 5, 1822, found in Territorial Papers-Florida, Vol. XXII, p. 538.

27. Clinch to Adjutant General, Oct. 12, 1822, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

were doomed, he fretted, when the government withheld the "means necessary to give success to their efforts."

To underscore the danger, Captain Pierce reported that Sergeant Willets had died this morning.[28]

Colonel Fenwick forwarded Pierce's letter to the War Department. On doing so, he reported that, because of the high mortality resulting from yellow fever, the troops had evacuated Fort San Carlos and had established a cantonment on Bayou Grande.[29]

3. 4th U.S. Infantry Establishes Cantonment Clinch

The 4th Infantry did not reoccupy the barracks it had evacuated at the Barrancas and in Pensacola when cooler weather, in late October, ended the yellow fever scourge. The footsoldiers were still two miles west of town in April 1823, when the two camps were merged and redesignated Camp Gálvez Spring.[30]

Meanwhile, on December 21, 1822, Maj. Gen. Edmund P. Gaines, who had succeeded General Jackson as commander of the vast Western Department, moved to implement orders he had received from Secretary of War Calhoun to have barracks constructed for the 4th U.S. Infantry near Pensacola. Capt. Daniel E. Burch was placed in charge of the project. Burch, who was assigned to the Quartermaster Department, was to proceed from Louisville to his new duty station. On reaching Pensacola, he was to make inquiries as to the lowest cost of suitable plank and scantling and other building materials, and execute necessary

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28. Pierce to Fenwick, Oct. 1, 1822, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

29. Fenwick to Adjutant General, undated, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

30. Returns for Regular Army Infantry Regiments, June 1821-December 1916, NA, Microcopy M-665.

contracts. In erecting the barracks, "the utmost economy" would be observed. Burch was to ascertain the difference in cost between log and lumber construction, and unless it was greatly in favor of the former, the quarters were to be built of plank and scantling.[31]

The plan prepared by General Gaines for the cantonment called for 16-by-16-foot, one-story huts, with a door and window to each room.

From New Orleans, where he arrived on the 29th, Captain Burch wrote Quartermaster General Thomas S. Jesup that it would be March 1823 before work on the barracks began. After visiting Mobile and Pensacola and ascertaining the cost of building materials, he would transmit estimates of funds needed to defray construction costs.[32]

Captain Burch spent a busy winter and spring on the Gulf Coast. He returned to Pensacola from New Orleans in mid-May and relieved Lieutenant Thornton as Post Quartermaster. The cost of living was extremely high, and he was compelled to pay his clerk $50 per month.

Some claims had been made upon the United States for timber felled for building the barracks. These claimants, however, had not had their titles to the tracts confirmed. Although Burch was reasonably certain that the commissioners, when they met, would validate the claimants' titles, he would defer paying them until he received instructions from General Jesup.

Problems had also been caused by failure of the Army to designate a commanding officer at Pensacola. Colonel Fenwick was posted in the town and commanded the artillery at the Barrancas, while Colonel

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31. Gaines to Burch, Dec. 21, 1822, NA, RG 92, Consolidated Correspondence.

32. Burch to Jesup, Jan. 2, 1823, NA, RG 92, Consolidated Correspondence.

Brooke was in charge of the 4th Infantry at Camp Galvez Spring. Neither officer, Captain Burch complained, seemed willing to assume command of all the troops in the harbor.[33]

Despite these difficulties, the barracks, quarters, and storehouses were completed by late June 1823. They were on the head of Little Bayou, at the confluence of the two upper branches, about two miles west of Pensacola. Little Bayou was navigable for boats drawing two to three feet of water. The cantonment enjoyed a healthy "situation," and Pensacolians hoped the 4th U.S. Infantry would enjoy the "present delightful station, selected by their colonel and prepared by their own labor."

On July 4, Colonel Brooke designated the camp Cantonment Clinch to honor the regimental commander--Col. Duncan L. Clinch. The editor of The Floridian deemed the compliment well deserved by that "meritorious and distinguished officer."[34]

Kurt Bernhard, Duke of Saxe-Wiemar Eisenach, was at Cantonment Clinch in January 1826. He reported that the cantonment was on the Barrancas road, about two miles west of Pensacola. On "an eminence," the cantonment consisted of ten log buildings built in a row. Each structure was home for one company, and contained two rooms. Before this "long range of barracks" was a large parade ground with a flagstaff. On the opposite side of the parade were the officers' quarters. Behind the barracks were the company kitchens and to their rear the guardhouse and stockade.

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33. Burch to Jesup, May 15, 1823, NA, RG 92, Consolidated Correspondence.

34. The Floridian, July 19, 1823.

On the "right wing" was Colonel Clinch's quarters, sited in a garden enclosed by a palisade. His quarters were frame, two stories, with a piazza below and a gallery above. Upon the left wing was a similar structure outfitted as quarters for the lieutenant colonel and major. As the former was at Tampa Bay and the latter on detail at Fort Mitchell, this building was being used as the post hospital.[35]

C. The Barrancas as an Artillery Base

1. 4th Artillery as the Barrancas Garrison

The flight of the infantry battalion to Camp Brady left the Barrancas garrisoned by Companies D and F, 4th U.S. Artillery. As senior captain, B.K. Pierce, commanded the post. In May 1823, the two companies were reinforced by the cannoneers of Company C, who were brought over from Saint Marks.[36]

On July 4, the officers of the 4th Artillery from the Barrancas and the 4th Infantry from Cantonment Clinch held a "splendid entertainment" at Plumb Grove on Bayou Grande. All the "respectable citizens" of the area were invited, but, because of the disagreeable weather, many did not attend. Even so, there was a "numerous and gay" crowd. The day was celebrated with the utmost "conviviality and harmony."

Colonel Brooke presided at the dinner, supported by Maj. William Wilson of the Artillery.[37]

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35. Kurt Bernhard, Duke of Saxe-Weimar Eisenach, Travels Through North America, During Years 1825 and 1826, 2 vols. (Philadelphia 1828), Vol. II, pp. 48-49.

36. Returns from Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727.

37. The Floridian, July 19, 1823.

Major Wilson had arrived on the Florida coast that spring and in August was placed in command of the Barrancas artillery battalion. In October, the battalion lost one of its units when Company F was ordered to the Rigolets.[38]

On Monday, September 11, Capt. Mathew Massey of the 4th Artillery died at Fort San Carlos after a brief illness. A native of New Jersey, he was 33 and had served with distinction in the War of 1812 and in the campaign against the Seminoles.[39]

In November, the U.S. Attorney called on Major Wilson to accept for confinement in the San Antonio bombproofs several prisoners convicted and sentenced by a recent term of the courts. Although the casemates had been formerly used as a state prison by the Spanish commandants, Wilson refused the request.[40]

About the same time, Colonel Fenwick received orders from the War Department to send Companies C and D to Old Point Comfort, Virginia, along with Company I from Saint Marks. Regimental headquarters would be removed from Pensacola to St. Augustine. Saint Marks was to be abandoned by the military, while the Barrancas artillerists were to be replaced by infantry from Cantonment Clinch.

Acknowleding this message, Fenwick promised to implement it as soon as he could secure transportation and clothing for his command. The brig Franklin, en route from Philadelphia to Pensacola

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38. Wilson to Adjutant General, July 1, 1823, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

39. The Floridian, Sept. 13, 1823.

40. Steele to Secretary of State, Nov. 18, 1823, found in Territorial Papers-Florida, Vol. XXII, p. 788. William F. Steele was the U.S. District Attorney for Florida.

with the regiment's clothing, had foundered off the Hole-in-the-Wall on August 30.[41]

Commenting on this news, the editor of The Floridian observed that the withdrawal of the Army from Saint Marks was expected following the treaty Colonel Gadsden had negotiated with the Seminoles. But the removal of Companies C and D, 4th U.S. Artillery, from the Barrancas left him at a loss. It was said that plans were afoot in the War Department to establish a school for artillerists at Old Point Comfort.[42]

2. Company B, 4th U.S. Infantry, Garrisons the Barrancas

It was January 1824 before arrangements were perfected by Colonel Fenwick, and the two companies, having loaded their gear aboard ship, sailed for Hampton Roads. To replace the artillerists at the Barrancas, Company B, 4th U.S. Infantry, Capt. Henry Wilson commanding, arrived from Cantonment Clinch.[43]

Then in February, the garrison at Cantonment Clinch was reduced by one-half, when Companies C, D, F, and G were ordered to Tampa Bay, where they established Cantonment Brooke. Six months later, in August, the force stationed near Pensacola was further reduced, when Company E was sent to Saint Marks and Company I to New Orleans.[44]

In the late winter of 1824, while Company E was still at Cantonment Clinch, there arrived from Saint Marks a shipment of stores.

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41. Fenwick to Adjutant General, Oct. 15 & 28, Nov. 13, 1823, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

42. The Floridian, Nov. 20, 1823.

43. Returns from Regular Army Infantry Regiments, June 1821-December 1916, NA, Microcopy, M-665.

44. Ibid.

As Amelia was currently unemployed, Captain Burch used her to evacuate and bring to Pensacola the remaining supplies, about 30 tons, from that abandoned post. Three boat loads of stores, principally ammunition, had been previously landed from Mobile and Dauphin Island, and for want of proper storehouses at Pensacola had been sent to the Barrancas.

There was, Captain Burch complained, no ordnance officer stationed in the area, and he could not give the ordnance stores the attention they warranted. Consequently, he had entrusted their oversight to Lt. J.B. Shaw, the commissary of subsistence.[45]

On Friday morning, April 2, there was a fire in Barrancas village. It started in the blacksmith shop belonging to the Army and quickly spread to several houses and outbuildings. The large dwelling occupied by Dr. Bell, formerly the residence of Maj. William Wilson, was the principal one destroyed. The furnishings, however, were saved by a detachment of troops led by Lt. Eustace Trenor.[46]

On August 1, Capt. Henry Wilson notified the War Department that his company was much reduced by discharges and "other casualties." To secure replacements, he needed funds and permission to open a recruiting station in Pensacola. He believed that it would be possible to reenlist a number of ex-4th Infantrymen, who, having served their enlistments, had remained in the area and were now out of jobs and broke.[47]

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45. Burch to Jesup, March 5, 1824, NA, RG 92, Consolidated Correspondence.

46. Pensacola Gazette, April 10, 1824.

47. Wilson to Adjutant General, Aug. 1, 1824, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

Captain Wilson was given the go ahead and a number of men were recruited.

3. Pensacola Gets a Lighthouse

The apparatus and materials for the lighthouse to be erected for Pensacola Bay were landed at the Barrancas in the last week of September. Collector of Revenue A.W. Hamilton, on October 1, 1824, selected a site west of the fort. The ground here was thought "to be very near the height of the lantern in the light vessel" now anchored in the bay. Construction began on Monday, the 4th. Hamilton hoped it would be completed to enable him to light the lamp on December 1, 1824.[48]

The contractor did not make as rapid progress as anticipated and it was December 20 before the lamp was lighted.[49]

4. Captain Burch: Florida Road Builder

In the late winter of 1823, the War Department determined to open a military road from Pensacola to the Barrancas, via "the most practicable route, bridging the bayou, etc." Captain Burch would be in charge of the project. Construction was to begin in May. For military purposes, the road was vital, while its economic benefits to the community would be far-reaching.

At present, the road from the city to the Barrancas was 15 miles, over a difficult route. The new road would reduce the distance by more than one-half. The 4th Infantry, once the new road was open, would be able to march from its cantonment at Gálvez Spring to the

48. Pensacola Gazette, Oct. 2, 1824.

49. Ibid., Jan. 8, 1825.

Barrancas in an hour. As the road now ran, the troops were hard pressed to cover the distance in six hours.[50]

By February 20, 1824, Captain Burch reported completion of the road, excepting the bridge over Bayou Grande.[51]

Meanwhile, Captain Burch had been given another road building assignment. On September 11, 1823, Quartermaster General Jesup had alerted Burch that as soon as the season admitted, he was to commence the survey of a road from Pensacola to St. Augustine. The commander of the 4th Infantry was to detail to Burch a subaltern and as many enlisted men as necessary.[52]

Six weeks later, on October 21, Captain Burch, accompanied by Lts. George W. Allen and Joshua B. Triplett and a score of enlisted men from the 4th Infantry, rode out of Pensacola and headed eastward.[53]

The survey was completed and Congress appropriated funds for opening the road. In September 1824, Pensacolians were delighted to learn that Captain Burch had been ordered to open a road over the route surveyed linking Pensacola and St. Augustine. The western terminus of the road was to be Deer Point. Burch was to begin work as soon as weather permitted.

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50. The Floridian, March 8, 1823; Jesup to Burch, May 6, 1823, NA, Ltrs. Sent, QMG, Microcopy M-745.

51. Burch to Quartermaster General, Feb. 20, 1824, found in Territorial Papers--Florida, Vol. XXII, p. 851.

52. Jesup to Burch, Sept. 11, 1823, NA, RG 92, Ltrs. Sent, QMG, Microcopy M-745.

53. The Floridian, Oct. 25, 1823.

The force to be employed at first would be small, but would be increased to 200 within a few weeks. By commencing at Deer Point, Captain Burch planned to have the road opened as far as Tallahassee by June 1, 1825.

The editor of the Gazette was confident that this "very important bond of union between the extremities of our territory will be completed as far as the St. Johns within a year."[54]

The trans-Florida road was completed by the autumn of 1825. But by that time, the Army no longer garrisoned the Barrancas.

D. Fortifications and Cantonment Serve the Navy

1. Army Withdraws Its Troops

In the spring of 1823, the Navy had established a depot at Key West for its West India squadron. It proved to be an unfortunate choice, when yellow fever broke out there during the summer, and claimed the lives of a number of sailors and Marines. This led to an investigation and report to Congress by a commission chaired by Commo. John Rodgers. Responding to the Rodgers' report and public pressure, the 2d Session of the 18th Congress enacted legislation for establishment of a Navy yard and depot on the coast of Florida, within the Gulf of Mexico.

Then, soon after the inauguration of John Quincy Adams as sixth President, on March 4, 1825, the new Secretary of the Navy, Samuel L. Southard, determined to abandon the "unhealthy depot" at Key West. First, however, he asked the Army to permit the Navy to use its facilities at the Barrancas. An order for the transfer was issued May 24

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54. Pensacola Gazette, Sept. 25, 1824.

to be sent to the squadron by the storeship Decoy. She did not sail, however, until July 13.[55]

Secretary Southard also alerted the commander of the West India Squadron to remove for the time being "so much of the forces and stores, now at Thompson's Island [Key West], as can be effected without inconvenience and loss to the public." The new base would be Pensacola, and he was authorized to receive possession of the facilities there from the Army. It was believed in Washington that he would "find full accommodations both for men and stores, in the fort, barracks, and houses which the War Department has been ordered to transfer."[56]

On May 13, the War Department, having agreed to turn over its facilities at the Barrancas to the Navy Department, issued the necessary orders. Company B, 4th U.S. Infantry, was to rejoin the regiment at Cantonment Clinch. Captain Burch of the Quartermaster Department was to transfer the barracks and fortifications to the Navy. If there were no buildings there suitable as a storehouse, he would, if practicable, provide the Navy with one in Pensacola.[57]

By June 18, Company B had moved to Cantonment Clinch. Notifying Quartermaster General Jesup of this, Captain Burch announced that he was prepared to turn over to the Navy, when called upon, the barracks, etc.[58]

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55. Southard to Congress, Dec. 2, 1825, found in the American State Papers, Documents, Legislative and Executive, of the Congress of the United States, Naval Affairs (Washington, 1862), Vol. II, p. 99.

56. Southard to Warrington, May 24, 1825, found in ibid., pp. 109-10.

57. Jesup to Burch, May 13, 1825, NA, RG 92, Ltrs. Sent, QMG, Microcopy M-741; Pensacola Gazette, June 11, 1825.

58. Burch to Jesup, June 18, 1825, NA, RG 92, Consolidated Correspondence.

Hardly had the soldiers of Company B rejoined the regiment before marching orders were received. Maj. Saunders Donoho was directed to proceed to the Creek Agency (Fort Mitchell) with Companies A, B, E, and K. On July 1, Donoho turned out his battalion and started for the Creek country.

Commenting on their departure, the editor of the Gazette informed his readers:

> We do not know whether it is the Creeks or their white patrons whom they are to quell, but he wished the brave fellows who are thus called to a disagreeable march over the southern sands at this unfavorable season a successful expedition and a speedy return to their delightful station at Cantonment Clinch.[59]

Donoho's battalion spent nine months at Fort Mitchell. When the troops returned to Cantonment Clinch in March 1926, they found the Navy in possession of the Barrancas.

2. Navy Arrives and Takes Charge

On October 4, 1825, the 30-gun corvette, John Adams, one of the vessels in Commo. Lewis Warrington's squadron, entered Pensacola Bay, having departed her station off La Habana four days before. She had left the brig Spark on that station, the brig Terrier off Matanzas, and Fox cruising the coast from Nuevitas to Matanzas. Capt. Joseph J. Nicholson on landing reported that the health of his crew was good, considering that the corvette had spent the previous 94 days at sea in the subtropics.

Nicholson's mission in bringing his ship into Pensacola Bay was to land Marines to take possession of the Barrancas and other public property to be transferred by the Army to the Navy, and to "refresh his crew." Despite orders to the contrary, the removal of the facilities from

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59. Pensacola Gazette, June 25 & July 2, 1825.

Key West to Pensacola was being carried out with much foot-dragging. Captain Nicholson told the editor of the Gazette that arrangements had been perfected for the "partial transportation of the stores and the sick."[60]

His time and attention engrossed by road building duties, Captain Burch had been compelled to delegate his paperwork to Lieutenant Shaw. On November 5, Shaw, having made out the necessary receipts, transferred to Captain Nicholson Fort San Carlos, its water battery, and nearby cantonment.[61]

3. Duke of Saxe-Weimar Visits the Fortifications

In January 1826, the Duke of Saxe-Weimar stopped at Pensacola for several days during his American tour. On the morning of the 13th, several officers from Cantonment Clinch stopped at the Collins Hotel, where the duke had spent the night. As he wished to see Fort Barrancas, the duke accepted the invitation of Lt. A.S. Campbell of the Marine Corps to accompany him on his return to the Barrancas.

The trip was made in Lieutenant Campbell's boat. With a favorable wind, they reached their destination in an hour. Kurt Bernhard found the country bounding the bay the "most disagreeable that can be conceived of; nothing but sand heaps, dazzling white like snow." Across the bay, he saw Santa Rosa Island, with its "growth of dwarf oaks."

Landing at the fort, he saw a number of brass cannon, Spanish and British. Among the former, he spotted two handsome 24-pounders, cast in Seville. In the gorge of the fort, there was a large bombproof (the Reduit), and on the parade, a shot furnace. "The whole of the work," the duke recorded, "is built of sand; therefore, the wall

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60. Pensacola Gazette, Oct. 8, 1825.

61. Shaw to Adjutant General, Nov. 5, 1825, NA, Ltrs. Recd., Adjutant General, Microcopy M-619.

outside, and the parapet inside, are covered with upright planks, and the cheeks of the embrazures in the same manner. The Spanish cannon, also mounted on the clumsiest carriages, are placed in battery." The fort was occupied by a detachment of Marines, who were employing the casemates and blockhouses for magazines until the "requisite preparations" can be made at the navy yard. When this occurred, Kurt Bernhard was told, the fort would be dismantled, and in its place, a respectable defense created to defend this important place.[62]

About 100 paces west of the fort was a brick lighthouse, about 80 feet in height, in "which twenty lamps in divisions of five, constantly turn upon an axis in a horizontal movement during the night." They were set in motion by a clock, and were manufactured in Roxbury, Massachusetts. The lamps were furnished with plated reflectors, and burned spermaceti oil.[63]

4. U.S. Marines Occupy the Cantonment

The site selected by the naval commissioners for the Nation's Navy depot on the Gulf Frontier was at Tartar Point, one and one-half miles east of the Barrancas fortifications. Until such time as quarters, barracks, shops, and storehouses could be constructed, the Navy utilized the cantonment buildings erected by the Army and fortifications for housing and storage. Facilities were also rented in the village.

The small Marine detachment assigned to the Pensacola Navy Yard continued to occupy several of the cantonment structures for a number of years. Initially, the Marines were there not because of orders

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62. Duke of Saxe-Weimar, Travels Through North America, Vol. II, pp. 95-96.

63. Ibid., p. 46.

from their Commandant, but because they had been detailed by the commodore of the West India Squadron. Lt. Richard Douglass had been placed in command of the detachment by Commo. Charles D. Ridgely, and Marine Corps headquarters had no authority over the situation.[64]

On March 5, 1828, 29 months after the first Marines had occupied the Barrancas, Marine Corps Commandant Archibald Henderson moved to get control of the situation. Orders were issued for Lt. George F. Lindsay to proceed from Norfolk to Pensacola and relieve Lieutenant Douglass. On his arrival, Lindsay was to report to the commandant of the yard.[65]

Lindsay found "everything in connection with the post in a horrible condition." His command consisted of three non-commissioned officers and five privates. Of the latter, one man's enlistment would expire in a few days, a second was suffering from diarrhea, while a third was a drunk. To make the situation worse, Comdt. M.T. Woolsey had repeatedly called on Lindsay to supply sentries for several posts and an orderly. From his understrength command, he had provided three reliefs for one post and a corporal to act as orderly.

The enlisted men were quartered in a log hovel and he in a hut. He accordingly had left his family in Pensacola. At the same time, the naval officers and petty officers attached to the yard were living in comfortable temporary quarters, while receiving a chamber's allowance.

Lieutenant Lindsay had spent the last two weeks trying to drum up recruits in Pensacola, without success. It was all but impossible

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64. Henderson to Twiggs & Douglass, August 27, 1827, NA, RG 127, Ltrs. Sent.

65. Henderson to Lindsay, March 5, 1828, NA, RG 127, Ltrs. Sent.

to enlist "native born Americans in the Southern country, where labor is so valuable." The Commandant was urged to send ten or 12 men from Philadelphia or New York by way of New Orleans.[66]

On the day after Christmas, Lieutenant Lindsay repeated his plea for reinforcements and funds to improve his quarters at the Barrancas. Only two days before, Commodore Ridgely had sent to him for confinement four men accused of piracy. Despite having only ten Marines and no guardhouse, Lindsay accepted their custody.[67]

Marine Commandant Henderson could give no encouragement. There would be no reinforcements for the Pensacola barracks until such time as Congress raised the Corps' personnel ceiling.[68]

During the autumn of 1829, there was a minor outbreak of yellow fever in the area, with a few deaths. When he reported this to Colonel Henderson, Lieutenant Lindsay complained, we are "entirely out of the world here and scarcely ever hear any Corps news." Will you, he implored, please let us know the probability of "our getting our former allowances?" If something were not done for the poor subalterns, they were in "a fair way to starve or go to jail."[69]

In the summer of 1830, the captain of the sloop-of-war Erie called on Lieutenant Lindsay to provide his vessel with a detachment of Marines. Although he was eager to comply, it continued to be next to

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66. Lindsay to Henderson, March 5, 1828, NA, RG 127, Ltrs. Recd.

67. Lindsay to Henderson, December 26, 1828, NA, RG 127, Ltrs. Recd.

68. Henderson to Lindsay, January 27, 1829, NA, RG 127, Ltrs. Sent.

69. Lindsay to Henderson, October 20, 1829, NA, RG 127, Ltrs. Recd.

impossible to recruit men locally. With the Commandant's permission, Lindsay would enlist them in Mobile and New Orleans. If he could recruit about 50 men, he could fill nearly all the empty billets aboard the vessels of the West India Squadron.[70]

Commandant Henderson squelched Lindsay's proposals. No Marines were to be sent aboard Erie unless the Department ordered, and no rendezvous was to be opened at Mobile or New Orleans. He could, however, enlist "any good men" who showed up at the barracks.[71]

Lieutenant Lindsay, after more than two years at the Barrancas, was becoming increasingly disenchanted by the Department's failure to take measures to provide his command with permanent quarters. Seizing on a letter from Secretary of the Navy John Branch to the yard commandant, referring to Pensacola as an "important Naval Depot," he wrote Colonel Henderson. As this was a "rather unexpected change of opinion" by the Department, Lindsay believed, the southern and western states would push to make the depot "what it should be." If this occurred, measures must be taken to "make it an efficient Marine station."

Lindsay urged that Commandant Henderson visit Pensacola on his next tour of inspection. He could then fix on the site of a barracks, and Lindsay could have them built on reasonable terms.[72]

Henderson's response to Lindsay's letter, with its implied criticism of the Department, could be predicted. Orders were drafted for Lindsey to turn over command of the barracks to his senior non-commissioned officer and report for duty to Commo. Jesse Elliott,

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70. Lindsay to Henderson, August 17, 1830, NA, RG 127, Ltrs. Recd.

71. Henderson to Lindsay, September 7, 1830, NA, RG 127, Ltrs. Sent.

72. Lindsay to Henderson, November 7, 1830, NA, RG 127, Ltrs. Recd.

with the West India Squadron.[73] His replacement would be Capt. Thomas A. Linton, who was ordered to Pensacola on December 4.[74] Almost five months slipped by before Linton arrived and took command on April 20, 1831.

On March 12, 1832, Captain Linton had Dr. B. Franklin Bache, the officer in charge of the nearby naval hospital, inspect the Marine barracks. He found them "deficient in the requisite essentials to comfort and health." The original construction was unsuited "to the purpose to which it is applied both for hot and cold weather, while the present decayed condition exposes the inhabitants to the influence of every change of temperature and to rain." Immediate repairs were necessary, along with an addition.[75]

Captain Linton forwarded Dr. Bache's report to Marine Corps Headquarters. Quartermaster Elijah J. Weed replied for Commandant Henderson. He informed Captain Linton that there was no money available this year to alleviate the situation. If this were correct, Linton trusted that a carpenter would be assigned to the barracks to make such temporary repairs as would prevent their falling down during the coming winter. This was done.[76]

It was the mid-1830s before Congress appropriated funds for construction of a brick barracks at the navy yard. By the time the Marines vacated the cantonment, the Corps of Engineers was preparing plans to modernize Bateria de San Antonio and to rebuild Fort San Carlos.

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73. Henderson to Lindsay, November 19, 1830, NA, RG 127, Ltrs. Sent.

74. Henderson to Linton, December 4, 1830, NA, RG 127, Ltrs. Sent.

75. Bache to Linton, March 12, 1832, NA, RG 127, Ltrs. Recd.

76. Linton to Henderson, August 16, 1832, NA, RG 127, Ltrs. Recd.

IV. BATERIA DE SAN ANTONIO IS MODERNIZED AND BECOMES THE BARRANCAS WATER BATTERY

A. Major Chase Presses for Action

1. General Bernard's "Memoir"

Brig. Gen. Simon Bernard of the Board of Engineers, in January 1830, prepared his "Memoir" on the defense of Pensacola Bay. To protect the entrace to the bay, he called for a fort on the western end of Santa Rosa Island, another on Foster's Bank, and a third on the mainland at the Barrancas. The bluff at the Barrancas was one and three-quarters of a mile northeast of Foster's Bank, and one and one-quarter miles northwest of Santa Rosa Point, and rose to a height of 60 feet above sea level. This commanding position, General Bernard observed, could "operate advantageously with the two former, but being in rear of them, and 1,200 yards distant from the main channel," could be deemed an auxiliary to both in defense of the entrance to the bay.

But, in relation to the navy yard, the bluff was an "essential protecting point," General Bernard noted, inasmuch as it possessed also a command of the land approach. It could be assumed as the "left of a line formed of two or three small detached works and destined to shelter the navy yard from a land attack directed between the Barrancas and Bayou Grande." The extent and importance of the navy yard would dictate the nature and strength of the defenses to be erected at the Barrancas. If the Tartar Point facility assumed the importance of a depot such as Gosport or Charlestown, the Barrancas should be crowned with a permanent fortification, with an "open sea battery" positioned under its protection. If, however, Tartar Point were to become a minor naval installation, a "temporary battery or, at the most, an open sea battery, secured by a small permanent reduit" would suffice. Consequently, "further arrangements adopted by the naval department will determine what, ultimately, is to be done at the Barrancas; and the defensive project in relation to it must, for the present, be postponed."[1]

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1. Bernard, "Memoir on the Defence of Pensacola Bay, January 1830," NA, RG 77, Ltrs. Recd., Chief Engineer.

Bernard, as to be expected in his "Memoir" (having thus eliminated formulation of a proposal for defense of the Barrancas), went into great detail as to costs and roles of the forts to be erected on Santa Rosa Point and Foster's Bank. His "Memoir" was supplemented by six sheets of plans for the Santa Rosa Point defense and seven rolls of drawings of the Foster's Island work.[2]

2. Captain Chase Calls for Funds to Accumulate Materials

The Board of Engineers and the Secretary of War approved Bernard's "Memoir" and construction of the fort on Santa Rosa Point, which commenced in 1829, was pushed by the engineer in charge, Capt. William H. Chase. In 1833, with work nearing completion on the Santa Rosa Island defense (Fort Pickens), ground was broken for the Foster's Bank fort.

On November 13, 1835, Captain Chase, with Fort Pickens finished and construction preceding as scheduled on the Foster's Bank work, wrote Chief Engineer Charles Gratiot. If it were Gratiot's design to recommend to Congress the early completion of the defenses of Pensacola Harbor, Chase urged that the Department ask for an appropriation for "collection of materials at the site of the old Spanish fort of Barrancas" in 1836.

Necessary materials for construction of this work, Chase pointed out, could be "obtained at moderate prices from the same sources from whence materials used" in construction of the other forts had been purchased. The collection of materials would enable the Department to proceed with "the construction under great advantages, as soon as the Board of Engineers" had prepared its plans for this defense.

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2. Ibid.

Chase estimated that about 5,000,000 bricks would be required at the Barrancas. He recommended that this number, along with such quantities of lime and lumber as were needed, be stockpiled. Cost of these items was placed at $50,000-$45,000 for 5,000,000 bricks at $9 per thousand, $2,000 for 1,000 casks of lime, and $3,000 for lumber, cement, etc.[3]

In Captain Chase's opinion, the "repair of the old Spanish water battery" at the Barrancas, "giving it casemated advantages," and the occupation of the Barrancas by a strong redoubt would suffice. These positions would afford a very important additional defense to the harbor. The water battery, in conjunction with Fort Pickens and the work on Foster's Bank, would, as General Barnard had written in his "Memoir," cover the channel. The bluff redoubt, overlooking the countryside in rear of Tartar Point, would shield the navy yard.[4] The Navy Department, in the years since General Barnard's 1830 "Memoir," had determined that the Pensacola Navy Yard was to be its most important facility on the Gulf of Mexico. Therefore, as recommended in the Barnard "Memoir," the bluff at the Barrancas should be crowned by a permanent work, with an "open sea battery" positioned under its protection.

When Chief Engineer Gratiot failed to acknowledge his letter, Chase slashed his request. On February 4, 1836, he recommended that Congress be asked for an appropriation of $160,000 for the fort on Foster's Bank, $50,000 for Fort Pickens, and $10,000 on account of the Barrancas.[5]

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3. Chase to Gratiot, November 13, 1835, NA, RG 77, Ltrs. Recd., Chief Engineer.

4. Ibid.

5. Chase to Gratiot, February 4, 1836, NA, RG 77, Ltrs. Recd., Chief Engineer.

The 2d Session of the 25th Congress, when it passed the Fortifications Bill, appropriated $50,000 for Fort Pickens, $33,000 for construction of the fort on Foster's Bank, and nothing for preliminary work at the Barrancas.[6]

3. The Texas War for Independence Causes the U.S. to Look to its Gulf Coast Defenses

Meanwhile, events in Texas and fears that the European powers might intervene to exploit the situation to their advantage caused the United States to belatedly look toward arming its Gulf Frontier forts. Chief of Ordnance George Bomford on January 4, 1836, wrote General Gratiot that large numbers of guns and barbette carriages would become available for emplacement in the coastal defenses in the near future.[7]

One of the measures advocated by Captain Chase to cope with the emergency was to occupy "the old battery at the Barrancas." The battery, he informed Chief Engineer Gratiot, could be made ready to receive 12 guns bearing on the channel for about $3,500. The money would not be lost to the Department, because this battery would undoubtedly be retained as part of the Pensacola defenses yet to be completed.

If the Ordnance Department provided the guns and carriages, he would undertake to have the fort at Foster's Bank and the old Spanish fort at the Barrancas ready to receive them when they arrived.

In event an enemy force made a serious attempt to capture Pensacola and its defenses as the Spanish had in 1781, it would be necessary that a strong line of field works, supported by redoubts, be

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6. Gratiot to Chase, July 6, 1836, NA, RG 77, Ltrs. Sent, Chief Engineer.

7. Bomford to Gratiot, January 4, 1836, NA, RG 156, Ltrs. Sent, Chief of Ordnance.

constructed extending from the Barrancas to Bayou Grande. In addition, an advance redoubt would have to be thrown up on the "prolongation of the southeast, capital of Fort Pickens."[8]

The Texans' victory at San Jacinto on April 21, 1836, secured the independence of the "Lone Star Republic." The crisis having passed, Chief Engineer Gratiot took no action to follow up on Chase's suggestion. Neither funds nor cannon were made available for arming the old Spanish fort.

4. Chase Asks for $75,000 to Begin Construction

More than two years after he had broached the subject, Captain Chase on January 8, 1838, suggested to Chief Engineer Gratiot that now was the time to ask Congress for an appropriation of $75,000 for "prosecution of the system of defense for the harbor of Pensacola." Now that the forts (Pickens and McRee) protecting the entrance to the harbor had been built, all that remained to be done to complete the system was "to restore and repair the old fort at the Barrancas."

Repair of this fort could be accomplished most efficiently and economically at this time, he argued, than if it were postponed. If given the go ahead, he would transfer men and machinery and some surplus materials from Fort McRee. This would result in a saving of time, and the immediate commencement of operations, thus avoiding the usual expenditure in making preparations for beginning a new project.[9]

Chief Engineer Gratiot was agreeable and included a request for $75,000 for construction at the Barrancas in his budget for 1838. While waiting for Congress to act, Captain Chase informed the

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8. Chase to Gratiot, March 7, 1836, NA, RG 77, Ltrs. Recd., Chief Engineer.

9. Chase to Gratiot, January 8, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer. The work on Foster's Bank had been designated Fort McRee.

Department that the defenses of the Gulf Frontier were essentially the same as they had been at the time of his report of January 23, 1836, except that the guns, cannonades, and mortars then on hand had been mounted.

Considerable injury to the works, he continued, had resulted as a consequence of the withdrawal of most of the garrisons in 1836 to fight in the Second Seminole War. But it was believed that "every fort and battery" on the frontier could be put "in a state of defense in one month's time if sufficient means and force are afforded for that purpose, so far as the Engineer Department is concerned." The most important needs, Captain Chase emphasized, were the emplacement of necessary cannon, the stockpiling of ammunition, and the detail of suitable garrisons to care for them.

He also called to his superior's attention the problems created by neglect of the defenses of the Pensacola Navy Yard, as well as its facilities for repair of and support of naval operations. At the moment, it was not equipped with the means for repair of ships-of-war.

Fort Pickens and the fort on Foster's Bank, Captain Chase observed, provided "a strong channel defense against an enemy fleet seeking to destroy the Navy yard." The rehabilitation of "old Fort Barrancas and the reoccupation of the line of defense" west of the navy yard could, in Chase's opinion, "be effected in one year, if the proper means and force were applied."[10]

5. Captain Chase Takes His Wife Abroad

The Nation in the throes of a depression, Congress dragged its feet on passage of the Fortifications Bill, which included General Gratiot's request for $75,000 to begin construction at the Barrancas. In mid-April, with limited funds available for Gulf Frontier projects, Captain Chase alterted the Department to the possibility that,

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10. Chase to Gratiot, March 3, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

because of his wife's delicate health, it might become necessary to take her abroad. This summer would be a good time for him to do so, because the only projects requiring his immediate supervision were those at the mouth of the Mississippi and those guarding the entrance to Mobile Bay. Capt. Andrew Talcott was in charge of the former and Lt. John G. Barnard of the latter. As officers of the Corps of Engineers, they required minimal supervision.[11]

General Gratiot recommended to Secretary of War Joel Poinsett that Chase's leave be granted in recognition of "his long and valuable service in a tropical climate." The Secretary gave approval,[12] and Captain and Mrs. Chase left Pensacola for Europe in May, 1838. During his absence, H.L. Higley, his clerk, would be in charge of the Pensacola Bay projects.

Landing in London, the Chases spent June and July in the London area and Yorkshire. August found them in Paris. Captain Chase, leaving his wife in France, sailed from Le Havre for the United States early in September, landing in New York City on the 24th. Chase returned from Europe a major, having been promoted from captain, a rank he had held for 13 years. His promotion was dated July 7. From there, Chase traveled to Washington.[13]

B. Work Gets Underway

1. Chase Submits a Program

In accordance with procedures, Chase on October 3, 1838, submitted for approval by the Department a program for expenditure of the $75,000 recently made available by Congress for repair of the old Spanish fort. During the quarter ending December 31, preparations

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11. Chase to Gratiot, April 19, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

12. Gratiot to Secretary of War, April 27, 1838, NA, RG 77, Ltrs. Sent, Chief Engineer.

13. Chase to Gratiot, June 1, August 1, & September 25, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

would be made for the commencement of the project. This would involve construction of wharves and quarters for the workmen and collection of materials.

One-half of the appropriation would be spent by March 31, 1839, and the remainder by September 30. In the near future, he would forward a supplemental estimate for 1839.

Chase trusted the Board of Engineers would finalize their plans for the "improvement and repair of this work during the 4th quarter 1838, in which event" he would begin construction in January 1839.[14]

General Gratiot, on reviewing Chase's program, found that one-half of the appropriation applicable to 1838 was budgeted as follows:

Construction of a wharf, including brick, palmetto logs, etc., but excluding lime	$ 4,000
One thousand barrels of cement for wharf piers	$ 2,500
Commencement of suitable quarters for engineers, workmen, etc.	$ 2,000
Six hundred thousand bricks delivered in scows and unloaded near the old fort ready for use	$ 6,000
Sundry incidental expenses	$ 1,000
Service for 4th Quarter of 1838	$16,000

The balance of the appropriation applicable to 1838, $21,500, and that applicable to 1839, $37,500, a total of $59,000, would be applied to construction of masonry and embankment in 1839.[15]

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14. Chase to Gratiot, October 3, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

15. Ibid.

General Gratiot acknowledged receipt of Chase's program without comment on October 9, which was interpreted as tacit approval.[16]

2. Captain Barnard Makes the Necessary Surveys

Major Chase was still in the Washington area on October 17, when he informed the Department that he had written Captain Barnard, directing him to make the additional surveys of the Barrancas site required by the Board of Engineers "to project the contemplated repairs and improvements."

As Col. James Kearney survey of 1824 supplied "every information except the detailed inequalities of the surface within cannon range of the fort, Captain Barnard's survey" would be limited to detailing the topography within that limit.

He expected Barnard to complete the project in time to present the survey to the Department by mid-November. Chase accordingly urged that the Board of Engineers be directed to focus its attention on plans for Fort Barrancas at its earliest opportunity.

To fund collection of materials and construction of support facilities, Chase requested the Department to deposit $2,000 to his credit in New York and $5,000 at New Orleans. The balance of his 4th Quarter estimate, $9,000, should be remitted to him at New Orleans by January 1.[17] On October 19, the Department made available the requested $7,000.[18]

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16. Gratiot to Barnard, October 9, 1839, NA, RG 77, Ltrs. Sent, Chief Engineer.

17. Chase to Gratiot, October 17, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer. Chase was in Georgetown, District of Columbia, on October 17.

18. Gratiot to Chase, October 19, 1838, NA, RG 77, Ltrs. Sent, Chief Engineer.

Chase returned to Pensacola after a seven-month absence on November 25. He was delighted to learn that Captain Barnard had completed the survey of the Barrancas. The drawings would be forwarded to Washington within a few days. He trusted that upon their receipt, the Board of Engineers would promptly mature and approve the Barrancas project.[19]

When he examined the drawings, Chase found that when rolled up, they made such a large package that he hesitated to trust them to the mails. Having no other option, he decided to order Captain Barnard to hand-carry his survey to Washington. He hoped this action on his part would be approved by the Department, especially as Captain Barnard could answer any detailed site questions the Board might raise. He, therefore, urged that Barnard be directed to carry the surveys from Washington for delivery to Lt. Col. Joseph G. Totten at Newport, Rhode Island.[20]

3. Corps Gets a New Chief Engineer

On December 6, 1838, two weeks before Captain Barnard started for Washington, the Army got a new Chief Engineer. General Gratiot on that day was dismissed from the service by order of President Martin Van Buren. He was charged with "having failed to pay into the Treasury the balance of the monies placed in his hands in 1835 for public purposes, after spending from the amount" which he claimed the

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19. Chase to Gratiot, November 25, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

20. Chase to Gratiot, December 10, 1838, and Barnard to Gratiot, December 17, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer. The first of the two plans prepared by Captain Barnard is titled "Plan of Fort San Carlos de Barrancas, Scale 25 feet to 1 inch"; and the second is titled "Map showing the situation of the Fort San Carlos de Barrancas with about one mile of its surrounding country at Pensacola Harbor, Scale 400 feet to 1 inch." Copies of both these drawings are on file at the Florida Unit, Gulf Islands NS.

government owed on settlement of his accounts as disbursing agent and superintending engineer at Hampton Roads from 1819 to 1826.[21]

Colonel Totten, the Nation's foremost authority on construction of masonry fortifications and senior member of the Board of Engineers, was named as Gratiot's replacement by Secretary of War Poinsett.[22] A tireless worker who loved detail, Colonel Totten soon made his presence felt. Refusing to delegate authority, he, for the next 26 years, kept a tight rein on his subordinates. It can be said that not a brick or a stone was laid, not a cubic yard of earth excavated or rammed, or a cubic foot of concrete poured in the forts under construction without his sanction.

4. Chase's Second Trip to Europe

a. He Asks for Permission

Within three months of his return to his duty station, Major Chase, on February 11, 1839, applied to the Department for authority to return to Europe. In his application, he pointed out that Mrs. Chase had remained in France "for the benefit of her health." He had expected her to return to the United States this spring, accompanied by the friends with whom she was staying. Recent letters from his wife had stated that her friends would not be returning to the States until autumn. Consequently, it was necessary for him to cross the ocean and get her.

To assure the Department that he would not be missed, Chase reported that, during the year, operations for which he was responsible would be limited to Pensacola Bay. Before leaving for

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21. Cullum, Biographical Register, Vol. I, p. 99.

22. Smith to Chase, December 17, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

Europe, he would make such arrangements as to ensure prosecution of the "works at Fort Barrancas," without detriment during the two to three months he would be away. Although absent from his command and subordinates, he would hold himself "strictly accountable for their faithful performance."[23]

Forwarding Chase's application to Secretary of War Poinsett, Colonel Totten observed that, on February 4, he had ordered Chase to conduct an inspection of the Gulf Frontier forts and batteries. He recommended that Chase be allowed to shift this duty, if not already commenced, to Captain Barnard and be absent from his post until June 30. If Chase were unable to immediately contact Barnard, he was to complete his inspection and then take leave, returning to duty by July 31.[24]

Secretary Poinsett, taking note of "the present political state of the country," determined on February 28 to defer action on Chase's request for authority to travel abroad. Chief Engineer Totten accordingly directed Chase to continue his inspections.[25]

Chase returned to Pensacola on March 19, having visited all the masonry forts and batteries on the Gulf. After drafting reports on their condition, he addressed, on the 27th, a letter to Colonel Totten. The Department was informed that, on advice of his physician, he would have to seek the "restoration" of his health by "a change of air." He, therefore, planned to visit Washington, where he hoped to arrive by April 10. If Captain Barnard had not left the capital on his

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23. Chase to Totten, February 17, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

24. Endorsement to ibid., February 26, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

25. Totten to Chase, February 28, 1839, NA, RG 77, Ltrs. Sent, Chief Engineer.

return to the Gulf Frontier, Chase hoped he would delay his start pending his arrival.

Since the first of the year, Chase had confined expenditures at the Barrancas to the delivery of bricks under existing contracts. No further purchases would be made until July 1.

Until that date, Chase explained, his duties, even if he remained on the Gulf, would be comparatively light. Trusting to Colonel Totten's indulgence, he did not, under the circumstances, hesitate to leave his post.[26]

b. He Receives Authority and Asks for Construction Funds

Reaching Washington, Major Chase called at the Department on April 10. There, he told Colonel Totten that he had contracted for delivery at the Barrancas of 1,500,000 bricks by July 1, on which payment would be due before that date. To meet this obligation, he needed $14,880. He asked the Department to remit to him this sum by draft on Mobile or New Orleans.[27]

Learning that Colonel Totten had approved his application for leave, Chase called on Secretary of War Poinsett. After he had reviewed his personal affairs with the Secretary, Poinsett gave him permission to leave the United States. Informing Totten of this, Chase assured him that during his absence, "no interest of the Department would be compromised." Once again, as in 1838, the Engineer Clerk at Pensacola, H.L. Higley, would attend to Chase's official correspondence and make all reports as scheduled.

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26. Chase to Totten, March 27, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

27. Chase to Totten, April 10, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

Before leaving for New York City to board a ship for Europe, Chase asked the Department to detail for duty on the Gulf, as assistant engineer, a young lieutenant. His services would be required by October 1.[28]

c. He Outlines His Construction Program for 1839

On April 11, the day following Chase's departure, Chief Engineer Totten requested Secretary of War Poinsett to have the requested $14,880 remitted to Chase's account with H. & W. Delafield, the New York firm who acted as his purchasing agents.[29] Chase at this time was directed to provide the Treasury Department with an accurate estimate of funds required for the Barrancas during the remainder of the calendar year.[30]

From New York City, on April 13, Chase responded that with exception of the outlay made for bricks delivered and a small contingent charge for clerk, office rent, and barge crew, no funds would be needed for the period April through June. He accordingly reported:

The sum already estimated for and received for April-June 1839	$14,880
For clerk, office rent, barge crew, and contingencies, April-June 1839	$ 1,104
For July, 500,000 bricks, $6,000; 700 casks of lime, $700; railway from wharf to fort, $1,500; clerk and contingencies, $368	$ 9,368
For August, 500,000 bricks, $6,000; clerk and contingencies, $368	$ 6,368

28. Ibid.

29. Totten to Chase, April 11, 1839, NA, RG 77, Ltrs. Sent, Chief Engineer.

30. Ibid.

For September, 500,000 bricks, $6,000; clerk and contingencies, $368; construction of superintendent's quarters, $1,500		$ 7,868

Assuming that the plans for repair of the water battery will have been approved by October 1, 1839:

For October, November, and December, each, workmanship of brickmasons, $4,000; 1,000 casks of lime, $2,000; excavation, $1,200; clerk and contingencies, $368;		$ 7,668
or a total for the three months of		$23,004

Recapitulation:

Amount not received and required for April, May, and June		$ 1,104
Sum needed for July		9,368
Sum needed for August		6,368
Sum needed for September		7,868
Sum needed for October		7,668
Sum needed for November		7,668
Sum needed for December		7,668
The amount required in 1839		$47,712
Add amount received and expended	$ 7,000	
Amount requested April 11, and to be applied	$14,880	
	$21,880	
Total		$69,592
Appropriation available		$75,000
Balance December 31, 1839		$ 5,408

The balance, Major Chase added, would be eliminated by absorbing it into monthly operations.[31]

d. The Chases Return from Europe One Month Late

Major Chase landed in France first, where he was joined by his wife. The couple arrived in England early in June,

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31. Chase to Totten, April 13, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

prepared to embark on the steamer Liverpool, on the 12th, for New York City. They, however, were unable to get passage, and their hopes of reaching Washington by the end of the month were doomed.

Next, they booked space on British Queen, slated to sail from London June 29. Five days before she was to cast off, the Chases were notified that her sailing had been postponed until July 10. Rushing out, Chase sought to purchase two tickets on Great Western, which was to sail on July 6. The agent refused his money, telling him that she was "entirely taken up by more passengers than she can accommodate with berths."

Writing Chief Engineer Totten to explain why he would be tardy, Chase noted, "I regret this delay since neither Mrs. Chase's health or my own require a longer absence from the United States." He did not believe the enforced delay would interfere with his duties, as with a favorable passage, they expected to arrive in New York City by July 25.[32]

British Queen made the crossing in 18 days.

On July 28, Chase reported his arrival in New York City. Unless his presence was needed immediately, he would pass through Washington, in eight to ten days, on his way south.[33]

e. Chase Stops Over in Washington

Major Chase reached Washington on August 8. Chief Engineer Totten having raised questions about the accumulation of materials, Chase explained that, in the winter of 1838-39, he had

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32. Chase to Totten, June 24, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

33. Chase to Totten, July 28, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

advertised for the delivery and purchase at the Barrancas of 3,000,000 bricks. In accordance with Totten's verbal instruction to limit expenditures as much as possible until July 1, he had slashed delivery to 1,450,000 bricks. After July 1, delivery had been resumed by the contractors, and he assumed that by September 30, the balance, 1,550,000, would be on hand. To pay for them, he needed an allotment of $18,600. Fourteen hundred dollars should be added to this figure for expenses incidental to completion of the railway from the wharf to the fort.

Of this sum, he requested that $10,000 be remitted to him immediately by a draft on New Orleans, and the second $10,000 be posted by September 20.[34]

Chief Engineer Totten approved this action. On August 8, a draft for $10,000 was transmitted, and on September 5, the second $10,000.[35]

5. Work Accomplished in the Year Ending September 30, 1839

The Chases' trip south from the Nation's capital was leisurely, and they did not reach Pensacola until September 29, 1839. Major Chase had been away seven months. Learning from Clerk Higley that arrangements to begin construction had been perfected, Chase wrote the Department, urging that the "plans . . . be sent on as soon as possible."[36]

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34. Chase to Totten, August 8, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

35. Ibid.

36. Chase to Totten, October 1, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

Six days later, on October 3, Chase submitted his annual report for the year ending September 30. At the Barrancas, bricks, lime, etc., had been purchased and stockpiled in sufficient quantities to commence operations. A wharf had been built, and a railway connecting it with the site, about 800 yards away, had been constructed. The horse railway provided an efficient way to move materials from the wharf to the fort site. A small house had been purchased for accommodation of the inspector of materials, and a small quarters for the assistant engineer was being erected.

The balance on hand of the $75,000 appropriated by Congress for the project was $48,729. A larger sum, Major Chase noted, could be used to advantage, and he requested that the Department ask Congress for another $50,000.[37]

6. Nation's Economic Plight Has Its Effect

The depression gripping the United States continued to affect defense spending. The Department, on October 31, notified Major Chase that the "available means of the Treasury are at the present moment very limited and expected to continue so" throughout the coming year. Secretary of War Poinsett had directed Colonel Totten to caution his project superintendents that it was "absolutely necessary that every branch of public expenditure be reduced as much as possible, so as not to exceed the means."

Chase, along with the other superintending engineers, would: (a) restrict the work under his charge "to as small a scale as is consistent with its essential interest--no expenditures will be made . . . that can be avoided or postponed without serious injury to public service"; (b) as the next season would "be considerably advanced before the new appropriations" were made, as large balances as possible should be carried over into 1840, to provide funding; and (c) no debts would be

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37. Chase to Totten, October 5, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

"contracted on the faith of the new appropriations as the estimates for the service of the year 1840 will embrace no greater amounts than are judged necessary to prosecute operations, between the time those appropriations may be expected to be made, and the close of the season."[38]

This letter was evidence that Colonel Totten, unlike General Gratiot, frowned on the practice followed by Major Chase, during construction of Forts Pickens and McRee, of permitting contractors to continue their projects, when no funds were available, in anticipation that Congress at its next session would make appropriations to retire the arrearages.

Chase kept this in mind when, in accordance with procedures, on January 5, 1840, he submitted his estimates for the 1st Quarter of the new year.

His January expenses for Fort Barrancas would be:	
Fuel for office, 1 cord	$ 5.00
Quarters and fuel	31.00
Clerk	124.00
Tallyman and inspector	62.00
280,000 bricks already delivered but not pd. for	3,360.00
300,000 bricks to be delivered	3,600.00
Barge crew	232.50
Office rent	20.00
Stationery	56.00
Total	$7,490.50

February expenses would be:	
Fuel for office, 1 cord	$ 4.00
Office rent	20.00
Quarters and rent	29.00
Clerk	116.00
Tallyman	58.00
200,000 bricks	2,400.00
Barge crew	217,50
Total	$2,644.50

38. Totten to Chase, October 31, 1839, NA, RG 77, Ltrs. Sent, Chief Engineer.

March expenses would be:	
Fuel for office, 1 cord	$ 5.00
Office rent	20.00
Quarters and fuel	31.00
Clerk	124.00
Tallyman	62.00
Barge crew	232.50
Total	$ 474.50

If the plans were received and construction commenced, $5,000 per month would be added for excavation, masonry, cement, etc.[39]

Totten, on reviewing Chase's program for the 1st Quarter of 1840, again cautioned him to "adopt measures suited to the possible contingency of our receiving no appropriations for this year for fortifications." Should this occur, it would be necessary for him to lay off all his construction hands, except a fort keeper at each of the three Pensacola forts, and the keepers should be each paid no more than one dollar a day. "Calculating from the time that the operations at Fort Barrancas with the present means will probably terminate, there must be retained a small amount over and above what will be needed to pay the keeper until" March 1, 1841.

If there were no appropriation, it would be mandatory to sell all public property that would deteriorate within the year, along with the horses and oxen, and store the other property in such manner as to secure it from injury and keep it from being a source of expense.[40]

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39. Chase to Totten, January 5, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

40. Totten to Chase, January 24, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

C. Modernizing the Water Battery

1. Chase Calls for Plans to Enable Him to Reconstruct Bateria de San Antonio

On October 31, 1839, Major Chase had suggested to the Department that, if the Board of Engineers had not completed its construction drawings, he be provided with "so much of them as embrace the building up of the old battery."

He also recommended that neither Capt. John G. Barnard nor Lt. P.G.T. Beauregard be required to proceed to their Gulf Coast stations until the "season becomes healthier." The Department, acting on Chase's April 10 request for the detail of a young assistant engineer to the Gulf Frontier, had selected 2d Lieutenant Beauregard of Louisiana, who had graduated No. 2 in the Class of 1838 from West Point.[41] In the months since receiving his commission in the Corps of Engineers, Beauregard had been stationed at Fort Adams, Rhode Island.

It was now unsafe to visit New Orleans, Chase added. Although there was no yellow fever at Pensacola, the "extraordinary dry and warm weather" had caused some fever, "insipidly in its character to persons new to this climate." During the past three weeks, the thermometer had seldom dropped below 78 degrees. It was a source of regret that no meteorological table had been maintained at Pensacola during the past few months, as they had experienced "a peculiar weather quite different from any recollections by the oldest inhabitants." There had been no hurricanes, and the only severe gale had blown in from the east, bringing with it no rain.[42]

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41. Ezra Warner, Generals In Gray: Lives of the Confederate Commanders (Baton Rouge, 1959), p. 22; T. Harry Williams, P.G.T. Beauregard: Napoleon in Gray (Baton Rouge, 1955), p. 9.

42. Chase to Totten, October 31, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

2. Totten Gives Instructions for Modernization of the Old Spanish Battery

On January 25, 1840, the Department, in response to Chase's request, forwarded detailed instructions for the modification of Bateria de San Antonio de Barrancas.[43]

Chief Engineer Totten wanted Chase to give priority to modernizing the old battery, while deferring construction of the new fort designed by the "Board of Engineers to occupy the top of the bank immediately" behind. Work on the Spanish battery would include:

a. Closing the Embrasures and Modification of the Parapet

The embrasures in the parapet were to be filled and the parapet raised so that the reference of the covering line would be 28'8" (the parade of the battery being 13'6"); the breast-height wall to terminate within 18 inches of the covering line--the latter 18 inches to be faced with 2-inch plank. The scarp wall would be carried up to the superior slope of the parapet; the new portion of the wall being 3 feet thick, and the mass of the parapet being raised with sand.[44]

b. Changes to the Terreplein

The terreplein of the battery was to be raised by adding sand (or concrete containing a portion of hydraulic cement) and to be made to slope to the rear. The height next to the parapet to be 5'6" lower than the covering line, and at the rear of the terreplein 6' lower.

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43. Totten to Chase, January 25, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer. In the correspondence, Totten refers to plans for modification of "Fort San Carlos de Barrancas," as the U.S. Engineers referred to Bateria de San Antonio. A search of the Cartographic Records at National Archives and the fact that neither Totten nor Chase specifically refer to a plan or plans for the modification of the subject fort leads to the conclusion that the Department's scribe errored in referring to plans.

44. Ibid.

The present drains at the foot of the parapet were to be covered but kept free. On the terreplein there were to be positioned 13 centers of motion and traverse circles for barbette guns. Their positions were as shown on the plan, "and the particular mode of construction" would be given separately.[45]

c. Raising the Gorge Wall

The gorge wall was to be raised with a thickness of 3 feet to reference 38'6".[46]

d. Alterations to the Reduit (Bombproof)

The Reduit was to receive on its southeast and southwest sides a thicker parapet than at present. It would be 12-foot thick, the mass being formed of sand. The exterior wall of this parapet, being the scarp of the Reduit, would be carried up with a thickness of 3' to the superior slope. The breast-height wall, founded on the tapia terreplein, was to be carried to within 18" of the covering line. This 18 inches to be faces with planks. On the northwest face of the Reduit, the parapet wall was to be of masonry 3 feet thick; and on the gorge side, the gorge scarp was to form the parapet.

There was to be a banquette on the three water fronts of the Reduit--the inner facing of which, together with the step, was to be of masonry. The covering line of the Reduit to be at reference 38'6"; the top of the banquette at reference 34 feet, and the new terreplein at reference 31'6".

The old terreplein was said to be watertight and would protect the casemates beneath from seepage. Measures would be taken to carry off rainwater, falling on the parapet and terreplein.

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45. Ibid. The plan referred to was the one prepared by Captain Barnard 14 months before and titled "Plan of Fort San Carlos de Barrancas."

46. Ibid.

Should there be any doubt as to the watertightness of the terreplein, it must be covered with asphalt, before any new work was undertaken.[47]

(e) Altering and Outfitting the Reduit Casemates

The three Reduit casemates were to be appropriated as follows: one for a magazine and two as storerooms. To do so, it was necessary that the ventilation be improved by cutting a two and one-half foot square window in the abutment wall under the stairs. Two windows of the same dimensions would be "pierced through each of the two piers, and one . . . of the same size over the door of the S.W. casemate."

To "prevent communication through" these windows, a composition grating would be inserted in the masonry, about the mid-point of the thickness of "the piers and within eight or ten inches of the outside of the abutment wall, and of the outside wall over the door of the S.W. casemate." Over the exterior of the latter opening, there would be strong shutters, and on the interior a sheet of copper or brass wire gauze, of about one-third inch mesh.

"The sand, or whatever constituted the floor of the magazine," was to be removed to a depth of the bottom of the walls and piers. Joists would be positioned on the offsets of the foundation, and a floor of 1¼-inch plank laid at reference 14 feet. The subject planking must not be carried nearer the walls and piers than the face of the furring, so there would be free circulation of air behind the furring and under the floor. The inner face of the furring to be 1'6" from the walls and piers. Chase was to allow one inch for the thickness of the lining and four inches square for the studs to which the lining was to be fastened, leaving 1'1" clear space between the studs and the walls and

47. Ibid.

piers. The ceiling was to be the same distance from the arch, and nailed to ribs of 1½-inch planks. By leaving a joint of about ½-inch between the floor and foot of the furring, any water that might condense on the furring would drop into the cellar, and not on the floor.

Opposite the openings in the piers were to be openings of the same size in the furring, each provided with a shutter to fasten on the inside. The outer door of the magazine was to be solid and hung as heretofore--the sill being raised to level of the floor. The inner grated door was to be hung in the furring, opposite the outer door. The inner door was to have a lock "admitting of being fastened on the either side," and be provided with a small trap through which cartridges could be passed. A wooden grating would close the passage, near the inner door, between the wall and furring.

The two storeroom casemates were to have paved floors of brick, laid flat in a sand bed. They would be furred with the same material as the magazine, but the back of the studs would be within 2 inches of the face of the masonry. Consequently, the inner face of the linings and ceilings would be 7 inches from the masonry. Outside shutters would close the window over the doors.[48]

f. Repointing

The "face of the old wall" was to be repointed where necessary.[49]

g. Access to Water Battery

By reference to the plans, Major Chase would see that for the subterranean gallery to communicate with the new defense to

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48. Ibid.

49. Ibid.

the rear, several old steps in the postern would have to be removed. As there would be no other entrance into the Water Battery, it would be necessary to hoist the guns and carriages over the parapet.[50]

h. Coping and Asphalting

The coping was to be formed as follows: The walls to terminate in a plane surface parallel to the superior slope, and about one foot below it, with the coping formed by independent masses of brick-work, each about one foot high by 1½-foot broad, and of a length to "reach quite across the wall--the upper surface of these masses being the superior slope of the wall." The subject masses were to be finished separately, and in succession; and on the completion of one, a sheet of zinc, or very thin lead, was to be placed against its side to prevent an adhesion to it, by the succeeding mass. The object of the separation of these masses was to avoid cracks caused by expansion and contraction due to changes in temperature.

By employing "a good portion of cement in the mortar-- filling the joints perfectly with mortar--taking the bricks out of water and laying them the moment they cease to drip--covering the masses as fast as they are completed, with matting--straw--old soiled cloth, or something of that sort, and keeping them constantly wet during the summer, these blocks may be made to be quite equal in hardness and durability to sandstone coping." To insure the "perfect tightness" of the wall, a layer of asphalt would be placed over the upper surface of the coping.

The old wall on which no additional masonry was to be placed, the counterscarp wall, and part of the gorge wall, were to be covered with asphalt.

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50. Ibid.

As the breast-height wall terminated in an inclined plane, it should be covered with a sheet of zinc, before putting on the sand.[51]

3. Chase Turns His Construction Hands To

a. Reduit Arches Are Uncovered and the Battery's Parapet Removed to the Coping

On February 16, 1840, Major Chase acknowledged receipt of the instructions relative to "the laying out and construction of the old . . . work." They would, he promised, be rigidly complied with unless circumstances occurred compelling a deviation from them. In that case, "the variation proposed" would be reported to the Department and its authority requested for its adoption.

Already, workmen had removed the covering of the Reduit arches, believing that this was necessary to prevent seepage. The old parapet of the battery had been removed to the level of the coping.[52]

b. Chase Submits His Estimates for the 2d Quarter of 1840

Major Chase, in March, mailed to Washington his estimates for the second quarter of the calendar year. He proposed to spend $13,510 during this quarter, an increase of nearly $3,000 over the first quarter. A larger sum could be "applied to excavation and brick masonry," he reported, as the materials on hand and other preparations

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51. Ibid.

52. Chase to Totten, February 16, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

enabled him to push operations, provided the Nation's financial situation referred to in Colonel Totten's October 31 letter had improved.[53]

c. Six Months' Hard Work Bring Great Change

The Department approved the estimates, and on April 8, 1840, Chase turned a force of mechanics and laborers to modernizing Bateria de San Antonio. Bricks of good quality had been stockpiled, having been purchased from kilns to a radius of 30 miles. Stone, lime, cement, etc., had been shipped to Pensacola Bay by his New York agents--Delafield & Delafield. Some materials and most of the tools had been bought in Pensacola, at prices not varying much, if any, from those prevailing in New Orleans and Mobile.

The force, which was not large, was paid a daily wage. The artisans (one mastermason, seven masons, one iron carpenter, and two carpenters) and the 25 laborers furnished their own tools and paid for their board, room, and medical attention.

Notwithstanding an extremely hot summer, few days were lost from sickness. Only three workmen, one of whom died within 9 hours of being stricken, had been felled with serious illness.[54]

During the six months ending September 30, 1840, the masons had prepared the old Spanish battery for masonry; repaired the coping of the scarp; built parapet and breast-height walls; constructed gorge wall of the Reduit; turned the arches for foundations of the Reduit breast-height wall; repaired foundations of scarp and counterscarp, of Reduit, and casemate piers; paved storerooms; plastered scarp and counterscarp of battery and Reduit; built stairs; laid coping of

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53. Chase to Totten, March 4, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

54. Fort Barrancas, Annual Report of Operations, Year Ending September 30, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

breast-height and parapet walls of Reduit; constructed subterranean gallery; finished openings through casemate piers; built Reduit banquette and repaired the gorge banquette; constructed steps to banquette and slopes of gorge wall; opened windows in Reduit; and closed the gap in the gorge wall.

The carpenters had prepared ceilings, joists, studs, ribs, etc., for the magazine and storerooms; built ramps and scaffolds; formed centres; erected sheds; framed windows; repaired carts and wheelbarrows; built doors for Reduit casemates; and erected a shed over well.

Several plasterers, beginning in July, had plastered the Reduit scarp; renewed Reduit cornice; and repaired old moulding around circular openings and over casemate doors.

A painter, in August and September, primed and painted the casemate woodwork.

The laborers had assisted the artisans; mixed mortar; cut poles for the ramp and scaffolding; secured and stored materials; filled in terreplein and ramparts of Reduit and Spanish battery; cleared and leveled ditch; and assisted with the barge.

Several teamsters had hauled materials and excavation.[55]

By the end of September 1840, Major Chase informed the Department that the Old Spanish Battery has been "repaired in all its parts, except the filling up of the casemates, a small amount of which remains to be completed, and the laying of the stone traverse circles and

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55. Fort Barrancas, Monthly Reports for April-September, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

pintle-blocks for the Barbette Guns." Part of the subterranean gallery, designed to connect the Water Battery with the new fort to be erected on the bluff, had been completed. As soon as the Water Battery was armed, the defense of the channel would be materially strengthened.[56]

Chase also forwarded to Chief Engineer Totten an annual drawing, depicting the "old battery . . . as nearly completed according to the plan furnished by the Department for its improvement and repair."[57]

D. Colonel Totten's 1841 Inspection

1. He Calls Chase's Attention to the Need to Shingle Certain Slopes and to Guard Against Seepage

Chief Engineer Totten left Washington on April 10, 1841, on an inspection tour of the Nation's Gulf Frontier defenses. Traveling by way of the Ohio and Mississippi Rivers, he reached Pensacola in early May.

From New Orleans, on May 5, he wrote Major Chase, describing what he had observed. As far as the Water Battery was concerned, what little remained to be done should be executed forthwith. In the future, it would be necessary to closely watch for leaks in the Reduit, and, if any occurred, the upper surfaces were to be covered with a half inch coat of asphalt. The passage branching off along the gorge, from the gallery between the Water Battery and the upper work, should be carried no farther than at present. After the Water Battery

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56. Fort Barrancas, Annual Report of Operations, Year Ending September 30, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer; Public Documents, Printed by Order of the Senate of the United States, During the 2d Session of the 26th Congress (Washington, 1840), Serial 375, Vol. I, p. 106.

57. Chase to Totten, September 30, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of the subject drawing, labeled Drawer 79, Sheet 7, is on file at the Florida Unit, Gulf Islands NS.

was completed, it should be walled up and covered with sand. "A better mode of communicating with the exterior," during the renovation, "would have been to leave the lower part of the gallery of the project" to the last.

He deemed it important, "in parapets which are not of masonry, that the crest be of earth." When brick breast-height walls were carried up to the superior slope of the parapet, a shot striking this slope, near the crest, would scatter brick fragments, capable of inflicting dangerous wounds. A similar effect occurred if the parapet were of masonry. As the drawings of the parapet of both the old battery and Reduit showed the breast-height wall reaching to within 18 inches of the crest, they must be arranged accordingly. Above the breast-height wall, the slope would be faced with shingles.

In closing, Colonel Totten wrote, "to the officer who has had the sole charge of these works from the beginning, and who has executed them with such distinguished zeal and ability, it is unnecessary to say how important it is to include, in the finishing operations, everything essential to their present efficiency in all respects, and to their future good condition."[58]

2. Chase Promises to Make Necessary Changes

Major Chase had been absent "on a short excursion" to Louisiana "for benefit of my health as well as to transact some business connected with the Engineer Department" at the time of Totten's visit. On his June 2 return to Pensacola, he acknowledged Totten's letter. He promised that Totten's instructions would receive "the prompt and constant attention you desire until the object" can be accomplished.[59]

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58. Totten to Chase, May 5, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

59. Chase to Totten, June 3, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

E. Improvements and Maintenance: October 1840-June 30, 1845

1. Work Accomplished: October 1, 1840-September 30, 1842

When Major Chase made his Annual Report for 1841, he informed the Department that the Water Battery had been completed and was ready for its armament.[60]

During the 12 months ending September 30, 1841, masons had laid the pintle-blocks and traverse stones; a stone cutter had drilled holes for the pintle-stones; painters had painted the woodwork in the storerooms; and carpenters had fashioned and positioned doorways and shelving in the storerooms and magazine, and hung doors and shutters in these casemates.[61]

Carpenters in 1842 completed hanging the magazine doors and shutters.[62]

2. Totten Calls for Certain Repairs to the Reduit

On his return to Washington following his May 1843 visit to the Pensacola forts, Chief Engineer Totten wrote Major Chase. The interior parapet of the Water Battery should be revetted, he noted, while additional ventilation of the linings of the casemate rooms was needed. The stucco had fallen off the Reduit to such an extent that the remainder must be removed to the height of the cornice. After this had been done, Chase was to clear the wall, and "put it in a decent state as a rubble wall, by repairing the pointing, etc."[63]

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60. Fort Barrancas, Annual Report for 1841, October 13, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

61. Fort Barrancas, Monthly Reports of Operations, October 1840-September 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

62. Fort Barrancas, Monthly Reports of Operations, October 1841-September 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

63. Totten to Chase, June 6, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

3. Chase Removes the Cracked Stucco and Repoints and Coal-Tars the Surface

Since his visit, Major Chase informed Colonel Totten, the cracked stucco had been removed from the Reduit, "leaving the sound portions to remain above the cornice." The stucco was cracked and non-adhesive only on the old Spanish masonry, "remaining in excellent keeping on the new masonry." He had carefully pointed up and covered with coal tar the "whole surface," which gave "a uniform and more agreeable appearance to the mixed masonry."

The only leak in the Reduit was in "the old front wall near a water pipe." It had been stopped.

The only work remaining at the Water Battery was to increase the ventilation of the magazine and to substitute a revetment of wood for brick on the top slope of the breast-height wall.[64]

4. Totten's 1845 Inspection Focuses on Maintenance Needs

As was becoming his practice, Chief Engineer Totten spent several days at Pensacola in May 1845. On inspecting the Water Battery, he saw that the "rough casting" falling off it looked bad. The remainder, he told Chase, was to be removed, leaving the original rough surface. Although the breast-height slope had not been shingled, as ordered, it could be left as it is. Chase would not renew the coal tar covering, while the grass on the parapet needed weeding.

The Reduit should be coated with asphalt, after which the masonry parapets, terreplein, banquette, and steps were to be given a waterproofing treatment, with Chase's "angillous mastic."

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64. Chase to Totten, June 22, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

The earth was to be removed from the earthen parapet to the top of the breast-height wall. Next, a rammed surface of sand, parallel with the superior slope, would be put down and covered with a coat of asphalt. The sod would then be relaid. To prevent rainwater from entering the 3-foot wall, forming the face of the subject parapet, its back, above the layer of asphalt, was to be smeared with a soft mixture of 6 pounds of mineral tar to 33 pounds of calcareous stone.

In covering the tops of steps, banquettes, etc., Chase was to take care to insert the edge wall into a joint of the adjoining vertical masonry, otherwise there would be seepage.[65]

On July 3, Chase assured the Department that the maintenance items referred to by Colonel Totten would be attended to.[66]

F. Providing the Water Battery With a Glacis

In June 1840, Major Chase informed the Department that construction of a "small glacis to the old battery" required about 1,700 yards of embankment at 10 cents per cubic yard. The glacis was desirable, he added, because it would give the "battery a more familiar appearance and add somewhat to the protection of the scarp wall."[67]

The Department vetoed for the time being work on the glacis.[68]

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65. Totten to Chase, May 30, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

66. Chase to Totten, July 2, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

67. Chase to Totten, June 6, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

68. Totten to Chase, June 22, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

Nearly four years later, the construction of Fort Barrancas almost finished, Major Chase returned to the subject. On June 12, 1844, he urged construction of a small glacis to extend out from the Water Battery, as the old counterscarp wall was very unsightly, "standing up in its nakedness." Lacking funds, he had not covered it with an embankment.[69]

This time there was no objection by the Department, and, during the summer and early autumn of 1844, this project was undertaken and completed.[70]

G. Chase's 10-Month Struggle to Retain a Surgeon's Services

1. Chase Contracts for Medical Services

Withdrawal of the troops garrisoning the Pensacola defenses to fight in the Second Seminole War deprived Major Chase and his key supervisory personnel of the services of an Army surgeon. To provide medical attention for the Army officers and clerks, Major Chase signed a contract with Assistant Surgeon A.J. Weddeburm of the U.S. Navy. When he forwarded the contract for approval, Chase pointed out that the other employees of the Department were not entitled to medical services.[71]

Before approving the contract, the Department would have to know: (a) the place of residence of the project engineer, the chief

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69. Chase to Totten, June 12, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

70. Fort Barrancas, Monthly Reports of Operations, August 1844-June 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

71. Chase to Totten, April 11, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

clerk, and Dr. Weddeburm; and (b) pertinent information bearing on the question of compensation.[72]

Major Chase, therefore, wrote Chief Engineer Totten that he occupied a private residence (Chasefield) about three-quarters of a mile from the Barrancas and three and one-half miles from the navy yard, where Dr. Weddebrum was quartered. The assistant engineer, when he reported, would be housed at the Barrancas in private housing, pending erection of public quarters. Currently, Clerk George Chase was living near the Engineer Office, but he was also slated to move into public housing.

The contract Major Chase had signed with the owner of slaves employed at the Barrancas provided for no medical attention by the government. The mastermason, master carpenter, principal overseer, and sub-overseer might, in Chase's opinion, be entitled to medical attendance. If approved, it would be extended to them without an increase in Dr. Weddeburm's compensation, which was established by contract at $50 per month.

The importance of having the services of a skilled physician in "this climate," Chase reminded the Department, was "obvious." In March 1840, Dr. Weddeburm had seen Mrs. Chase through a serious illness. This was previous to the date of the contract, and by his actions, he had assured Major Chase that he "possesses great skill in his profession."[73]

More than five weeks having passed and not receiving a reply to his letter, explaining the Weddeburm contract, Chase presumed it had gone astray. In view of the importance of the subject at this season

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72. Totten to Chase, May 12, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

73. Chase to Totten, May 31, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

of the year, Chase, on July 9, addressed to Totten a second letter on the subject.[74]

2. Treasury Department Questions the Contract's Legality

Unknown to Chase, the Department on June 30 had approved Dr. Weddeburm's contract. But within 48 hours, a hitch developed, when the Treasury Department questioned its legality. To test the principles involved, Colonel Totten directed Chase to make out and mail an account for the doctor's services. This would enable Totten to bring the subject to the attention of the Secretary of War. Should his sanction not be secured, the contract would have to be voided.[75]

3. Chase Justifies His Actions

On receipt of the Department's letter, Major Chase reported that Dr. Weddeburm had entered on his duties, and would also provide medical attention to the Corps' subordinate agents--the overseers, master craftsmen, etc.[76]

Chase, after reviewing the legislation, concluded that it offered "no obstacle to the arrangement with Dr. Weddeburm." The subject legislation, he informed the Department, bore entirely on the services of Naval officers, regulating their pay, and forbidding their receiving anything beyond it in the form of additional compensation, when discharging their appropriate duties.

Among services enumerated was that of awaiting orders, i.e., holding themselves ready at anytime to enter on duty. For this,

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74. Chase to Totten, July 9, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

75. Totten to Chase, July 2, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

76. Chase to Totten, July 10, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

they were paid $650 per annum as a full equivalent. But while awaiting orders, there was no legal prohibition denying them the priviledge of practicing their profession, "selling medicine or planting corn, and to receive therefrom the results of whatever produced."

When stationed at navy yards or aboard ship, surgeons received a higher rate of pay, with restrictions as to its increase while this employed. It was common practice for surgeons posted at naval yards and hospitals to be called upon to "exercise the healing art in the neighborhood, where no other surgeon lives, or peradventure a quack." This they did with approval of the station commander, who recognized that "humanity required it." The poor thus received gratuitous attention, and the wealthy reimbursed the physician for his trouble and expense. No one, Chase argued, could say that receiving such "renumeration impinges the law, or offends propriety." Of all services difficult to obtain, those of a "skilled and kind" physician were the greatest. "Any one who has seen dear friends, or has himself been snatched from death's grasp, by the care of one skilled in the healing art will acknowledge obligations difficult to cancel."

If it were permissable, with the approval of the yard commandant, for naval surgeons to give medical attention to civilians near the station, why could not officers of the Engineers and others employed by them be permitted to receive their help when required. Or, Chase admonished, must they, in absence of an Army doctor, obtain such "attendance as may be afforded by a strange quack who is willing to take the wages allowed by the Department, which, small as they are, would far exceed any amount he could earn elsewhere."

To Chase there was only one answer. No objection could be voiced by the Treasury to the surgeon providing medical attention or

to the officer receiving it. The officer, unwilling to obtain it gratuitously, should pay an equivalent out of the funds of his Department, or that being denied him, out of his own pocket.[77]

4. Secretary of War Poinsett Sides With the Treasury People

Secretary of War Poinsett, on reviewing the vouchers, decided the Weddeburm contract was contrary to the law making appropriations for the civil and diplomatic expenses of the Nation.[78]

To cope with this situation, Secretary Poinsett authorized a change in regulations to provide that employees of the Engineer Department could be allowed medical attention if approved by him. To secure such authority, the project engineer must justify every case where such attention was required. In no case would the cost of such medical care exceed the pay of an Assistant Army Surgeon of less than five years' service.

If there were now employed at any of the works, a physician, or, if they deemed one necessary, they were to report to the Department the circumstances conceived of as necessitating such employment.[79]

5. Chase Challenges the Secretary

Major Chase answered that the only medical attention required was for the officers of the Engineer Corps. But as the sum paid for attention of a surgeon would not be increased, and considering

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77. Chase to Totten, July 12, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

78. Totten to Chase, November 11, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

79. Smith to Chase, November 26, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer. Captain F.A. Smith was on temporary duty in the Chief Engineer's Office.

the character of the climate, it would be extended to the superintendent, clerk, and master craftsmen.

Maladies common to the southern climate, he reminded Colonel Totten, "when they occur are sharp, active and fatal unless promptly and skillfully handled."

He recommended that an Army surgeon be attached to his command. In the interim, should occasion demand, he would procure medical aid from the navy yard, the surgeon stationed there being the only one whose services could be secured nearer than Pensacola.

The per diem paid the owners for the services of their slaves, both skilled and unskilled, embraced all allowances, including medical expenses.[80]

Major Chase protested Secretary Poinsett's decision on eight counts because: (a) officers of the Corps of Engineers, like all others, were entitled to the care of surgeons; (b) his decision had deprived members of the Corps of the benefit of medical aid; (c) regulations permitted employment and payment of other physicians, when Army surgeons were not assigned to Engineer posts; (d) the population within ten miles of the Barrancas did not encourage the presence of a practicing physician, nor did the compensation allowed by "Regulations" enable the post to "command the services of one exclusively, to whom I would willingly commit the safety of my slave's life"; (e) the Engineer Department, in absence of an Army surgeon, had been compelled for years to rely upon the naval doctors stationed at the Pensacola Navy Yard for medical aid; (f) the naval surgeon's services, being in no manner subject to the orders of the War Department or any of its officers, could not be commanded at Fort Barrancas; (g) the naval

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80. Chase to Totten, December 21, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

surgeons in rendering aid in the neighborhood of their stations had done so "es cathedra," and at times when their duties did not conflict, and with the sanction of the navy yard commandant; and (h) the services of Doctor Weddeburm were rendered from the day of his employment to the present, and occasionally at times of great danger, "when his prompt attention and excellent skill could not have been dispensed with," without endangering his patient's life.

As there was no Army surgeon in the area, Major Chase continued, he had entered into a contract with Dr. Weddeburm, conforming to regulations, to provide medical assistance to the Engineer Department. This contract, he agreed, was subject to the approval of the Secretary of War, but relying on precedent and the necessity for his services, Chase had engaged Weddeburm at once. Since then, they had been continuous until receipt of Totten's November 11 letter.

As Dr. Weddeburm had been performing his duties for months, at considerable risk and inconvenience, Chase believed him "entitled to an equivalent." Reason and justice demanded it, and, "the law opposing no obstacle," Chase resubmitted Dr. Weddeburm's "account for medical services," and would "rely upon the justice of the War Department for its allowance."[81]

6. Chase Loses His Fight

Colonel Totten, after reviewing the correspondence, notified Chase that he deemed the Weddeburm decision final, and he would not again bring the subject before the Secretary of War.[82]

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81. Chase to Totten, December 21, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

82. Totten to Chase, January 11, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

On February 27, 1841, an embittered Chase resubmitted the voucher for Dr. Weddeburm's services, with a request that it be forwarded, through channels, to the Comptroller, accompanied by his letters of protest. If again disapproved, he wished it to stand as a disallowed account to which he could refer, when he applied to Congress to redress.[83]

H. Management, Wages, and Hours in 1840

1. Chase Names His Key Supervisory Personnel

On April 1, 1840, preparatory to breaking ground on the Barrancas project, Major Chase reported that, to insure efficient supervision, he had employed his brother, George E. Chase, as clerk and inspector of materials at $4 per day; Celestino Gonzales as inspector of masons, carpenters, and labors at $4 per day; and Peter Gonzales as tallyman and keeper of tools and materials at $2 per day.[84]

Chief Engineer Totten reviewed and approved Chase's choice of supervisory personnel and their wage scales.[85]

2. President Van Buren Standardizes the Working Hours

President Van Buren, cognizant of complaints voiced by mechanics and laborers concerning different rates and hours prevailing on the various public works, ordered that they be standardized. The Department, therefore, notified its project engineers that the "ten hours system prescribes labor from 6 o'clock A.M. until 6 o'clock P.M." from March 21 to September 21, and "from sun to sun" from September 21 to

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83. Chase to Totten, February 27, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

84. Chase to Totten, April 1, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

85. Totten to Chase, April 20, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

March 21," allowing one hour for breakfast and an equal time for dinner.[86]

3. Chase Continues to Use Chasefield as His Headquarters

On June 29, 1840, the Department notified Major Chase that, in accordance with a War Department order of May 5, his commutation for quarters was $5 per room per month and $5 per quarter for fuel. His duty station would be the Pensacola fort most condusive to the interest of the public service. If there were no public quarters at the site selected, Chase was authorized to draw from the Quartermaster Department commutation at the stated rate.[87]

As there were no quarters at Pensacola, Chase was allowed the stipulated rate for use of Chasefield, the home he had erected on the mainland near the Barrancas.

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86. Totten to Chase, April 4, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

87. Totten to Chase, June 25, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

V. THE CONSTRUCTION HISTORY OF FORT BARRANCAS: JANUARY 1840SEPTEMBER 1842

A. Preparations for Getting the Project Underway Jell

1. Totten Provides Construction Guidelines

It was January 25, 1840, before the Department finally mailed to Major Chase plans for construction of the new masonry work on the site of San Carlos de Barrancas. This defense, designed by the Board of Engineers, was to "occupy the bank immediately behind the old Battery."[1]

In a covering letter, Chief Engineer Totten called attention to these details:

a. Scarp, Sallyport, and Communication Galleries

On examining the plans, Major Chase would see that the scarp wall of the new work was to be 20 feet high and 4 feet thick, sustained by relieving arches. The piers of the subject arches were to be pierced by an opening 3 feet wide, so that a communication behind the scarp wall could extend around the work. In addition, the scarp wall would be pierced by loopholes and ventilators.

Face No. 1 would contain the sallyport, with access afforded by a bridge and drawbridge across the ditch. Adjoining the gateway, on one side, would be a "large casemate guard room" and on the other a flight of steps "affording a descent to a passage leading under the ditch into the counterscarp gallery." Immediately adjoining this stairway would be a "casemate appropriated in part as a magazine."

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1. Totten to Chase, January 25, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

Near the junction of Faces 3 and 4 would be "a descent through the rampart leading to a subterranean gallery," providing access into the old Spanish Battery.[2]

b. Counterscarp

Fronting Faces 1 and 2 would be a counterscarp and ditch; Faces 3 and 4 would be open toward the bay. The counterscarp was to be provided with casemates of "reverse fires flanking all the ditches and scarp walls and with a gallery leading from one group of reverse casemates to another." This gallery was to be 6 feet wide, with the floor 2 feet above the level of the ditch. Each group of casemates was to consist of two rooms for one carronade each, and a magazine. The slope of the glacis was to be 1 to 6, and the width of the ditch 35 feet.[3]

c. Glacis

The profiles of the glacis were to be on a slope of 1 to 2 and directed to be subject "to be flanked and seen in reverse by the Reduit" of the Water Battery.[4]

d. Fort's Armament

The parapet of Face No. 1 was to be 16 feet thick; of Face No. 2, 18 feet; and of Faces Nos. 3 and 4, 12 feet. A pan coupé would be constructed at the angles of Faces Nos. 1 and 2 to receive three guns; another at the junction of Faces Nos. 2 and 3 for one gun; and a

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2. Ibid. The relieving arches had been introduced to sustain the sandfill, and thus prevent from happening at Barrancas what had occurred at Fort Pickens, where pressure from wet sand had thrown down several scarp walls.

3. Ibid.

4. Ibid.

third at the junction of Faces Nos. 3 and 1 for one gun. Upon Faces Nos. 3 and 4 would be mounted 12 guns, including two at the pan coupé, all bearing on the channel. The land fronts toward Face No. 2 would be commanded by five guns and those toward Face No. 1 by four guns. These cannon, 20 in all, were to be mounted on the new coast and garrison barbette carriages; and the terreplein to be arranged accordingly, the traverse circles and centers laid in a permanent manner.[5]

e. Use of Kyanized Wood for Facing the Slopes

The exterior slope of the parapet was to be "1/1.5 and the interior slope 1 to 5/1," the latter being 18 inches high and resting on a breast-height wall. Because of the difficulty in preserving a "good sodded surface on sandy slopes and on that crowning the counterscarp wall, a facing of Kyanized wood was to be employed. Such a facing prevented washing and wearing. In event of war, it might be necessary to replace the wooden lining of the interior parapet with a sodded slope. Colonel Totten believed there might also be some advantage in facing the interior slope of the rampart with wood.

All wood, except that used in temporary buildings, was to be Kyanized. A tank for this purpose would be built.[6]

f. Use of Concrete--Preferred Formula

Wall piers and arches were to be built of brick, but there would "be great economy and advantage . . . in free use of concrete containing a portion of hydraulic cement." A good concrete could be had by utilizing fragments of stone or brick, not exceeding four ounces, cleaned of all grit, to 1½ barrels of stone lime or 2 barrels of shell lime, to 1 barrel of hydraulic cement, and sand.

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5. Ibid.

6. Ibid.

In constructing the foundations, a casing could be made of brick, two or three courses in height, which being first backed with sand, could be filled with concrete, thoroughly rammed, as fast as poured. The ramming was to be continued until all the aggregate was out of sight and a film of water had risen to the surface. Upon this, a second casing of brickwork, and a second layer of poured concrete would be added, and the same procedure employed. This would be repeated until the desired height of the foundations was reached.

Figures X and Y on the enclosed drawing showed two methods of forming brickwork casing. If the bricks were 2½ inches thick, there should not be more than two courses to each layer of concrete; if thinner, there could be three courses. The recommended thickness for a stratum of concrete was 6 inches. An equally satisfactory mode for foundations and much cheaper was depicted in Figure Y. In this, the cases would be made by positioning strips of planking about 6 inches wide, retaining the planks in their proper positions by notched cross pieces of timber, which were to be removed as the space filled. Figures X and Y also showed methods of employing concrete in the heart of walls and piers.[7]

It would "probably be as easy, by arranging some simple means whereby the brick casing would be supported against the pressure resulting from ramming, to reduce this brick casing to the thickness of a half and a whole brick alternately."

The masses over the arches, constituting caps and roofs, would be formed of concrete, put on in layers, no greater than six inches. All small foundations, such as those of breast-height and other walls with little effect to the foundations, foundations of gun traverse circles, etc., were to be of concrete in a rough side casing of boards.

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7. The drawing referred to is missing from Record Group 77.

Wherever concrete was used, it, as soon as a stratum was laid, must be covered with dampened sand or earth, or with wet straw. On being finished, it should be kept covered in a similar manner for several months. The concrete must be mixed only as used, and it was important for the aggregate to be saturated with water before being added to the mortar.

A coarse, ferrous stone quarried nearby constituted a satisfactory aggregate. It should be cheap and fragment easily. All damaged bricks would be salvaged, broken to proper size, and used as aggregate.

At Fort Adams, Rhode Island, the cost of breaking brickbats to proper size was 2½ cents per bushel, and of breaking granite, 4 cents per bushel. It had been done by laborers with hammers on rainy days. The coarse fragments must be separated by a rake from the finer, and the finer, constituting a sort of gravel, should be separated by a screen, from the sand. This gravel was desirable material for "nicer works to be made of concrete rammed into moulds."[8]

g. Siting the Work

To "precisely" locate the new defense and its form, Major Chase was to measure from the western extremity of the gorge wall of Bateria de San Antonio a distance of 85 feet along the gorge. From this point, a line was to be run, at right angles to the gorge, a distance of 325 feet, which would determine the site of the northern salient. From this point, laying off on the west side of this line, an angle of 28 degrees 30 minutes would determine the direction of the face of the work (No. 2) to be 257 feet. Laying off on the other side of the line an angle of 46 degrees would determine Face No. 1 to be 276 feet. From the southern extremity of Face No. 2, a third face (No.3), 176.42 feet, would

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8. Ibid.

be laid off making an angle of 20 degrees with an imaginary line extending from this extremity, to the extremity of Face No. 1. Face No. 4, making an angle of 21 degrees with the same imaginary line, would connect the extremity of Face No. 4 with Face No. 1, its length to be 168.38 feet.

The reference of the covering line was to be 69 feet; of the cordon and crest of glacis 58 feet; of the parapet 56 feet; and of the ditch 38 feet.[9]

2. Chase Acknowledges Receipt of the Instructions

On February 16, 1840, Major Chase acknowledged receipt of the plans and instructions relative to "laying out and construction of the . . . new work." They, he promised, would be rigidly complied with unless circumstances occurred compelling a deviation from them. In that case "the variation proposed would be reported to the Department and authority requested for its adoption."[10]

3. Preparations for and Kyanizing Timbers

Major Chase, who was well read, questioned the propriety of paying John H. Kyan royalties for use of his patent. Writing the Department, he pointed out that the principal of saturating timbers with corrosive sublimates was not novel. He was accordingly not satisfied that Kyan commanded an "exclusive right for the use of a simple tank, and 'citeron' pump in applying the sublimate."

Capt. J. L. Smith of the Corps of Engineers, he continued, had suggested to him in 1835 or 36 the advantages of saturating wharf piles and other wooden fixtures likely to be attacked by teredos. Captain Smith had employed the sublimate some years before in New York Harbor.

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9. Ibid.

10. Chase to Totten, February 16, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

If he had made use of "the sublimate four years ago and continued to use it until Kyan obtained his patent on 23 June 1838," he inquired, "would the right conferred have prevented the further use of any given sublimate remaining . . ., without paying" Kyan "fifty cents per pound duty?"

Chase could not see what Kyan's invention consisted of, because the sublimate, itself, was used in the United States before Kyan secured his patent. Moreover, there was nothing novel in "a tank or trough composed of plank put together to make it watertight." A reservoir could be supplied with a barrel to hold the sublimate when drawn off from the tank to keep it from the air.

If Colonel Totten did not agree with his contention that they could employ the sublimate process without a license, Chase desired that the enclosed be forwarded to Kyan's agent for approval.

There would be no occasion to employ the sublimate for several months, so he would have ample time to construct necessary fixtures.[11]

Chief Engineer Totten informed Chase that the Department considered "the action of Congress in favour of the invention of Kyan as controlling" its action. Although he was a foreigner, the Corps, in view of this, had no right to withhold Kyan's patent privileges or that of his assignees. Totten had, therefore, mailed to F. & D. Samuels of Philadelphia a blank license with a request that he contact Major Chase.[12]

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11. Chase to Totten, June 1, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

12. Totten to Chase, June 15, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

In April 1841, Chase, having received and signed the license, forwarded by Kyan's attorney, turned his carpenters to constructing a tank for treating lumber. As Kyanized lumber would be used at all the Pensacola Bay defenses, the tank was positioned adjacent to the Barrancas wharf.[13]

By mid-August, more than 20,000 feet of timbers had been Kyanized. Assistant Engineer George Chase was disappointed in the results, as the corrosive sublimates seemingly had little or no effect on yellow pine.[14]

Replying, the Department advised that experiments had demonstrated that the sublimate would act on pitch pine more slowly, perhaps than upon other kinds of timber, and not penetrate to as great depth. Timber, in a rough state, should never be submitted to this process. It should be planed and fitted, and then immersed. If Kyanized in "rough state," those parts of "the timber which have been most thoroughly acted upon will be cut away by the workmen, and the beneficial effects of the process will . . . be lost."[15]

B. Funding, Budgeting, and Programming, 1840-41

1. Chase Urges That Priority Be Given To Repair of Forts Pickens and McRee

Early in March 1840, Major Chase suggested the desirability of prevailing on Congress to appropriate all the money requested by the Department for funding the year's construction program

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13. Chase to Totten, April 3, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

14. G. Chase to Totten, August 20, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

15. Welcker to Chase, August 30, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer. 1st Lt. George L. Welcker from 1841-42 and from 1845-48 served as assistant to Chief Engineer Totten. Cullum, Biographical Register, Vol. I, p. 493.

in Pensacola Harbor. If any appropriations were withheld and the Corps had any input in the determination, he suggested that those for Fort Barrancas and the barracks be dispensed with "as being less injurious to the service, than the small amounts asked for Forts Pickens and McRee." The monies required for repairs and improvements were "absolutely necessary to the well being of those works and expenditures made . . . to prevent further and more serious injury to them."

The sum already appropriated for Fort Barrancas, Chase continued, could be "so economically applied as to sustain the operations until March 1841." As the estimates for Pickens and McRee were limited, he trusted there would be no difficulty in obtaining the money for their repair and upkeep.[16]

The Department concurred in Chase's assessment of the relative importance of the Pensacola projects, "and should it be found necessary to reduce the amounts asked," his views would command attention.[17]

2. Chase Submits His Estimates for the 3d and 4th Quarters

On July 7, Major Chase forwarded to Washington an estimate of funds required for construction at the Barrancas in the third and fourth quarters of 1840. As Colonel Totten could see, he had drawn his estimates to leave about $9,000 to be applied to the project in the first quarter of 1841, if needed, to support operations until the appropriation for 1841 became available. If the Department opposed this arrangement, he could easily absorb the $9,000 by reinforcing his construction hands and stockpiling materials.[18]

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16. Chase to Totten, March 6, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

17. Totten to Chase, March 18, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

18. Chase to Totten, July 6, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chase, on July 1, had available from the old appropriation $14,231.43. To this, he added the "supposed appropriation for 1841," $15,000. This gave a figure of $29,231.43, of which he proposed to spend on the Barrancas by December 31, $20,356. His breakdown for the third quarter called for:

780 days' work--masons	$1,950
1560 days' work--laborers	1,872
78 days' work--mastermason	273
78 days' work--master carpenter	234
78 days' work--carpenter	156
78 days' work--carpenter	117
92 days' work--overseer	368
92 days' work--clerk	368
92 days' work--tallyman	184
3 months for surgeon	150
3 months extra allowance	90
3 months office rent	60
15,000 feet 3-and 1-inch lumber	150
100 barrels lime	200
100 barrels cement	300
300,000 bricks	3,600
Postage	50
Stationery	6
Sundry Small Items	50
TOTAL	$10,178
The fourth quarter, same as third quarter	$10,178
Total third and fourth quarters	$20,356[19]

3. Depleted Treasury Reserves Cause Problems

a. Totten Calls for a Revised Program

Chief Engineer Totten on July 22, 1840, notified his superintending engineers that Congress had granted the appropriation for fortifications requested by President Martin Van Buren, "but with restrictions as to disbursements, which are to be regulated by the President, to conform with condition of the Treasury."

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19. Ibid.

They would, therefore, not "enter into any new engagements, make any purchases, or enlarge" their force, until contacted by the Department.[20]

This legislation led Colonel Totten to draft procedures for the guidance of his project engineers. On August 10, 1840, Major Chase was informed that the condition of the Treasury made it necessary that: (a) no calculation be made on receiving before next March 4 any portions of the recent appropriation for fortifications; (b) unless such "arrangement" can be made as mentioned under (d). He was to immediately reduce his force to "an absolute minimum--discharging every person but one or two, on low wages as Fort Keepers"; and sell such property as cannot be retained without expense. (c) If there were any outstanding obligations, the payment of which by mutual agreement could be deferred, he was to make necessary arrangements, preferring for the date of payment, the furtherest day that could be agreed upon. (d) If he could make arrangements "on favorable terms, for the supply, in the meantime, of materials, workmanship, or labor, to an extent not exceeding one quarter of the late appropriation, and one quarter of the balance in the Treasury of the old appropriation--conditioned that payments are not to be demanded before" January 1, 1841, or April 1, 1841, whichever date the government may prefer, he was authorized to do so. Under these arrangements, he could continue the work, laying off all persons not indispensible to this reduced scale of operations.

The 26th Congress at its recent session, Colonel Totten continued, had appropriated $15,000 for repair of Fort Barrancas and $8,000 for Fort Pickens in 1841. There remained in the Treasury from the former appropriation for repair of Fort Barrancas $8,000.[21]

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20. Totten to Chase, July 22, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

21. Totten to Chase, April 10, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

b. Major Chase Searches for a Loophole

After studying Totten's letter, Major Chase, on August 25, informed the Department that there were "no outstanding obligations of any magnitude besides the amount due for labor and a few materials at Fort Barrancas up to this date." These could be discharged momentarily. The $3,000 asked for in July, by postponing a few payments until the end of October, would be sufficient to handle most urgent demands.

There was no need to discharge the small force employed at the Barrancas, because he had made arrangements to maintain it on condition that payments are to be made on January 1 or April 1, 1841, as the government might designate.

Major Chase recommended that these arrangements govern the expenditure of funds on the Gulf Frontier:

(a) The $3,000 estimated for July for Fort Barrancas be applied to payment of all urgent demands up to August 31.

(b) The small outstanding obligation, $1,000, be postponed to November 1.

(c) The balance remaining of the old Fort Barrancas appropriation ($7,000) be applied to expenditures for September-December to be made by January 1 or April 1, 1841.

(d) The appropriation for Fort Pickens ($8,000) be applied in payment of arrearages due on January 1 or April 1, 1841, or as much sooner as the condition of the Treasury warrants.

(e) One-quarter of the Fort McRee funds ($3,500) be applied to payment of arrearages and such workmanship, etc., as the condition of that defense requires.

(f) No portion of the new appropriation, $15,000, for Fort Barrancas be called for until after March 4, or April 1, 1841.

(g) No part of the appropriations ($44,780) for Forts Morgan, Pike, Wood (Macomb), Jackson and St. Philip, Battery Bienvenue, and Tower Dupré be called for until after March 4 or April 1, 1841.

It would be seen, Major Chase explained, that he had not "taken a quarter part of each appropriation old and new as directed." By postponing the entire 1841 appropriation for the Gulf Frontier defenses, he would be able to "command a sum less than 1/4 of the appropriations old and new if taken pro rata, the application of which sum by the first of January or first of April next will permit the prosecution of the work at the Barrancas; the performance of a small amount of necessary work "on Fort McRee; and the payment of "all arrearages, including those due at Fort Pickens." The postponement of operations under the new appropriation for Fort Barrancas, along with those for the other Gulf Coast fortifications, would cause no injury to the Nation's defense.

Major Chase recommended that this policy be adopted, as it involved no greater sum to be drawn from the Treasury by January 1 or April 1, 1841, than is authorized by taking one-quarter of each appropriation. To demonstrate what he proposed, he prepared a table:

Old Appropriation (Fort Barrancas); bal. in Treasury $8,001;
¼ which is $2,000
New Appropriation (Fort Barrancas); bal. in Treasury $15,000;
¼ which is $3,750
New Appropriation (Fort Pickens); bal. in Treasury $8,000;
¼ which is $2,000
New Appropriation (Fort McRee); bal. in Treasury $14,000;
¼ which is $3,500
New Appropriation (Fort Morgan); bal. in Treasury $10,000;
¼ which is $2,500
New Appropriation (Fort Pike); bal. in Treasury $5,000;
¼ which is $1,250
New Approptiation (Fort Wood (Macomb); bal. in Treasury $3,580;
¼ which is $895

New Appropriation (Battery Bienvenue); bal. in Treasury $2,500;
¼ which is $625
New Appropriation (Tower Dupré); bal. in Treasury $400;
¼ which is $100
New Appropriation (Fort Jackson); bal. in Treasury $20,000;
¼ which is $5,000
New Appropriation (Fort St. Philip); bal. in Treasury $3,300;
¼ which is $825

TOTAL $22,445

If his proposal were approved, Chase would apply the balance of the old appropriation to Fort Barrancas---------- $ 8,001

The entire new appropriation to Fort Pickens------- $ 8,000

One-quarter of the new appropriation to Fort McRee---------- $ 3,500

TOTAL---------- $19,500

This sum would be nearly $3,000 under what he was authorized to spend, and would enable him to meet all engagements, "with much advantage to the government," as it curbed expenditures and preserved its faith and credit, with "no greater jolting of the interest of individuals than their being obliged to wait the payment of amounts already due until after January 1, 1841."[22]

c. Totten Calls Chase's Attention to Regulations

Colonel Totten had to reject Chase's plan. On September 29, he reminded his senior engineer on the Gulf Frontier that an appropriation for one project could not be "made to bear upon the expenditure of another." For certain defenses, it would be permissable to expend by April 1, 1841, one-quarter of the available sum, while at points where expenditures were deemed less important, nothing might be disbursed. Although it was probable that the appropriation granted for "certain other positions on the Gulf will not be touched within the period

22. Chase to Totten, August 25, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

named, . . . this would not justify an increased expenditure at Pensacola beyond the one-fourth currently agreed to."

This principle must also be applied to the Pensacola forts. But as the three works had "the same object, and as one or two of these seem to require it, there may be a deviation so far as to regard the three appropriations as one." As the unexpended balance in the Treasury for these works was $45,000, one-quarter of this, $11,250.25, could be obligated by April 1, 1841.

Major Chase was to correct his program to reflect this situation, and provide the Department with projects on which he proposed to spend the balance, $33,750.50, between April 1, 1841, and July 1, 1842, listing his monthly expenditures.[23]

d. Chase Revises and Submits a 9-month Program

Consequently, Major Chase revised his program. On December 1, 1840, he reported that the available funds, $11,250, would be applied as follows:

Pay the balance due as of September 30 against Fort Barrancas	$ 631.96
Paid since lumber	54.70
Paid since fuel	21.00
Paid since medicine	46.50
Paid since stationery	11.07
Paid since smithery	123.54
TOTAL	$ 888.77
Pay the balance due as of September 30 against Fort Pickens	$1,414.77
Pay the balance due as of September 30 against Fort McRee	$1,074.40
Amount Due	$3,377.94

23. Totten to Chase, September 29, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

Deducting this sum, $3,377.94, from the $11,250 left $7,872.06, of which he proposed to apply $7,489.25 to Fort Barrancas, reserving $382.85 for Fort McRee. He would spend the $7,489.21 in this manner:

Pay of mastermason's wages for 3d quarter of 1840-----	$ 192.50
Pay of master carpenter's wages for 3d quarter of 1840--	231.00
Pay of superintendent's wages for 3d quarter of 1840----	368.00
To pay for 80 casks of lime----------	200.00
To pay for sundry small items----------	326.00
TOTAL----------	$1,317.50

In October, to disburse:

182 days' wages--masons----------	$ 456.00
648 days' wages--laborers----------	786.60
Forage for 5 horses----------	75.00
Mastermason's wages----------	91.00
Master carpenter's wages----------	78.00
Two carpenters' wages----------	84.00
Office expenses----------	20.00
Extra pay----------	17.00
Clerk's salary----------	124.00
Superintendent's salary----------	124.00
TOTAL----------	$1,855.60

Expenses for November and December would be identical to those for October, boosting expenditures for the 4th quarter to $6,884.30. To this figure would be added, in December, purchase of 300 casks of lime for $604.91, making the total amount to be applied to Fort Barrancas for the 4th quarter $7,489.21.

Of monies appropriated for the Pensacola forts, Chase continued, there were available for expenditure, between April 1, 1841, and July 1, 1842, $33,751. The breakdown was:

For Fort Barrancas----------	$14,623.02
For Fort Pickens----------	6,585.23
For Fort McRee----------	12,542.75
TOTAL----------	$33,751.00

Of this sum, $6,583.23 would be required by April 1, 1841, to retire arrearages charged against Fort Pickens.

Chase's estimate of the application of the $14,623.02 on account of Fort Barrancas embraced the three months beginning January 1, 1841, with "the expectation . . . that no funds will be required until such times after the 1st of April as the Treasury will permit." He urged approval of this arrangement, rather than being compelled "to reduce our small force."

Chase's recommended program called for expenditure of the $14,623.02 as follows:

January 1, 1841	
182 days' work masons on counterscarp	$ 456.00
648 days' work laborers assisting masons and transporting brick	786.00
Mastermason	91.00
Forage 5 horses	75.00
2 carpenters	84.00
Office expenses	20.00
Clerk	124.00
Superintendent	124.00
Sundry current expenses	239.40
TOTAL	$2,000.00
February 1841	
182 days' work masons	$ 456.00
648 days' work laborers	786.00
Mastermason	91.00
2 carpenters	84.00
Forage 5 horses	75.00
Office expenses	20.00
Clerk	112.00
Superintendent	112.00
Sundry Current expenses	63.40
TOTAL	$1,800.00
March, 1841	
Same as February	$1,800.00
April, 1841	
Same as February	$1,800.00*
400 casks lime	800.00*
13 sets pintle-blocks and traverses	600.00
	$3,200.00

*These figures do not add up to $1,800.00; however the total ($14,623.02) includes the $1,400.00 for lime and pintle-blocks.

May, 1841	
Same as February----------	$1,800.00
June, 1841	
Same as February----------	$1,800.00
July, 1841	
Same as February----------	$1,800.00
TOTAL----------	$14,200.00
Sundry incidental expenses to the operations January 1-July 31, 1841----------	423.02
TOTAL----------	$14,623.02

If the entire estimate in 1841, $45,000 for Fort Barrancas, were not appropriated by Congress, Major Chase trusted that steps may be taken to get an appropriation of at least $12,500. This small sum "would enable him to sustain operations "until larger and regular appropriations can be obtained," or failing that complete the Barrancas counterscarp and glacis.[24]

4. Wreck of "North Carolina" Delays a Draft

To make his short-term financial situation bleaker, Major Chase was told by the Pensacola postmaster, in mid-August 1840, that the Washington mail had been lost in the wreck of the steamer North Carolina.[25] What made this especially devastating was that he was expecting a draft for $3,000.

On August 29, Chief Engineer Totten wrote Chase that, an inquiry at the Treasury Department, had elicited information that the $3,000 had been posted on July 20 and may have been aboard the ill-fated

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24. Chase to Totten, December 1, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

25. Chase to Totten, August 21, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

ship which had foundered off the Carolina coast after casting off Wilmington.[26]

Satisfied by a report received from the post office people that the money had been aboard the ship, a duplicate draft for $3,000 was issued by the Treasury on September 4.[27]

5. Chase Submits a Revised Estimate of Cost of Project

The modernization of the old Spanish battery well in hand, Major Chase was able to evaluate his costs and update the figures for the Barrancas project. On August 17, 1840, he submitted his revised estimates to the Department. They called for:

Embankment

Glacis 40,000 cubic yards at 30¢ per cubic yard--------	$12,000.00
Ramparts 16,000 cubic yards at 40¢ per cubic yard-----	6,400.00
Parapet of old battery and Reduit 1,000 cubic yards at 40¢ per cubic yard----------	400.00
To provide for second removal of 10,000 cubic yards at 30¢ per cubic yard----------	3,000.00
Contingencies----------	1,000.00
TOTAL----------	$22,800.00

Brick Masonry--10,886 cubic yards at $9.10 per yard, to include:

Bricks 4,354,400 at $12/per 1,000----------	$52,282.80
Receiving and conveying them to site at 50 cents per 1,000----------	2,177.50
Lime 3,000 casks at $12 per cask----------	6,000.00
Receiving and conveying to site at 10¢ per cask---	300.00
Cement 2,000 casks delivered at site at $3.50 per cask--	7,000.00
Centering for arches----------	300.00
Staging, ramps, etc., leading to works----------	300.00
Masons 5,443 days' work at $2.50 per day----------	13,607.50

26. Totten to Chase, August 29, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

27. Totten to Chase, September 4, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

Laborers 10,886 days' work aiding masons at $1.20 per day	$13,063.20
Sundry contingencies of masonry, providing for any possible addition to it; also for the difficulties of the position, being 900 yards from landing and 60 feet above sea level; and unforeseen expenses that may occur in loss or injury of materials, etc.	4,993.30
Total	$100,000.00

Stonework

Cordon 877 running feet at $3 per foot	$ 2,631.00
Gun traverses, including iron traverse plates, pintles, and pintleplates, 41 sets	4,370.00
Magazine and storerooms in old battery, fitting them up	600.00
Plastering scarp wall of Reduit, 41 days' work at $3 per day	123.00
Coping 8,000 pounds zinc at $4 per 100 pounds	320.00
Magazine near main entrance, fitting up	100.00
Guardroom near main entrance, fitting up	50.00
Flagstaff	25.00
Sodding 3,000 square yards or 1,000 cubic yards at $1 per yard	1,000.00
Clerk, overseers, mastermason, barge crew, extra pay, postage, medical services, printing, wharfage, stationery, and sundry small items that may be required in the course of construction	12,515.00
To which should be added the sum expended for the wharf, railway, boats, tallyman's house, and sundry contingent services in making preparations, and before actual commencement of construction	8,632.95
To which also add 15 percent for possible improvement, extension, and underestimate of cost of project	22,825.04
	$53,191.99
GRAND TOTAL	$175,991.99[28]

28. Chase to Totten, August 17, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer. To secure the $100,000, Chase apparently subtracted $128.30 from the total to round out the figure at $100,000.

6. Chase Takes an Emergency Leave

Major Chase, in the autumn of 1840, with construction at the Barrancas slowed by financial restrictions, wrote Colonel Totten that there was some "private business" which compelled his presence in Boston. The call came so suddenly and unexpectedly that he had no opportunity to apply in advance for leave. On completing his annual reports, due September 30, he left Pensacola on October 6. During his absence, the clerk, who was his younger brother, George E. Chase, would be in charge of the Pensacola Bay projects.

Chase promised to stop briefly in Washington on his way to Massachusetts. He assured Colonel Totten that "not a single interest confided to me will in any way be compromised by my absence." He would be back on station by November 1.[29]

Chase was detained in Boston a few days longer than anticipated. On November 2, from Philadelphia, he advised the Department that he was returning to Pensacola by the most direct route. Even so, it was the evening of the 10th before he reported himself back on station.[30]

C. Building Fort Barrancas: the First 16 Months, June 1840-September 1841

1. Construction Gets Underway

In June 1840, construction began on Fort Barrancas, when Major Chase had his laborers commence excavating for foundations of the counterscarp of the north salient and sinking a well. To facilitate work, a "substantial cart ramp" was built, providing easy access to the bluff.

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29. Chase to Totten, September 30, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

30. Chase to Totten, November 2 & 18, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

The following month, the mastermason had several of his men start on the counterscarp foundations. By August, they were laying bricks for the foundation of the west front counterscarp.[31]

2. The Barrancas Well

On August 15, Major Chase notified the Department that his workmen had completed the well, "which affords good, cool and wholesome water." It was on the parade of the bluff fort, near the north salient site. Its depth, when the embankment was finished, would be about 58 feet.

The well would eliminate the necessity of the garrison having to depend on cisterns as at Fort Pickens. Its construction at this time enabled the laborers to mix mortar atop the bluff, leaving nothing to haul but the lime.[32]

3. Chase Submits His First Annual Drawing

Major Chase, on filing his Annual Report on October 1, 1840, informed Chief Engineer Totten that considerable excavation for the foundations of the scarp and counterscarp walls of the new fort on the Barrancas has been accomplished. The foundations of a portion of the counterscarp had been laid.[33]

Chase mailed to the Department an annual drawing, "exhibiting the location of the new Fort of Barrancas; the excavations for

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31. Fort Barrancas, Monthly Reports of Operations for AprilSeptember, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

32. Chase to Totten, August 18, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer. Cost of the well was $800, which included: carpentry, $105.70; masonry, $128.80; excavation, $72.90; 32,000 bricks, $384; 16 barrels of lime, $32; 16 barrels of cement, $52; and contingencies, $24.40.

33. Fort Barrancas, Annual Report for Year Ending September 30, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

foundations of counterscarp and scarp of the sea fronts; the masonry of casemates and counterscarp; and the position of Ramp leading to the work."[34]

4. Counterscarp Construction Details Cause Difficulties

a. Totten Provides Chase with Counterscarp Sections

On November 9, 1840, Chief Engineer Totten notified Major Chase that he was about to leave Washington for the north, and it would be impossible, before his return, to mail drawings of the counterscarp casemates. Pending their arrival, Chase would direct his attention to other parts of the work for which he possessed sufficient details.[35]

Colonel Totten was back in his office on December 5, and, on reviewing Major Chase's report of November 18, he was disturbed to discover that the masons had commenced building piers of casemates and gallery walls of the counterscarp of the southwest front. Fearful that it might be in advance of the drawings, he ordered the work suspended.

In explanation, Totten continued, he was "carrying on the drawings as fast as possible and hope soon to send the whole."

To enable Chase to proceed with the project, Totten transmitted "a section of the counterscarp gallery--and two sections of the scarp, one through the casemate, and another through the pier." With the aid of these and the plans on hand, Chase could expedite construction of the scarp. This project, however, should not be carried

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34. Chase to Totten, September 30, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of this plan, labeled Drawer 79, Sheet 7, is on file at the Florida Unit, Gulf Islands NS.

35. Totten to Chase, November 9, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

higher than line A-B in the sections, and it would be wise "to omit the casemates near the angles, as well as those near the gateway and postern."

The counterscarp gallery, he continued, should not reach quite to the casemates, and a length of about 50 feet should be omitted opposite the gateway. The walls of the gallery could be carried to the height of line C-D on the sections.[36]

b. Chase Describes What He Has Done

Major Chase, after studying the drawings and Totten's letter, informed the Department that his object in "asking for details for the extreme" counterscarp casemates was to ascertain their intended position and the type of embrasure to be constructed. The subject casemates on the right flank had been "covered in," ready for their earth covering. The counterscarp wall fronting them had been "left sufficiently low to receive the embrasures." Counterscarp gallery walls had been erected, and the roof of this gallery nearly completed. The profile of the scarp wall indicated there would be loopholes, but the profiles of the counterscarp, in the first plans received, did not give their location. The sketch, accompanying Totten's recent letter, depicted the loopholes. This, however, was not a problem, as the wall could easily be pierced to receive them at a small labor cost.

Enclosed Totten would find a sketch, detailing existing conditions of the counterscarp. The purpose of this drawing was to depict what had been done. Raising the counterscarp before work was commenced on the scarp wall would enable Chase to "bestow the earth excavated from the main foundation and ditch very economically."

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36. Fort Barrancas, Monthly Report of Operations, October 1840; Totten to Chase, December 5, 1840, NA, RG 77, Ltrs. Sent and Recd., Chief Engineer. The plan referred to is not on file in the records of the National Archives.

Another month's work would be involved on the counterscarp, before he turned the men to on the casemates. He would like to have "the position and plan of the embrasures" before doing so, especially if they differed from those at Fort Pickens. He would also like to be provided with locations of the gallery loopholes.[37]

5. Totten Sends Three Sheets of Drawings and Provides Additional Construction Details

The questions raised by Major Chase, along with a number of others, were answered by Chief Engineer Totten on February 16, 1841. On that day, he mailed to Chase three sheets of plans for Fort Barrancas, approved by the Board of Engineers. These drawings were titled: "Plans, Sections and Elevations of Fort Barrancas as projected by the Board of Engrs. in 1841"; "Sections to Elevations of Fort Barrancas as projected by the Board of Engineers"; and "Details of Draw-Bridge, of Fort Barrancas as projected by the Board of Engineers." Colonel Totten had personally drawn these handsome plans.[38]

In the covering letter, Totten provided his superintending engineer with additional construction details:

a. Communications Between Counterscarp Gallery and Casemates

The proper communication between the counterscarp gallery and casemates would be under the ditch. To facilitate emplacement of carronades in these casemates, a doorway should open into the gallery of each counterscarp. On the outside of these openings,

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37. Chase to Totten, December 28, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer. A search of pertinent record groups at National Archives failed to locate the plan referred to.

38. Totten to Chase, February 17, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer. Copies of these drawings, labeled Drawer 79, Sheet 10; Drawer 79, Sheet 11; and Drawer 79, Sheet 12, are on file at the Florida Unit, Gulf Islands NS.

strong, 3-inch oak doors were to be hung with locks, admitting of being locked from either side. Sills of the doorways would correspond with the floor of the gallery--the height to the impost of the door arch to be 5 feet, and to the key 6 feet. Both the rise and thickness of the arch were to be 1-foot. In time of peace, these doorways could be kept open, but if war threatened, the openings, except the portion occupied by the door, were to be filled with brickwork laid in mortar.[39]

b. Outfitting the Magazines

Two and one-half-foot square windows would provide ventilation for the magazines. These, as a rule, would be kept open and be provided with strong shutters with fastenings on the outside. A copper or composition grating would bar access. Several smaller ventilators, about 6 inches wide, would also be provided. In case this had not been attended to, it would be necessary to open the piers and construct them. Over each ventilator and against the inside wall would be stretched a copper or brass screen, the wire being small and the mesh about one-third of an inch square. Magazine linings were to be placed some distance from the walls and arches to facilitate circulation of air around, above, and below, where the powder was stored. Every magazine was to have two doors--the inner of open-work and the outer, solid. The former was to have both outside and inside fastenings so a "person supplying powder may prevent the entrance of others." Cartridges would be passed out through a "small trap in the upper part of the inner door."[40]

c. Positioning Pintle Stones

At the embrasures, pintle stones were to be placed as shown, but the pintle would not be positioned and its hole drilled until its form and dimensions had been determined.[41]

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39. Ibid.

40. Ibid.

41. Ibid.

d. Casemate and Gallery Ventilators

In the gallery proper, a ventilator was to be made above each loophole. In each counterscarp gallery casemate, there would be a large ventilator, at the top of each arch, through the counterscarp wall. The latter were to be protected by gratings "which should be of composition, and be built in the wall in an inclined position."[42]

e. Height of Gallery

The gallery would have a height of 10 feet everywhere, except opposite the sallyport. Here, for a distance of 25 feet, it would be necessary to lower the arch to 8 feet. This was to permit the bridge to cross the sallyport at a suitable slope. A second exception would be at the eastern extremity, where for a short distance, the height would be 8'2".[43]

f. Construction Materials for Loopholes and Embrasures

Available materials would dictate whether the loopholes and embrasures were concrete or some other material.[44]

g. Waterproofing the Casemates and Galleries

Although the drawings showed that the casemates and galleries of both scarp and counterscarp were covered with lead, it was believed that a covering of asphalt would be cheaper and more satisfactory in preventing seepage.[45]

h. Paving of Sallyport, Galleries, Casemates, etc.

The sallyport was to be paved with very hard brick, laid on their edges, or with 4-inch flagging. The floors of the counter-

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42. Ibid.

43. Ibid.

44. Ibid.

45. Ibid.

scarp galleries and casemates, guardroom, magazine anterooms, passage to the Water Battery, and counterscarp gallery were to be paved with bricks laid flat, or with a layer of concrete 3 inches thick. Casemates abutting on the scarp would not be paved.[46]

i. Surfacing the Parade, Terreplein, and Ramps

The surfaces of the parade and terreplein were to be "formed of a mixture of soil and sand, or of soil alone." Ramps might require paving, "if a good hard and lasting surface cannot be made for them with shells, the refuse of the brick kiln, or some such material."[47]

j. Limiting Work at Sallyport

Until detailed drawings of the sallyport and drawbridge were completed, Major Chase was to restrict work on the scarp at the gateway, and the piers of the gateway casemates.[48]

6. Chase Calls for Four Change Orders

Major Chase acknowledged receipt of the drawings and Totten's covering letter on March 14. A review of the documents satisfied him that "nothing has been advanced in the construction at variance with the plans, as may not be easily adjusted and made conformable thereto."

The three arches of the northeast counterscarp casemates differed from the plan, as shown in his sketch sent to the Department. By comparing construction with the details, it was found that "the former varies from the latter only in the heights of the casemates which, in construction," were 10 feet for a depth of 13 feet, and 9 feet for a depth of 7 feet. The enclosed arch of the plan had a height of 12 feet in front

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46. Ibid.

47. Ibid.

48. Ibid.

and 8 feet 6 inches in rear in two casemates, and 10 feet of height in front and 7 feet in rear of the third casemate in which a magazine was to be placed. The arrangement, Chase agreed, depicted in the plan was superior as it afforded more space. But, he continued, the arches, as constructed, would fulfill their object, and he recommended their retension.

As instructed, he would open 21 loopholes and ventilators through the counterscarp of the southwest front, and an opening for the sallyport. These, together with an opening to be made for a ventilator in the southeast casemate magazine, embraced all necessary alterations. Chase did not believe their cost would exceed $185.

If Totten were agreeable to the arches remaining in their present state, and after the aforementioned alterations were made, every part of the fort would conform to the approved plans. No deviation would, hereinafter, be made unless sanctioned by the Department.

In interest of economy, Chase urged that these changes be made in the plans:

a. Substitution of a brick coping on the counterscarp in place of stone. A brick coping, 1-foot thick, interrupted every 18 inches or 2 feet with zinc plates, made an excellent covering, and was as durable as stone. Some of the walls of the Water Battery, he explained, were covered with brick coping. The scarp cordon, however, must be of stone, projecting as it would, one-foot.

b. The loopholes and embrasures to be of brick masonry, instead of concrete. This was due to an insufficiency of brick fragments, which would necessitate breaking up whole bricks. If he had large quantities of debris, either of stone or brick, concrete might be made cheaper than brick masonry.

c. All steps in the stair communication ways to be brick rather than stone. If approved, this would result in a "saving of expense with equal durability."[49]

7. Totten Approves all Change Orders Except the One Applying To Height of Casemate Arches

On March 30, Colonel Totten approved all the suggested changes except one. The three arches in the northeast counterscarp must remain as shown on the plans.[50]

8. Totten Sends a Sheet of Drawbridge Details

On March 22, 1841, the Department forwarded drawings showing details of the Barrancas drawbridge.[51]

D. Work Accomplished: October 1, 1840, to September 30, 1841

During the year ending September 30, 1841, the masons built casemate piers, gallery walls, and counterscarp walls of southwest, west, and northeast front; laid foundations and curbing for the north front counterscarp; pointed casemate arches in southwest front counterscarp; positioned casemate roofs of southwest front counterscarp; cut loopholes in southwest and west counterscarp fronts; constructed magazine wall in north angle, casemates in south gallery of north angle, and ventilators in the subject magazine; laid walls and arches of the subterraneous passage; turned arches of magazine and passage at north angle; repaired well; and built chimney for blacksmith shop.

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49. Chase to Totten, March 14, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

50. Totten to Chase, March 31, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

51. Totten to Chase, March 22, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer. A copy of this drawing, labeled Drawer 79, Sheet 13, is found in the files of the Florida Unit, Gulf Islands NS.

The carpenters fashioned and raised centers; repaired carts; prepared timbers for railway; built kyanizing tank, shed, cistern, blacksmith shop, and stables.

The laborers were employed assisting artisans; hauling and receiving materials; excavating; aiding on boat service; helping carpenters in removing centres; cutting loopholes; getting out posts and clapboard for blacksmith shop and stables; aiding in making solution and charging tank for kyanizing; and kyanizing lumber.

A blacksmith shoed horses and mules; repaired carts; and sharpened tools.

Several teamsters had been engaged hauling supplies and excavating, while a caulker had worked on the kyanizing tank.[52]

On October 13, 1841, Major Chase filed his annual report. He informed the Department that the gallery and casemates of the counterscarp of the east and west fronts of the new work on the bluff had been completed to the "great gateway." The subterraneous communication had been finished and covered. By the end of October, the counterscarp would be extended to its northeast terminous.

The glacis had, on the average, been raised to half its planned height. With an increased labor force and additional mules, it would soon be finished. It, in connection with the completed counterscarp, would provide a "strong cover" to the Water Battery.

Excavation for the scarp walls had progressed sufficiently for the masonry to be laid.

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52. Fort Barrancas, Monthly Reports of Operations, October 1840-September 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

During the past 12 months, materials had been bought with "facility at fair prices--bricks from yards near Pensacola; lumber from mills on Pensacola Bay; and lime, cement, and stone from New York." Mechanics and laborers had been hired locally at "moderate rates."[53]

In accordance with procedures, an Annual Drawing, exhibiting "the condition of the work on the 30th Sept. 1841," was forwarded to the Department.[54]

E. Planning, Programming, and Funding: March 1841

1. Totten Calls on Chase to Submit a Comprehensive Three-Year Program

On March 16, 1841, Chief Engineer Totten reviewed for Major Chase the financial situation of the Pensacola forts. Of the last annual appropriation of $30,000 for the Barrancas, there had been obligated $1,475.32; of the $10,000 for Fort Pickens, there had been disbursed $2,325.61; while for Fort McRee, there remained $11,674.50 unexpended. Because of the continued tight fiscal situation, it was mandatory for Chase to evaluate his program, and advise the Department as to the specific amounts available for each project.

At the Barrancas, priority must be given to placing the Water Battery in condition to receive its guns. This was to include "the perfect adjustment of all parapets and terrepleins, traverse circles, and pintle centers, and the completion of the magazine." As for the bluff fort, Chase was expected "to press your operations vigorously, and in such manner as shall at the earliest period, bring the work, or portions thereof, to a state of efficiency."

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53. Fort Barrancas, Annual Report for 1841, October 13, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer; Public Documents, Printed by Order of the Senate of the United States, 2d Session of the 27th Congress, (Washington, 1842), Serial 395, Vol. I, p. 125.

54. A copy of this drawing, labeled Drawer 79, Sheet 16, is on file at the Florida Unit, Gulf Islands NS.

In preparing his operating program, Chase must: (a) make provision for the contingency of no appropriation being granted at the next session of Congress. This would necessitate setting aside a sum to guard the public works and property from July 1, 1842, to March 4, 1843; and (b) to budget a sum for protection of each work from April 1, 1842 until July 1, 1842.

He would also give timely notice to the Department of his "being in want of pintle plates, bolts, etc., for barbette guns," so necessary requisitions could be made upon the Chief of Ordnance. He would report the number of guns each of his forts was prepared to receive, specifying for which part of the work, whether barbette or casemate, and the number already emplaced.[55]

2. Chase Submits a 15-Month Program

Major Chase accordingly prepared a tabular statement of the gross funds required for operations at the Barrancas for each month in the present calendar year. In April, he proposed to spend:

Workmanship		
Masonry laying bricks, 150 days	$ 475.00	(counterscarp)
Masonry mastermason, 15 days	60.00	(counterscarp)
Carpentry, 50 days	100.00	(making tank, cisterns, and centers
Labor of men, 430 days	525.00	(assisting artisans, and excavating)
Painting	40.00	(last coat in magazine)
Laying & cost of traverse rails, 13 days	150.00	(in Water Battery)
Materials		
Fixing & cost of copper locks, hinges, etc.	55.00	(magazines)
Cement, 100 bbls.	250.00	(masonry)
Lumber, 3-inch planks, 1500 ft.	30.00	(kyanizing tank)
Sulphur, 130 pounds	10.40	(fixing pintles)
Sundries	10.00	

55. Totten to Chase, March 16, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

Contingencies		
Forage	75.00	(for 3 horses and 3 mules)
Stationery	25.00	(office functions)
Postage	20.00	(correspondence)
Wharfage	4.00	(boats)
General repairs	250.00	
TOTAL	$2,099.00*	

*This total does not add up.

During the other months, programmed expenditures would range from a high of $4,625.85 in August to a low of $2,655.25 in September. Construction costs at the Barrancas would be pegged at $29,950.33 for the nine months ending December 31, 1841. Deducting this sum from the $38,950.33 appropriated funds available, left $9,000 to be "applied in support" of Fort Barrancas between January 1 and July 1, 1842, provided Congress failed to make any additional funds available for 1842. Expenditure of these monies would enable him to complete the masonry of the counterscarp, its gallery and gun rooms, the passage under the ditch, and some portions of the scarp walls. He also hoped "to make good the embankment of the Glacis against the counterscarp," sufficient to afford a respectable defense on the land front in event of attack.[56]

3. Major Chase Suffers a Sunstroke and Goes on Leave

a. Chase has $2,500 Sent to Him by the Treasury on New York

On June 17, 1841, Major Chase wrote Colonel Totten that he needed about $2,500 to pay for lime, cement, and stone traverses ordered from his New York agent. To avoid having his remittance discounted, the money should be sent to him by Treasury draft on New York City.[57]

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56. Chase to Totten, April 6, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

57. Chase to Totten, June 17, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer. This sum was to be charged against Fort Barrancas.

The Department, therefore, requested the Secretary of the Treasury to "cause . . . $2,500 to be placed" to Chase's credit with the designated bank.[58]

When advised of this, Chase assured the Department that, so far as he could foresee, no more money would have to be placed to his credit with New York City's Bank of Commerce during 1841.[59]

b. The Chases Start for the Northeast

Major Chase was compelled to renege on this pledge, however. On July 5, 1841, learning that Colonel Totten had arrived back in Washington, he forwarded a request for several weeks' leave, because of his health. As his brother, George, was a competent assistant, he, as heretofore, could superintend the project while the major was absent.

If the Department were agreeable, Chase would travel to New York City and Boston. While seeking "relaxation from business," he would perfect with his New York agents--Delafield & Delafield--arrangements for shipment of needed stores and materials to Pensacola.[60]

On July 17, the Department approved Chase's request for 20 days' leave, the maximum permitted by the new regulations. If he desired a longer furlough, his request must be submitted to the Army's commanding general.[61]

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58. Welcker to Chase, July 1, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

59. Chase to Totten, July 24, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

60. Chase to Totten, July 5, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

61. Totten to Chase, July 17, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

Chase, meanwhile, had suffered a sunstroke by which his brain and nervous system "were exposed to a severe shock." On July 25, Dr. Hulse certified to his condition, and addressed a letter to the War Department, urging that to insure restoration of the major's health he be allowed to absent himself from his duties for a month or two. Chase's absence was to include a trip to the northeastern states.[62]

Dr. Hulse's certificate in his pocket, Major Chase, accompanied by his wife, departed Pensacola on July 29 for Mobile. There they boarded a New York-bound ship. On disembarking in the city, Chase wrote Chief Engineer Totten that, while there, he could be contacted through Delafield & Delafield. From New York, the Chases traveled by train to the Boston area.[63]

c. Chase Has the September Funds Sent to Him

On August 14, Major Chase, from Lowell, Massachusetts, notified the Department that Assistant Engineer George Chase would mail the September estimates. On their being received, $2,000 was to be added to the Fort Pickens estimate for purchase of 20 mules to be employed on the glacis. When they were no longer required on Santa Rosa Island, the mules could be sold to Fort Barrancas.

He asked to be advised if the August estimates for the Pensacola forts had been remitted. In addition, he desired that the September estimates, when determined, be remitted by draft on New Orleans or Mobile to him at New York so he could endorse and forward it to the Commercial Bank of New Orleans to be deposited to his credit.

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62. Chase to Totten, August 7, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

63. Chase to Totten, August 7 & 10, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

His health had improved rapidly, and he was desirous of returning to Pensacola.[64]

The Secretary of War was requested by the Department to have $6,479 remitted to Chase at New York City.[65]

4. 1st Session, 27th Congress, Appropriates $45,000 for the Barrancas

On July 19, 1841, Chief Engineer Totten wrote Major Chase that "it is still doubtful whether or not the additional sums of $45,000 for Fort Barrancas, and $20,000 for Fort Pickens (now before Congress) will be appropriated during the" current session. If they were, it was desirable that they "should be expended upon those works (in producing the greatest possible efficiency) by an early period of next spring, reserving such sums only as will maintain the watch and guard over them necessary to their preservation until the 1st of July next."

In addition, it was desirable that measures "be taken" to expend the sums now available for those works by January 1, 1842.[66]

Two months later, on September 9, Totten notified Chase that Congress had passed and President John Tyler had signed into law a Fortifications Bill appropriating $45,000 for Fort Barrancas and $20,000 for Fort Pickens. In expending these sums, Chase would keep in mind the Department's letters of March 16 and July 19, as to the nature of the operations and their execution.[67]

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64. Chase to Totten, August 14, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer. Chase's New York forwarding address was H. & W. Delafield, No. 12, Old Slip.

65. Welcker to Chase, September 2, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

66. Totten to Chase, July 22, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

67. Totten to Chase, September 9, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

5. Chase Returns to Duty

Low water that autumn on the Ohio River slowed steamboat traffic to a crawl, and delayed Major Chase's return to the Gulf Frontier. He reached New Orleans on November 9, ten days after he had planned, and Pensacola on the 12th. He was delighted with progress during his absence.[68]

6. Chase Submits a 6-Month Program

On December 15, 1841, from New Orleans, Major Chase forwarded to the Department, in accordance with procedures, his program for expenditure of funds during the next six months. As of December 31, there would be $50,000 available for Fort Barrancas. There were no outstanding contracts, so none of this sum was encumbered. To sustain the project through June 30, 1842, he proposed to spend in:

January	$15,000
February	7,000
March	7,000
April	7,000
May	7,000
June	7,000
TOTAL	$50,000[69]

Chase's estimate for January called for disbursement of:

DESIGNATION	TIME	COST	GENERAL DESCRIPTION
Mastermason	27 days	$ 108.00	Construction of scarp revetment
15 masons	405 days	1,012.50	Construction of scarp revetment and completion of counterscarp
Carpenters	54 days	108.00	Making centres

68. Chase to Totten, November 12, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

69. Chase to Totten, December 15, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

Laborers	1080 days	1,350.00	Assisting artisans, excavati receiving, and transportati of materials
Superintendent	31 days	124.00	
Tallyman-overseer	31 days	62.00	Receiving bricks and mater
Assistant engineer	31 days	186.00	Assisting in operations
Forage, 8 horses and 2 mules	1 month	120.00	Hauling materials and excav
Postage	1 month	20.00	Public letters
Extra pay	1 month	20.00	Disbursing
Office	1 month	20.00	Engineer Department
Timber	2,000 ft.	14.00	Scaffolding, centres, and foundations
Cement	200 casks	500.00	To keep up 3 months' supp
Lime	500 casks	1,000.00	To keep up 3 months' supp
Bricks	800,000	9,600.00	General service of masonry
Small items of copper, iron, paints, maintenance of boat, etc.		100.00	General Service
Schooner of 11 tons		825.00	Transporting materials
Amount for January		$15,169.50	
Round off at		$15,200.00[70]	

The Department approved the program as submitted.

7. Chase Learns that the 2d Session, 27th Congress, Will Not Make an Appropriation for the Barrancas

Major Chase, on reading the Army & Navy Chronicle for February 7, was disturbed to see that the Fortifications Bill, as introduced, contained no money for Fort Barrancas. Writing Chief Engineer Totten on March 19, he urged that the Department ask for $10,000 for that work. This sum would enable him "to proceed with present operations without dimunation of his force until March 4, 1843."[71]

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70. Chase to Totten, December 14, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

71. Chase to Totten, March 19, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

On March 30, 1842, the Department confirmed what Chase had read. There was no possibility of obtaining an appropriation from the current session of Congress for the Barrancas, and he must regulate his program accordingly. In applying available funds, he would have the option of determining "whether to proceed rapidly . . . or moderatly."[72]

8. Chase Quibbles With the Department

a. Chase Submits a 22-Month Program

Major Chase, in programming available funds for the period August 1842-July 1, 1844, wrote the Department that he required $5,000 for Fort Barrancas in August. Of this sum $3,000 would be allotted for August and $2,000 for September. Thereafter, he required for each month until April 1, 1843:

October 1842----------	$ 3,000.00
November 1842----------	3,000.00
December 1842----------	2,000.00
January 1843----------	2,000.00
February 1843----------	2,000.00
March 1843----------	2,000.00
	$14,000.00
For pay of fort keeper from April 1, 1843, to July 1, 1844, 457 days at $1 per diem----------	$ 457.00
Incidental expenses--------	660.84
	$15,117.84.

This $15,117.84, plus the $5,000 estimated for August, equalled $20,117.84, the amount of the Fort Barrancas appropriation remaining in the U.S. Treasury.

This arrangement would enable Chase to maintain "the works with much advantage, and save the necessity of incurring loss by

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72. Totten to Chase, March 30, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

a sudden cessation of labor; at the same time enabling us to place the works in a respectable state of defense."[73]

b. Department Calls for Stringent Economy

Meanwhile, 800 miles to the northeast, Chief Engineer Totten was writing his project engineer that the "state of the Treasury" was such as to necessitate stringent economy measures. While existing contracts must be honored "so far as the means on hand will permit," no new engagements would be made, except in cases of extreme urgency and must be approved by the Department. "The number of employees must be reduced, and expenditures slashed, without reference to unexpended balances of appropriated funds."[74]

c. Chase Presents His Rebuttal

When Major Chase replied, he called attention to his letter of July 28. He informed the Department that repairs and improvements to Fort Pickens were nearly finished and would absorb the remainder of the appropriation for that work; the appropriation for Fort McRee had already been exceeded; and when existing obligations for Fort Barrancas were discharged, there would be a balance of less than $20,000 applicable to that work. Application of this sum would enable him to sustain operations there until March 4, 1843, with great advantage.

Deeming the situation at Fort Barrancas to be of "great urgency," Chase trusted that the remainder of the appropriation would be applied as recommended on July 28. Abandonment of operations at this time, he warned, "would be productive of injury to the works as well as of sacrifice in disposing of perishable property thereto pertaining,

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73. Chase to Totten, July 28, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

74. Totten to Chase, July 28 & 29, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

besides leaving the position in a defenseless condition, whereas by continuing them . . . the critical masonry can be covered in and secured from the weather." Moreover, the heavy mass of sand collected within the main work could be properly supported, and the glacis completed. The glacis with the counterscarp and Water Battery, in event of war, would "afford a somewhat respectable defense."[75]

d. Chase Describes the Condition of the Fort

To properly understand the need to continue the project, Chase briefed the Department on its current condition:

1. The counterscarp and its underlying gallery and casemates were completed, with exception of outfitting the magazines and laying the stone traverse circles for the carronades.

2. The top of the counterscarp, and roofs of galleries and casemates were nearly prepared to receive their sand embankment, and no time should be lost in completing this part of the work. Chase estimated that one-half the embankment of the glacis was finished.

3. The scarp wall was raised to 6 feet, except a small portion of it above the subterraneous communication with the Water Battery, a portion of which was raised to 4 feet.

4. The piers of the arches were raised to their full height, and the arches commenced. It was vital to promptly finish these arches "to afford support to the mass of sand, heaped up in the center of the Fort, with a view of preventing frequent removals of sand." This sand was "tending every day to assume its natural slope, and is now only held in check until we can complete the arches and prepare them to receive" it.

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75. Chase to Totten, August 9, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

If allowed to continue, the scarp wall and arches would be placed in condition to be secured against the weather, by leveling the sand of the rampart with the height of the cordon; by placing the cordon in position; and by finishing the top of the scarp with its slope, etc.

This work accomplished, the project could be closed down without loss or injury.[76]

e. War Department Decides to Permit Construction to Proceed

On receipt of Major Chase's July 28 letter, Chief Engineer Totten cautioned, until "congress had decided what course to pursue in reference to the Treasury, no decision" on his request could be made. If no funds were provided by Congress, work must stop.[77]

On September 2, Totten had more grim news for his project engineers: The 2d Session of the 27th Congress had adjourned without enacting a Fortifications Bill.[78]

Chase's letter of August 9 caused Totten to have reservations on his decision to shut down the Barrancas project. After discussing the situation with Secretary of War John C. Spencer, Totten notified Chase on September 5 that it had been agreed to permit continuation of work on Fort Barrancas as described in his letter of July 28. Funds would be remitted to him on his monthly estimates.[79]

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76. Chase to Totten, August 9, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

77. Totten to Chase, August 18, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

78. Totten to Chase, September 2, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

79. Totten to Chase, September 5, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

f. Chase Calls for $58,225.40 to Complete the Project by June 30, 1844

On October 1, 1842, Major Chase transmitted to Washington detailed estimates of the sums needed to fund operations at Fort Barrancas from January 1 to June 30, 1843, and for the fiscal year beginning July 1, 1843.[80]

The amount estimated for the former was $27,239.90 and for the latter $30,895.50, or a total of $58,225.40 to complete the project. This figure, Chase noted, embraced everything necessary to finish the fort. The best way to preserve the work, he reminded the Department, was to complete it. It was difficult to say what would be the smallest sum sufficient for its preservation. Perhaps, if the estimate were cut to $30,000, the works "could progress in such a way as to incur little injury by delaying to complete them." If the project were suspended, he would require $2 per day for hire of a fort keeper.

To obtain his cost figures, Chase had employed:

For materials such as brick, lime, cement, and lumber, the probable rates as established in 1842--bricks and lumber being obtained locally and the lime and cement from New York City.

The cost of stone was conjectural and was based on the prices that might prevail in New York, from where it was obtained.

Costs of iron, copper, nails, and sulphur were founded on prices prevailing in the New Orleans market.

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80. The government, on July 1, 1843, began funding its operations on a fiscal year beginning July 1 of one year and ending June 30 of the subsequent year.

The costs of iron- and copperwork was derived from what had, heretofore, been paid for the same in New Orleans and Pensacola.

The expense of Kyanizing was conjectural, but was assumed from experience to be $3 per 1,000 feet.

Mechanics' and laborers' wages were pegged on those prevailing in and around Pensacola. The figure for daily wages "embraced every allowance of quarters, tools (except carts), provisions, etc." The amount of work, i.e., of days' work, was conjectural, as there were always diversions.[81]

F. Work Accomplished: October 1, 1841-September 30, 1842

1. Chase Reports the Counterscarp Completed

On April 3, 1842, Major Chase informed Chief Engineer Totten that the counterscarp "with its galleries and casemates, embrasures and loopholes is complete." The finishing of the glacis (two-thirds done) "will enable us to lay aside this portion of the work."

If all went according to schedule, by September 30 the scarp walls and piers of relieving arches of the main work would be finished. This would leave the "heavy work" of filling in the ramparts and parapets.

The "confined space in which we labor," he reported, and the "long slopes of sand through which we excavate for foundations" necessitates frequent removals. He, however, sought to avoid more than were necessary.

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81. Chase to Totten, October 1, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer. The data for estimates had been required by Section 14 of the Act approved August 26, 1842.

The high cost of having iron castings made for the drawbridge machinery and fixtures on the Gulf Coast made it necessary to have them manufactured in the north. He would have plans and specifications prepared and mailed to Lt. James L. Mason at Newport, Rhode Island.[82]

The Department approved the proposal for casting the drawbridge ironwork in the north.[83]

On June 7, Chase assured the Department that the project was progressing steadily and rapidly, with the strictest economy, "without losing efficiency."[84]

2. Work Done by the Artisans and Laborers

During the 12 months ending September 30, 1842, the masons completed the arches and roofs of casemates and magazines at the north angle, and constructed the "counterscarp along same"; erected counterscarp wall and gallery of southeast front; completed loopholes and embrasures in counterscarp of "east end"; laid foundations of scarp and raised scarp wall of east front to 6 feet; turned arches and galleries of southeast counterscarp; laid foundations and raised scarp and piers of two water fronts; raised piers of relieving arches to spring along northwest and northeast fronts; finished steps leading up from subterraneous gallery to Water Battery; laid foundations of scarp wall at south angle; commenced turning relieving arches of southwest water front; raised walls of passage to postern; and repaired lightning damage to assistant engineer's quarters. By the last day of September, the scarp wall had everywhere been raised to 6 feet.

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82. Chase to Totten, April 3, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

83. Totten to Chase, May 20, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

84. Chase to Totten, June 7, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

Carpenters had completed the stables and assistant engineer's quarters; erected centres; and repaired wheelbarrows, railway, tools, and carts; and hung doors and shutters in magazine of Water Battery.

Teamsters had hauled materials and excavation.

The blacksmith had repaired and sharpened tools; shoed horses and mules; and repaired carts, wheelbarrows, and the railway.

The laborers, in addition to assisting the mechanics, had received and transported materials; hewed timber; manned the boat; excavated for foundations; built scaffolding; embanked glacis along northeast front and north angle; broke brick for concrete, and Kyanized lumber.[85]

3. Substitution of Brick Walls for Timber Bulkheads at Rear of Casemates

On October 13, 1842, Major Chase mailed the annual drawing of the fort, illustrating the condition of the work as of September 30.

Chase, in a covering letter, called Chief Engineer Totten's attention to the "slight variation from the original plan" made by "substituting brick walls 1 foot thick for timbers one foot square placed in the piers of arches for the support of sand that otherwise would fall into the galleries." These walls had been carried up to the same height as that intended for the timber bulwarks, and were slightly curved, the versed side being 6 inches.

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85. Fort Barrancas, Monthly Reports of Operations, October 1841-September 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chase justified this change by the need to hold as much sand as possible within the fort, to forego expense of frequent removals. He would have built the bulkheads of timber, but delays in receiving corrosive sublimate, necessary to Kyanizing, left him no option but to construct the brick wall or allot money for removing the sand, which would have been continually falling into the galleries and between the arches.

These brick supporting walls, Chase assured the Department, were "very strong and already support, in their five feet of height, nearly all that it is intended to impose on them."[86]

On November 1, 1842, Totten approved the substitution of the vertically arched wall in rear of the casemates, under the relieving arches, for a facing of timber, provided it possessed sufficient strength. He termed the idea "ingenious," as it was bettered centered. He questioned, however, whether Chase had given it sufficient curvature, as the drawing did not contain sufficient detail. Chase would prepare and forward a large scale sketch of one casemate, to enable him to study the junction with the piers.[87]

Chase was happy to learn that Colonel Totten had sanctioned the change order. When he forwarded the requested sketch, he went on record that he had no doubt of the "strength" of the brick walls being adequate to sustain the pressure imposed. Some of them had already sustained for several months nearly the entire pressure to which they were to be subjected.[88]

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86. Chase to Totten, October 13, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

87. Totten to Chase, November 1, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

88. Chase to Totten, November 12, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of "Plan and Section of a Relieving Arch, showing the curved wall, between piers constructed in place of timber supports, and of a Detail showing the bonding into the pier of said wall," labeled Drawer 79, Sheet 19, is on file at the Florida Unit, Gulf Islands NS.

4. Chase's Annual Report

Early in October, Major Chase submitted his annual report for the year ending September 30, 1842. Since his last annual report, there had been expended on Fort Barrancas $34,709.36, raising total disbursements on the project to $150,986.36. There remained in the Treasury of the $165,000 appropriated by Congress for the Barrancas $14,091.84.[89]

The $58,225.40 called for in October 1841 to complete the project, in Chase's opinion, was not exorbitant. "Though not absolutely necessary to the preservation of the work, yet as its completion will save expense," it was hoped that the necessary appropriation would be forthcoming.

Very small expense would be incurred in putting on sod and clay on the slopes of the ramps and rampart. The "top slope of the counterscarp and breast-height wall would be covered with shingles, the exterior slope of the parapet would be faced with brick laid flatwise, and the superior slope would be sown in Bermuda.

He did not propose to incur any expense for lead or asphalt for roofs of arches. These roofs would be plastered with cement, and to "secure an easy drainage, courses of brick" would be laid 4 inches apart, forming small drains leading into the principal drain. On top of these ribs and gutters, a pavement of brick, laid flat and in cement, would be placed. Any water penetrating this upper brick pavement would fall into small gutters below and flow freely into the main gutters or valley.

As the Redoubt, to be erected on the old hospital site, was intimately connected with the Barrancas project, Chase suggested

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89. Chase to Totten, October 2, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

that, before the latter was closed down, a small sum be appropriated to "make preparations and collect materials for continuation of operations."

Many of the fixtures belonging to Fort Barrancas could be applied to the Redoubt. The Barrancas railway would be extended and directed toward the hospital site at small expense.

Twenty-five thousand dollars would be sufficient to make preparations and collect materials for construction of the Redoubt.[90]

G. Totten's Review Leads to Detailed Instructions on Several Points

1. Waterproofing the Arches

On reviewing Major Chase's annual report and drawing, Colonel Totten had a number of comments. He liked the mode of covering the roof surfaces with courses of brick 4 inches apart, thus forming small drains leading into the principal drain, and on top of these "ribs and gutters, laying in cement, a pavement of brick laid flat." It was not enough, he continued, to protect a sloping surface, because a similar covering must be applied to vertical surfaces of walls bounded by earth-covered casemates.

If there were no further motion in the arches, after striking the centres and finishing the masonry above, the cement covering, if well applied to the roof surface, would prevent leaks. But, unfortunately, the great weight superimposed on the rampart and parapet always "produced a further change of figure in the arch," which caused "cracks in a substance so unyielding as a cement plaster." It was accordingly necessary to cover this plaster with an impervious but yielding material. Lead had been employed at Fort Pickens, but it was very expensive, and liable to decay if in contact with mortar. Asphaltum

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had come into general use, with great success, but it was as expensive as stucco. Whether asphaltum could be applied with a brush in one or two coats, economically, or whether coal tar could be applied in the same manner, with success, were important problems.

Totten presumed that it would suffice to cover all the roofs over the relieving arches with two or three coats of coal tar, but he questioned whether it would be safe to cover in the same manner the casemate, gallery, postern, and magazine arches, etc. Of this, Chase must be the judge, after having first freely applied coal tar over the relieving arches. In either case, the material must be spread on the roof surfaces, upon a carefully prepared cement plaster. On vertical surfaces, it could be applied directly against the brickwork. The brick covering was to be laid upon a coating of asphalt or tar.[91]

2. Compacting the Embankment

Colonel Totten admonished Chase on the necessity of compacting the embanked sand, because the "imperfect manner in which this has been done, has involved very serious consequences in numerous instances." In embanking the glacis, Major Chase was to do it in horizontal layers, so that it would be further impacted by rains and passage of troops across it.

As for the other embankments, Totten desired Chase to consider this rule: all sand, or other earth, to be deposited in horizontal or nearly horizontal layers of a thickness not exceeding six inches each. Every layer to be thoroughly rammed. Sand, as he was aware, could not be pressed into a "coherent mass by any ramming, but it may easily be made entirely unyielding, and solid under pressure, by the use of rammers with a small face--the process being rather packing than ramming." Each layer of six-inch thickness would be carefully packed

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91. Totten to Chase, December 9, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

with such instruments. As it could not be determined from appearance of a mass of sand, whether it had been packed or not, close supervision on the part of the overseers was required to "guard against unfaithfulness on the part of the laborers." Under no circumstances were the layers to be inclined.[92]

3. Chase Replies to Totten

a. As to Covering the Casemate Arches

On February 2, 1843, Major Chase acknowledged that his young assistant, Lt. Jeremiah M. Scarritt, was author of the proposal advanced in his annual report for covering the roof surfaces of the arches.

He was confident of the plan's success in preventing leaks. Several coats of coal tar would be applied on both courses of brick, and "thoroughly" laid over the ribs and gutters.

The covering being applied to the relieving arches would enable them to judge of its success. He would, however, keep in mind Chief Engineer Totten's instructions.[93]

b. As to Compacting the Embankment and Revetting the Counterscarp Slope

Sand for the glacis was being hauled by mules and carts. Chase planned to also transport the sand for the ramparts by cart. The sand was more compacted by traffic of 10 carts and 14 mules than by hours of ramming, he explained. He would, in deference to the Department, have it also rammed.

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92. Ibid.

93. Chase to Totten, January 22 & February 2, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

It would cost as much to haul clay or mud to form the slope on top of the counterscarp as to make one of wood, unless they "placed sod also on the slope." Sod was necessary to keep the sand from being washed away before a stand of Bermuda was established. In addition, the acute angle at the foot of the slope, resting on solid masonry, would deprive the sod, for at least a foot in width, of all "vertenance" by which that portion of the slope will soon be destroyed. A wood revetment would not be costly, except for the shingles which could be fabricated from lumber on hand.[94]

4. Totten Orders the Counterscarp Sodded

After studying Major Chase's letter, Chief Engineer Totten informed him that he wanted the slope at the top of the counterscarp sodded. The sloughing of the sod, constituting the acute angle, could be avoided by setting the slope back 2 feet, and by raising the masonry of the wall no higher than the bottom of the coping. He recommended that the coping be of brick in sections of no more than 18 inches.[95]

H. Chase Has One Short and One Long Term Assistant Engineer

1. Lieutenant Beauregard as Chase's Assistant

Lieutenant Beauregard reported to Major Chase as assistant engineer in December 1939.[96] The construction program at Pensacola currently limited to the Barrancas, Chase detailed his young assistant to duty on the Louisiana coast.

In July 1840, Beauregard was at Grande Isle, where Fort Livingston was under construction. Captain Barnard, who was in charge

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94. Ibid.

95. Totten to Chase, February 21, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

96. Beauregard to Totten, November 20, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

of the Fort Livingston project, in mid-July, told Major Chase that Beauregard was desirous of being near his family in Louisiana and preferred to remain at Grande Isle to returning to Pensacola. Relaying this information to Chief Engineer Totten, Chase announced that he would be glad to accommodate his young lieutenant, but, as operations at Pensacola would be "considerably extended this autumn," it was necessary for him to have an experienced assistant, especially as discharge of his other duties as senior engineer on the Gulf Frontier occasionally required his attention elsewhere. He accordingly believed that Beauregard should remain under his orders.[97]

The Department, Captain Barnard having been assigned to temporary duty in the Detroit area, determined to retain Beauregard at Fort Livingston for the time being with the understanding that he would return to Pensacola on Barnard's arrival back in Louisiana. Ten months later, on May 4, 1841, Chief Engineer Totten, impressed with Beauregard's ability, formally relieved him as Chase's assistant at Pensacola. Beauregard would take charge of repair of Forts Pike and Wood (Macomb), Battery Bienvenue, and Tower Dupré. Until such time as it was in his power to detail an officer from the Corps as Beauregard's replacement, Major Chase was authorized to employ George Chase as assistant engineer at six dollars per day.[98]

2. Lieutenant Scarritt is Sent to the Gulf Frontier

Early in August, 1841, Major Chse learned that either Lt. Paul O. Hébert or Lt. Jeremiah M. Scarritt was to be assigned to Pensacola Bay as assistant engineer. Writing the Department, Chase suggested that as Lieutenant Hébert was a Louisianian, he might find it more agreeable to be posted at Fort Livingston, while he knew Lieutenant Scarritt preferred Pensacola.

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97. Chase to Totten, July 21, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

98. Totten to Chase, May 4, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

With the Department's approval, Chase would have his new assistant survey and map the country between Fort Barrancas and Bayou Grande, preparatory to siting the defense "intended to cover the navy yard." This survey was necessary and perhaps should be done by the Topographical Corps, with instructions to survey all the country between the Barrancas, Bayou Grande, and the Gulf shore, as far west as the mouth of the Perdido.[99]

The Chief Engineer proceeded as requested. Lieutenant Scarritt would be Chase's assistant at Pensacola.

Scarritt, New Hampshire born, was living in Illinois when appointed to the United States Military Academy. He was a cadet from July 1, 1834, to July 1, 1838, when he was graduated and promoted to 2d lieutenant in the 6th Infantry. Having stood number five in his class, Scarritt was assigned to the Corps of Engineers seven days later. His first duty station was St. Louis, where he was assistant engineer in charge of harbor improvements. He was then ordered to Florida as chief engineer in the Second Seminole War. Promoted 1st lieutenant on September 1, 1839, Scarritt was detailed to West Point as Principal Assistant Professor of Engineering, a post he held until August 1841, when he was ordered to the Gulf Frontier.[100]

Scarritt hardly remained at Pensacola long enough to unpack his gear. Having received a plea from Captain Barnard, at Fort Livingston for help, Major Chase ordered Scarritt to Grande Isle. George Chase, in his brother's opinion, pending Scarritt's return from Louisiana, could perform the duties of assistant engineer and clerk for the Pensacola

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99. Chase to Totten, undated, NA, RG 77, Ltrs. Recd., Chief Engineer.

100. Cullum, Biographical Register, Vol. I, p. 550.

defenses, as operations after December 31, 1841, would be confined to Fort Barrancas.[101]

Lieutenant Scarritt returned to Pensacola from Grande Isle in August 1842. George Chase, on Scarritt's arrival, relinquished his position as assistant engineer. Writing Chief Engineer Totten, George Chase thanked him for the "confidence" which had permitted him to perform the dual duties of assistant engineer and clerk for more than a year.

Progress on the three Pensacola forts, then in various stages of construction and repair, had enabled Chase to add to his professional experience and whenever the Nation's economic condition warranted, he trusted to again find employment as an assistant engineer.[102]

3. Scarritt Takes Post at Pensacola and Begins a Survey of the Barrancas

The Department, meanwhile, had approved Major Chase's proposal of the previous year. Scarritt's first task on reporting would be to survey the area between the Barrancas and Bayou Grande. The survey was to extend outward from the old cantonment, three-fourths of a mile from Fort Barrancas; north to the mouth of the branch flowing into Bayou Grande; south to include the shore in front of the Barrancas; and east and west to a distance of one mile, thus including the entire complex.

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101. Chase to Totten, November 12, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer. By assigning Scarritt to temporary duty at Fort Livingston, the government would avoid the contingent expense of $6 a day for a civilian assistant engineer.

102. George Chase to Totten, August 10, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer. In closing, Chase flattered Totten by writing, "May you long remain in the exercise of the high duties of Chief of the most distinguished corps of our Army."

Data secured should be utilized in conjunction with Colonel Kearney's 1824 map, and a new one prepared at a scale of 12 inches to a mile.[103]

Acknowledging the Department's letter, Chase announced that as soon as the weather moderated in late September, Lieutenant Scarritt, assisted by George Chase, would commence the survey. If all went according to schedule, it should be completed and its results in the Department's hands by December 1.[104]

By November 22, Scarritt had completed a map of Hospital Hill and adjacent grounds to a radius of 400 yards, with a contour interval of one foot.

When he transmitted this map to Colonel Totten, Major Chase reported that Scarritt and his party were working on their general survey of the ground between the Barrancas and Bayou Grande.[105]

4. Scarritt Redoes His Large Scale Map

It was late summer of 1843 before Scarritt and his party completed the large scale map of the harbor. Disaster then struck, and the map was accidentally destroyed. To make matters worse, Scarritt had disposed of his field notes, and would be compelled to redo part of the work. As the "sickly season" was at hand, Major Chase, with the

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103. Totten to Chase, July 24 & August 11, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer. Chase had been notified that on Scarritt's arrival, he was to discharge his civilian assistant.

104. Chase to Totten, August 24, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

105. Chase to Totten, November 22, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chief Engineer's permission, would have the new survey delayed until mid-or late-September.[106]

Scarritt resumed his survey in September, but the hot sultry days caused Chase to order it suspended, pending a change in the weather.[107]

Work was resumed in the late autumn, and the completed map forwarded to the Department in May 1844.

I. Building the Assistant Engineer's Quarters

On February 4, 1841, Major Chase informed the Department that unless it was determined to construct barracks at the Barrancas, it would be necessary to erect a small building as quarters for the assistant engineer. As soon as work was accelerated, he would require an assistant stationed at Pensacola. There were at this time no accommodations for Lieutenant Beauregard at or near the Barrancas. It was fortunate, therefore, that he did not require Beauregard's services, because the limited operations in progress could be overseen by him, while George Chase and his men were surveying Foster's Island. Beauregard was absent, aiding Captain Barnard with the Fort Jackson survey.

Within the near future, Major Chase would forward for review and approval plans and estimates for the desired quarters.[108]

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106. Chase to Totten, August 4, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

107. Chase to Totten, September 30, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

108. Chase to Totten, February 4, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chief Engineer Totten was agreeable, and authorized construction of a small frame building to serve as quarters and office for the assistant engineer.[109]

More than a year passed before Chase, in April 1842, mailed to the Department plans, elevations, and sections for the assistant engineer's quarters now being erected. Cost of the building, including a small kitchen, would not exceed $925.

After construction of the defenses was completed, the building, Chase wrote, could accommodate the lieutenant commanding the detachment that would probably garrison Fort Barrancas in time of peace. The troops could be quartered in the counterscarp casemates.[110]

Totten, on approving the plans, admonished Chase to observe the "strictest economy" in construction.[111]

Chase was agreeable. The quarters would be nothing more than a small three-room house and a small building for a kitchen, enclosed by a "plain and cheap but strong fence."

The quarters, by early June, were nearly ready for occupancy.[112] They had been completed by late August, when Lieutenant Scarritt arrived at the Barrancas from Fort Livingston.

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109. Totten to Chase, February 22, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

110. Chase to Totten, April 3, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

111. Totten to Chase, May 20, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

112. Chase to Totten, June 7, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

VI. MAJOR CHASE COMPLETES THE FORT: OCTOBER 1842-SEPTEMBER 1847

A. Secretary of War Calls for a Strict Accounting

1. His September 6 Letter Asks Some Hard Questions

In September 1841, the Department called for a report from its superintending engineers, touching on unnecessary or extravagant expenditure of public funds. This request had been triggered by an order from Acting Secretary of War Albert M. Lea. On September 6, the Acting Secretary had complained to Chief Engineer Totten that information received from various sources had led to fears that "no inconsiderable portion of the funds provided by Congress for purposes connected with the National defence" have "been applied to objects, or in modes, not contemplated by law; such as salaries to unnecessary officers or agents, and excessive expenditures on quarters and grounds occupied by officers." As it was imperative that the appropriations be applied for the advancement of the projects intended, the Chief Engineer was to report, as soon as practible, on the following:

a. Whether the plans of some of the works, as well as those under construction, may not be "advantageously reduced?"

b. Whether the style of construction and materials employed may not be changed, without injury to the efficiency of the works?

c. Whether there had been unnecessary expenditures in building and furnishing officers' quarters, laying out gardens, and "other objects designed more for personal gratification than public use?"

d. Whether excessive sums have been paid for sites?

e. Whether exorbitant prices have been, and were being, paid for materials?

f. What was the number, grade, and pay of assistant engineers, agents, clerks, etc., excluding mechanics and laborers, employed under the Chief Engineer's orders?

As large appropriations had been recently voted by Congress for continuing construction of the coastal fortifications, Acting Secretary Lea noted, it was obligatory for the Department to search out all sources of waste and extravagence, and to "enforce greater vigilance and more strict economy in the due application of the public monies to the important objects for which they have been appropriated."[1]

2. Chase Defends His Position

a. He Criticizes the Unique Role Enjoyed by General Bernard in the Planning

Responding to the Department's circular of September 13, 1841, Major Chase noted that the Gulf Frontier forts, except for Barrancas and Livingston, had progressed to the point where "no alteration by reducing their plans can be effected." He had long been of the opinion that the New Orleans and Mobile Bay defenses were "unnecessarily large and expensive, considering how difficult, nature" has made their approaches.

Perhaps, as senior engineer on the Gulf, he should have gone on record "as to the fitness of those plans for the object to be effected." If it were, he could plead that the "Regulations governing the Board of Engineers, as well as the peculiar composition of the Board, cut" him off from participation in its "counsels and decisions." In this respect, he called Chief Engineer Totten's attention to the report made by Capt. James Gadsden of the Corps in 1817, when the defense system for the Gulf Frontier was projected. The Gadsden report, as Totten knew, had been pigeonholed, while the report and plans of a single member of the Board (General Bernard) were adopted. In addition, the project of Col. William McRee, relative to Hampton Roads, had been rejected for the one prepared by Bernard, which led to McRee's resignation.[2]

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1. Lea to Totten, September 6, 1841, NA, Ltrs. Sent, Military Affairs, Secretary of War.

2. Chase to Totten, September 22, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

b. He Argues Against any Further Reduction in Scale of Fort Barrancas

If, he admitted, that reasons advanced a quarter of a century before were then valid, Chase inquired, are they relevant today? In those 25 years, the Nation had grown immeasurably stronger in all elements of defense--the population had doubled, communications had improved, there had been an increase in use of steam, defensive weapons had increased in power, and the U.S. Navy had become a force to be reckoned with.

If it were the Department's desire to reduce the scale of the new works, Chase pointed out, the primary role of the Barrancas was to guard the land approach to the navy yard. It had already been, he observed, "reduced in size when compared with works already constructed at similarly situated sites." Although money had been saved, "the skillful disposition of its parts will not only secure Fort Barrancas from immediate assault, but enable its garrison to hold out against a 10 days' siege, beyond which . . . no Nation's army in the world can hold possession of a single point."

The project for Fort Livingston had recently been revised, resulting in a considerable reduction in its perimeter.

Consequently, these two projects had been designed with reference to a reduction of the overall cost of the Third System program.

Major Chase next analyzed the situation of the defenses guarding the approaches to New Orleans and Mobile Bay. Mistakes had been made as to the scale of Forts Jackson, Wood (Macomb), Pike, and Morgan, he acknowledged, but the projects had either been completed or were too far along to "admit of important alteration."

At Pensacola Bay, Forts Pickens and McRee presented a strong channel defense, and in conjunction with the Barrancas provided that harbor with a defense system that was, perhaps, second to none in

the United States. The land defenses, when completed, would be of sufficient strength to meet "any possible demonstration against them, supposing our Naval forces on the Gulf of Mexico were composed" of steampowered warships.[3]

c. He Protests that His Operations have been Conducted in an Economical and Prudent Manner

The style of construction of Forts Barrancas and Livingston was simple, without any expensive ornamentation, while the materials employed could not have been purchased for less, as bricks were the only building materials the region afforded.

No public quarters for officers had been erected at the Barrancas, because they could be rented. It had been necessary, however, to build quarters at Fort Livingston for accommodation of the engineer officers. These had been "plain buildings erected at a small cost."

He knew of no instances, during his 23 years on the Gulf Frontier, when "Green Houses, gardens, and other objects designed for personal gratification," rather than for public use, had been sanctioned by himself or any other engineer officer.

Only two sites for defenses had been purchased on the Gulf. Five thousand dollars had been paid for the site of Fort Pickens and $10,000 for that of the Barrancas. Neither sum had been deemed exorbitant by the War Department.

He had never paid excessive prices for materials. The brick for the Pensacola forts, "80 cubic inches of solidity, had cost $12 per thousand delivered" at the forts' wharves. This was the same price paid by the Navy.

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3. Ibid.

Currently, there were employed on his staff at the Barrancas: one civilian assistant engineer, who doubled as clerk. His salary was $7 per day, of which $1 was allowed for his extra duties as clerk. One superintendent at $4 per diem, one mastermason at the same rate, and one overseer at $2 per day were also on his staff. These individuals were zealous and afforded "full equivalents for the wages paid." The number of supervisory personnel and their wages could not be reduced.

It seemed to Chase that this inquiry must have been inspired by some person or persons. He, therefore, asked to be informed if, from the various sources alluded to, particular officers had been cited "as having abused their trust by willful or foolish misapplication of the public money; and if so, if I am one of the officers thus indicated." If he were, he desired to know the informant.[4]

Chase's reply to the September 13 circular was acknowledged and filed, along with those received from his fellow superintending engineers. If needed, they could be used to document the Department's requests to Congress for money to continue funding construction of the Third System forts.

B. Funding the Project: January 1843-March 1844

1. 3d Session of the 27th Congress Appropriates $55,000 to Complete the Project

On January 22, 1843, from New Orleans, where he had stopped en route back to Pensacola from an inspection of Fort Jackson, Chase wrote the Department. His January 15 absence from his duty station had precluded preparation and transmission of his monthly estimate

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4. Ibid.

for February. It would be the same as for January--$2,000--and should be remitted by the 15th.[5]

Concurrent with remittance of this sum from the Barrancas account, Chief Engineer Totten advised Chase that on supposition that no new appropriation would be made for projects under his supervision by the 27th Congress, during its current session, the following sums would be available for expenditure during the six months ending March 31, 1844: Forts Barrancas and Pickens, $250 each per month. The sum allotted for the latter, however, could not be expended except for projects which could not be postponed.[6]

On March 10, 1843, Colonel Totten had good news for Major Chase. The 27th Congress, before passing into history, had enacted and President Tyler had signed a Fortifications Bill, appropriating $25,000 for construction at Fort Barrancas in the year ending June 30, and another $30,000 for Fiscal Year 1844. The $55,000 appropriated was $3,225 less than the sum asked for to complete the project. Chase was to forward: (a) a work program for expenditure of the appropriation; and (b) a statement showing a breakdown of the monthly rate of expenditures.[7]

2. Chase Programs the Expenditure of the Appropriation

Chase, on receipt of this information, asked the Department to forward, to meet outstanding liabilities, the balance of the old appropriation.[8]

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5. Chase to Totten, January 22, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

6. Totten to Chase, February 6, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

7. Totten to Chase, March 10, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

8. Chase to Totten, March 26, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

The $55,000 appropriated by Congress to complete Fort Barrancas, he reported, would be budgeted as follows:

Item No. 1 to include debts due or falling due by March 31, 1843.

Item No. 2, Masonry

Masonry of scarp wall and its stone cordon.

Masonry of arches, i.e., ribs & gutters, and top of paved covering.

Masonry of breast-height walls.

Masonry of sally port and guardroom.

Masonry of foundations of traverse circles in counterscarp casemates and in barbette tier.

Masonry of bridge piers.

Masonry of casemates of counterscarp sally port passage, and exterior slopes of parapet.

Masonry of 4 stones in embrasures of counterscarp casemates.

Masonry of loopholes of scarp wall.

Masonry of pointing up joints injured by frost.

Masonry of plastering Reduit in water battery.

Masonry of traverse stones in casemates and barbette tier.

Masonry of 16 stones for end of wall.

Masonry of drilling holes in embrasure stones.

Item No. 3, Embankment

Completion of glacis.

Ramparts & interior steps.

Levelling ditch & adjusting slopes of bluff in front of fort.

Forming slope with sod on top of counterscarp.

Forming slopes at end of glacis.

Covering glacis with marsh earth.

Cultivating grass on superior slope of rampart.

Item No. 4, Carpentry

Outfitting 6 magazines with floors, doors, ceilings, shutters for ventilating, and fastenings.

Construction of drawbridge and bridge, of main gates, postern gate, and two gates for subterraneous passage to counterscarp, flagstaff, framing and shingling slope to breast-height wall, scaffolding for scarp wall, and kyanizing.

Item No. 5, Sundry Work

Copper gratings for magazines and casemate ventilators, iron traverse rails, coal tar for tops of arches, and perhaps for use of asphalt for same.

Item No. 6, Contingencies and Service

Pay of clerk and overseers, and small incidental expenses. Chase proposed to accomplish this work by employing 10 masons, 48 laborers, 3 carpenters, 15 horses and mules, and 12 carts. Carts would be used exclusively for forming the ramparts. He would employ rammers to insure that each layer of sand was thoroughly compacted.

Priority would be given to raising the scarp wall to its intended height, completing the casemate roofs, and then gradually ramming the parapets, so as to afford time for them to be exposed to rains, which would help settle the mass.

He needed 200 working days to complete the masonry. All other items, except No. 3, would be finished within this time frame.[9]

A breakdown of costs among the six enumerated categories disclosed:

Item No. 1--Debts now due or falling due March 31, 1843: $16,142.92

9. Chase to Totten, March 26, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

Item No. 2--Masonry

1,280,200	bricks at $10 per 1,000	$12,202.00
750	barrels of lime at $1.75 per barrel	1,312.50
16	stones at $5 each	80.00
600	barrels of cement at $2.50 per barrel	1,500.00
200	days' labor mastermason at $3 per day	600.00
2,000	days' labor masons at $2.50 per day	5,000.00
5,000	days' labor aiding masons, making mortar, receiving and transporting bricks, etc., at $1.25 per day	6,250.00
Contingencies		1,696.08
	TOTAL	$29,240.58

From which deduct materials on hand:

200,000	bricks at $10 per 1,000	$ 2,000.00
250	barrels of lime	300.00
250	barrels of cement	625.00
	TOTAL	$26,115.58

Item No. 3--Embankment & Excavation

400	days' work of cart drivers hauling sand for glacis at $1.75 per day	$ 500.00
400	days' work horses and mules carting sand for glacis at $.50 per day	250.00
600	days' of levellers, wheelers & rammers forming slopes at $1.25 per day	750.00
1,800	days' of cart drivers hauling sand for ramparts at $1.25 per day	2,250.00
1,800	days' of horses and mules hauling sand for ramparts at $.50 per day	900.00
2,700	days' levellers, rammers & slope makers, and wheelers at $1.25 per day	3,375.00
600	days' cart drivers hauling marsh earth for glacis at $1.25 per day	750.00
600	days' horses and mules hauling marsh earth for glacis at $.50 per day	300.00
400	days' levellers & rammers forming slopes on top of counterscarp & around glacis at $1.25 per day	500.00
10	days' levelling & cleaning up ditch at $1.25 per day	12.50
260	days' cart drivers hauling earth to cover ditch at $1.25 per day	325.05
20	days' forming slopes of bluff at $1.25 per day	25.00
20	days' cultivating grass on slope at $1.25 per day	25.00
100	days' sundry small jobs at $1.25 per diem	125.00
	TOTAL	$ 9,587.25

Item No. 4--Carpentry and Kyanizing

	Fitting up 6 magazines, complete at $1.50 each	$ 6.00
	Constructing drawbridge, bridge, and main gate	350.00
	3 small gates	30.00

Flagstaff	50.00
Scaffolding for scarpwall	100.00
Shingling slopes of breast-height walls	250.00
Kyanizing	300.00
TOTAL	$ 1,950.00

Item No. 5--Sundry Work

19 sets of copper gratings for ventilating casemates and magazines at $20 each	$ 380.00
41 sets of iron traverse rails at $20	820.00
100 barrels coal tar at $3.50	350.00
200 days' sundry labor at $1.25 per day	350.00
TOTAL	$ 1,900.00

Item No. 6--Contingency & Service Expenses

1 clerk 244 days' work at $4	$ 976.00
1 overseer 244 days' at $2	488.00
1 overseer 200 days' at $2	400.00
Sundry expenses, postage, stationery, etc.	410.00
TOTAL	$ 2,274.00

RECAPITULATION

Item 1--Amount due for March	$16,142.92
Item 2--Masonry	26,115.58
Item 3--Embankment & Excavation	9,587.50
Item 4--Carpentry & Kyanizing	1,980.00
Item 5--Sundry Work	1,900.00
Item 6--Contingencies & Service	2,274.00
TOTAL	$57,995.00[10]

Chief Engineer Totten approved Chase's program subject to whatever constraints the Treasury Department might impose.

3. Condition of the Treasury Compels a Reduction in Expenditures

Within four months, such a situation occurred. On July 19, 1843, Colonel Totten notified his project engineers that Secretary of the Treasury John C. Spencer had determined that "a considerable reduction of expenditures below the estimates" of the Department for the quarter ending September 30 was necessary. To tide the Treasury through this financial crisis, Totten slashed projected expenditures for

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10. Ibid.

Forts Barrancas and Pickens for the subject quarter from $27,000 to $19,000.[11]

Chase, in the meantime, had informed the Department that he was submitting no estimate for August, and would not require any funds until September 1. His September estimate would embrace needed August disbursements.[12]

Chief Engineer Totten, at the beginning of 1844, notified Chase that he was authorized to draw from the Treasury during the next six months for the Barrancas: $2,000 in January; $1,500 in both February and March; $1,000 in April; and $500 each in May and June.

Chase was cautioned that this rate of expenditure could be reduced at the request of the Secretary of the Treasury if the necessity arose. He would, therefore, keep his "expenditures, contracts & engagements so in hand as to be able to curtail at any moment to the extent required by the condition of the Treasury."[13]

Meanwhile, Chase's attention had been called by the Department to the Secretary of War's order of October 13, 1841, requiring that a description of funds on hand at the end of a month be enumerated, along with the depository.[14]

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11. Totten to Chase, July 19, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

12. Chase to Totten, July 24, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

13. Totten to Chase, January 4, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

14. Woodbury to Chase, December 13, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer. Lt. Daniel R. Woodbury was assistant to the Chief Engineer in 1842-44.

Chase assured Totten that he would govern his expenditures accordingly and abide by the Secretary of War's letter of October 13, 1841.[15] Having only limited obligations to meet in the first two months of 1844, Chase deferred calling for funds until February 19. When he did, he asked that $5,000 for the period January 1-March 31 be remitted to him by March 15.[16]

4. Government Establishes a Fiscal Year Beginning July 1

The United States having determined to fund its operations for a fiscal year beginning July 1 and ending June 30, the Department, on May 31, 1843, notified its superintending engineers that certain reports heretofore due on September 30 would be made on June 30. Thus, the fiscal year for governmental operations to begin July 1 was established.

The fiscal year, as designated in 1843, was the practice until Fiscal Year 1976, when the fiscal year for governmental functions again became October 1 to September 30.[17]

C. Fort Barrancas Takes Shape

1. Colonel Totten's May, 1843, Visit to the Site

Chief Engineer Totten was at Pensacola in May, 1843, and inspected the defenses. This was his first visit since May 1841. Arriving back in Washington in early June, he wrote Major Chase about what he had observed at Fort Barrancas. His comments were few. It appeared to him that "every operation" was "advancing . . . in the most proper and judicious manner." The brickwork was of excellent quality, and the "arrangements you have applied to the roofs are likely to afford

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15. Chase to Totten, undated, NA, RG 77, Ltrs. Recd., Chief Engineer.

16. Chase to Totten, February 19, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

17. Woodbury to Chase, May 31, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

protection against leaks--and the embankment will prove . . . to be well consolidated." He reiterated his admonition that the method of ramming sand should "rather be a process of tamping." The tamper that best served the purpose had a conical head.[18]

In excavating the area forward of the glacis, Totten directed that the workmen must not go below the "natural surface" more than a few feet; the new surface must be smooth and not far from level; the outer limits of the excavation must be straight and parallel with the crest of the glacis; and it must be formed into a regular reverse slope of 3 to 1.[19]

2. Work Accomplished: October 1, 1842-September 30, 1843

a. Completing the Glacis

By the time Chase received Colonel Totten's letter, the glacis of the upper work was nearly completed. As soon as formed, the surfaces were covered with manure "in which Bermuda would be cultivated."[20]

b. Chase Cites Accomplishments

When he filed his annual report for the year ending September 30, 1843, Major Chase noted that progress had been steady but unspectacular. The glacis had been completed, except for some adjustments to the slopes, and the planting and cultivating of grass. The counterscarp and its crowning slope was finished. The floors of the underlying galleries and gun casemates had not been paved with brick, nor the traverse circles and rails laid.

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18. Totten to Chase, June 6, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

19. Ibid.

20. Chase to Totten, June 22, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

The four small magazines under the glacis were nearly outfitted, while the scarp required for completion about 1,600 cubic yards of masonry. The relieving arches had been finished and covered with earth to a height of 5.9 feet and the two magazines connected therewith nearly completed, as was the woodwork of the bridges. All subterraneous communications were finished.[21]

c. Chase Lists Items Still to be Done

Completion of the project would involved: the scarp and its cordon; the earthen parapets, banquettes, and slopes; the bridge and main gate; fitting up of magazines; construction of breast-height wall and its top slope of wood; traverse circles of iron and masonry in counterscarp casemates; traverse circles of iron and masonry and pintle-blocks on terreplein; planting of grass on earthen surfaces; exchange of masonry for wood for slope of breast-height wall in water battery; paving of sally port, gallery, and casemates of counterscarp; and cleaning and putting in "good order all things pertaining to the Fort."

Chase was satisfied that sufficient money was in hand to complete the project, and there was no necessity to ask Congress for another appropriation.

The masonry would have been finished, Chase explained, if it had not been necessary to transfer some of the masons to Fort McRee. This delay had an advantage, as it permitted "construction of the ramparts to a certain extent before the scarp is carried higher." The arches were now well loaded with earth, and as yet exhibited no

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21. Public Documents, Printed by Order of the Senate of the United States, 1st Session. 28th Congress (Washington 1844), Serial 431, Vol. I, p. 410; Chase to Totten, September 30, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

tendency to settle unequally into the scarp. No leaks had appeared in the arches, and much "reliance is placed on Lt. Scarritt's method of constructing the Roofs."[22]

3. Projects Undertaken by the Artisans and Laborers

During the 12 months just ended, the masons had constructed the relieving arches of the southwest angle, and front walls of subterraneous passages, small drain arches in valleys of counterscarp, supporting walls of sally port entrance through counterscarp, walls and turning arch of postern, relieving arches along southeast and northwest fronts and north salient, arches of sally port, supporting walls for floors of magazine, scarp wall all around, piers of drawbridge, and walls of magazines; plastered and cement washed roofs of casemates in counterscarp; paved floor of gallery leading to water battery; roofed relieving and sally port arches; cut and laid stones in sally port; finished passage through counterscarp at gateway; pointed counterscarp; finished embrasures of counterscarp; and cut brick for loopholes.

Carpenters had erected centres for arches and loopholes, and a shed to shelter the workmen during rain storms; fashioned mast and repaired boat; repaired carts, railway cars, and tools; shaped flagstaff; prepared timbers for magazines; fenced foot of glacis; repaired assistant engineer's quarters; constructed drawbridge; and extended the wharf.

A blacksmith had shoed the horses and mules; repaired stonecutters' and masons' tools and machinery; made gudgeons for gates of subterraneous galleries; fashioned band for boat; and repaired boat, carts, wheelbarrows and railway cars.

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22. Chase to Totten, September 30, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer. Lt. Scarritt had been advised by the Department on July 29 that the piers of the scarp gallery of Fort Barrancas could be bonded with the scarp wall, "when or after they rise above the roof." Woodbury to Scarritt July 29, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

A caulker had caulked the boat.

Laborers, besides assisting the artisans, had embanked the glacis; received and transported materials; applied coal tar to roofs of casemates of counterscarp; manned the boat; cut roads and trails for Scarritt's survey; broke brick for concrete; hewed timbers for gateway bridge gates and magazines; rammed earth over relieving arches; painted the boat; cut sod and sodded interior slopes of glacis; painted roofs of relieving arches, face of counterscarp, scarp, gorge, and Reduit walls with coal tar; covered glacis with bushes; procured posts and pickets for fence at foot of glacis; kyanized lumber; made charcoal; embanked ramparts; and planted grass on glacis and ramparts.[23]

Either Chase failed to submit an annual drawing, or if he did, it was not filed by the Department. Our assumption is that one was not prepared, because there is no reference to such a document in the correspondence.

4. Colonel Totten Suggests the United States Subsidize Construction of Railroads

Chief Engineer Totten at this time informed Congress that the fortifications guarding Pensacola Harbor constituted "a formidable and efficient array of strength." Within two or three years, he forecast, the "entire system of local defence will be complete," except such "auxillary means as may, without danger, be left to be executed when about to be needed."

But, he cautioned, beyond the fortifications, there were other aspects of providing for security of "this great harbor." The most vital of these was related "to a safe and easy communication with sources

23. Fort Barrancas, Monthly Reports, October 1842-September 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

of supply and relief." Pensacola's isolation from any populous or productive region was a particular disadvantage, a factor of which the military had been aware of for years.

At one time, private enterprise had seemed ready to "convert this mere harbor of refuge into one of the great entrepots of Western commerce, by opening a direct and speedy communication with the interior," but this project had failed to elicit necessary backing. Totten accordingly raised the subject of the federal government assuming an active role by financing construction of railroads to link the city with the hinterland.[24]

Nothing came of Totten's proposal for federal assistance to foster construction of railroads to promote Pensacola as a military base. Another 15 years were to slip by before private enterprise constructed railroads linking Pensacola with Mobile and Montgomery.

D. Chase and His "Angillous Mastic"

1. He Experiments with Angillaceous Mastic

Major Chase was an innovator. On his own initiative, he undertook and carried out experiments to develop a substitute for the expensive imported mastic waterproofing. If he were successful, it would result in "a great saving of expense with perhaps superior advantages." The product developed by Chase could be applied "to terraces and all sorts of air surfaces; to underground surfaces; to joints of wood, metals and stone; and, in short, to every purpose to which any other mastic has been applied."

His product, he informed Chief Engineer Totten in September 1843, had the capacity to resist heat at 112°, the air temperature being 88°. At 112°, his composition, which he called "angillous mastic," had been plunged into a well, the water having a

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24. Executive Documents, Serial 431, p. 109.

temperature of 55° without exhibiting any cracks. It was then spread on a board with a trowel, and maintained "constantly a complete adhesion."

Its tenacity would be tested, but was greater than that of any asphaltic mastic he had seen. At 70°, it took repeated blows from a hammer to break it; at lower temperatures, it gave off sparks when struck by the hammer. It was impervious to water. What effect cold would have on it was unknown.

His "angillous mastic" consisted of an "imperfect red sandstone" found locally, containing a high degree of oxide of iron; a pure clay; and a proportion of mineral tar, said to be obtained from Val-du-Travers stone or some other asphaltic stone.

Chase had conducted four tests of his "angillous mastic."

In the first test, he had the red sandstone at a white heat, pulverized and reduced to a powder, fired, then added 33 percent of mineral tar, and boiled for 20 minutes. The composition had then been spread on a board. After several hours of 112° solar heat, the composition softened slightly. At 65°, it became very hard, "but quite brittle as asphaltam." Although the powdered sandstone had a rust color, after heating, it took on "a beautiful dark purple," evidence of a chemical change.

For the second experiment, equal portions of pulverized sandstone and pure clay were mixed in a 42-percent mass of cold mineral tar and boiled. The composition was then spread on a board and subjected to heat varying from 50° to 112°, without "sensible change by expansion or contraction." It softened after several hours of exposure to the sun's heat, and then yeielded slightly to a foot step. But, when allowed to cool, it hardened and could be subjected to repeated hammer blows before fracturing.

Chase, in the third experiment, employed a mixture of 1 part pulverized sandstone, 1 part pulverized pure clay, and 1½ parts

mineral tar. After 20 minutes boiling, the mass caught fire and burned for 3 minutes. The composition was then spread on a board, and, while cooling, was sprinkled with oak ashes. When cooled, it became very hard, and its color changed from yellow to dark brown. It was extremely hard, yielded slightly to the sun's heat, and was more brittle than composition No. 1.

The fourth experiment involved a mixture of 1 part red sandstone, 1½ parts pure clay, and 1½ parts mineral tar, mixed and boiled as before and spread on masonry in contact with wood. With 5½ percent less tar, this composition was more ductile than No. 2, which Chase assumed was because it contained a greater proportion of clay. At 112°, it yielded about 1/10 of an inch to a foot's tread.

Chase, satisfied with the results, suggested that, if the Department employed his "angillous mastic," certain procedures be adhered to: (a) before spreading, the surface be "strewn" with powdered sandstone; (b) the powdered sandstone and clay be passed through a sieve or screen of 1/30-inch mesh; and (c) the powders be "faithfully mixed," so that the lighter colored clay and the darker sandstone dust assumed one hue.

As the mineral tar, in its extraction, had already sustained a great heat, the object of heating the composition was to facilitate the amalgamation of all the materials. He accordingly limited the boiling to 20 minutes.

If composition No. 4 proved too ductilable for air surfaces exposed to the temperature of the sub-tropics, a greater hardness could be imparted by adding more powdered sandstone.

Chase claimed for himself discovery of "new local ingredients for a mastic," superior "not only to other local ingredients substitutively used but to the asphaltic rock said to be found" only in France's Jura Mountains. He based this on these factors, because: (a) of its cheapness, and facility of obtaining and preparing it; (b) experiments had given a composition equal to that in which the asphaltic

stone of Val-du-Travers, etc., is contained, and superior to any local materials heretofore employed; (c) the iron oxide found in the red sandstone contributed to the hardness of the composition; and (d) with the use of mastic zooming, it was desirable that the ingredients be secured locally.[25]

2. Totten Voices Cautious Optimism

Colonel Totten read with interest Chase's letters describing his experiments with angillous mastic, and concluded they may lead to important results. But, he cautioned, it would be imprudent to apply "any new composition to the works, except as experiments, in a small way, and in positions where they can be constantly examined and easily replaced if defective." Time, weather, and vicissitudes of the seasons were the only reliable tests.

All mastics or cements, he continued, in which coal or vegetable tars were a base were "reportedly unworthy of trust," decomposing within a few years. The latter were soluable in water, and the former were believed to be. Therefore, all experiments should exclude them. The indispensable conditions were: (a) resistance without cracking in winter and opposition to "the tread in summer which may be much helped by incorporation in the surface of a hard and wetish substance," such as white sand; (b) resistance to decomposition when constantly exposed to inclement weather; and (c) economy.

The change in color of the sandstone, Totten attributed to the passage of iron from "a state of peroxide to a lower state of oxygenation." To avoid this reaction, it might be wise to substitute a mixture of sand and clay with the asphalt, or even try clay alone.

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25. Chase to Totten, September 11 & 16, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

Koyles cement, he explained, was made of "highly ignited clay and resin" and possessed many good properties but lacked durability.[26]

3. Chase Covers the Floor of the Entrance Casemate

On July 22, 1844, Chase, in accordance with Totten's suggestion, informed the Department that he would cover the floor of the Barrancas entrance casemate with his "angillous mastic." He estimated it would cost 54 cents to cover a square yard to a depth of 1/2-inch. He would also experiment with common tar and pitch to see if they could be substituted for the more expensive mineral tar in preparation of "angillous mastic."[27]

Totten cautioned Chase against use of "common tar and pitch" or resin, as they had "proved ever so many times" that they would not "resist the decomposing effects of weather."[28]

Chase, by early July, had nearly covered the floor of the entrance casemate and passageway with "angillous mastic." He had employed two formulas. The section shaded from the sun by the arch had been covered with a formula consisting of 6.50 gallons powdered clay, 6.50 gallons powder sandstone, and 6.50 gallons mineral tar measured in lumps; and the section exposed to the sun's heat had been covered with a mixture of 9.50 gallons powdered clay, 9.50 gallons powder sandstone, and 6.50 gallons mineral tar.

Both compositions had been applied with ease. The latter, however, had to be heated longer, and required "more manipulation in laying down." It had been spread during the heat of the day, and had

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26. Totten to Chase, November 11, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

27. Chase to Totten, June 22, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

28. Totten to Chase, July 13, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

gradually hardened. The same composition had been used on a gutter's side, exposed to the sun, without yielding, while the first composition in a similar position had softened.

Chase favored the second composition because it was cheaper, having a larger proportion of low-cost clay and sandstone. He believed it contained the maximum amount of these which could be utilized, as a larger quantity would be difficult to heat and handle.

He pronounced "angillous mastic" equal to or superior to any know asphaltic mastic.[29]

Chase, at this time, proposed coating the walls of Fort Barrancas with coal tar. It would saturate the bricks and prevent dampness from penetrating them. The scarp wall, as yet, had not been covered. As the material was on hand, Chase recommended its application. If approved, this would be another innovation introduced into the construction of the fort.[30]

Totten rejected this proposal until such time as he had an opportunity to evaluate the use of "angillous mastic" on the floor of the entrance casemate.

4. Chase Seeks to Patent His "Angillous Mastic"

Chase, satisfied of its success, applied for a patent for his "angillous mastic." Specimens, in accordance with the law, were forwarded to the Commissioner of Patents.[31]

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29. Chase to Totten, July 10, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

30. Chase to Totten, June 30, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

31. Chase to Totten, August 9, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

He encountered difficulties. The Commissioner of Patents questioned the uniqueness of his "angillous mastic." Writing Chase, the Commissioner pointed out that "a variety of earths, among them sandstone, have before been mixed with mineral tar to form a cement wich seems to conflict with your claims." He cited Newton's London Journal of Arts and Sciences, Vol. 6, page 25 and Vol. 21, page 405, as containing descriptions of cements similar to Chase's.

Chase accordingly asked Chief Engineer Totten to transmit to the Commissioner a copy of the article on "Bitumen," in the Papers on Practical Engineering. This would document his contention that of "the variety of each mineral mixed with mineral or other tars there is not one similar in mixture with mine and producing a mastic equal if not superior to the . . . Val-du-Travers Stone."[32]

E. Fort Barrancas is Completed Except for Its Pintles, etc.

1. Nelson & Brown Seek to Influence Chase to Employ Their Product

In February 1844, Messrs. Nelson & Brown of New York City wrote Major Chase, inviting him to purchase Rosendale cement from them. Enclosed were letters from Chief Engineer Totten and Lt. Col. René De Russy, project engineer at Fort Monroe, recommending their product and attesting to their high character.

Chase accordingly wrote Nelson & Brown, stating that he would avail himself of the opportunity to make a purchase from them the next time he ordered cement for the Pensacola forts. He also relayed this information to the Department.[33]

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32. Chase to Totten, December 20, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

33. Chase to Totten, March 7, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

On April 17, Colonel Totten cautioned that his recommendation in favor of Nelson & Brown had been taken out of context. He believed the firm was "highly respectable, and to be relied upon for honor and fidelity to engagements," but he did not mean to indicate that Chase was to give them or their cement preference.[34]

Chase assured Colonel Totten that he understood the recommendations to mean no more than that Nelson & Brown were honorable men, and could be relied upon to execute a contract, leaving it up to him "to try or not try their cement." His practice was to buy the best materials, and he was always willing to try any that were offered. He had never made any "agreement that will trammel me on that score."[35]

2. Chase Introduces Stakes to Hold the Sand and Earth Slopes in Position Until a Stand of Bermuda is Obtained

Major Chase perfected "a good and cheap" method of forming slopes for sand parapets. After shaping the mass of sand as compactly, by ramming, as possible, and "nicely adjusting" the exterior slope, 9-inch shingles were driven into the slope vertically 6 inches apart, and in parallel rows. The space between was filled with manure, in which Bermuda was planted. Soon the grass spread, "forming with its entwining roots an excellent covering to the slope."

The object of the shingles was to prevent the exterior slope from being eroded by rain, or "blown out of shape by the winds." When no longer needed, the shingles, which protruded 3 inches above ground, were driven out of sight into the sand.[36]

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34. Totten to Chase, April 17, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

35. Chase to Totten, April 26, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

36. Chase to Totten, April 12, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chief Engineer Totten found this "ingenious method of securing a turf upon sand slopes" well adapted to the purpose, and gave it his sanction.[37]

On May 29, 1844, Chase informed the Department that we are nearly finished with the project. After the pintle-blocks had been set, they would "adjust and plant with grass the interior terreplein and slopes, fortifying the latter with shingles similar to the exterior slope of the parapet." There, the shingles had proved themselves. There had been no erosion and Bermuda grew vigorously.[38]

Running out of shingles, Chase substituted lime barrel staves, cut to the proper length, to form part of the interior parapet slope.[39]

A drought which seared the area from April through August 1845 killed all the grasses except the Bermuda. It, Chase reported, barely preserved vitality. Even so, "mowing was out of the question." Following the September rains, the Bermuda sprang "up beautifully in all directions."

Fortunately, Major Chase reported, our sand embankments received "kindly this grass for it will grow thereon when no other grass will." Its "interlocking roots" quickly bound the soil and prevented erosion.[40]

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37. Totten to Chase, April 18, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

38. Chase to Totten, May 29, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

39. Chase to Totten, June 12, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

40. Chase to Totten, September 25, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

3. Chase Reports and Explains an Arrearage

On June 12, 1844, Chase advised the Department that a few more days will see the project completed. Although he had striven to "eke out the appropriation so as to cover it," he had been unsuccessful. Expenditures would exceed appropriations by about $4,500. He had procured these added items without "obligation on the part of the Engineer Dept," the "furnishers" chancing that the arrearage may be made good from the "Incidental Expense" account, or from the Fortification appropriation for 1845. It was, Chase wrote, out of the question to suspend operations in "the midst of half-formed parapets, terrepleins, etc," without doing great injury to the fort.

When work was closed down, it would be necessary to employ one man to weed the earthen slopes.[41]

4. Chase Claims Four Firsts for Fort Barrancas

Chase, the project nearly completed, boasted of four innovations introduced into the construction of Fort Barrancas. They were: (a) relieving arches of peculiar construction by which large masses of earth were employed as supports. Chief Engineer Totten was credited for devising this feature. (b) The ribs and gutters for protecting casemate roofs from leakage "ingeniously devised by Lt. Scarritt." These would materially reduce future costs for asphalting. (c) The mode of forming sand slopes with shingles which he had implemented. (d) The substitution of brick masonry for stonework wherever possible. The coping, stairs, and cordon were of brick, except the granite salient angles.[42]

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41. Chase to Totten, June 12, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

42. Ibid.; Chase to Totten, June 30, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

5. Work Accomplished: October 1, 1843-July 31, 1844

Chase made his annual report for Fiscal Year 1844, as directed, on June 30. The project was nearly completed, he reiterated, lacking only a few days' work in adjusting the surface of the parade and paving the main gate entrance and covering it with "angillous mastic."

"Little or no subsidence, or at least no unequal subsidence" had been exhibited. The masonry was excellent; the materials of good quality; and the workmanship faithfully performed.

A small surplus of lime, Rosendale cement, etc., had been transferred to Forts Pickens and McRee. There was also some lumber on hand, as well as tools, carts, and horses and mules, which would be disposed of as directed by the Chief Engineer. Some of these items, as well as the railway, would probably be used in construction of the Redoubt. A lime shed, blacksmith shop, kyanizing tank, and quarters for the mastermason had been built with Fort Barrancas funds. But, as they were of a temporary nature, their cost had been minor. The wharf was now nearly useless because of the accumulation of sand around it. To be of further use, it would have to be extended into deeper water.[43]

Three weeks before, Major Chase had advised the Department that he would soon put the 12 horses and mules belonging to Fort Barrancas out to graze on Santa Rosa Island until such time as he received directions for their disposal. Some, if not all, would be required at the Barrancas, as they were good animals. With pastureage available, all that would be required for their keep was to gather them and feed them a little corn each evening. The monthly cost of keeping them on Santa Rosa Island would not exceed $22. While there, they could

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43. Chase to Totten, June 30, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer; Public Documents, Printed by Order of the Senate of the United States, 2d Session of the 29th Congress (Washington 1845), Serial 449, Vol. 1, p. 182.

occasionally be worked by hauling materials from the wharf to Fort Pickens.[44]

In the 10 months ending July 31, 1844, the masons had completed the scarp wall of the west and south fronts; built loopholes in scarp wall; erected breast-height walls; constructed cordon of scarp wall; pointed scarp; turned arch of sally port; laid traverse circles; finished pavement of galleries under counterscarp and gun casemates; completed one embrasure left unfinished for communication; placed copper gratings in ventilators; paved guardroom; placed iron supporters for platforms in scarp gallery communications; completed coping of retaining walls of sally port and postern leading to water battery; placed and fitted iron hooks for posterns in counterscarp gallery; plastered with cement top of breast-height wall; drilled holes in traverse stones for traverse rails; cut stones for traverses; adjusted banquettes; and positioned pintle-blocks.

Carpenters, during this period, had repaired boat, railway, tools, and carts; lined magazines; built drawbridge and main and postern gates; shingled top slope of breast-height wall; made and erected flagstaff; laid wooden platforms for counterscarp communication gallery; erected addition to assistant engineer's quarters; removed scaffolding; built balustrade around stair opening in counterscarp gallery; and constructed and hung magazine doors.

The blacksmith had repaired and sharpened tools; fitted bars and rivets to magazine doors; shoed horses and mules; fashioned metal parts for drawbridge; and repaired carts.

Chase's laborers, in addition to assisting the artisans, had embanked and rammed the ramparts, parapets, and glacis; manned the boat; received and hauled materials; repaired fence protecting the glacis;

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44. Chase to Totten, June 10, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

built and removed scaffolding; assisted Lieutenant Scarritt in surveying the area; repaired railway; planted grass on earthen slopes; made charcoal; adjusted slopes of glacis; placed brush on glacis; collected broken brick for aggregate; levelled ditch; drove shingles into slopes; dug foundations for stone traverses and pintle-blocks; policed works; cared for public animals; built fence around the Barrancas defenses; put down mastic; dug well for assistant engineer's quarters; and hauled and spread manure on glacis.[45]

6. Chase Describes What Has Been and What Needs to be Done

On September 30, 1844, Major Chase informed the Department that in the construction of Fort Barrancas, old Fort San Carlos (consisting of a picketed earth redoubt on the crest of the bluff) was "enveloped," and Bateria de San Antonio "improved and repaired." The project had been completed and the fort and water battery exhibited a "good defense sea and landward." The object contemplated in placing fortifications at the Barrancas had been partially accomplished. Construction of the Advanced Redoubt would "increase the means of defense but not complete them." To do so, Chase urged construction of a second redoubt on a hill 800 yards northeast of the Advanced Redoubt. This work would prevent "a descent on the naval arsenal by a coup de main, and will have sufficient strength to resist a regular attack for so long a time as to render it too hazardous for an enemy coming out of ships to make it."

Fort Barrancas, Major Chase continued, was "complete in all its parts, with the exception of fitting the iron pintles and wedges to blocks, which work has been delayed in consequence of not receiving the pintles until very lately." Bermuda had been "successfully cultivated,"

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45. Fort Barrancas, Monthly Reports of Operations, October 1843-August 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

and the slopes of the parapets and terreplein were in excellent condition, although "simply composed of sand." The glacis required more maintenance than the exterior parapet slopes because of lack of manure. Fearful of disturbing the vegetative cover, Chase had not restored the "smoothness" to the surface, where it had been rutted by passage of workmen. Very little labor would be necessary to correct this situation, and it would be accomplished by the barge crew when not otherwise employed.

A portion of the armament had been received, but none of the cannon had been mounted. Although the water battery's eleven 32-pounders had been landed and stored, their chassis and carriages had not arrived, nor had the pintles and wedges for the Fort Barrancas emplacements.

A glacis for the water battery had been finished, along with a fence enclosing the entire fort. The latter was needed to keep "mischievous men and brutes from doing injury to embankments." Two men were constantly engaged in planting grass in the ditch and on the slopes of the bluff and glacis.

Accompanying his report, Chase forwarded an annual drawing, exhibiting condition of the project as of September 30.[46]

F. Funding the Project in Fiscal Year 1845

1. Congress Appropriates $12,500 for the Barrancas

On July 15, 1844, the Department notified Major Chase that President Tyler had signed into law a fortifications bill, appropriating $12,500 for Fort Barrancas. With this sum, Chase was to liquidate

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46. Chase to Totten, October 3, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of the subject map, "Plan and Section of Fort Barrancas" (labeled Drawer 79, Sheet 28), is found in the files of the Florida Unit, Gulf Islands NS.

outstanding obligations, while endeavoring to reserve a sufficient sum to begin construction of the Redoubt.

The glacis of the water battery would be left, "until we can better afford to execute it."[47]

Blanketing of construction funds for Fort Barrancas and the Redoubt had been done at Chase's suggestion. On September 30 of the previous year, he had recommended to the Department that the projected defense at Hospital Hill not be classified as a new project. To justify this action, he argued successfully that it was "intimately connected with Fort Barrancas, quite as much so as the advanced or detached works of any place." If considered in this light, appropriations could be requested for "continuation of dependent operations of the Barrancas, and classed with the old work's estimates." An appropriation would enable preparations to be made and materials collected for commencement of the Redoubt.[48]

2. Chase Explains His Arrearages

Major Chase, when he acknowledge receipt of this information, submitted data documenting the arrearages charged against Fort Barrancas as of June 30, 1844. The deficit was $7,384.40, from which he hoped to deduct $3,200, the estimated value of items on hand that could be credited to construction of the Redoubt. This would leave about $4,100 to be debited against the recent appropriation.

To this arrearage must also be added his estimate for July, $988, making a total of $8,352.05. The July expenditure had been principally applied to "arranging the slopes of the bluff in front of the

47. Totten to Chase, July 15, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

48. Chase to Totten, September 30, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

new work and covering the whole with bushes to prevent the sand's drift."

On policing the area, Chase had thrown up "some portion" of the water battery's glacis. There were some hands currently engaged in this work, arrangements having been made with their owners that no payment would be forthcoming until passage of a future appropriation. If no appropriation were made to cover this undertaking, the slave owners would submit no claims for compensation. This project, which was advantageous to the government, was not embraced in the estimates documenting his arrearages through July 31.

In addition, there were other small items requiring attention--positioning the iron pintles, when received, into the pintle-blocks, and cultivating grass--the cost of which would increase the deficit to $8,500.

This would leave $4,000 of the appropriation applicable to the Redoubt for construction of the railway, and relocating the lime house, kyanizing tank, and blacksmith shop to more convenient locations.[49]

3. Repair and Relocation of Support Facilities Preparatory for Construction of the Redoubt

On August 22, 1844, Chief Engineer Totten wrote Major Chase that he was "busily engaged . . . on the project for the advanced Redoubt." On reviewing Lieutenant Scarritt's topographic map of the area to be occupied by the Redoubt, he had noticed the "trace of a proposed railroad to Hospital Hill." He hoped construction had not been commenced, because the tracks could not be extended to the shore without creating a defiladed area near Fort Barrancas. He urged that the

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49. Chase to Totten, July 29, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

railway be located east of the line of defense. Such a route would enable the Department to dispense with the necessity for a new wharf west of Fort Barrancas.[50]

Major Chase agreed that it would be wiser to repair the wharf and to extend the railway from the landing to the site selected for the Advanced Redoubt, than to erect a new wharf as heretofore proposed. He estimated cost of repairing the wharf and lengthening it about 30 feet at $300. The distance involved in extending the railway would be greater than the route first projected, but the additional cost would be less than called for if a new wharf were built. Moreover, the old wharf site was better sheltered from storms.

Chase urged that, in the interest of economy, the railway be "permanently constructed as it will be convenient for use after the works are completed."

The lime house and kyanizing tank would be positioned near the wharf, so that materials, when received, could be immediately placed under cover. For protection, the sills and stringers would be painted with "angillous mastic," when these structures were relocated.[51]

The Department agreed with Chase's views on repair of the old wharf and location of the railway. Colonel Totten, however, did not consider it necessary to extend the railway beyond the barracks site in a "permanent manner," as its only object was to facilitate transportation of building materials from the wharf for construction of the Redoubt.[52]

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50. Totten to Chase, August 22, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

51. Chase to Totten, September 1, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

52. Totten to Chase, November 22, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

By the end of Fiscal Year 1845, the wharf had been extended and repaired, a lime shed erected, and an old building repaired as a toolhouse and shelter for workmen. The railway had been made permanent to the top of the Barrancas, while the extension to the site of the Advanced Redoubt would be temporary. After the Redoubt was completed, the rails and ties would be taken up and sold.[53]

G. Construction and Maintenance in Fiscal Year 1845

1. Chief Engineer Totten's May 1845 Inspection

In early May 1845, Colonel Totten spent several days in Pensacola. Two years had passed since his last visit to the Gulf Frontier. Before continuing on to New Orleans, he told Major Chase that he was gratified by what he had seen, "and could not take my departure without leaving this brief expression of my opinion."

As Maj. Jacob Brown, the commander of the harbor defenses, had remarked that he would like to drill a company at the Fort Barrancas guns, after they were mounted, this was agreeable.

To facilitate this proposal, Chase would fix the well, drawbridge, rooms in front of the magazine and in the east angle, and seal the cracks in the asphalt. Asphaltic tar would be poured into the voids around the gun pintles.[54]

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53. Chase to Totten, July 3, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer. On September 25, 1845, Chase informed the Department that the railway, embracing the iron rails salvaged from the old road, had cost $6,029.61. The value of the permanent section of the railway, 1,540 feet, was placed at $2,576.40, leaving $3,453.21 as the cost of the temporary portion. When the Advanced Redoubt was finished, the rails from the temporary right-of-way could be salvaged and sold for an estimated $1,200. This would reduce the sum charged against the Advanced Redoubt to $2,253.21. Chase to Totten, September 25, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

54. Totten to Chase, May 5, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

On his return to Washington, Colonel Totten wrote Chase, describing needed maintenance. Items requiring attention were:

a. Grass and Drawbridge--The grass needed constant attention, as did the earthen surfaces. The drawbridge was well hung, and all ironwork except the surfaces acting on the play of it, were to be lacquered. The "cranks must fit everywhere and quite loosely," he cautioned.[55]

b. Asphaltic Mastic, Varnishing, and Paving--The asphalt of the sally port pavement needed attention and the irons of the pintle-centres varnishing. The arched rooms in front of the magazines were to be paved with brick, laid in mortar, while the corner room would be outfitted with a door and paved as an artillery-room. The intermediate arched rooms would be paved with brick in sand, and the well arched over with a lateral communication.[56]

c. Removal of Wire Gauze from the Magazines--The wire gauze was to be removed from the magazine ventilators.[57]

d. Repointing Cordon and Coping--The joints in the cordon and coping were to be cleaned to a depth of two inches and pointed with an asphaltic mixture.[58]

e. Major Chase Promises Action--On July 3, Chase notified the Department that the maintenance items referred to by Colonel Totten would be attended to.[59]

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55. Totten to Chase, May 30, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

56. Ibid.

57. Ibid.

58. Ibid.

59. Chase to Totten, July 3, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

2. Work Accomplished August 1, 1844, to June 30, 1845

During the 11 months ending June 30, 1845, the laborers built a picket fence around Fort Barrancas and its water battery; made a small banquette in the water battery; received and cared for the Barrancas cannon and carriages; transported and emplaced one 24-pounder for testing the pintle-blocks; surveyed and marked the reservation boundary; manned the boat and barge; cared for ordnance; dug ditches; drained and landscaped the area in front of the fort; and mounted cannon in fort and water battery.

The teamsters had hauled posts and pickets for the fence; transported materials (lime and cement) transferred to Fort Pickens to the wharf; and hauled manure for the Bermuda and sand for the glacis.

Carpenters had altered the gunners' platforms in the water battery to facilitate traversing the guns; repaired chasis of 24-pounder emplaced for experiment to test the pintle-blocks; repaired assistant engineer's quarters; and made and hung two doors.

The masons had paved sections of the fort.[60]

Chief Engineer Totten, when he made his annual report to the Secretary of War for Fiscal Year 1845, noted that Fort Barrancas "is reported to be in a good condition for defense."[61]

H. Construction and Maintenance in Fiscal Year 1846

In Fiscal Year 1846, several maintenance-oriented projects were accomplished at Fort Barrancas. In August and September, 1845, a

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60. Fort Barrancas, Monthly Reports of Operations, August 1844-June 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

61. Public Documents, Printed by Order of the Senate of the United States, 1st Session of the 29th Congress (Washington, 1846), Serial 470, Vol. I, p. 260.

work gang assisted by several teamsters planted grass in the ditch and mounted and dismounted a number of cannon in the fort on the bluff; in December, carpenters and laborers spent a few days repairing the fence enclosing the fort; in March, 1846, the masons repointed some of the masonry and the teamsters hauled manure for the glacis; in May, the masons drilled holes in a number of traverse plates; and in June, the teamsters and laborers hauled a number of guns (the carronades) and carriages from the wharf to the fort.[62]

I. Armament of Fort Barrancas and Its Water Battery

1. Readying the Water Battery for its Armament

a. Chase Calls for Pintle-Plates, Pintles, etc.

In late September, 1840, Chief Engineer Totten directed Major Chase, on making requisitions for pintle-plates, bolts, etc., to specify the number of guns, dimensions of the pintle-blocks, and the blocks under the pintle-blocks. Requisitions were to be directed to the Chief Engineer, who would buck them to the Ordnance Department.[63]

Chase accordingly forwarded to the Department a requisition for 13 iron pintles, 13 iron pintle-plates, and 52 iron bolts, or rods, for barbette gun carriages for the water battery. The bolts, not including the screw at the bottom, were to be 2'11" in length.[64] The dimensions of the pintle-blocks, Chase wrote the Department in December,

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62. Fort Barrancas, Monthly Reports of Operations, July 1845-June 1846, NA, RG 77, Ltrs. Recd., Chief Engineer; Public Documents, Printed by Order of the Senate of the United States, During the 2d Session of the 29th Congress (Washington, 1847), Serial 493, Vol. I, p. 128.

63. Chase to Totten, July 7, 1840, & Totten to Chase, September 29, 1840, NA, RG 77, Ltrs. Recd. and Sent, Chief Engineer.

64. Chase to Totten, September 21, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

were 2' by 2' by 1'3¼", while the underblocks were 4' long, 1'6" wide, and 1'6" thick.[65]

On December 14, 1840, the Department advised Chase that, on October 2, the Chief of Ordnance had been requested to provide the pintle irons for the Pensacola forts. Within 24 hours, the Ordnance people responded that orders had been issued to the Watervliet arsenal for their shipment.[66]

b. Chase Introduces a Novelty--Single Stone Pintle-Blocks

The pintle-blocks and traverse stones reached Pensacola Bay in late January, 1841, from New York. On inspecting the blocks, Major Chase saw they were in one piece, 2-foot square, and 5 feet 6 inches long. He had ordered them cut to these dimensions, because he believed they would answer his purpose better than those composed of two pieces, banded together with bolts. The pintle-plate was secured to the block by "small bolts 4" long, which together with the pintle" were fastened in holes sealed with molten sulphur. If necessary, the pintles could be keyed into position by a lateral bolt. To illustrate what he had done, Chase enclosed a sketch which he had prepared.

The advantage of these blocks over the old way, Chase informed Totten, was that they had a "stronger hold in the ground and the concrete surrounding them." In addition, the pintle and plate need not be placed in the block until ready for use. In addition, they could be replaced if damaged by rust, which could not be done with the old style blocks, such as were positioned at Forts Pickens and McRee, without raising them from their beds.

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65. Chase to Totten, December 1, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

66. Smith to Chase, December 14, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

Chase had taken the "liberty" of making this experiment at his own risk, and "if it did not answer in every respect," he would sustain the loss incurred.[67]

c. Totten Calls for a Test

Chief Engineer Totten, after studying Chase's report, wrote his Pensacola engineer: If the pintle-blocks were well embedded in the ground and concrete, "they may prove to be firm enough . . . provided always that the pintle be attached to them with adequate firmness." A trial, however, was necessary.

As soon as guns and carriages were received for the water battery, Chase was to have one of them tested, "first with several discharges of the ordinary load of 32-Pdrs., and then with two or three successive discharges with 8 lbs. of powder and two shot."

Chase's new method, however, would be "inapplicable" over casemates, the roofs of which must never be connected either with the pintle-blocks or traverse circles. For casemate ramparts, the mode previously described would govern.

Colonel Totten would make requisitions for the barbette guns for Fort McRee and the water battery, presuming the centres and traverses would be ready by the time they were received.[68]

It was June 29, 1841, before the "fixtures" for the 13 guns were positioned.[69]

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67. Chase to Totten, February 5, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of Chase's sketch, Drawer 79, Sheet 14, is found in the files of the Florida Unit, Gulf Islands NS.

68. Totten to Chase, February 22, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

69. Chase to Totten, June 29, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

Eight weeks later, on August 21, Chief Engineer Totten called on the Ordnance Department for eleven 32-pounders and two 8-inch seacoast howitzers for the water battery, as it was ready to be armed.[70] When more than half a year passed and no guns arrived, Chase, in mid-August 1842, complained that the ordnance people had not yet supplied the anxiously awaited armaments.[71] Once again, nothing happened.

2. Caring for the Ordnance and Ordnance Stores

On September 5, 1843, Major Chase informed the Department that the big guns and their equipments delivered at Forts Pickens and McRee, together with the remainder slated for these works and Fort Barrancas, were very valuable. Consequently, if an officer from the Ordnance Department could not be assigned to Pensacola, he would direct his assistant engineer to also perform the duties of Ordnance Officer. Lieutenant Scarritt had expressed a willingness to do so, and Chase was agreeable, as soon as the Ordnance Department caused the guns of the Pensacola defenses to be "properly arranged."[72]

The Ordnance Department, on being alerted to this situation, sent an officer to Pensacola Bay from the Mount Vernon Alabama Arsenal to look after the cannon. This resulted in an improved situation. One year later, Chase was able to report that all ordnance, not damaged, was in excellent condition, for which he wished to commend the officer and ordnance-sergeant involved.[73]

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70. Totten to Chase, May 20, 1842, NA, RG 77, Ltrs. Sent, Chief Engineer.

71. Chase to Totten, April 18, 1842, NA, RG 77, Ltrs. Recd., Chief Engineer.

72. Chase to Totten, September 5, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

73. Chase to Totten, September 7, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

3. Chase Requisitions the Fort Barrancas Ordnance

Major Chase, in mid-April 1844, suggested to the Department that the guns and carriages for Fort Barrancas be shipped immediately. By employing the railway which was slated to be dismantled after Fort Barrancas was finished, they could be positioned easier and at less cost. The guns, if shipped without carriages, could be placed on the terrepleins of the water battery and the new fort, and in the casemates under the counterscarp.[74]

On April 22, the Department, in accordance with Chase's request, forwarded his letter to the Ordnance Department, "suggesting that the guns for Fort Barancas . . . be sent while the wharf, railway, etc., were in position."[75]

The Ordnance Department this time acted. Chase was notified that the cannon for arming Fort Barrancas and its water battery, with the exception of 8 carronades not on hand, had been ordered shipped to Pensacola from the New York Ordnance Depot.[76]

Chase, in the meantime, had ordered from the Ordnance Department, through the Chief Engineer, 20 sets of pintle-plates for the Barrancas barbette platforms.[77]

4. The Armament Designated by the Board

Chief Engineer Totten returned to Washington in early June, following an inspection tour of the Atlantic Seaboard and its

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74. Chase to Totten, April 13, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

75. Welcker to Chase, April 22, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

76. Chase to Totten, May 7, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

77. Chase to Totten, May 2, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

defenses, which took him as far south as St. Augustine, Florida. To make certain Chase knew what was expected, Totten reminded him of the 1839 Report of the Armament Board. The Board had determined that eleven 32-pounders and two 8-inch seacoast howitzers were to be mounted in the water battery, "the latter being placed next each other and in the middle of the battery." Two "heavy" 10-inch mortars were to be positioned in rear of the terreplein, each about midway from the extremity to the middle of the battery, the platforms not to be built unless war was declared.

Eight carronades were to be emplaced in the casemates of the Fort Barrancas counterscarp. Ten 24-pounders and two 8-inch seacoast howitzers, the latter being positioned next to each other, were to be mounted at the junction of the two water fronts, the former in the remaining emplacements of the subject faces. Five 18-pounders were to be placed on the west land front and in the middle of the pan coupé, three 12-pounders on the north land front; and one light 8-inch mortar and two coehorns on the terreplein of the west land front. Construction of the mortar platforms would be deferred. Two 6-pounder guns and one 12-pounder, on field carriages, would be unlimbered on the parade.[78]

The armament, on its receipt, Chase acknowledged, would be emplaced as directed.[79]

5. Department Calls for a New Method of Securing Pintle-Stones

a. Totten Describes the New Mode

On May 14, 1844, the Department advised Chase that a new arrangement for securing pintle-centres dispensed with plate and

78. Totten to Chase, June 7, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

79. Chase to Totten, June 17, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

bolts. Pintles were now being secured by two wedges. If he had obtained from his New York agents pintle stones of the old pattern, he was to advise Colonel Totten. If not, he was to adopt, with necessary modifications, the method depicted on the enclosed sketch "showing the mode of securing pintle centres, forming gunners' platforms, and earthen banquettes."

The depth of concrete shown was that required in northern latitudes. But on the Gulf Coast, the concrete around the pintle stone need not extend more than 2'9" below the top of the upright stone. Depth of the concrete foundation of the traverse stones was to be the same as heretofore.

As Chase would see, the sketch called for a circular recess in front of the gun to increase the traverse. Where the breast-height wall was unfinished, this recess would be advantageous, but where it had been constructed in "a right line, or without . . . recesses, the pintle-centre must be placed at its usual distance from the wall."

The upright stone, 2'x2'x4'6", its top 4'2½" below the interior crest, should be cut "quite smooth" on top and on the sides to a depth of 3" from the top, and should be accurately cut on the front and sides where it entered a notch 4" deep in the horizontal stone. Beyond this, there need be no stone cutting. The block should be split out straight to the proper dimensions and all lumps broken off.

The horizontal stone, 5'4"x1'6", was to be split out straight, but would receive no cutting, except where it came in contact with the other stone. There it should be made to fit perfectly.

The earth or sand, under the upright stone and surrounding concrete, was to be compacted and all "cement well rammed in layers" of 6 inches.

If the breast-height wall were straight, and the pintle at a different distance from the wall, the earthen platform between the guns would remain the same in reference to that wall. The gunners' platforms, in rear of the pintle, would also remain the same in relation to the pintle, and the concrete in front of the pintle would extend to the breast-height wall.[80]

b. Chase Reports on Required Modifications

Acknowledging receipt of the sketch and instructions, Chase reported that his workmen had commenced laying the pintle-blocks, when they had arrived. They thus enabled Lieutenant Scarritt to "adjust their position to dispense with the iron plates, i.e., to place the top stone exactly 4'2½" below the crest of the breast-height wall." But as the holes had already been cut into the blocks for the old model pintle, it would be necessary to employ it instead of the modified pintle. Chase, accordingly, requested that the requisite number of old-style pintles be requisitioned.

The pintle-blocks used at Fort Barrancas, Chase explained, were "nearly similar" to the ones described and identical to those positioned in the water battery. It was a "single stock of granite" around which could be adjusted the gunners' platform as detailed in the sketch.

As the breast-height wall had been completed without circular recesses, the pintle-blocks were being placed 2'11" from the straight wall.[81]

The other changes, as noted, would be made.

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80. Welcker to Chase, May 14, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer. A copy of the subject plan, labelled Drawer 79, Sheet 21, is found in files, Florida Unit, Gulf Islands NS.

81. Chase to Totten, May 29, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

c. Totten Refuses to Permit Certain Liberties

On June 10, Colonel Totten, after reviewing Chase's letter, informed him that the 2'x5' stones would answer for the vertical ones, but it would be necessary to add the "notched horizontal stone and make all other arrangements precisely" as shown on the sketch. As the pintle-centre had been adopted by a Board of Officers, Totten did not feel authorized to sanction any departure from it that "would . . . diminish the stability."

As requested, 20 sets of pintles and wedges had been requisitioned from the Ordnance Department for Fort Barrancas.[82]

d. Chase is Rebuffed Again

Early in June, Chase provided the Department with added details. The water battery pintle-blocks were "single stocks of granite five feet in lengths" and were embedded in concrete to within 14 inches of their tops.

The pintleblocks in the new work were "exactly" alike. He proposed to raise the concrete to within 14 inches of the top of these blocks, similar to those in the water battery. This differed from the Department's sketches, which showed the concrete carried up to within 9½ inches of the top. But as these blocks were only 4'6" in length, while those at the Barrancas were 5 feet, he believed that the height of concrete proposed would be sufficient. If the Department disagreed, he inquired, must he also have additional concrete added to the pintle-blocks?[83]

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82. Totten to Chase, June 10, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

83. Chase to Totten, undated, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chase should have known better. On June 13, the Department replied. He would reset the water battery pintle-blocks in the same manner as in the new fort. The "earthen banquette between the guns of the old Spanish Fort and between the guns of the water front of the new fort," were to be constructed in accordance with the Department's sketch.[84]

e. Chase Disregards the Instructions in Regard to the Horizontal Stones

On June 22, Chase reported that, before receipt of Totten's June 13 letter, he had completed the banquettes and gunners' platforms around the pintle-blocks. Not having on hand the horizontal stones shown in the Department's sketch, he had concluded to set the pintle-blocks without them. If needed, the horizontal stones could be laid, closely fitted, by cutting down a small portion of the concrete which had been carried to within 9 inches of the top of the block. Chase felt that the great weight of the pintle-stone and its "solid embedment in concrete" afforded an immovable mass, resistant to the shock of a cannon's discharge.

The water battery pintle-blocks, he explained, had been positioned in 1841 and were "in connection with the concrete the same as one mass of rock." In addition, the upper portion of the block received support from an old concrete terreplein covering pertaining to the Spanish work. He had uncovered the concrete, finding it as hard as rock. It would require "great labor to take these blocks up and reset them."

Whenever the cannon were received from the New York Depot, Chase proposed to emplace a 32-pounder in the water battery and a 24-pounder in the new fort, and have them fired with double shot,

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84. Welcker to Chase, June 13, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

20 times apiece, to determine if there was any motion in the joint between the concrete and stone. If there were any motion, he would add the horizontal stone.

The gunners' platforms around the pintle-stones in the water battery were wood, but the banquettes between the guns, which had not been started, would be of earth.[85]

f. Test Discloses no Motion in the Pintle-Centres

On his return from West Point, Chief Engineer Totten, on July 13, approved Chase's proposal to test the stability of the pintle-centres. If they were immovable, the expense of adding to each a horizontal stone would be saved. His experience, however, caused him to doubt the test's success. With the 32-pounder in the water battery and the 24-pounder in Fort Barrancas, Chase was to fire 10 rounds "with one ball, 2 wads and 1/4 the weight of the ball of powder"; to be followed by 10 discharges with "2 balls, 2 wads, and 1/4 the weight of the ball." One-half the shots would be made with the gun standing square to the parapet, and the remainder with the piece traversed to its limit.

After each discharge, Major Chase was to measure the distance from the breast-height wall to the pintle-centre, to detect whether there had been any motion.[86]

While Major Chase was on leave, in November 1844, Lieutenant Scarritt tested the stability of the pintle-centres. First, however, an attempt was made to pierce the pintle-blocks to adjust the new pintles. It failed because, as the mastermason chiseled into the stone, the angle between his tool and the face against which he worked

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85. Chase to Totten, June 22, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

86. Totten to Chase, July 13, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

was too restricted. At a depth of 6 inches, the angle became so small that it was impossible for him to sustain his chisel against the face.

After one of the blocks had been pierced to a depth of 6 inches, as described, and discovering it impossible to use the new model pintle, Lieutenant Scarritt prepared for the test. An old model pintle was employed. The space up to the surface of the block was filled with stiff "angillous mastic." A 24-pounder was mounted in Fort Barrancas and fired in accordance with Colonel Totten's instructions.

In addition to the usual care taken to measure and register any motion of the block, sand was dampened and smoothed with a trowel around the edges of the block, so that "even an elastic spring of the block which would escape detection by measurement must register itself." No evidence of motion was disclosed during the test.

When he reported the result to the Department on November 20, Lieutenant Scarritt wrote that, on the chasis employed, "the head and nut of the middle transome" projected so far as to prevent passage of the large wheels of the carriage. Consequently, they were not used, which allowed an excessive recoil when the piece was double-shotted.[87]

6. Water Battery and Fort are Partially Armed

By May 1845, when Colonel Totten inspected the fort, two 8-inch seacoast howitzers had been emplaced in the water battery, while the eleven 32-pounders and two mortars, lacking their carriages and beds, were positioned but not mounted. In Fort Barrancas, ten 24-pounders, two 8-inch seacoast howitzers, and five 18-pounders were emplaced. Three 12-pounders, lacking their carriages, were positioned

87. Scarritt to Totten, November 20, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

but unmounted. All the guns and mortars were on hand, except the carronades for the counterscarp casemates and the field pieces.[88]

Colonel Totten told Chase he trusted that the remainder of the guns would be mounted. After they were emplaced, he was to have the tubes and carriages washed, and thereafter kept in "perfect order."[89]

On returning to Washington, Totten inquired of the Ordnance Department, "When will the needed chasis, carriages, and carronades for the Pensacola forts be forthcoming?" He was told they would soon be shipped.[90]

If the carronades were to be mounted, their iron traverses would have to be positioned. On July 3, 1845, Chase informed Chief Engineer Totten that, agreeable to orders, the iron traverses for the carronades had not been laid.[91]

Totten, on his return from West Point in September, directed that the traverse irons be put down at once.[92]

On November 6, 1845, Chase complained to Chief Engineer Totten that, whenever the Ordnance Department provided what was necessary (and much was lacking for the Pensacola forts) and repaired

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88. Chase to Totten, June 30, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

89. Totten to Chase, May 30, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

90. Welcker to Totten, May 27, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

91. Chase to Totten, July 3, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

92. Totten to Chase, September 10, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

the chassis and carriages, already in position, the forts would "be in condition for a strong defense." Pensacola Harbor, he boasted, is the only one in the United States where "the system . . . designed for its channel defense is complete.[93]

7. Fort and Its Water Battery are Finally Armed

The Ordnance people again failed to make good on their commitment. Thirteen months later, on June 13, 1846, four weeks after the United States had declared war against Mexico, Major Chase reported Fort Barrancas in good condition. Nearly all the armament was in position, and had recently been inspected and repaired by the Ordnance Department. Penthouses had been provided for the guns en barbette. The flank defense carronade carriages had been received from the New York Ordnance Depot and would soon be mounted. Carriages for the water battery's eleven 32-pounders and for Fort Barrancas' three 12-pounders had been shipped.

Meanwhile, Chase inquired, will it not be well to mount the two 10-inch mortars?[94]

Because of the ease of construction, Colonel Totten directed Chase to delay work on the mortar beds.[95]

The quantity of ordnance and ordnance stores currently reaching the harbor was large. Receiving and removing these items from the wharves to the forts, and positioning or storing them, involved an "immense amount of work" for the one company (G, 1st Artillery) garrisoning the harbor. Chase regretted that "no larger force than what

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93. Chase to Totten, November 6, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

94. Chase to Totten, June 13, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

95. Totten to Chase, July 16, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

an incomplete company of artillery affords can be employed in its performance."

Even so, whenever Lt. George H. Talcott of the Ordnance Detachment and the garrison completed their labors, Chase notified Washington, the armament of the three Pensacola forts will be in "superb condition."[96]

The carriages for the 32- and 12-pounders were landed in June and the guns, which had been on hand for more than a year, mounted. The carronades were then received and emplaced in the counterscarp casemates, and Colonel Totten, on November 10, 1846, informed the Secretary of War that Fort Barrancas and its water battery were finally armed.[97]

8. Totten Vetoes a Proposal to Mount Two 8-inch Columbiads in the Water Battery

In mid-July 1846, Major Chase suggested that two of the 8-inch columbiads recently received for the defenses of Pensacola Bay be mounted on the Reduit.[98]

Colonel Totten rejected the proposal to emplace the columbiads there because they would be too near the other guns. Until further dispositions were made, the best use of these huge guns would be to substitute them for smaller pieces in either the water battery or on the barbette tier of Fort Barrancas.[99]

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96. Chase to Totten, June 13, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

97. Executive Documents, Serial 493, p. 128.

98. Chase to Totten, July 22, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

99. Totten to Chase, September 4, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

Chase accordingly made plans to mount the columbiads in one or the other of the suggested positions.[100]

J. Management of Materials and Labor at the Barrancas

1. Average Cost of Materials: November 1838-November 1841

In mid-November 1841, Major Chase reported that construction had commenced at the Barrancas on November 1, 1838, and in the two months ending December 31, $180.76 had been expended in paying 8 laborers. In 1839, there had been disbursed on the fort $41,797.18, and the average monthly payroll numbered 9 mechanics and 20 laborers. Each mechanic averaged $60 in wages and every laborer $29.20 per month. In 1840, the sum expended was $26,033.28; in the period January 1-March 4, 1841, $2,497.36; and from March 4-September 30, 1841, $29,406.68. During these seven months, the average daily work force was 15 mechanics and 33 laborers.

The average cost of materials was: $.16 per cubic foot of timber; $12 per 1,000 brick; $1.40 per cubic foot of stone; $2.21 per barrel of lime; $3.01 per barrel of cement; $.39 per pound of copper; $.09 per pound of nails; $.04 per pound of zinc; $.88 per pound of corrosive sublimate; $.07 per pound of sulphur; and $.25 per pound of wire nails.

No contracts had been made for purchase of materials, they being bought "in open market at a fair market price."[101]

2. Chase Justifies the Labor and Its Cost

The Department, in the spring of 1843, called on its superintending engineers for data as to their labor costs. On May 7, Major Chase informed Chief Engineer Totten that the wage scale at the Pensacola forts allowed:

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100. Chase to Totten, September 14, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

101. Chase to Totten, November 14, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

> The clerk, $4.00 per day in full compensation; overseers, $2.00 per day in full compensation; first-class laborers, $1.25 per day "in full of pay, rations, lodging, tools, medical attendance, etc."; second-class laborers, $.75 to $1.00 per day to include pay, rations, lodging, tools, and medical services; master carpenters, when employed, $3.00 per day to include pay, rations, lodging, tools, and medical services; mastermasons, $4.00 per day to include pay, rations, lodging, tools, and medical services; masons (slaves), $2.50 per day to include pay, rations, lodging, tools, and medical services.

These wages were in "full compensation," except that the mastermason was allowed to occupy a small building belonging to the United States.[102]

Chief Engineer Totten found the wages paid slaves too high. By public advertisements, competitive wages might be introduced without loss of the best employees. Lt. Henry W. Benham, at Fort Marion, he chidded, paid his best slave masons $20 per month and his laborers $12 per month, while rations cost $.07 per day.[103]

If his projects were in "the midst of the industrious populations of New England," Chase countered, we would "not lack the services of good men at wages considerably below what we pay here." But, in the Florida panhandle, he could only "command the services of white men, in the person of wild Irishmen and migratory Germans whose aversion to discipline and system is well known to those who have the misfortune to come in contact with them."

He had to depend, in the Pensacola area, on black laborers, for "whose service, in consequence of their full employment in the cities, and on plantations, we must pay somewhat higher than for

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102. Chase to Mansfield, May 7, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer. Capt. Joseph K. F. Mansfield at this time was a member of the Board of Engineers for the Atlantic Coast Defenses.

103. Totten to Chase, June 6, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

white laborers" in the north. But, Chase continued, "we have the advantage of control over them, and of commanding a constantly active force not subject to the whim or caprices of individuals composing it." He questioned whether "the slave worker is not entitled to as high a compensation as the white worker."

Chase assured Colonel Totten that "our present system . . . is a good one, it has worked well; the per diem allowance to mechanics and laborers white or black is inclusive of all allowances" for pay, quarters, etc. We have nothing to do with the workers until they report on the job, when all we have to do is "to watch closely that they perform a full day's work and to give them credit for it on the rolls."

The first time he had noticed this system was at Fort Adams. He had been impressed with its economy by saving the government the expense of quarters and the care and trouble of issuing rations, which left the project engineers "free from details by no means congenial to their pursuits."[104]

At the Pensacola forts, he did not allow any man to be withdrawn from the project without permission, the slaveowners being "obliged to continue their services so long as the superintending engineer requires, hence few or no changes occur." The slaves were soon disciplined, accustomed to their work, and to the ways of the overseers. With this system, the service of one sub-overseer, one mastermason, and when the construction was important, one master carpenter, were required to control a force of 60 workers. At Pensacola, there had been "no discontent or riotious outbreaks, so frequent of occurrence amongst Irish & German laborers."

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104. Col. Totten had been superintending engineer at Fort Adams, Rhode Island, for many years.

Chase was satisfied that with his force of well organized blacks, "at least 25 percent of work more is obtained than could be given by men not long working together." Lieutenant Scarritt, the mastermason, and overseer shared this view.

He approved and desired to continue this system, "as being productive of good to the public interest." He did not deem the wages too high, because he took care that only the best men received them, and he was confident that "full and complete value is rendered for the equivalent paid by the Government."[105]

Colonel Totten answered that his intentions in regard to a reduction in wages had been misconstrued, as there was no plan of abandoning the employment of blacks. On the contrary, he believed slave labor was best suited to Chase's purpose. He was of the opinion, however, that it would be possible to "excite much competition for employment among this kind of force." Such a force, to be economical, must be fed by the government, and the logic which might lead to hiring free labor, independent of food and lodging, was not applicable to slave labor.[106]

On July 22, 1843, Chase assured the Department that steps would be taken to reduce wages as of the 1st. Upon "the speedy completion of our works at present in hand," he believed, it would be unnecessary to undertake the feeding and lodging of workmen. "The present system, under such reductions in wages as can be affected," he wrote, "had better be adhered to."[107]

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105. Chase to Totten, June 22, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

106. Totten to Chase, July 8, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

107. Chase to Totten, July 22, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

3. Chase Lists His Supervisory Personnel

The Department, in an effort to pare overhead, in the autumn of 1843, called on its superintending engineers for information regarding supervisory personnel. Major Chase, in mid-October, responded with a roster of all persons, except laborers and black mechanics, employed on the Pensacola defenses since September 30, 1841. They included George E. Chase of Massachusetts as clerk and assistant engineer; Celestino Gonzales, a Floridian, as overseer at Barrancas; John Sweeny, born in Ireland, as mastermason at Barrancas; Samuel Z. Gonzales, a Floridian, as tallyman till October 21, 1841, when he was replaced by William Flowers of Louisiana. The latter position had been abolished on October 28, 1841, and reestablished on July 1, 1843, when Stephen Gonzales of Florida was hired. Pedro Gonzales had been employed as a sub-overseer; Albert Golay of Ohio as a master carpenter; Louis Gagnet of Florida as a painter; José Medina, born in Spain, as a caulker; Thomas Etheridge and Peter Duncan as plasterers; and Thomas Fall as a boatwright.[108]

Two years later, on September 29, 1845, Chase reported that, during the period beginning October 1, 1843, there had been employed by the Corps of Engineers on the Pensacola forts in an administrative capacity: George E. Chase as clerk and inspector from October 1, 1843, until his death on March 28, 1844; Celestino Gonzales as superintendent from October 1, 1843, to April 4, 1844; Theodore Moreno as clerk from April 1, 1844, to September 30, 1845; and Albert Golay as superintendent from October 1, 1843, to September 30, 1845.[109]

More than two years after George Chase's death, Major Chase was notified that the 3d Auditor had disallowed the extra two dollars per day authorized the deceased, while he was acting as assistant

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108. Chase to Totten, October 20, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

109. Chase to Totten, September 29, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

engineer for the Pensacola forts, from May 1, 1841, to August 31, 1843. The retained money would only be released to the estate if sanctioned by Secretary of War William L. Marcy.[110]

The Department, in a successful effort to win the Secretary's approval, certified that "the want of an Engineer officer to assist Maj. Chase" had led Chief Engineer Totten to authorize the employment of George Chase as assistant engineer at $6 per diem. As a resigned West Point graduate, the deceased had been well qualified for the position, and his employment was deemed necessary by the Department to the success of the Pensacola construction program.[111]

K. Chase's Travels, Other Duties, and Bureaucratic Problems

1. His Travels as Senior Engineer on the Gulf Frontier: 1842-44

Major Chase, as Senior Engineer on the Gulf Frontier, was superintending engineer of the Pensacola Bay defenses, while having general supervision of all other works on the Gulf of Mexico and on the approaches to New Orleans. As such, he was entitled to an additional allowance for fuel and quarters, not to exceed $1.50 per day.[112]

Chase's duties called for considerable travel. He was absent from Pensacola from June 13 to July 6, 1842, on an inspection trip which took him to New Orleans and Forts Jackson and Livingston. Five days, July 13 to 19, were involved in a trip to and from Fort Morgan.

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110. Chase to Totten, June 1, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

111. Welcker to Marcy, June 11, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

112. Woodbury to Chase, June 6, 1843, NA, RG 77, Ltrs. Sent, Chief Engineer.

In January 1843, while in New Orleans, Chase spent two days at Fort Jackson on official business. Four days, December 27-30 of that year, were occupied by an inspection that took him to Fort Livingston and back to New Orleans. From January 27 to 29, 1844, Chase was at Forts Pike and Wood, Tower Dupré, and Battery Bienvenue, and, on March 7, back at Fort Morgan.[113]

2. His October-November 1844 Furlough

Major Chase, having received a 20-day furlough, left Pensacola on October 22, 1844, for Massachusetts. When he returned, he was accompanied by his mother, which precluded his traveling by the most expeditious route. Consequently, he did not arrive back at Chasefield until November 23, having overstayed his leave 12 days.

When he notified the Department of this, he reassured Chief Engineer Totten that had he anticipated so much delay, he would have applied for an extension. He trusted that this explanation was satisfactory, and the Department could rest assured that "no interest of the public service had suffered because of his absence."[114]

3. Chase Serves as a Member of the Board of Engineers for Fortifications

Major Chase, at the end of 1844, traveled from Pensacola to Key West by way of New Orleans. He spent the next seven weeks at Key West and the Dry Tortugas as a member of the Board of Engineers, making a study of the fortifications to be constructed to guard the Straits of Florida.

When it came time for Chase to return to his duty station, he had Capt. George Dutton hire, for $130, a fishing smack which took

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113. Chase to Totten, Aug. 20, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

114. Chase to Totten, November 25, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

him to La Habana, from where he booked passage on the mail packet Alabama for New Orleans. Chase arrived back in Pensacola on March 7. Had he not returned via this route, he would have been detained at Key West until March 22, and then he would have returned via Charleston.

The 3d Auditor, however, refused to pay this account unless it was sanctioned by the Secretary of War. In a futile attempt to secure the Secretary's approval, Chief Engineer Totten pointed out that, even with the help of a "quick passage back," Chase was absent two and one-half months. If he had waited until March 23, his absence would have been extended another month. All the while, Totten argued, the important works under construction at Pensacola, for which Chase was responsible, required his attention. He believed Chase's decision, in obtaining the quickest mode of returning to his duty station, was justified.

Totten, however, conceded that Chase had been wrong in ordering Captain Dutton to hire the smack. He should have done so himself, paid the account, and presented the voucher to the Quartermaster Department.[115]

4. Major Chase Gets a New Assistant

Major Chase, in August 1845, learned that he would be losing his capable young assistant, Lieutenant Scarritt, who had been ordered to Aransas Bay, Texas. There, he would report to Bvt. Brig. Gen. Zachary Taylor. Following the March 1845 annexation of Texas, General Taylor had been ordered to concentrate a small army in and around Corpus Christi.[116]

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115. Dutton to Chase, June 12, 1845; Chase to Totten, undated; Totten to Marcy, March 5, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

116. Welcker to Chase, August 8, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

Scarritt said his goodbyes and caught a ship for New Orleans on the 16th on the first stage of his trip to join Taylor's army.[117] The assistant engineer position at Pensacola remained vacant until October 10, when Scarritt's replacement, Lt. William H. T. Whiting, reported. Whiting, a Mississippi-born son of a career army officer, had graduated in June from the U. S. Military Academy with the highest scholastic average attained up to that time. After giving Whiting three weeks to familiarize himself with the routine, Chase, in mid-November, took seven days' leave. With travel time, he was absent from his post 14 days.[118]

5. Chase Spends Nine Weeks in Texas

When he returned to Pensacola on November 26, 1845, Chase found a copy of Engineer Order No. 6, dated the 17th, ordering him to temporary duty with General Taylor. As the next ship for Texas would sail from New Orleans on December 8, he asked the Department to forward large-scale charts and maps of Texas to him at Galveston.[119]

Chase was compelled to delay his departure by "extreme bad weather," which induced his physician to recommend that he not "travel in its midst." He finally departed Pensacola for Texas two days before Christmas. Lieutenant Whiting would be in charge of the Pensacola projects during his absence.[120]

Chase returned to Pensacola on March 5, 1846. On doing so, he commended Lieutenant Whiting for the "zeal and good management"

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117. Chase to Totten, August 31, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

118. Chase to Totten, October 15 & November 26, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

119. Chase to Totten, November 26, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

120. Chase to Totten, December 21, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

displayed "in the discharge of his duties" during his absence. Whiting's excellent care of public property and economical application of the means employed in the operation, "left nothing to require on the score."[121]

6. The Storm of January 1846

During Chase's absence, the Pensacola area was hammered by a winter gale. On January 20, a storm swept the coast. The sloop Veto went to pieces at her moorings. Several barrels of cement and lime were lost as breakers pounded the eastern end of the public storehouse. Until he received instructions from the Department, Lieutenant Whiting employed the schooner Roebuck as Veto's replacement. She was a small vessel of about the same tonnage as Veto.[122]

7. Chase Defends His Rent of Office Space

In November 1845, Chase explained to the Department why he had been compelled to continue the "hire" of an office at so high a rate. The reason, he reported, was simple: he could not get space for less. Not having government quarters, his office was "ches moi." Consequently, "the valuable papers, books, accounts and money pertaining to the administration of the public works" had to be under his immediate care, otherwise, he would not "care" to accept responsibility for their safekeeping. An office was, therefore, necessary to the performance of his duties and the rate charged was the lowest at which it could be obtained.[123]

Chase's explanation was satisfactory, and the Department did not again question his disbursement for office rent.

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121. Chase to Totten, March 5, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

122. Whiting to Totten, January 20, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

123. Chase to Totten, November 6, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

8. Chase's General Supervisory Duties are Augmented

On August 17, 1846, Major Chase, the Nation at war and many of his fellow engineer officers in the field, was given additional responsibilities. As Senior Engineer on the Gulf Frontier, his general supervision was extended to include the new works under construction at Key West and Dry Tortugas.[124]

9. Chase Takes an Emergency Leave

Major Chase, having learned by mail on October 14, 1846, that urgent personal business required his attention in Boston, availed himself of a 7-day leave. He left Pensacola the next day. His hopes of reaching Washington on the 22d were doomed by an accident on the Georgia Railroad. When he passed through Washington late on the 23d, Chase, because of his haste, was unable to report in person at the War Department.

Writing a hasty note to Chief Engineer Totten, posted at the depot, Chase requested approval of his actions, and a 30-day leave to commence on October 15. If all went according to schedule, he hoped to be back on the Gulf Coast by November 10.[125]

On returning to his Boston address on the evening of November 8, Chase opened a letter from the Department approving his leave of absence through the 15th.

He now found, he wrote the Chief Engineer, that even with the "most industrious application, he could not complete his business until mid-November. He accordingly asked for an extension through December 1.[126]

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124. Totten to Chase, August 17, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

125. Chase to Totten, October 23, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

126. Chase to Totten, November 9, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

Secretary of War Marcy approved Chase's request on November 11.

When he returned to Pensacola, Chase traveled by way of New Orleans. He carried with him important dispatches to be forwarded to General Taylor.[127]

L. Chase Thinks Iron

1. He Prepares Plans for Iron Embrasure Shutters

Major Chase, in 1845, on his own initiative, prepared plans for wrought iron embrasure shutters. When he transmitted the sections and elevations to the Department, he pointed out, in his covering letter, that "on the recoil of the Gun, the shutters are so hung as to close immediately. Connecting chains pulling thro' the wall and on pullies" enabled the shutters to reopen when the gun was pushed into battery, preparatory to firing.[128]

Several days later, Chase forwarded a second and revised sheet of drawings of his proposed wrought iron embrasure shutters.[129]

Although the Department did not adopt Chase's proposal, his concept triumphed in the 1850s. During that decade, Colonel Totten perfected practical iron embrasure shutters for the Nation's Third System forts then under construction.

2. He Seeks Funds for Test Firing Against Iron Plates

On October 27, 1845, Major Chase asked for authority to conduct, at the Barrancas, "a series of experiments" to ascertain the

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127. Chase to Totten, December 4, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

128. Chase to Totten, May 11, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

129. Chase to Totten, May 13, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

effect of shot fired from 12-, 18-, and 24-pounder siege guns on "wrought iron bars, either square, round, or eliptical when attached to a wall of masonry or a bulwark of wood." Cost of the target, if made of masonry and earth, was estimated at $1,000.

To justify his request, Chase pointed out that the "advantages to be derived by the introduction of iron into construction of fortifications are incalculable, establishing at once the assurance that the costly fort shall no longer be crumbled to the earth under the cannon's strokes."[130]

The Department vetoed Major Chase's request for funds to carry out his experiments. On doing so, Colonel Totten mailed to him copies of articles found in the September issue of the Journal of the Franklin Institute and the Memond de L'Artillerie regarding recent experiments in Great Britain and France regarding results of recent tests on projectiles fired against wrought iron targets.[131]

He was acquainted with the experiments at Portsmouth, Chase testily informed the Department. Those results, he continued, "as well as those of the iron targets at Woolwich," however, afforded no information on the "effect of cannon shells on solid iron of 5 or 6 inches in thickness." He regretted that the Department would not fund his experiments.[132]

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130. Chase to Totten, October 27, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

131. Totten to Chase, November 7, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

132. Chase to Totten, November 25, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

M. Establishing, Delineating, and Marking the Military Reservation

1. Corps of Engineers Press for an Army Reserve

Major Chase, on visiting the Barrancas following his return from Europe in late November 1838, found the old Spanish fort and its dependencies in possession of the Navy. Writing Chief Engineer Gratiot, he urged that the Secretary of War secure an Executive Order transferring jurisdiction of the fort and its vicinity from the Navy Department to the Corps of Engineer.

All public lands, he reported, near the navy yard and Fort San Carlos had been reserved from sale, and placed under jurisdiction of the commandant of the navy yard. He suggested that in dividing the reservation, the Corps of Engineers be given responsibility for a triangular acreage bounded by a line running north from the fort 600 yards to the "Live Oak" private property; then southwest 1,200 yards until it struck the property of David Williams; and then easterly 1,200 yards to the point of beginning. These metes and bounds embraced "an extent of country necessary to be brought under cannon range of the fort."

In addition, Major Chase believed that the superintending engineer must have control of the area contigious to the fort, so he could keep unauthorized intruders off the grounds.[133]

The administrative shake-up resulting from Gratiot's dismissal and his replacement as Chief Engineer by Colonel Totten resulted in an 18-month pigeon-holing of Chase's request. Finally, on May 16, 1840, the Department contacted Chase. To complete its survey of public lands required by the United States for fortifications, details not found in the Washington files were called for. To rectify deficiencies, the Department needed a plat of the grounds of Fort Barrancas.

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133. Chase to Gratiot, November 26, 1838, NA, RG 77, Ltrs. Recd., Chief Engineer.

Regarding transfer of Fort Barrancas to the Engineer Department, Chase's letter of November 1838 was not sufficiently explicit. A "more particular description" was needed. For this purpose, Chase would transmit a plat of the subject grounds, bounded on the west by a north-south line 1,200 yards west of the fort and extending from the channel to Bayou Grande and on the east by a parallel line drawn at a similar distance east of the fort, insofar as the site of the naval hospital and magazine would permit. Any private property within these boundaries was to be identified.

Should he discover any lands in the vicinity of the Pensacola forts, not belonging to the United States, that might in the future be used for defense, Chase was to advise the Department.[134]

2. Vain Search for a Barrancas Plat

This time, Chase had the "slows." Months having passed and no reply to its request for additional data received, the Department, in September 1841, again called on Chase for a list of persons occupying or claiming lands adjacent to the site of Fort Barrancas, and within such distance of the work as would make it desirable that the United States be the exclusive owner.[135]

When he replied, Chase advised Chief Engineer Totten that at Fort Barrancas there were a few lots claimed by citizens which the United States should acquire. On his return to Florida from New England, where he had gone to recover from effects of sunstroke, he would prepare and forward a list of the claimants.[136]

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134. Totten to Chase, May 16, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

135. Totten to Chase, September 15, 1841, NA, RG 77, Ltrs. Sent, Chief Engineer.

136. Chase to Totten, September 16, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

Moreover, he continued, it was desirable that the bounds of the public domain "necessarily dependent on Fort Barrancas be adjusted and transferred" from the Navy Department to the Corps of Engineers. At present, the Corps held possession under naval authority, and this could cause future problems.[137]

As yet, Chase reported on December 27, following his return to Florida, he had been unable to secure the desired information. The United States Attorney at Pensacola had been employed "to obtain the information as to title and present occupancy of the lots of ground held by individuals at the Barrancas." As soon as he had the report, it would be transmitted.

From what Chase could learn, these lots were "held subject to the uses of the Government of Spain--and that the servitudes imposed by the Government on these lots were transferred to the United States" at the time of the cession.

He had been unable to procure a plat of the Barrancas lots, and he was at a loss how to indicate them in reference to the public lands by which the fort was encircled.[138]

Many months slipped by before Major Chase returned to the subject. On May 31, 1843, he wrote Colonel Totten that the United States Attorney had not found any documents in the Public Archives relating to ownership of lots in the "old town of Barrancas" other than those already copied.

He had written Col. Robert Butler, Surveyor-General of Florida, to ascertain if he possessed or knew of a town plat.

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137. Ibid.

138. Chase to Totten, December 27, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

Chase had compiled a list of lot owners, and as soon as he could obtain their cooperation, he would have the metes and bounds of their respective claims entered on a survey plat of public lands. This would establish their relationship to the section lines and their position in reference to Fort Barrancas.[139]

3. President Tyler Acts

On June 4, 1844, the Department forwarded "a sketch of the land reserved for Naval purposes near Pensacola," showing the section to be transferred from the Navy to the War Department. As agent for the War Department, Major Chase was to take possession of the reservation acreage which President Tyler had ordered transferred.[140]

Chase moved slowly. Soon after returning from a month's leave in the fourth week of November, he received from the Department a request for a tracing, showing the eastern boundary of the reservation in respect to Fort Barrancas. This was needed to delineate the boundary between the military reservations.[141]

On November 30, 1844, Chase accordingly notified the Department that he had "received today from Capt. Elie A.F. Valette, commandant of the naval base, possession of all that portion of the public reservation . . . lying near" the navy yard which the President had directed transferred to the War Department.

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139. Chase to Totten, May 31, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

140. Welcker to Chase, June 4, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

141. Totten to Chase, November 26, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

Captain Valette had had the boundary surveyed and staked. Posts would be placed at all corners.[142]

Acknowledging Chase's communication, the Department directed that the boundary posts be of "a permanent character, and distinctly marked."[143]

4. David Williams Asks for and Receives a Special Use Permit

Residing on the tract transferred was David Williams. As Williams' home and lot were "neither presently nor prospectively valuable," either for timber or as a site for defense, Chase was agreeable to his remaining on the reservation. He, therefore, drafted and forwarded for approval by the Secretary of War, a special use permit allowing Williams to continue to occupy the small tract on which he had his house and other improvements.[144]

Colonel Totten replied for the War Department. The Secretary objected to special use permits for occupancy of land on military reservations except in "extraordinary cases." Totten was in agreement with this policy, because he had personally "scarcely known an indulgence of that kind that did not lead to trouble." The Secretary would, however, in consideration of Williams' character permit him to remain upon signing the attached declaration.[145]

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142. Chase to Totten, November 30, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer. With his letter of December 8, Chase mailed a "sketch showing the relation of Fort Barrancas and its Redoubt with the boundaries of the Military Reserve." A copy of this sketch, labeled Drawer 79, Sheet 30, is on file at the Florida Unit, Gulf Islands NS.

143. Totten to Chase, December 12, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

144. Chase to Totten, December 8, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

145. Totten to Chase, December 24, 1844, NA, RG 77, Ltrs. Sent, Chief Engineer.

Williams signed, signifying acceptance of the conditions.

5. Troops are Rebuffed in an Effort to Take Possession of Fort Barrancas

On March 2, 1845, Major Chase landed in New Orleans en route back to Pensacola from the Florida Keys, where he had been on duty with the Engineer Board. While in the city, he was told that Maj. Jacob Brown, the commander of the troops stationed on Pensacola Bay, had asked the War Department to be placed "in possession of Fort Barrancas." If true, Chase urged Chief Engineer Totten to oppose this request. His reasons for doing so were twofold: (a) the works had not been completed; and (b) their occupation by the troops would "materially interfere with operations of the Engineer Department, the fixtures, railway, wharf, etc., being around and about Fort Barrancas & its dependent works."

He also urged that the reservation "remain exclusively" in custody of the Corps.

The troops currently camped at the Barrancas had been assigned to garrison Forts Pickens and McRee. Major Brown, however, had ordered them to establish themselves on the mainland with a goal of improving their comfort.

In delineating the boundary between the Army and Navy reservations, part of Camp Barrancas (the area occupied by the soldiers) had been left within the naval base. Major Brown had accordingly applied for possession of the entire area. As part of the camp was already within the Army reservation, Chase saw no reason why the entire cantonment could not be included, without it being necessary to transfer Fort Barrancas and its military reserve to the care of the troops.

There was ample room for the garrison already. Moreover, it was contrary to the public interest for the troops to become custodians

of Fort Barrancas or its dependent lands until the Engineer Department had completed the Advanced Redoubt and other necessary projects.[146]

Colonel Totten sided with Chase and Major Brown's application to take possession of Fort Barrancas was disapproved by the Secretary of War. The Chief Engineer, however, was agreeable to Brown drilling his artillerists at the cannon after they were mounted.[147]

6. Catholic Congregation Seeks Permission to Erect a Church

In March 1846, several Catholic families asked Major Chase for permission to erect a small church on the reservation. Referring the subject to the Department, Chase pointed out that there were 50 to 60 Catholics residing in the Barrancas area who had no place of worship. He recommended that, if their request were granted, the best site for their church was about 500 feet east of the Engineer wharf, on the dividing line between the Army reserve and the naval base. This site would have a twofold advantage--it would be the most convenient for the parishioners and be less likely than any other to interfere with the defense of Pensacola Bay.[148]

Secretary of War Marcy, after studying the correspondence, authorized construction of the church. The congregation, however, would have to agree to destroy the structure whenever notified to do so by United States authorities. Chase was to see that the site selected in no way interfered with the defenses of Fort Barrancas or the public convenience.[149]

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146. Chase to Totten, March 2, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

147. Totten to Chase, May 5, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

148. Chase to Totten, March 11, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

149. Totten to Chase, March 23, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

Although they received authority to build a church on the reservation, the congregation failed to follow up. No church was erected at this time.

7. Making the Boundary Official

The Department, on July 18, 1846, transmitted to Chase a draft of an agreement he was authorized to enter into with the claimants to inholdings. Before any conveyances were signed, the subject lands and improvements must be appraised by disinterested parties, and separate lists of the improvements and lots prepared. While the Secretary of War might be willing to pay for the improvements, Congress might fail to appropriate monies for the land. Final ratification of the agreements was reserved to the Secretary of War.[150]

Chief Engineer Totten, on reviewing the documents, found that the section of the reservation transferred to the War Department "was to be bounded on the East by a line so drawn as to include in the tract the Engineer wharf and to correspond with the Western Boundary of the Moreno tract purchased by the Navy Department." The joint application by the War and Navy Departments for the transfer made to the President was with the understanding that the eastern boundary correspond with this description, and it was so ordered. If the eastern boundary of the Army reservation, except as modified, did not conform to the western boundary of the Moreno tract, it must.

Every corner of the reservation was to be marked by stones sunk into the earth.[151]

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150. Totten to Chase, July 18, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

151. Totten to Whiting, November 16, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

On the last day of 1846, Chase was called on to provide the Department with a sketch map locating the new boundary between the Army reservation and the navy yard, and pinpointing the naval hospital, Fort Barrancas, the Redoubt, the Engineer wharf, and other prominent features. To make it official, it would be signed by Chase and the navy yard commandant.[152]

On March 12, 1847, Chase mailed to the Department a "sketch showing the extent of Public Lands in the vicinity of Pensacola Navy Yard appropriated to Naval and Military purposes." As requested, the map was signed by Major Chase and Capt. W. W. Latimer, the navy yard commander.[153]

N. Establishment of the New York Engineer Depot

In the interest of economy, the Department, in 1845, established an office in New York City. The function of this office was to consolidate and centralize purchases by the superintending engineers. The officer in charge was to expedite and coordinate purchasing activities, and Chief Engineer Totten urged his project superintendents to make requisitions through this facility rather than agents, such as Delafield & Delafield, as they had been doing heretofore. A circular announcing establishment of the office and assignment of Lt. Danville Leadbetter, as its head, was issued on September 10, 1845.[154]

Chase either failed to receive or ignored the circular. The Department, when he continued to order through Delafield & Delafield, on

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152. Totten to Chase, December 31, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

153. "Sketch Showing the extent of Public Lands in the vicinity of Pensacola Navy Yard . . .," NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of the subject sketch, labeled Drawer 79, Sheet 49, is found in the files of the Florida Unit, Gulf Islands NS.

154. Welcker to Chase, September 16, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

September 18, 1846, reminded him that Lieutenant Leadbetter was stationed in New York City for the purpose of making purchases for project superintendents at a distance, and the Department desired that purchases be made through him.[155]

Chase, acknowledging receipt of the circular announcing establishment of the New York Depot, promised to hereinafter make his purchases through that office.[156]

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155. Ibid.

156. Chase to Totten, September 27, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

VII. BUILDING THE BARRACKS AND MAINTAINING THE FORT: 1846-1860

A. Fort Barrancas Shot Furnace

Although the fort was reported completed in September 1845, it was the autumn of 1847 before the shot furnace was finished. More than seven years earlier, on June 6, 1840, Maj. William Chase had asked instructions on two points. Was he to construct a shot furnace in the old Spanish Battery? If so, was it to be on the site of the one that he had torn down?[1]

Colonel Totten asked Chase to defer construction of the furnace, pending completion and evaluation by the Ordnance Department of experiments currently in progress with cast iron furnaces.[2]

On October 2, 1840, Army Regulations were changed and responsibility for construction of shot furnaces transferred from the Ordnance Department to the Engineers.[3]

Not having heard anything from the Department, regarding construction of a shot furnace in 18 months, Major Chase, in December 1841, again inquired, "Shall I put up a hot shot furnace" in the Water Battery?[4] He, however, received no reply.

The subject of shot furnaces surfaced following Colonel Totten's May 1845 visit. Totten, at that time, directed Chase to erect a 7-foot

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1. Chase to Totten, June 6, 1840, NA, RG 77, Ltrs. Recd., Chief Engineer.

2. Totten to Chase, June 22, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

3. Totten to Chase, October 2, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

4. Chase to Totten, December 15, 1841, NA, RG 77, Ltrs. Recd., Chief Engineer.

furnace at Fort Barrancas.[5] Chase held out for two shot furances, one in the water battery and the other at Fort Barrancas.[6]

Totten countered that his decision for positioning a shot furnace in the fort was firm, but he would approve construction of a smaller one in the water battery. No work was to be done on the second until the first had been completed.[7] Meanwhile, the irons could be requisitioned.

The irons were ordered and received, and on November 1, 1846, when he made his annual report to Congress, Chief Engineer Totten announced that the furnaces would be built "as soon as more important labors connected" with the Redoubt were completed.[8]

In October 1847, Major Chase turned his masons to building the Fort Barrancas shot furnace. It was completed before winter.[9] The water battery furnace was never built.

B. Construction of 4 Divisions of the Barracks and 4 Kitchens

1. Totten Vetoes Chase's Request for Funds to Construct Barracks

The casemate quarters at Fort Pickens had proved to be unsatisfactory during their brief occupancy in the mid-1830s. In October

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5. Totten to Chase, May 30, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

6. Chase to Totten, June 18, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

7. Totten to Chase, September 3, 1845, NA, RG 77, Ltrs. Sent, Chief Engineer.

8. Executive Documents, Serial 493, p. 128.

9. Fort Barrancas, Monthly Report of Operations, October 1847, NA, RG 77, Ltrs. Recd., Chief Engineer.

1839, Major Chase, having heard that the War Department was planning to redeploy troops to garrison Forts Pickens and McRee, proposed that the Department seek an appropriation for construction of barracks at the Barrancas. Such structures could also serve as quarters for the Corps of Engineers.[10]

With the Nation in a depression and an injunction to pare expenditures, Chief Engineer Totten axed Chase's proposal. No construction of this type would be undertaken unless sanctioned by the War Department.[11]

Suspecting that Colonel Totten may have coupled his request for funds to rehabilitate the frame building on Santa Rosa Island, formerly used as quarters for the assistant engineer, with his proposal for monies for construction of barracks at the Barrancas, Chase returned to the subject. On December 7, he wrote that no work has been done to this structure. In his mid-October letter, he had meant to imply that a wing of the proposed barracks be built and occupied by the Engineer Department, while the Barrancas forts were being built. If this were done, it would alleviate the necessity of erecting temporary facilities during the construction phase.

If the Department approved his proposal, Chase would forward plans, elevations, and sections of a small house for the assistant engineer, along with an estimated cost.[12]

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10. Chase to Totten, October 15, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

11. Totten to Chase, November 16, 1839, NA, RG 77, Ltrs. Sent, Chief Engineer.

12. Chase to Totten, December 7, 1839, NA, RG 77, Ltrs. Recd., Chief Engineer.

Totten urged Chase to hold his proposal in abeyance until the country's economic condition improved. Whenever this occurred, he believed Congress would look favorably on a request for an appropriation for construction of the barracks.[13]

2. Uncomfortable Casemate Quarters in the Island Forts Leads to Establishment of Camp Barrancas

With construction of the fort well along, the Nation's economy on the upswing, and troops again garrisoning the Pensacola forts and complaining about the Forts Pickens and McRee quarters, Major Chase again broached the need for barracks. On September 30, 1843, he wrote the Department that in the area was found red sandstone in abundance. This material hardened when exposed to air, and could be used to advantage in construction of barracks. Shells and lime could be purchased locally, but at prices much higher than those paid for "good Thomastown Lime." West Florida timber--embracing pitch pine, white pine, swamp pine, live oak, ash, and locust--was excellent.[14]

The Department, however, was unprepared to act. Four months earlier the battalion of the 7th U. S. Infantry, assigned to the defenses of the harbor, had evacuated the Forts Pickens and McRee casemates and had established Camp Barrancas on the mainland. The soldiers remained at the camp until April 1845, when they reoccupied the forts.

Still dissatisfied with the casemate quarters, Capt. Dixon Miles, the battalion quartermaster, requested authority to erect housing for his troops on the Army reservation. He asked Chase to pinpoint a site. Before doing so, Chase sought guidance from Chief Engineer Totten, because any additionl structures might interfere with location of the proposed permanent barracks.

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13. Totten to Chase, January 24, 1840, NA, RG 77, Ltrs. Sent, Chief Engineer.

14. Chase to Totten, September 30, 1843, NA, RG 77, Ltrs. Recd., Chief Engineer.

The naval authorities, Chase believed, would have no objection to the continued occupation of the "small strip of land adjoining the military reserve," even if huts were erected.[15]

Before the Department could act on this request, Maj. Jacob Brown's battalion of the 7th Infantry, in August, was ordered to join General Taylor's army in Texas. The footsoldiers were replaced at Pensacola by a battalion of the 1st U. S. Artillery. Then, in November 1845, two companies of the artillerists were transferred to Louisiana and one to Fort Brooke, Florida, leaving two companies and regimental headquarters for defense of the Pensacola forts.

Major Chase was disappointed to see the garrison reduced, as the troops at Forts Pickens and McRee and Camp Barrancas had recently moved into more comfortable housing "than the first look at them seemed to promise; and . . . they had in some degree become reconciled to leaving the magnificent quarters at Fort Adams" to come to the "rougher and narrower ones of Pensacola."[16]

3. Chase Prepares to Get the Project Underway

a. Chase Calls for $25,000 to Begin Turning Pensacola into a Military Base

Major Chase, 13 months earlier, with Fort Barrancas nearly finished, tried a new approach to secure funds for construction of barracks, and, at the same time, expand Pensacola's role in the Nation's defense. On October 3, 1844, Chase outlined his concept. The Barrancas, he informed the Department, afforded many military advantages, among which were its "healthfulness" and public ownership of

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15. Chase to Totten, June 18, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

16. Chase to Totten, November 6, 1845, NA, RG 77, Ltrs. Recd., Chief Engineer.

the land for many miles around. As such, it could be employed as an "arsenal of depot and construction of ordnance" for the Gulf Frontier. It could also function as a "school of practice on which every branch of the military art" could be employed.

A concentration of the Gulf Frontier troops at the Barrancas could afford a beginning. Barracks for a regiment would offer necessary accommodations. Maneuvers could be undertaken without fear of trespassing on private property. Cavalry and light artillery would "find plenty of rough riding over the hills and low grounds, giving considerable variety to the exercise of these arms." Ponton and bridge exercises could be conducted to an advantage on Bayou Grande. An arsenal of deposit and construction similar to the one at Fort Monroe would be valuable to the Ordnance Department.

The Engineering Corps should take the initiative in establishing the Barrancas as a formidable military base, Chase urged, by asking Congress for an appropriation for construction of barracks. Twenty-five thousand dollars was his estimated cost of this facility.[17]

b. Congress Appropriates $25,000 to Begin Work

The Department pigeon-holed Chase's letter, but his estimate was not forgotten. On May 21, 1846, 8 days after war was declared against Mexico, the Department notified Major Chase that the Fortifications Bill, recently signed into law by President James K. Polk, appropriated for the fiscal year ending June 30, 1847, $50,000 for the Barrancas and $10,000 for Fort Pickens. The former included funds for erection of permanent barracks. This money was available for immediate expenditure, and Chase was to forward for approval an operating program.[18]

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17. Chase to Totten, October 3, 1844, NA, RG 77, Ltrs. Recd., Chief Engineer.

18. Totten to Chase, May 21, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

One month later, the Department informed Chase that one-half of the $50,000 was to be programmed for construction of the Redoubt and the remainder for the barracks.[19]

Chase, replying, pointed out that immediate "construction of a portion of the soldiers' barracks for two companies and a building for the commanding officer" would meet current needs. By watching costs, he might be able to complete enough officers' quarters to accommodate all officers assigned to two companies.

Although these buildings were to be built substantially, "all expensive ornaments" were to be dispensed with. He also regretted that the barracks were not to be fireproof. In quarters of this type, he reminded Colonel Totten, no wood should be used except for doors and flooring.[20]

c. Chase Changes His Bank of Deposit

One month before, on May 30, Chief Engineer Totten notified Chase that, at the request of the Secretary of the Treasury, no more funds were to be deposited with the Bank of Louisiana.[21]

Next, Secretary of the Treasury Robert J. Walker advised the War Department that the Canal & Banking Co. of New Orleans, along with certain banks in other cities, had posted collateral security for safekeeping of public funds. He recommended that

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19. Totten to Chase, June 26, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

20. Chase to Totten, July 6, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

21. Totten to Chase, May 30, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

disbursing officers keep public accounts with these banks. Secretary of War Marcy was agreeable and issued necessary orders.[22]

Acknowledging this communication, Chase announced that, hereinafter, he would deposit public funds for which he was responsible in the Bank of Mobile and the Canal & Banking Co. of New Orleans.[23]

d. Chase Seeks but Fails to Acquire for Quarters the Gonzales Property

On August 26, 1846, Chase suggested that by adding a wing to the north elevation of the assistant engineer's house, "very comfortable and suitable quarters" would be afforded for the post commander. He estimated the cost of this project at $700.

He also recommended purchase of the six-room house that had belonged to Celestine Gonzales, his recently deceased construction superintendent. The Gonzales lot, on which were also a kitchen and servants' quarters, was southwest of the site selected by Colonel Totten for the commanding officer's quarters. This property, if acquired by the United States from the Gonzales heirs, could serve as quarters for the post adjutant and quartermaster. Until such time as the Corps of Engineers was prepared to turn over Fort Barrancas and the assistant engineer's quarters to the troops, the Gonzales house could be occupied by the commanding officer.

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22. Walker to Totten, June 10, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

23. Chase to Totten, July 2, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

This arrangement would negate necessity of erecting, at this time, a commander's quarters, thus affecting a considerable savings, which could be applied to other projects.[24]

Colonel Totten appreciated Chase's proposals. But, before giving approval, he would have to see a floor plan of the Gonzales house, and an estimate of the cost of its rehabilitation.[25]

On October 3, Chase mailed to the Department two sheets of drawings of the Gonzales house. He estimated the cost of rehabilitating the house and kitchen at $600. This involved replacing the light wood piles on which they stood with brick pillars; painting interior and exterior; and renewing a portion of the floors and piazzas. As Lt. Thomas W. Brent of the Navy (who was representing the heirs) was with the fleet blockading Veracruz, it had been impossible for Chase to ascertain the property's selling price. He estimated that it would not exceed $2,000.[26]

Chief Engineer Totten pronounced the estimated price of the property too high. With the value of the improvements, it would cost more than a new structure. Under no circumstances would he approve "an expensive" renovation of an old house.[27]

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24. Chase to Totten, August 26, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer.

25. Totten to Chase, September 18, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

26. Chase to Totten, October 3, 1846, NA, RG 77, Ltrs. Recd., Chief Engineer. The Gonzales house and kitchen were weatherboarded, the boards lapping. The interior of the house was plaster over laths, while the kitchen was not plastered. On the property, there was an excellent well, protected by a shed. It, along with the other outbuildings, required some repairs. A copy of the Gonzales plat, labeled Drawer 79, Sheet 43, is found in files, Florida Unit, Gulf Islands NS.

27. Totten to Chase, November 15, 1846, NA, RG 77, Ltrs. Sent, Chief Engineer.

Major Chase, having learned that the Gonzales heirs would sell for $1,650, reduced his estimate of the cost of rehabilitating the property from $600 to $400. Thus, the United States, for $2,050, would obtain a "substantial good building" for accommodation of its officers.

As the repairs could be deferred, Chase asked the Department for $1,650 to pay for the property.[28]

Colonel Totten was absent, having joined Maj. Gen. Winfield Scott's army, then preparing to attack Veracruz. Pending his return, a decision on this expenditure would be held in abeyance.

If the Gonzales property were within the reservation, the Department inquired, would not the Secretary of War's directive in regard to settling claim to lands and improvements be applicable?[29]

Colonel Totten returned to Washington in April 1847 with General Scott's dispatches, announcing the capture of Veracruz. In recognition of his services and gallantry in the siege leading to the capture of that city, Totten was breveted brigadier general.

On learning that the 2d Session of the 29th Congress had adjourned without passing a Fortifications Bill, Totten notified Major Chase that he was unprepared to recommend purchase with the small sum currently available for the defenses of Pensacola of either the Gonzales house or the four properties recently appraised by Lieutenant Whiting and

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28. Chase to Welcher, February 10, 1847, NA, RG 77, Ltrs. Recd., Chief Engineer.

29. Welcher to Chase, February 23, 1847, NA, RG 77, Ltrs. Sent, Chief Engineer.

a Mr. Avery. The entire available sum must be applied to construction of the soldiers' barracks.[30]

The purchase of the Gonzales property by the government was dropped and did not resurface for a number of years.

4. Four Divisions of the Barrancas are Completed and Occupied

Ground was broken for construction of the barracks in June 1847. When he made his report for the year ending September 30, 1848, Major Chase informed the Department that the masonry of the centre pediment was nearly ready to receive its roof. As soon as this section was covered, the interior work--plastering, flooring, painting, and glazing--would be commenced, together with the rear piazzas and detached kitchens. After this pediment was ready for occupancy, the two adjoining divisions would be built.

The location of the barracks on the Barrancas, 600 yards east of the fort, Major Chase assured the Department, did not interfere with the four nearby private homes. Neither had it necessitated "cutting down the noble live oak trees in the vicinity." These would be preserved for "ornament and shade."[31]

On October 31, Chase reported the centre pediment finished, with exception of the arches for support of the girders, and a "small portion of the division wall." The roof was ready to put up, and a part of the piazza "formed" ready to be kyanized.

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30. Totten to Chase, April 18, 1847, NA, RG 77, Ltrs. Sent, Chief Engineer. Mr. Avery had been selected to appraise the four reservation inholding belonging to Dr. Hulse, and Messers. Dougherty, Clifford, and Oldmixon.

31. Fort Barrancas Annual Report for Year Ending September 30, 1848, NA, RG 77, Ltrs. Recd., Chief Engineer.

Accommodations for two companies of troops could be afforded within the centre pediment, if it were required. He, however, trusted that soldiers would not be returning to the Barrancas until the Redoubt was completed.[32]

Chase, in mid-December, advised the Department that "excellent water" was obtained at 18 feet. Would it not, he inquired, be better to have "brick curbed wells" than cisterns for the barracks? Wells would be cheaper.[33]

The Department having approved substitution of wells for cisterns, Major Chase, on March 25, 1849, reported a well, which afforded a plentiful supply of good water, had been constructed at a cost of $75.[34]

A massive construction program at the navy yard, in the years following the Nation's victory in the Mexican War, confronted Major Chase with a two-fold problem: it placed bricks in heavy demand and raised their price. This had so limited supply that hopes of completing all the brickwork for the "four divisions of barracks, together with that of their adjacent kitchens" by June 30, 1849, were dashed. The carpentry work of two divisions was well advanced and was being accomplished as rapidly as the masonry allowed? Concrete foundations for the east wing has been laid, and the masonry raised to the top of the water table.[35]

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32. Chase to Totten, October 31, 1848, NA, RG 77, Ltrs. Recd., Chief Engineer.

33. Chase to Totten, December 17, 1848, NA, RG 77, Ltrs. Recd., Chief Engineer.

34. Chase to Totten, March 25, 1849, NA, RG 77, Ltrs. Recd., Chief Engineer.

35. Chase to Totten, July 1, 1849, NA, RG 77, Ltrs. Recd., Chief Engineer.

By September 30, Chase reported the masonry of the four divisions of barracks and their kitchens complete, except the small flooring arches in two divisions, the brickwork of which was now underway. The lower rooms of the barracks and of two kitchens remained to be paved, as well as the front walk and floor of the rear piazzas. Windows of the two middle divisions in the centre pediment and of the corresponding kitchens were glazed. The carpentry of the interior of the structures had been "prepared, a part of it put up and all the remainder in readiness to be."

Slaters were at work on the roofs of these two divisions.[36]

By the end of Fiscal Year 1850, four divisions of the barracks had been "completed in all their parts, except the substitution of two sets of iron stair cases in place of temporary wooden ones." The building was in good condition and ready for occupation by enlisted men of four companies.

A second barracks, east of the centre pediment, was well underway, with the brickwork of another division and two passageways nearly completed; the brickwork of the other two divisions raised to the level of the first floor window sills; the brickwork of a double kitchen completed; the foundation of a second single kitchen laid in concrete; and two additional wells dug and curbed with brick.[37]

Work continued on the barracks until August 23, 1851, when appropriated funds were exhausted. By that date, four divisions had been completed, and had been occupied since November 1850, by Company D, 1st U.S. Artillery. On the fifth division, all the masonry

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36. Chase to Totten, September 30, 1849, NA, RG 77, Ltrs. Recd., Chief Engineer.

37. Fort Barrancas, Annual Report, Fiscal Year 1850, NA, RG 77, Ltrs. Recd., Chief Engineer.

had been finished, except the small arches supported by the iron girders forming the floors of the second and third stories. The frame of the piazza and the roof were completed and slated. Brick floors had been laid in the first story, and the ground floor of the piazza paved with brick. The masonry of the kitchens of the fifth and sixth divisions, including the brick flooring in the lower story, had been completed; and the joists of the second floor laid, and the roof slated.

The passageway of the sixth division, adjoining the fifth division, had been carried up with the latter, roofed and slated, and its interior arches turned. Foundations of the sixth and seventh divisions (west of the centre pediment) had been laid in concrete, and the front, rear, end, and cross walls raised to the level of the first story window sills. The foundations of the kitchen for the seventh division had been laid and another well dug.

To complete the barracks and build the necessary officers' quarters, Major Chase estimated, required an additional $76,044. Expended to date on the project had been $75,071.[38]

5. Company D, 1st U.S. Artillery, Occupies the Barracks

Lt. Col. Levi Whiting of the 1st Artillery, seeing that four divisions of the barracks were completed and knowing that they would afford more comfortable quarters than the Fort Pickens casemates, called upon Major Chase in late November 1860. At Chase's invitation, Company D moved from Santa Rose Island into the barracks. It was understood, however, that Whiting's command merely occupied "the barracks with the use of the railway and the wharf"; and that in no way did he "exercise any authority, except in the command of the troops, over any of the engineer dependencies." Fort Barrancas was as far removed from his command as Fort Morgan, Alabama.

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38. Chase to Totten, October 1, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer.

As determined in 1845, with construction in progress, it was not convenient for the Engineers to turn Fort Barrancas, the Redoubt, the barracks, railway, wharf, and reservation over to the troops.

Meanwhile, Chase recommended to the Adjutant General that he continue to command the Fort Barrancas ordnance-sergeant, and that he be held responsible for the safekeeping of the ordnance property therein. Any arrangement whereby Colonel Whiting was given command of Fort Barrancas could, Chase cautioned, lead to "unpleasant misunderstandings" as to their respective duties.[39]

Chase's letter to the Adjutant General had been triggered by one from the War Department to Colonel Whiting, informing him that the Fort Barrancas armament was considered to be in his charge and the ordnance-sergeant subject to his orders.[40]

6. Lieutenant Simpson Describes the Post

The troops were withdrawn from the Pensacola defenses in the autumn and winter of 1851-52. First to go was Company D, which left on October 4, to be followed on February 23 by the band and regimental headquarters. Company D, 1st U.S. Artillery, returned on May 31, 1852, the troops again taking up quarters in the barracks. The company remained 17 months before it boarded a vessel chartered to carry it to its new station at Fort Capron, Florida. Company F, 2d U.S.

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39. Chase to Thomas, April 9, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer. Company D, 1st U.S. Artillery, had been transferred to the Barrancas from Fort Brooke, Florida. The company was joined by the regimental band, which arrived on April 13, 1851, from New Orleans. Troops were daily detailed from Barrancas barracks for guard duty at Forts Pickens and McRee. Returns for U.S. Military Posts, NA, Microcopy M-617.

40. Thomas to Whiting, April 12, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer.

Artillery, which had been posted at Fort Capron, traded places with Company D, and occupied Barrancas barracks on November 11, 1853. Six weeks later, on December 23, the regimental band arrived from Fort Monroe.[41]

The barracks again occupied, Major Chase, in June 1854, recommended that they be painted, both inside and outside.[42]

On May 27, 1854, 1st Lt. Marcus D. L. Simpson, the post quartermaster, submitted a detailed report on the quarters and facilities at the Barrancas. The barracks, he reported, were in an unfinished state. In the four completed divisions, there were 12 large squadrooms occupied as quarters by Company F and the band; clothing room, chapel, company messroom, company storeroom, and carpenter's shop; and offices for the post commander, post quartermaster, and Major Chase.

North of the barracks were two kitchens used as quarters for the laundresses, company cookhouse, guardhouse, and quartermaster storehouse. In winter, these were good quarters, but they were "scarcely habitable in summer on account of heat and closeness," being too near the barracks to get any breeze off the bay. A third kitchen (the westernmost) had been recently abandoned by the quartermaster sergeant as too warm and unhealthy. He, at his own expense, had rented the house, formerly the home of Dr. Hulse, north of the kitchens. A fourth kitchen, the easternmost, was unfinished.

A frame bakehouse, built in 1852, was north of the Hulse yard.

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41. Returns for U.S. Military Posts, NA, Microcopy M-617.

42. Chase to Totten, June 3, 1854, NA, RG 77, Ltrs. Recd., Chief Engineer.

Northeast of the barracks were two quarters and the post hospital. The first of these was a shed-house, with attached kitchen. It had formerly been used as laundress quarters, but was now abandoned as it leaked and was tumbling down. Lieutenant Simpson believed it not worth repairing. To the east of this structure was the post hospital, with two 20-by-20 foot rooms, front porch, and shed-room in rear. The detached kitched was falling down. Southeast of the hospital was a house with two 16-by-16-foot rooms, two shed-rooms in the rear, and a front porch. The detached kitchen was very dilapidated. This house served the 1st sergeant as quarters.

Between these structures and the bay was the parade ground and woodyard. This area was fenced and near its south boundary was the garrison flagstaff.

The public stable, a small dilapidated structure, stood between the parade ground and the bay.

On the edge of the Barrancas, south of the barracks, were the officers' quarters. It was a frame building with four rooms (two large and two small), porches in front and rear, and attached kitchen. The newer section of the quarters was occupied by Lt. Albert J. L. Molinardi, while the old, being very dilapidated, was unoccupied. The woodshed and other outbuildings were falling down.

East of the Engineer's wharf was a boathouse. The wharf, Lieutenant Simpson reported, was "too dilapidated and decayed for use." Supplies for the post were landed at the navy yard, nearly a mile away, and hauled to the barracks in carts over "a heavy sandy road."

Between the barracks and the Barrancas, west of the officers' quarters, were three inholdings. On each were houses and outbuildings which had been erected between 1827 and 1840. Those on the center lot by Mr. Dougherty in 1827, those on the west lot by Mr. Oldmixon, and those on the east lot by Mr. Clifford in 1840. Francisco Gomez rented the Clifford property, while Mrs. Dougherty and her family

and Mr. Oldmixon occupied their houses and lots. Gomez and Oldmixon would not rent to the military, while Mrs. Dougherty would rent her house year-to-year for $180. Her home, Lieutenant Simpson noted, had two assignable first floor rooms, with attached kitchen, while there were several small second story rooms of "such size, state, and arrangement, as not to be assignable quarters." The house also leaked and needed to be re-roofed.

Nearer the fort was the dwelling owned by the Gonzales heirs and leased by a Mr. Herring for two years. In the past, this property had been rented by the Army.

North of the kitchens, east and west of the Hulse property, were two houses that were unsuitable for rent as officers' quarters. One of them was tumbling down and was home to a family of blacks, while the other was in too dilapidated condition to justify repairs by its owner. Even so, it was too close to the barracks to "make it proper or decent ever for officers."

To provide quarters for officers, not living on post, Lieutenant Simpson paid to them, as commutation, $7 per month for rent of housing in Pensacola. Rooms, however, cost more, and the officers were compelled to sustain the loss.[43]

Simpson's letter succeeded in goading an allotment from the Quartermaster General for repair of the officers' quarters and for construction of quarters for the garrison commander. The repairs and new house were completed by mid-April 1855.[44]

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43. Simpson to Jesup, May 21, 1854, NA, RG 92, Consolidated Correspondence File.

44. Simpson to Jesup, April 5, 1855, NA, RG 92, Consolidated Correspondence File.

C. Defending the Reservation

1. Department Calls for a Better Map Showing Reservation Improvements

Administration and protection of the Army Reserve, until August 1858, continued to be vested with the Corps of Engineer.

On February 6, 1850, the Department, having observed certain inconsistencies in the maps of the reservation in its files, asked Major Chase to extend his survey in one direction to connect with the fort, and in other directions with the several buildings of the naval hospital, the Engineer wharf, and the Redoubt. Within the area indicated, all buildings were to be located, with the dimensions, designations, owners names, and their relative positions shown by written distances. The subject sketch, when completed, would be transferred to the plan of the grounds made in 1844 by Lieutenant Scarritt.[45]

Chase promised to extend the survey to include the designated points.

He, at this time, informed Washington that he had not placed any stones to mark the boundary between the Army and Navy Reservations. He had not done so because the Navy had anticipated him by positioning "light wood square posts with pyramid tops" along the boundary. Trees and underbrush had been cut to clear the line, so it was easily identified on-site.[46]

The requested map, containing the desired data, was completed by Major Chase on February 25 and forwarded the next day.[47]

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45. Totten to Chase, February 6, 1850, NA, RG 77, Ltrs. Sent, Chief Engineer.

46. Chase to Totten, February 17, 1850, NA, RG 77, Ltrs. Recd., Chief Engineer.

47. Chase to Totten, February 26, 1850, NA, RG 77, Ltrs. Recd., Chief Engineer. A copy of this map, labeled Drawer 79, Sheet 55, is found in files, Florida Unit, Gulf Islands NS.

2. Department Faces the Special Use Permit Issue

G. A. Underhill, a son of the late Lt. Frederick A. Underhill of the Corps of Engineer, in May 1851, requested permission to erect a summer cottage on the reservation. The site pointed out to Major Chase was on the bay shore southwest of the lighthouse.

Relaying Underhill's request to the Department, Chase endorsed the proposal, writing that a house "occupied by a responsible person would be no injury to the public interest."[48]

Secretary of War Charles M. Conrad rejected Chase's proposal to lease the site to Underhill. He did so in accordance with General Totten's recommendation. The Chief Engineer had explained to the Secretary that in all "similar cases, trouble and annoyance" had resulted, without any compansating advantage.[49]

On November 12, 1851, Francisco Gomez applied for a permit to erect a hotel. In his application, he pointed out that there was need of a "respectable hotel" at the Barrancas for accommodation of Army and naval officers and visitors to the area.

After discussing the subject with Major Chase, who supported his proposal, they selected a construction site northeast of the railway, near the bay, and "removed from all interferences with the public buildings." In his application to the Secretary of War for authority to build his hotel, which was endorsed by Major Chase and

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48. Chase to Totten, May 12, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer. Lieutenant Underhill had died July 21, 1829.

49. Totten to Chase, May 27, 1851, NA, RG 77, Ltrs. Sent, Chief Engineer.

other officers, Gomez promised to abide by regulations, maintain a strict police, and to remove the buildings if required for public purposes.[50]

Gomez's application was approved by the War Department, subject to these conditions: (a) the approval of the navy yard commandant; (b) plans to be submitted for review and approval by the military, with no additions made thereafter; (c) he enter into an agreement to consider himself a tenant at will, subject to being evicted or compelled to relocate his hotel and its dependencies whenever notified by proper authorities; (d) he conform to all orders or regulations of the military for maintenance of "health, good order and discipline"; and (e) he pay rent of $100 per year "to be applied to the benefit of the post fund whenever there may be a garrison at Barrancas, and at other times to be applied to repairs and improvements of the public quarters and barracks, wharfs, and roads."[51]

Gomez refused to accept the condition calling for the $100 annual fee for his special use permit. Chase, on relaying this information to the Department, termed Gomez's proposed enterprise highly desirable. He pointed out that "hundreds of stores, restaurants and dwellings have been erected within the Naval Reserve," one of which has recently been raised within a "stone's throw of the buildings at the Barrancas," without consulting the Army.[52]

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50. Gomez to Chase and Chase to Totten, November 12, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer. On December 31, Chase forwarded to the Department a petition signed by six naval officers (W. Decatur Hunt, W. F. Spicer, Robert D. Thorburn, F. B. Kershaw, and W. Holland), one civilian (Jasper Strong), and Lt. Col. Levi Whiting, Lt. William H. C. Whiting, and himself, urging that permission be granted Gomez to erect a hotel on the public domain. Chase to Totten, December 31, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer.

51. Totten to Chase, January 24, 1852, NA, RG 77, Ltrs. Sent, Chief Engineer.

52. Chase to Totten, February 5, 1852, NA, RG 77, Ltrs. Recd., Chief Engineer.

Secretary of War Conrad, in view of the position taken by Chase, reversed himself. On March 11, he agreed to drop the condition calling for payment by Gomez of an annual fee.[53]

Gomez, for some undetermined reason, failed to implement his plan. No hotel catering to Army and Navy officers was erected on the reservation in the 1850s.

3. Warding off the Railroaders

In 1855, legislation enacted by the 2d Session of the 33d Congress posed a dire threat to the reservation. To stimulate economic development of the area, Congress granted to Jasper Strong, George Terrell, and their associates a right-of-way, 100 feet in width, through the land reserved by the government west of the navy yard for "construction of a railroad from the Perdido River, on the most direct and practicable route to the waters of Pensacola Bay." The incorporators were also given use of any timber or other materials along the route and within one-half mile on either side thereof, which might be needed for construction purposes. At their Pensacola Bay terminus, the promoters were to have the priviledge of "erecting a wharf and establishing a depot for lumber and other items." The terminal could not exceed one acre.

The grant was conditioned on the Secretary of the Navy giving his approval to the location of the right-of-way and terminal. Nothing in the act was to be construed as authorizing Strong, Terrell, and their associates to use or destroy any of the live oaks reserved for naval purposes.

A similar franchise was granted by Congress to James Herron and his associates from their steam saw-and gristmill on the

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53. Totten to Chase, March 11, 1852, NA, RG 77, Ltrs. Recd., Chief Engineer.

Perdido, through the government lands, west of the navy yard to Pensacola Bay.[54]

Lt. John Newton, Major Chase's successor, was understandably dismayed by this legislation. Writing General Totten, on March 13, he pointed out that Congress must have intended the grant to apply only to the naval reserve, but it was not so expressed. By "this hasty piece of legislation, the War Department had not the power to prevent the location" of the railroads on the Fort Barrancas reservation.[55]

By the beginning of the fourth week of March, Newton learned that the promoters planned to build their railroad across the Fort Barrancas reservation, passing between the fort and the Redoubt.

Even if he were misinformed on this, he protested, the legislation was an "outrage upon the right of the military authorities to be consulted," and a "great wrong to the public interests." It was his belief that "the measure was hurried through Congress, by keeping that body in ignorance of the state of affairs." He was led to this conclusion by the phraseology of the bill, in which the "fact" that the Army's jursidiction over any portion of the grounds was "studiously" avoided. Congress had been led to infer by the act's sponsors that "the Navy Dept. alone has rights in the premises."

In addition to the injury to the defenses, location of the railroads on the reservation would expose the government to claims for

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54. Statutes at Large and Treaties of the United States of America from December 1, 1851 to March 3, 1855 . . ., edited by George Minot (Boston, 1855), p. 680.

55. Newton to Totten, March 13, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

damages in event of their destruction during hostilities, Newton warned the Department.[56]

Chief Engineer Totten, on apprising Secretary of War Jefferson Davis of the situation, recommended that the Secretary of the Navy be asked not to sanction the location of any railroad across the reservation until its right-of-way had been approved by the superintending engineer at Pensacola.[57] Confronted by the opposition of the military, the promoters located their railroad north of the Bayou Grande, with its eastern terminus at Pensacola rather than at the navy yard.

D. Maintaining and Protecting the Fort: 1847-1854

1. Repairs and Maintenance in Fiscal Year 1847

During Major Chase's last seven years as Superintending Engineer of the Pensacola Defenses, recently completed Fort Barrancas occupied little of his time or attention. Until 1851, when Congress for the time being ceased appropriating construction funds for the Barrancas, Chase was engrossed with building the Redoubt and the barracks and other duties pertaining to his position as Senior Engineer on the Gulf Frontier.

In Fiscal Year 1847, a few masons were diverted from their work on the Redoubt to: (a) alter the carronade embrasures preparatory to emplacement of 24-pounder howitzers; (b) pave the parapet of the Reduit and tar its walls; (c) "make drain for leaks" in Fort Barrancas; (d) drill and repair pintle holes; (e) repoint casemate galleries and arches; and (f) plaster galleries and casemates.

The carpenters (a) built penthouses for the Fort Barrancas and Water Battery barbette guns; (b) made slight alterations to

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56. Newton to Totten, March 23, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

57. Totten to Davis, April 6, 1855, NA, Microcopy M-22.

drawbridge and sally port gates; and (c) outfitted an ordnance implement room in one of the Fort Barrancas casemates.

A blacksmith fabricated hooks for doors and made a kettle for boiling mastic.

The teamsters hauled the 24-pounder howitzers, their carriages, brush and manure, and boiling mastic.

The laborers, besides assisting the artisans, (a) mounted cannon and howitzers; (b) policed the area and planted Bermuda; and (c) repaired banquettes.[58]

2. Maintenance and Repairs in Fiscal Year 1848

Funds appropriated for construction of the Redoubt and barracks were again diverted for maintenance of Fort Barrancas. Laborers and teamsters were employed hauling manure, leveling sand, and planting grass on the glacis and earthen parapets; repairing the fence on crest of glacis; and assisting the ordnance-sergeant. The masons spent several days repointing and repairing coping.[59]

When he filed his annual report for the year ending September 30, 1848, Major Chase noted that these projects had been accomplished: repair of "the reversed slope of the crest of glacis, and making a small fence to protect the same from being walked over."

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58. Fort Barrancas, Monthly Reports of Operations, July 1846-June 1847, NA, RG 77, Ltrs. Recd., Chief Engineer. It had been decided to substitute eight 24-pounder flanking howitzers for a similar number of carronades in the counterscarp casemates.

59. Fort Barrancas, Monthly Reports of Operations, July 1847-July 1848, NA, RG 77, Ltrs. Recd., Chief Engineer.

He considered the fort, its Water Battery, and ordnance in "perfect condition."[60]

3. Maintenance in Fiscal Years 1849-1851

Major Chase, when he drafted his annual report for Fiscal Year 1849, called attention to a drought which had seared the region. According to Dr. Hulse, the average yearly rainfall at Pensacola was 78 inches. Since January 1, only 12 inches had fallen. This "extraordinary dry weather" had "retarded the growth" of grass on the earthen parapets and glacis. Care had been taken to protect the slopes, and it was believed that when the rains came, the sunburned Bermuda would spring back to life.

The fort and Water Battery were in good condition, and their armament "well preserved by Ordnance-Sergeant Armstrong and one man."[61]

Three months later, on September 30, Chase again informed the Department the fort was in "good condition and requires no repairs." The casemate arches were free of seepage.

A new fence was needed to protect the grass from the cattle and hogs. This barrier of juniper posts and yellow pine plank, besides embracing the fort, should protect the barracks, and extend from the line dividing the military and naval reserves.[62]

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60. Fort Barrancas, Annual Report for Year Ending September 30, 1848, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, 30th Congress, 2d Session (Washington, 1849), Serial 537, Vol. I, p. 267.

61. Chase to Totten, July 1, 1849, NA, RG 77, Ltrs. Recd., Chief Engineer.

62. Chase to Totten, September 30, 1849, NA, RG 77, Ltrs. Recd., Chief Engineer.

Fort Barrancas was in "good condition," Major Chase reported, on July 1, 1850. He reiterated the need for a "good strong fence" to preserve the "embankment from cattle, etc., the present fence being much decayed."[63]

On October 1, 1851, Chase wrote that, during the past 15 months, no work had been done at Fort Barrancas. Beyond repointing the walls and rebuilding the fence around the works, none was necessary. A want of funds had prevented his attending to these projects.

To repoint the walls he asked $500 and to renew the fence, $350.[64]

The well at the assistant engineer's quarters had caved in, its wooden curb having rotted. Chase, in mid-September, asked for an $80 allotment to dig a new well to be curbed with brick.[65]

General Totten approved expenditure of $80 from contingency funds for construction of a new well.[66]

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63. Fort Barrancas, Annual Report, Fiscal Year 1850, NA, RG 77, Ltrs. Recd., Chief Engineer.

64. Chase to Totten, October 1, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer.

65. Chase to Totten, September 20, 1851, NA, RG 77, Ltrs. Recd., Chief, Engineer. Chase listed a cost of $25 for 2,500 brick; 4-1/2 casks of cement at $9; 10 days' labor, $10; 8 days' masonry, $16; iron cover, $16; and sundry hauling, $8.

66. Totten to Chase, October 3, 1851, NA, RG 77, Ltrs. Sent, Chief Engineer.

4. Cutting Back Personnel

a. Chase Loses his Assistant

Upon suspension of construction in 1851, Major Chase lost his brilliant young assistant engineer, Lieutenant Whiting. Earlier, to cut overhead, he, in the first quarter of 1850, had employed Abigail Armstrong, wife of Ordnance-Sergeant Armstrong, as his clerk.[67]

b. Chase Reports on the Slaves' Pay

On August 5, 1851, Major Chase made a report, listing the slave mechanics and laborers employed at various times since the first of the year on the Pensacola defenses. Hired as a mason at $3.50 per day was Peter Dison; as masons at $2.50 a day, Solomon Grimes, Moses Shields, Robert Benton, Cornelius Wilson, Davey Johnson, and Joe Davis; as masons at $2 per day, Tom Polk, Nat Ramsey, Joe Hunt, and Ephraim Lindsey; as laborers at $1 per diem were Davey Leverich, John Gibbon, Charles Warfton, Moses Beyer, Joe Gilbert, Paul Brown, Sam Leverich, Tarleton, Abram Knight, Alec Payne, Isadore, Charles Lee, Ben Haynes, Wesley Fountain, Jim Redman, Moses Smith, Archibald Jackson, Addison Lacy, Sam Gibson, Louis Hamilton, Colbert Payne, Henry Bryan, and William Cooper; Alfred Gibson, George Adams, and Edward Diggs were paid $.75 per day; and Nathan Hicks, Sam Hunt, and Lewis Dison drew $1 a day as bargemen.[68]

c. Chase Hires a Fort Keeper

Five months before, on March 19, Major Chase had explained to the Department that the expense of hire of a fort keeper to look after the public property at the Barrancas, with the work about to be closed down, could be avoided. Although the barracks were unfinished, they were occupied by the troops of Company D, who looked

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67. Chase to Totten, March 31, 1850, NA, RG 77, Ltrs. Recd., Chief Engineer.

68. Chase to Totten, August 8, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer.

after them. The Redoubt was in such condition as to require no supervision beyond that afforded by the Engineer officer, while Fort Barrancas was in charge of an ordnance-sergeant and one man.[69]

This situation changed in February, 1852, when Company D, 1st U.S. Artillery, was withdrawn from Pensacola Bay. The departure of the artillerists made it impossible to provide routine maintenance for Fort Barrancas. An ordnance-sergeant, Chase complained, could not physically care for Fort Barrancas, the Redoubt, and the barracks. He urged the Department to allow him to hire a fort keeper to assist the sergeant. The keeper could be paid from funds reserved for "Contingencies of Fortifications."[70]

General Totten was agreeable, and sanctioned employment of a keeper at one dollar per day.[71]

5. April 1850 Storm Threatens Fort McRee

On April 2, 1850, a storm, characterized by Major Chase as the most severe he had seen at this season on the Gulf in a quarter of a century, ripped the area. Ordnance-Sergeant Weeks, posted at Fort McRee, reported that the surf rose higher there than it had for "five years past." The sea breached Foster's Island in many places, especially at the "the narrow neck of land south of the Fort." Fifty feet of beach disappeared, and fears were voiced that an inlet would be opened. To cope with this threat to Fort McRee, Major Chase had his men make a fill on the lagoon side.

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69. Chase to Totten, March 19, 1851, NA, RG 77, Ltrs. Recd., Chief Engineer.

70. Chase to Totten, March 29, 1852, NA, RG 77, Ltrs. Recd., Chief Engineer.

71. Totten to Chase, April 12, 1852, NA, RG 77, Ltrs. Sent, Chief Engineer.

Soundings showed that the storm had deepened the channel into Pensacola Bay guarded by the forts, "while washing the northern shore so as to widen the pass to about 500 feet."[72]

6. Two Years of Minimum Maintenance

Money spent for preservation and protection of the Barrancas works in the years from July 1, 1851, to June 30, 1854, had to be allotted by Chief Engineer Totten from contingencies. On June 30, 1852, Major Chase reported that during the last 12 months minor repairs had been made to the Barrancas works for a sum of $382, which also included the pay of the keeper.

No injuries had been sustained by the Redoubt and the barracks because of suspension of operations. Nothing worthy of note had occurred at the Barrancas during the year.[73]

Major Chase was in Washington in the third week of July. As Lieutenant Whiting had been transferred and the assistant engineer's billet had not been filled, Chase, during his absence, left former Mastermason John Sweeny in charge of the works. Calling on Chief Engineer Totten, Chase suggested that in Fiscal Year 1853, he be permitted to hire one laborer to weed the grass slopes and glacis, mend the fence, and care for the public property.[74]

General Totten acquiesced. Chase was authorized to employ a fort keeper at the Barrancas for Fiscal Year 1853 at the same wages as heretofore.[75]

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72. Chase to Totten, April 3, 1850, NA, RG 77, Ltrs. Recd., Chief Engineer.

73. Fort Barrancas, Annual Report, Fiscal Year 1852, NA, RG 77, Ltrs. Recd., Chief Engineer.

74. Chase to Totten, July 20, 1852, NA, RG 77, Ltrs. Recd., Chief Engineer.

75. Totten to Chase, July 21, 1852, NA, RG 77, Ltrs. Sent, Chief Engineer.

One year later, on June 30, 1853, Chase reported that the Barrancas works were in "good condition as regards preservation." The current drought, however, had withered and stunted the grass. In a few places on the Fort Barrancas parapets, the Bermuda had been seared and the sand laid bare. As soon as the rains came, the grass, where it had been killed, would be reseeded.

It was becoming increasingly difficult to shore up the dilapidated fence enclosing the glacis.[76]

7. Repairs and Maintenance in Fiscal Year 1854

Major Chase, in September 1853, recommended to the Department early completion of the public works at the Barrancas. This would require an appropriation of $145,000, allotted as follows:

Repair of Fort Barrancas Fence----------	$ 980.00
Complete Redoubt----------	46,976.00
Complete barracks----------	75,044.00
Purchase of inholdings----------	14,055.13
Construct officers' quarters----------	6,000.00
Repair of railway, wharf, etc.----------	1,944.87
	$145,000.00[77]

When no action was taken on this request, Major Chase scaled down his immediate needs from rebuilding the fence to its thorough repair. For $274, the fence could be repaired sufficiently to keep cattle and hogs off the glacis and slopes. This price took into consideration that many of the old posts could be salvaged.[78]

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76. Fort Barrancas, Annual Report, Fiscal Year 1853, NA, RG 77, Ltrs. Recd., Chief Engineer.

77. Chase to Totten, September 30, 1853, NA, RG 77, Ltrs. Recd., Chief Engineer.

78. Chase to Totten, January 3, 1854, NA, RG 77, Ltrs. Recd., Chief Engineer. Chase's estimate called for 15,000 feet refuse plank, $120; hauling the plank from the wharf, $20; 150 posts, $112.50; and labor, $18.

Chief Engineer Totten allotted the requested sum from contingencies. In May 1854, Chase, having stockpiled the planks and posts, employed two men to repair the fence.[79]

When he submitted his annual report for Fiscal Year 1854, Chase wrote that "a good strong fence has been constructed around and at the foot of the glacis." Unlike the previous year, there had been plenty of rain during the spring, and grass was again growing on the earthen slopes. Except for a few erosions, the "general condition" of Fort Barrancas was good.[80]

In October, shortly before he was transferred to Key West, Chase employed several men to sod the Fort Barrancas parapets.[81]

E. John Newton Replaces Major Chase as Superintending Engineer

1. Chase is Transferred to Key West

For a number of years, relations between General Totten and Major Chase had been unsatisfactory. There had been difficulties almost from the time that Totten replaced Chase's friend, General Gratiot, as Chief Engineer in late 1838. Totten, a brilliant engineer and tireless worker, was unable to delegate responsibility to his project superintendents, whereas Gratiot, a lax administrator, had given them great latitude. After Totten took charge, it can be said that it was impossible to lay a brick or stone or move a cubic yard of earth at a Third System fort without his authority and detailed instructions. Such a policy, although Totten possessed tremendous professional competence, stifled initiative and embittered many subordinates.

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79. Fort Barrancas, Monthly Report of Operations, May 1854, NA, RG 77, Ltrs. Recd., Chief Engineer.

80. Fort Barrancas, Annual Report, Fiscal Year 1854, NA, RG 77, Ltrs. Recd., Chief Engineer.

81. Fort Barrancas, Monthly Report of Operations, October 1854, NA,RG 77, Ltrs. Recd., Chief Engineer.

Totten, in the early 1840s, had clashed with Chase over Chase's practice of allowing contractors to continue work and make deliveries in anticipation of future appropriations. This was illegal. Chase sought vainly to justify it by explaining that the contractors did so at their risk. While General Gratiot had winked at this; Totten was horrified. Much acrimonious correspondence was exchanged between Totten and Chase on this subject, before Chase ceased running up huge arrearages.

Then, in the late 1840s, Totten had sought to send Chase to the West Coast, as a member of the Board of Engineers for the Pacific. His efforts, however, were nullified when Chase rallied sufficient political support from the Florida and Alabama congressional delegations to frustrate Totten's designs.

In 1854, the death of the project engineer for construction of Fort Taylor at Key West gave General Totten another opportunity to transfer Major Chase. Chase, by this time, had also become closely associated with Pensacola railroad promoters and was devoting much time and energy to their projects. Once gain, Chase sought to sabotage Totten's plans. Although he traveled to Washington to seek political support, Chase failed as Secretary of War Jefferson Davis backed Totten. In early November, a disgruntled Chase reluctantly left Pensacola, where he had served as Superintending Engineer for more than a quarter century for his new duty station.[82]

2. Lieutenant Newton Reports for Duty

Capt. Gustavus W. Smith, Chase's designated successor, was notified in late August that, upon being relieved of his duties at the U.S. Military Academy by Maj. John G. Barnard, he was to travel to Pensacola and take charge of Engineer operations in that harbor.[83]

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82. Bearss, Historic Resource Study and Historic Structure Report: Fort Pickens, pp.382-86.

83. Totten to Smith, August 26, 1854, NA, RG 77, Ltrs. Sent, Chief Engineer.

Smith did not go to Pensacola. On December 18, 1854, he resigned his commission and was hired as construction superintendent for the U.S. Treasury building in Washington.[84]

Captain Smith's resignation compelled General Totten to select another officer as Major Chase's replacement. His choice was 1st Lt. John Newton. Since 1853, Newton had been stationed on the South Atlantic coast overseeing improvements to navigation on Florida's St. Johns River; repair of the St. Augustine seawall; repair of Forts Pulaski and Jackson, Georgia; and trial and inspection of a dredgeboat for Sullivan's Island, South Carolina.

Born in Virginia in 1822, Newton was graduated from the U.S. Military Academy as No. 2 in the class of 1842. Commissioned a 2d lieutenant in the Corps of Engineers, Newton remained at West Point as assistant to the Board of Engineers and Assistant Professor of Engineering until July 1, 1846, when he was ordered to Fort Warren, Massachusetts, as assistant engineer. From 184649, he was assistant engineer at Fort Trumbull, Connecticut. His next three years were spent as superintending engineer on four Great Lakes forts--Wayne, Porter, Niagara, and Ontario.[85]

Lieutenant Newton acknowledged, on December 27, receipt of his orders. He promised to start for Pensacola as soon as relieved of his Charleston Harbor duties by Capt. George W. Cullum.[86]

Before departing Charleston for his new duty station, Lieutenant Newton wrote the Department. He wished to know how much

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84. Cullum, Biographical Register, Vol. II, p. 55.

85. Ibid., pp. 38-9; Ezra Warner, Generals in Blue: Lives of the Union Commanders (Baton Rouge, 1964), pp. 344-45.

86. Newton to Totten, December 27, 1854, NA, RG 77, Ltrs. Recd., Chief Engineer.

money had been appropriated for the Pensacola works, and the amount available for each. As he was unacquainted with affairs there, and as Major Chase was already at Key West, he asked that he be provided with "the various points worthy of notice . . . and such general instructions, etc., as it may not be of inconvenience to the Dept. to furnish."

He also suggested that $1,000 be deposited to his credit with the assistant treasurer in New York City on account of the Pensacola defenses.[87]

On January 17, the Department notified Newton that $1,000 was being held subject to his call, and would be charged against the recent Fort Barrancas appropriation. When drawn, this would reduce the balance on account of the Pensacola fortifications in the Treasury to $7,900 for Fort Barrancas and $10,000 for preservation of the site of Fort McRee.[88]

Congress, General Totten explained, had recently appropriated for Fiscal Year 1855, $10,000 for Fort Barrancas. After examining the defenses, Newton was to submit for approval, in accordance with procedures, a construction program for application of this sum, specifying the parts of the project to which it should be applied. He would provide the Department with an estimated rate of monthly expenditures and reserve a sufficient sum to maintain a guard over the public property from the close of operations till June 30, 1856.

This money should be "applied almost entirely to the advancement of the Redoubt" and the barracks. To guide Newton in allotting these funds, General Totten advised him that the present Congress has before it a "Fortification Bill," with an item of $30,000 for

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87. Newton to Totten, January 8, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

88. Totten to Newton, January 17, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer.

Fort Barrancas, including the Redoubt, but nothing for the barracks. He might therefore budget most of the current appropriation to the barracks.[89]

Newton reached Pensacola from Charleston on the last day of January and formally took charge as Superintending Engineer.[90] The assistant engineer's quarters being unoccupied, they became Newton's.

3. Newton Vainly Seeks an Assistant Engineer

Two months later, on the last day of March, Lieutenant Newton inquired into the possibility of the Department providing him with a young assistant. This would be good training for an assistant because the defenses of Pensacola were of "first importance" and the military architecture varied. Moreover, the heavy work load involved in laying out and supervising the construction dictated his need for assistance. He knew not where to look for a qualified person, except to the Corps.[91]

The Department, because of heavy commitments elsewhere, was unable to assign one of its young lieutenants to Pensacola. Newton would have to hire locally an assistant.

F. Plans, Maintenance, and Repairs: March 1855-May 1857

1. International Difficulties Cause the U.S. to Look to the Security of the Gulf Frontier Forts

Soon after Lieutenant Newton arrived on the Gulf Frontier, there was a war scare. Many Americans, particularly those living in the South, in the 1850s, became increasingly interested in freeing Cuba from the Spanish yoke. Filibustering expeditions were outfitted in our Nation's

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89. Totten to Newton, January 20, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer.

90. Newton to Totten, February 2, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

91. Newton to Totten, March 31, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

ports and landed Cuban patriots and American adventurers on the beaches of that troubled island. When the Spanish successfully coped with these 19th century freedom fighters, the United States Minister to Spain, Pierre Soulé, in October 1854, authored the Ostend Manifesto. Soulé proposed that the United States purchase Cuba at once. If Spain refused to sell, "then, by every law, human and divine, we should be justified in wrestling" Cuba "from Spain if we possess the power."

The United States repudiated the Ostend Manifesto, the Spanish Cortes voted against even considering the sale of Cuba, and Soulé resigned as Minister to Madrid. Chief Engineer Totten, cognizant of the implications of the Ostend Manifesto, alerted his Superintending Engineers to see that their defenses were ready if there were war with Spain.

Relations with Great Britain were also strained during the mid-1850s by Central American difficulties. Commo. William Vanderbilt had moved into Nicaragua with his Accessory Transit Company, and had established and exploited a trans-isthmus route. The Franklin Pierce administration, perhaps privy to the filibustering expedition William Walker was outfitting in California to take over strife-torn Nicaragua, sent Chief Engineer Totten to inspect the Gulf Frontier forts.[92]

2. Newton's Analysis of His Needs to Hold the Forts

On March 30, 1855, Lieutenant Newton accordingly informed the Department that Fort Barrancas had been reported finished on many occasions by his predecessor, Major Chase. So it was, he continued, except for "accessory defenses to be constructed in time of emergency, as mines, palisading, etc."

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92. Edward S. Wallace, Destiny and Glory (New York, 1957), pp. 29-30, 136-37, 157-59.

Its armament consisted of:

	32-pdrs	8"S.C.H.	24-pdrs	18-pdr	12-pdr	24-pdr how.
Water Battery	11	2				
Two Water Fronts		2	10			
North Land Front					3	
West Land Front				5		
Flank Defenses Counterscarp						8
	11	4	10	5	3	8

There were on hand but not mounted two 8-inch columbiads and two 10-inch mortars.

The condition of several of the carriages was:

	Injured	Bad	Missing
18-pdr. barbette		2	
24-pdr. barbette	1	8	
32-pdr. barbette	2		
8-inch columbiad barbette		2	
10-inch mortar			
	3	12	2

All carriages, except those for the eight 24-pounder flanking howitzers in the counterscarp and six of those for barbette guns, were in need of repair.

Fort Barrancas and its Redoubt, with mines and other "accessory defences," anchored the flanks of a line of defense. If occupied by a large force, Newton observed, these works constituted a "nearly impregnable position." The same could not be said of Fort McRee which could be isolated from reinforcements and compelled to rely on its own resources. Capture of McRee would entail loss of the harbor entrance. Unless he seized the Barrancas defenses, a foe would be unable to retain possession of McRee.

If the Barrancas line were held by "a respectable force," an enemy assailing the entrenchments, if defeated, faced annihilation. If bested, United States troops could retreat to the cover afforded by the Barrancas defenses.

Lieutenant Newton's studies led him to conclude that: (a) no successful siege of Forts McRee and Barrancas could be achieved without the presence of a greatly superior investing force; (b) the besieging force, if McRee were isolated, would make its approach against its south rather than north face; and (c) such being the circumstance, it was vital, for the defense of the fort, to complete the arrangements commenced on the south wall to cover the gorge and north wall from the enemy's guns.[93]

The next day, March 31, Newton raised another issue regarding defense of Pensacola Bay. He believed that heavier armament was needed, not only on the water fronts, but "likewise on the land side." He noted that the advantages of heavy guns, for land defenses, "were too well known to need any enlargement" on his part.

As the pintles and traverse circles for heavier guns were somewhat different, he required plans and instructions. If the Ordnance Department were unable to send heavier guns for the land fronts, he hoped to be provided with large caliber mortars. With the latter, he could compell an investing force to establish its camp and depot at some distance.[94]

3. Davis Board Boosts the Weight of the Armament

The Department, meanwhile, notified Newton that a Board of Engineer and Ordnance officers, convened by Secretary of War Davis,

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93. Newton to Totten, March 30, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

94. Newton to Totten, March 31, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

had reviewed the armament of the Nation's seacoast fortifications as established by the 1839 Board. Technological advances afloat and ashore called for change. European naval powers were arming their ships with heavier guns. Her Majesty's vessels had seen their 18 and 24-pounders replaced by 42-and 68-pounders. More and more warships were now powered by steam, and, in an attack on seacoast forts, would be able to maneuver much more effectively than vessels under sail. Many ships, coming off the ways, were driven by screw propellers rather than by the more exposed sidewheels. Heavier guns, 8- and 10-inch columbiads, were being cast and had proven themselves in tests.

As soon as these guns and carriages were made available by the Ordnance Department, the Fort Barrancas' armament, as detailed by the Davis Board, was to consist of:

Water Battery-----	Thirteen 8-inch columbiads mounted en barbette
Water Fronts------	Twelve 42-pounder guns mounted en barbette
Land Fronts-------	Eight 24-pounder guns mounted en barbette
Counterscarp------	Eight 24-pounder howitzers mounted en casemate
Siege Battery------	Two 8-inch siege howitzers
	One 10-inch siege mortar
	Two 8-inch siege mortars
	Four coehorn mortars

The "exact positions" of the guns en barbette would be provided after additional study.

Guns capable of firing solid projectiles (the 42-pounders) had been introduced because the Ordnance people held that columbiads were not designed for hot shot. Columbiads mounted en barbette, Newton was informed, required a different traverse platform than those now in the Water Battery. Its form, materials, etc., however, had not been determined.[95]

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95. Totten to Newton, April 4, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer.

Fort Barrancas, however, enjoyed a lower priority in the Department's program than Fort Pickens. No money was allotted at this time for altering the platforms for the heavy armament established by the Davis Board.

4. Totten's April 1855 Inspection Identifies a Number of Items Requiring Attention

General Totten spent Tuesday, April 17, 1855, at Fort Barrancas. As they toured the area, he told Lieutenant Newton that the last time he had been in Pensacola to inspect the works was seven years before, in 1848. Totten called to Newton's attention a number of items that required attention:

a. He was to replace, with a thin wall, the shingle slope crowning the breast-height wall. The superior slope needed mowing. A hollow in its plane was to be levelled with a thin layer of rich soil.

b. The interior slope should be mowed. The tread of men serving the guns had broken down the banquette slope, so it should be faced with a thin brick wall. The rampart slope was to remain in grass.

c. On the ramp leading up from the gateway, the asphalt was "much cracked."

d. The relieving arches of the three acute salients had "crowded out the scarp where they bore against it," and conspicious cracking had occurred. In addition, the scarp had separated slightly from the ends of the relieving arches. To ascertain if the counterfort had been carried up over each pier to the top of the scarp, which should have prevented this, Newton was to investigate by digging down to the counterforts.

e. On his return to Washington, General Totten would consider plans to carry the scarp higher in an effort to maintain the superior slope in sand; also, whether to raise the counterscarp to the

plane of the glacis; and whether the pit into which the drawbridge fell must be modified.

f. The gallery, as far as the ordnance implement storeroom, was to be paved with brick laid in mortar.

g. A sill was needed for the upper doors of the shot furnace.

h. Steps must be taken to prevent any further motion in the counterscarp gallery where a crack had opened along the key.

i. A few but important leaks in the casemates were pointed out. The cracks causing these were to be neatly repointed. Generally, pointing necessitated by "the decayed state of the mortar in the joint" would be postponed. Meanwhile, Newton would "experiment in pointings, to secure . . . a kind that will not decay," one not yet having been discovered for the Gulf of Mexico brickwork.[96]

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96. Totten to Newton, April 17, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer. In March 1850, Major Barnard had complained to Major Chase that, at Fort Livingston, he was having difficulty "making any kind of pointing stand." Chase accordingly reported that, from long experience, he had learned that the best time to point walls was in cool, moist weather. The heat of the sun, he had found, was "too powerful" on the Gulf Frontier to permit any "kind of masonry especially that composed of brick of porus quality to be exposed to its influence until the mortar is set." Moisture, so essential to forming good cement, in the heat rapidly evaporated, even when the bricks were saturated.

If walls had to be pointed in the summer, he covered their surface with bagging, which was constantly dampened.

March and April were better adapted to pointing than any other months, because the fogs of the former and showers of the latter dampened the masonry. Chase to Totten, March 31, 1850, NA, RG 77, Ltrs. Recd., Chief Engineer.

j. The Water Battery was in good order. The shutters between the magazine and storerooms were to be removed. Under the stairway several bad leaks were pinpointed and would be corrected.[97]

On returning to Washington, General Totten cautioned Lieutenant Newton that he was to consider carefully the probable cost of the operations deemed necessary (not to include raising the scarp and counterscarp) to arrive at a figure within which all expenditures, including those for the Redoubt, must be kept. A separate estimate of the cost of altering the scarp and counterscarp would be submitted to assist the Department in determining the best mode to adopt for correcting the "apparent weakness" of the subject walls.[98]

5. Replacing the Shingled Slope with a Thin Brick Wall and Paving the Scarp Gallery

In June, Lieutenant Newton shifted his masons and laborers from Fort Pickens to Fort Barrancas. The decaying shingles were removed from the crest of the interior slope and replaced at the top of the breast-height wall with a "thin wall" of bricks. The scarp gallery was paved as far as the ordnance storeroom.[99]

6. Totten Calls for Newton to Use a Soap Solution

The Department, meanwhile, had some advice for Newton on means of preserving mortar and brickwork. Numerous trials with other substances led General Totten to believe that a solution of soft soap

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97. Totten to Newton, April 17, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer.

98. Totten to Newton, June 21, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer.

99. Newton to Totten, July 26, 1855; Fort Barrancas, Monthly Report of Operations, June 1855, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the Senate of the United States, 1st and 2d Sessions, 34th Congress (Washington, 1856), Serial 811, Vol. I, Pt. II, p. 202.

might prevent the efflorescence that so injured the brickwork of the Gulf Frontier forts. Consequently, Lieutenant Newton would, on part of his brickwork, both interior and exterior, have a space saturated with numerous washings with as strong solution of soft soap as can be employed. Each trial must be delineated for comparison next to an area badly deteriorated and unprotected.[100]

If he did as directed, Newton failed to report the results of the experiment. In 1859, Capt. Jeremy F. Gilmer, Superintending Engineer at Fort Point, experimented with various pointing formulas.[101]

7. Newton Submits His Program for Reinforcing the Scarp and Counterscarp

Lieutenant Newton, the crisis which threatened to plunge the Nation into war with Spain having passed, made a study and formulated plans for reinforcing the walls of Fort Barrancas and its counterscarp. On September 29, 1855, he wrote General Totten that "a minute examination of the walls and the necessary calculations" had demonstrated a "general insufficiency of resistance against several thrusts along the whole line" of scarp and counterscarp walls. His computations showed:

Scarpwall	
Moment of thrust multiplied by 1.91 =	42957
Moment of resistance including counterforts =	21415
Moment of resistance to be supplied =	21542

This could be accomplished, he wrote, by adding to the face of the wall, at the base, "a thickness of 2'6" and rising with a batter to meet the face at a height of 14.55 feet above the foundation or

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100. Totten to Newton, June 21, 1855, NA, RG 77, Ltrs. Sent, Chief Engineer.

101. Bearss, Historic Structure Report: Fort Point Historical Data Section (Denver, 1973), pp. 227-8, 299.

by removing a portion of the parapet against the scarp," and by laying concrete in such a manner as to relieve the wall of the greater amount of earth. This addition was to be disconnected from the scarp, but securely joined to the roofing.

The south salient, he reminded the Department, demonstrated the effect of this thrust of the arches. He proposed to correct this in the same manner as other sections of the scarp, because the "defect here existing results in great measure from the same cause that has elsewhere produced the heeling of the scarp." He suggested that at this and the opposite salient, the concrete addition rise to the top of the scarp, and be jogged into the existing roof, so as to serve as a tie against the thrust of the arches. The other salients did not require any special arrangement. These concrete reinforcements would not increase the weight imposed upon the arches, because well-rammed sand was as heavy as the concrete which would replace it.

The soffit of the arch of the counterscarp gallery exhibited "long lines of cracks varying in position between the highest point of the rise and the back wall of the gallery." The worst was the separation that occurred at the middle of the arch. In making his computation, the earth's condition was assumed to be as it would after a heavy rain, when it was soaked to a depth of 5'3" below the plane of the glacis. The lower prism of pressure was supported in its ordinary condition. Newton's calculations showed:

Moment of the thrust consisted and multiplied by 1 =	52899
Sum of the moment of resistance =	33419
Moment of resistance to be supplied =	19480

No advantage would be obtained by adding to the back of the scarp wall above the arch, because the sand resting upon the half arch would remain attached to the wall. In wet seasons, it would provide a greater counterpoise than any substitute. Should the latter be laid in ridges perpendicular to the counterscarp, extending to the rear of the gallery and be jogged into the roofing to serve as a substitute for a tie,

it could still be subject to cracks about the joint of rupture, in case of unequal settlement.

To guard against this, the counterscarp wall could be faced by enlarging the width of the base 2 feet and by rising with a batter to meet the surface of the wall at a height of 6 feet above the base, i.e., the level of the loopholes.

The pointing, Newton reported, is defective, and he estimated that at least one-half should be removed and replaced.

In addition, the gateway should be covered by "a wood road of 2" or 3" planks."

Newton estimated the cost of this work to be:

Repair of scarp wall by concrete addition:		
Removing and replacing 3,500 cubic yards of earth--------		$1,050.00
Grading, sodding, etc., 2,046 sq. yds @ $.50 -	$1,023	
66,000 shingles @ $ -	264	1,287.00
Replacing sodding & shingles by a brick slope		
56,160 bricks @ $16 including hauling -	$ 898.56	
Laying the same----------	776.00	1,674.56
203 cubic yards of concrete at $10----------		2,030.00
Estimate of repair of counterscarp wall by a facing		
Facing 170 cubic yards @ $19----------		$3,230.00
Foundations, 170 cubic yards @ $8----------		1,360.00
Pointing----------		2,000.00
Wood flooring over pavement of gateway:		
2,814 ft @ $13----------	$36.73	
Laying the same----------	10.00	46.73
Clerk and office expenses----------		180.00
Overseer----------		1,200.00
Amount asked to be appropriated----------		$12,303.73

Newton, not having received any descriptions of the type pintles and traverse circles, did not prepare detailed estimates of the costs involved in altering the gun platforms to receive the heavier armament recommended by the Davis Board. He, however, believed the figure would be at least $3,000.

Like Major Chase, he recommended against turning over the fort to "the line until the repairs enumerated" have been made.[102]

The Department was unable to either program or secure from Congress the $15,383 needed to reinforce the scarp and counterscarp and to prepare the gun platforms for heavier armament.

8. Repairs and Maintenance in Fiscal Year 1856

Having received an allotment for $799.63 from contingencies, Lieutenant Newton, in September and October 1855, had his men repair the engineer's quarters and the fence around the glacis.[103]

Newton, in the spring and summer of 1856, employed a few hands landscaping the glacis, which, with the repair of the fence, was easier to maintain.[104]

9. Captain Newton's May 1857 Report of Needed Repairs

a. His Survey and Identification of Leaks

Heavy rains in late April 1857 provided Captain Newton (he had been promoted captain in August 1856) with an opportunity of pinpointing and identifying for the Department points at which Fort Barrancas seeped. Beginning in the guardroom, he noted, these leaks: (1) a large one in that room against the scarp; (2) in the northwest angle, two leaks; (3) southwest angle, "not a leak properly, but a shower"; (4) gallery leading to Water Battery, "a leak or shower";

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102. Newton to Totten, September 29, 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

103. Ibid.; Totten to Newton, September 13, 1855; Fort Barrancas, Monthly Report of Operations, October 1855, NA, RG 77, Ltrs. Recd. and Sent, Chief Engineer.

104. Newton to Totten, October 2, 1856, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the Senate of the United States for the 3d Session, 34th Congress (Washington, 1857), Serial 876, Vol. 3, p. 285.

(5) in casemates on the right and left, large leaks; (6) returning to the main work, another leak in the gallery; (7) continuing around the work, a leak in the 2d casemate from the northeast angle; (8) "a large leak or shower in northeast angle"; (9) a large leak next to the scarp in the casemate adjoining the sallyport; and (10) one in the narrow passage between this casemate and the sallyport.

In the counterscarp, there were leaks in the casemates opposite the northwest angle, and in the casemates of the southwest angle. In the latter, the leakage was principally into the magazine.

Newton called General Totten's attention to the fact that the major leakages were "at the angles, where a change of load on the faces takes place." Unless they were careful, he cautioned, at the Redoubt, in securing the foundations of the piers to the half bastions, "we may expect there a repetition of the same disasters."

He presumed that the Department would not allow Fort Barrancas to "remain long" in this condition. He had given orders to have the scarp and counterscarp "protected" with a view to furnishing calculations for stability, to permit all necessary masonry repairs to be estimated for and to proceed simultaneously.[105]

b. He Calls for Repair of the Drawbridge, etc.

The drawbridge was also rapidly decaying. Newton suggested that as soon as Lt. George T. Balch and his Ordnance Department employees finished with their work, the bridge be repaired and raised. Individuals would then be required to enter and leave the fort through the posterns of the counterscarp gallery. He, likewise, recommended that a light frame building be erected upon the standing drawbridge to protect it from weather.

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105. Newton to Totten, May 3, 1857, NA, RG 77, Ltrs. Recd., Chief Engineer.

Also needing attention was the pointing, the stucco on the exterior of the Reduit, and the guardroom. In the latter, water which ran down the sallyport slope, stood after a rain.[106]

General Totten, in view of the tight financial situation, had no money to allot for these projects. Somewhat out of character, he failed to acknowledge receipt of Newton's letter.[107]

10. Maintenance and Repairs in Fiscal Year 1857

In February 1857, Captain Newton assigned several laborers to Fort Barrancas. After painting the engineer's quarters and office, they painted, in March, the fort's exterior doors. In the latter month, they were joined by several carpenters and a blacksmith. The carpenters repaired the quarters and made desks for the engineer's office, while the blacksmith repaired the drawbridge ironwork. The laborers, after the blacksmith finished, painted the ironwork and the sallyport and postern doors.[108]

G. 1857 Restoration of the Ordnance and Ordnance Stores

1. Dismounting Two 8-inch Seacoast Howitzers Have Important Repercussions

In late May 1856, the garrison was turned out by Capt. James Totten for gunnery drill at the Water Battery. Gun crews manned the two 8-inch seacoast howitzers. The pieces were loaded with ordinary service charges and given an elevation of 3°. At the third round, each piece and its carriage and chassis was thrown off the pintle and traverse circle into the sand. The first split some woodwork while the second broke a traverse wheel and fractured its carriage.

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106. Ibid.

107. Letters Sent Books, NA, RG 77.

108. Fort Barrancas, Monthly Reports of Operations, February-May, 1857, NA, RG 77, Ltrs. Recd., Chief Engineer.

When he reported what had happened to General Totten, Lieutenant Newton attributed the difficulty to the "shock of the recoil disengaging the tongue-hole from the pintle." He accounted for this by the supposition that the barbette pintle did not engage sufficiently in the tongue-hole of the 8-inch seacoast howitzer.

What especially troubled Newton was that the Davis Board had called for arming the Fort Pickens Northwest Bastion Curtain with seacoast howitzers.

Consequently, it was important to "determine the feasibility of attaching these guns to the present pintles." Moreover, this was merely the latest in a series of accidents that had plagued the guns mounted in the harbor forts. This led to the conclusion that "every gun" should be test fired at least five times with service charges.

He requested the Department to requisition for the desired tests, necessary powder, shot, and shell.

In respect to the serviceable condition of the guns, those of Fort Barrancas were equal to and probably superior to those in the other harbor forts, while those of Fort Pickens were "probably in the worst order."[109]

Newton's letter, requisitioning powder and projectiles, was returned to him by the Department in September. With it came a note, calling attention to Regulations directing that such requisitions be

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109. Newton to Totten, June 9, 1856, NA, RG 77, Ltrs. Recd., Chief Engineer. There had been trouble when several 8-inch columbaids were fired at Fort McRee.

forwarded to the commander of the military department in which Fort Barrancas was located.[110]

The Department, meanwhile, had referred Newton's June 9 letter to Chief of Ordnance Henry K. Craig. After reviewing the subject with members of his staff, Colonel Craig wrote Newton that the Pensacola gun carriages had been in position more than ten years. For much of that time, the forts had not been garrisoned, and the armament had failed to receive the care required to "preserve it in good order and serviceable condition." It was, therefore, to be expected that certain of the woodwork will be "decayed or warped, and the iron parts rusted, and that the carriages, unless thoroughly examined before firing and their defects repaired would give way in some parts under shock of discharge with service charges of powder and projectiles."

To continue firing the cannon in this manner, without examination, Craig cautioned, will injure some of the sound parts, which are connected with defective ones, causing greater damage than may be necessary. Colonel Craig would order one of his officers and a mechanic to Pensacola to inspect the carriages and to put them in order. Only then should they be test fired.

There was no doubt that the carriages, when sound, will withstand the effects of firing, because they had been proofed with service charges, and even heavier, and at all elevations. Colonel Craig was accordingly unable to account for the two 8-inch seacoast howitzers being dismounted, provided the tongue-props were correctly supported.[111]

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110. Wright to Newton, September 9, 1856, NA, RG 77, Ltrs. Sent, Chief Engineer. Capt. Horatio G. Wright was in the Washington Office as Assistant to the Chief Engineer from 1856 to 1861.

111. Craig to Newton, June 20, 1856, NA, RG 77, Ltrs. Sent, Chief Engineer.

Captain Newton, after studying Chief of Ordnance Craig's letter and examining the howitzer emplacements, reiterated his contention that additional support for the 8-inch seacoast howitzer tongue-prop was necessary, as that derived from embedding it firmly in the sand of the terreplein was insufficient. Comparing the weight and recoil of a 32-pounder on a barbette carriage, with the corresponding elements of the seacoast howitzer, Newton found that the recoil of the latter was greater. In trials at Fort Barrancas, the 32-pounders were stable on their platforms, while of three howitzers tested, one broke the rear traversing wheel of its chassis by the force of its recoil, and the other two were dismounted.[112]

2. Lieutenant Balch and His Men Rehabilitate the Armament

In October 1856, Lt. George T. Balch of the Ordnance Department reached Pensacola from Baton Rouge, accompanied by his mechanics, to begin repair of the armament. This was Balch's second trip to Pensacola. He and his master carpenter (Mr. Rainey) had been there in August and September to survey the armament and submit to Colonel Craig an estimate of the cost of putting it in "defensible condition." After reviewing Balch's report, Colonel Craig allotted the requested sum--$3,175--for funding the project.[113]

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112. Newton to Totten, August 6, 1856, NA, RG 77, Ltrs. Recd., Chief Engineer.

113. Balch to Craig, June 11, 1857, NA, RG 156, Ltrs. Recd., Chief of Ordnance. On July 8, 1856, Chief of Ordnance Craig had forwarded to Lt. Balch at St. Louis letters from Lt. Newton and Capt. Totten, complaining about the condition of the Pensacola forts' armament. Balch was to proceed to Pensacola, examine the armament, and estimate the cost of putting it in serviceable condition.

On October 18, Col. Craig acknowledged receipt of Balch's report. In allotting the sum requested ($3,175), Col. Craig directed Balch to make the repairs suggested. He was authorized to shift guns between the forts to complete, as far as possible, the armament called for by the Davis Board. He was to call on the commanding officers of the Baton Rouge and Mt. Vernon Arsenals for such aid in the way of services of enlisted men and supplies, as their facilities could afford to dispense with.

By February 1, 1857, Balch and his men had dismounted every gun in the Pensacola forts, and all the carriages requiring repair had been dismantled. Upon arrival of the ordnance stores from the Watervliet Arsenal, Balch reinforced his crew. He hoped to finish the project by April. When the stores were unloaded, it was found that many had been damaged by leakage from a barrel of coal tar and two barrels of oil which had been stowed on top of them. Considerable time was lost in cleaning and painting the carriages and chains, at a cost of not less than $5 to $10 each.[114]

On March 5, Balch informed Colonel Craig that for the past three months he had employed a force of 30 men. Much had been accomplished. But, however, the principal work, repair of the carriages, remained. The reason, he explained, was the "bad condition of the implements and equipments and the shameful manner in which a majority of them were stored." As the armament would not be in serviceable condition if the stores were "left untouched," he had attended to this matter. He knew it would be worse than useless to repair and put the implements in order only to "consign them again to the rickety and tumble down frames, the boxes and damp corners where" they had been exposed under a covering of dust.

Men were turned to making racks and shelves in each of the three forts' ordnance storerooms. Although it cost time and money not allowed for in his estimate, Balch explained, had he left the "implements, equipments, and stores in this Harbor in the condition" in which they were found, not only would he have been remiss in his duty,

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(cont.) Col. Craig was directing the commanding officer of the Watervliet Arsenal to ship to Pensacola items needed for repairing, replacing, and rendering serviceable, the guns, carriages, instruments, and equipment. Craig to Balch, July 8 & 28, August 29, & October 18, 1856, NA, RG 156, Ltrs. Sent to Ordnance Officers.

114. Balch to Craig, January 17 & June 11, 1857, NA, RG 156, Ltrs. Recd., Chief of Ordnance.

but "the Department would have been brought into disgrace in the eyes of every officer who had any cognizance of such matters."[115]

On May 29, Lieutenant Balch applied for four months' leave to begin about July 10. By then, he would have completed the work at Fort Barrancas; all the implements, equipments, and miscellaneous tools at Forts Pickens and McRee would be in "perfect order and securely stored"; and the carriage repairs at Fort Pickens nearly completed and that at Fort McRee underway. By mid-July, there would remain to be accomplished only two to three weeks' work at Pickens and no more than six weeks' at McRee. His mechanics and laborers were well organized and his replacement would encounter no difficulty in finishing the project.[116]

Lieutenant Balch, in the second week of June, warned Chief of Ordnance Craig that the $3,175 allotment, granted on his estimate, will be exhausted with a large amount of work at Forts Pickens and McRee not accomplished. On forwarding a special estimate, covering details he considered essential to put these armaments in serviceable condition, he sought to explain why his original figures had been so far off. First, when he had prepared his estimates, he had not observed all the defects in the carriages, and had placed the figure for their repair at $3,000, when it should have been nearer $15,000. Part of this he blamed on limited experience. His estimate had provided for no penthouses, and to date 30 had been built, with another 51 well in hand. Each had cost, for labor alone, from $35 to $40.

As of May 31, he had expended $7,113.60, of which nearly $1,500 had been disbursed for work on the guns, which the presence of a garrison would have saved; more than $1,000 for penthouses; $1,500 on

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115. Balch to Craig, March 5 & June 11, 1857, NA, RG 156, Ltrs. Recd., Chief of Ordnance.

116. Balch to Craig, May 29, 1857, NA, RG 156, Ltrs. Recd., Chief of Ordnance.

implements, equipments, etc.; and nearly $2,500 for carriage work. In June, he had programmed for carriages $2,000 and $300 for mounting cannon.

At Fort Barrancas, Lieutenant Balch wrote, all the implements, equipments, and stores were in order; all the carriages repaired, painted, and covered with substantial penthouses, except the two new 8-inch columbiad carriages which were covered with "rough houses." Work to be accomplished included altering one 8-inch columbiad carriage and building two columbiad penthouses.[117]

H. Lieutenant Prime Replaces Captain Newton

1. Newton's Final Months at Pensacola

Captain Newton departed Pensacola on December 14, 1857, for New Orleans to attend a meeting of the Special Board of Engineers to prepare plans for new forts on the Gulf. During his absence, R. L. Sweetman, his foreman, was in charge of the local projects.[118]

He soon returned, but his days at Pensacola were numbered. On February 4, 1858, three years and four days after his arrival at the Barrancas, Newton received a copy of a special order detailing him for duty with the Mormon Expedition. Delighted to escape

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117. Balch to Craig, June 11, 1857, NA, RG 156, Ltrs. Recd., Chief of Ordnance. A breakdown of the $1,582.90 charged against the Barrancas revealed: removing old penthouses--$2.60; dismounting and mounting cannon--$118.75; scraping, cleaning, and lacquering cannon--$65.50; repair of carriages, carpentry--$263.20; scraping and cleaning carriages--$182.17; repair of carriages, painting--$111.25; repair of implements, painting, and cleaning--$158.80; making and putting up implement racks and shelves--$117.75; building and painting penthouses--$269.45; building sling cart and gin house--$168.58; and making ladder--$3.75. At Barrancas barracks, $120.10 had been spent for repairs to the field battery. Balch to Craig, June 17, 1857, NA, RG 156, Ltrs. Recd., Chief of Ordnance.

118. Newton to Totten, December 14, 1857, NA, RG 77, Ltrs. Recd., Chief Engineer.

from his present assignment and General Totten's patronizing supervision, he fired off a letter thanking Lt. Col. Sylvanus Thayer for this opportunity.[119] Newton hurriedly wrapped up his business relating to the Pensacola forts and by the end of the month had turned over his papers to Mr. Sweetman. From Mobile, on March 2, he wrote Colonel Thayer, reporting that he was en route to Fort Leavenworth, Kansas Territory, where he would join the expedition.[120]

2. Prime Divides His Time

a. He Takes Charge

On March 2, 1858, the Department selected Newton's replacement. Orders were issued for 1st Lt. Frederick E. Prime, currently stationed at Mobile, to proceed without delay to Pensacola and "assume charge temporarily of Engr. operations in that harbor" from Captain Newton, receiving from him the funds and property for which he was accountable. Prime would retain responsibility for the works at Mobile, assigning his "assistant, lt. Snyder, to position at either Mobile or Pensacola as you may judge best."[121]

Prime had excellent credentials. Born in Italy to United States citizens, he was appointed to the U.S. Military Academy from New York. Prime graduated No. 1 in the Class of 1850, and was commissioned a brevet 2d lieutenant in the Corps of Engineers. From 1850 to 1852, he was assistant engineer for repair of Fort Wood in New York Harbor; in 1852, he helped oversee the construction of Fort Schuyler; and in 1852, he supervised improvements to the Hudson River

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119. Newton to Thayer, February 4, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer. Col. Thayer, with Gen. Totten on extended leave and travel status, was acting as Chief Engineer.

120. Newton to Thayer, March 2, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

121. Wright to Prime, & Wright to Newton, March 2, 1858, and Prime to Totten, March 4, 1858, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer.

navigation. He was promoted 2d lieutenant on September 13, 1853, and ordered to California, where he spent the next four years as assistant engineer at Alcatraz. In 1857, he became Superintending Engineer for the Alcatraz project. Eighteen hundred and fifty-eight found Prime on the Gulf Frontier as Superintending Engineer in charge of construction of Fort Gaines and repair of Fort Morgan, Alabama.[122]

On March 5, Lieutenant Prime traveled to Pensacola and assumed charge of the works, giving Mr. Sweetman receipts for the funds and public property. On his return to Mobile, he ordered Lt. George W. Snyder to "take post at the works in Pensacola Harbour."[123]

Snyder, a New Yorker, had graduated from the U. S. Military Academy as No. 1 in the Class of 1856. Commissioned a brevet 2d lieutenant in the Corps of Engineers, Snyder was ordered to Mobile as assistant engineer for construction of Fort Gaines and repair of Fort Morgan.[124]

b. Prime Loses his Assistant

Lieutenant Prime found it cumbersome to oversee the Mobile Bay projects and to supervise Lieutenant Snyder's work at Pensacola. He accordingly requested, in late March, to be relieved of responsibility for the latter.[125]

The Department, because of the shortage of engineers with supervisory experience, found it impossible to relieve Prime of

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122. Cullum, Biographical Register, Vol. II, 253.

123. Prime to Wright, March 10, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

124. Cullum, Biographical Register, Vol. II, p. 418.

125. Prime to Wright, March 22, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

responsibility for the Pensacola forts. His application was filed, and would be reviewed whenever personnel problems became less pressing.[126]

The need to oversee projects on Mobile and Pensacola Bays necessitated considerable travel on Prime's part. On May 13, he asked the Department to approve his requests to be reimbursed for mileage between Mobile and Pensacola for trips made on March 7 and 23, April 15, and May 7.[127]

Lieutenant Snyder also had problems. Captain Newton, on starting for the West, left his family at the Barrancas, where they continued to occupy the Engineer's quarters. Unwilling to ask them to vacate, Snyder took quarters off post and applied for commutation. Rejecting Snyder's voucher, the Department chided that he was not entitled to commutation, while there were quarters at the post occupied by persons not entitled to public housing by Regulations. If Captain Newton's family continued to dwell in the quarters, Snyder must ask them to vacate.[128]

Snyder employed the Department's letter as leverage to prevail on Newton's family to move out of the Engineer's quarters.

By mid-June 1858, funds for the Pensacola projects were nearly exhausted, and they would soon be closed down. Lieutenant Snyder accordingly requested the Department to relieve him as assistant engineer for the Pensacola defenses.[129] Lieutenant Prime was agreeable.

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126. Wright to Prime, April 13, 1858, NA, RG 77, Ltrs. Sent, Chief Engineer.

127. Prime to Wright, May 13, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

128. Wright to Snyder, March 29, 1858, NA, RG 77, Ltrs. Sent, Chief Engineer.

129. Snyder to Thayer, June 14, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

On June 25, he wrote Colonel Thayer that Snyder's "services can be dispensed with as soon as it is thought proper to relieve him."[130]

After studying the correspondence, Capt. Horatio G. Wright forwarded Snyder's application to Acting Chief Engineer Thayer. The request was approved by both Thayer and the Adjutant General. In July, Snyder started for the U.S. Military Academy, where he would assume his new duties with the Board of Engineers for the Atlantic Coast defenses.

Lieutenant Prime now moved from Moblie to Warrenton, taking quarters on the Barrancas Reservation.[131]

3. Prime's First Four Months as Superintending Engineer

a. He Seeks Guidance

Lieutenant Prime found, on assuming responsibility for Fort Barrancas, that funds available from the appropriations for "Contingencies of Fortifications" and for "Permanent Platforms" were seemingly unlimited. Before committing himself, he wished to know if this were correct.

A review of the books for Forts Barrancas, Pickens, and McRee revealed that monies allotted for these defenses were limited. If no additional funds were forthcoming in the immediate future, it was probable that they would "have to be left in a state to stand the inclemencies of the weather for a year or two, unless Congress voted an appropriation." This, he confided, made "supervision of operations

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130. Prime to Thayer, June 25, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

131. Prime to Wright, August 22, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

connected therewith one of unpleasant responsibilities," and one that he hesitated to undertake.[132]

In mid-May, when he inventoried the Fort Barrancas plans, Lieutenant Prime was unable to locate a measured drawing of the work as completed. Writing the Department, he inquired, "have you all the drawings of this fort you require or do you wish finished drawings made and forwarded with those of the Advanced Redoubt?"

He also called attention to the "bad cracks on the salients in the scarp, extending from top to bottom." It appeared to him that the southwest angle had entirely separated from the curtain walls. Prime discovered that, in the 20 months since Captain Newton's report on this subject, the width of the cracks had increased.[133]

Lieutenant Prime was directed to have an examination made of the fort "to test its agreement with the project of the Board of Engineers of 1841," and have such drawings made "as may be necessary to exhibit the departures in construction, if any, from the project."[134]

A number of years, bringing with them a terrible fratricidal war, were to pass before Prime found time and money to prepare the desired drawings.

b. Maintenance and Repairs Accomplished in Fiscal Year 1858

When he submitted his annual report for the fiscal year ending June 30, 1858, Lieutenant Prime informed the Department that

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132. Prime to Wright, March 22, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

133. Prime to Wright, May 15, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

134. Wright to Prime, June 10, 1858, NA, RG 77, Ltrs. Sent, Chief Engineer.

during these months, repairs to the Water Battery's magazine had been commenced but not finished. The Fort Barrancas shot furnace and drawbridge ironwork had been painted and "decayed embrasure shutters" replaced.[135]

In January 1858, Captain Newton had switched several carpenters and a blacksmith from the Redoubt to Fort Barrancas. The former, assisted by several laborers, were put to work making embrasure shutters and the latter fastenings for the embrasures. The carpenters, in February, built new doors for the Water Battery magazine.[136]

c. He Submits a New Estimate for Repair of the Fort and Modifying the Platforms for Heavier Armament

Lieutenant Prime estimated, at this time, that to repair Fort Barrancas and to increase the weight of its armament to that called for by the Davis Board will cost $26,597.70. This figure brokedown:

Repair of leaks at 4 salient angles	
1,442 cubic yards of excavation of roofs @ $.30-------	$ 423.60
1,442 cubic yards of embankment @ $.50--------------	721.00
138 square yards of mastic @ $1.50----------	207.00
8,550 bricks to cover mastic @ $16----------	136.89
23 cubic yards of clay for parapet @ $2.50----------	67.50
23 cubic yards of shells to cover roofs @ $4----------	92.00

135. Fort Barrancas, Annual Report, Fiscal Year 1858, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the Senate of the United States, 3d Session, 34th Congress (Washington, 1857), Serial 876, Vol. 3, p. 826.

136. Fort Barrancas, Monthly Reports of Operations, Jan.-Feb., 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

Constructing a wall of concrete around the works behind scarp, resting on the roofs, 4 feet thick

2,900 cubic yards of excavation back of scarp @ $.30	$ 870.00
2,900 cubic yards embankment @ $.50	1,450.00
355 cubic yards of concrete @ $8	2,440.00
120 square yards of mastic on back of wall @ $1.50	180.00
3,100 pounds lead flashing @ $.12 per pound	372.00
218 cubic yards clay for slopes @ $2.50	545.00
Laborers applying bricks and lead	44.50

Strengthening counterscarp walls, west branch

Foundation, 222 cubic yards @ $7.50	$1,665.00
Facing and enlarging bottom of wall, 90 cubic yards @ $20	1,880.00
Excavation for foundations, 290 cubic yards @ $.16	46.40

Repair of roofs of counterscarp gallery over NW and SW casemates

515 cubic yards excavation @ $.20	$ 103.00
515 cubic yards embankment @ $.25	153.75
340 square yards of mastic @ $2.50	510.00
2,108 bricks to cover mastic @ $16	337.28
57 cubic yards of shells @ $4	228.00
542 pounds of lead @ $.12	65.04
Laborers applying bricks, shells, and lead	61.42

Maintenance

Paving 638 square feet, 6-inch granite, 319 cubic feet @ $1.10	$ 319.00
Paving 6-inch concrete under flagging, 36 cubic yards @ $7.50	270.00

Bridge and Draw

Repairs of woodwork	$ 250.00

Barbette Guns

12 24-pounders, modification of platforms	$1,440.00
13 8-inch columbiads, Water Battery	5,200.00

Water Battery

Screening and re-embanking terreplein 2 feet, 50 cu yds	$ 20.00
Clay for surface, 10 cubic yards @ $2.50	25.00
Altering breast-height wall, 87 cubic yards brickwork	1,191.90
12 cubic yards of concrete	90.00

Fort Barrancas	
Altering breast-height wall, 84 cubic yards of brickwork	$1,150.80
Altering breast-height wall, 22 cubic yards of concrete	165.00
Contingencies	$3,478.82
TOTAL	$26,597.70[137]

Prime asked for this sum in expectation that with funds allotted from the "Contingent and Permanent Platforms appropriations, and funds appropriated for Fort Pickens," repairs to the Santa Rosa work would be completed by early 1860. If that did not occur, he recommended application of this money to the barracks, leaving the "change of armament of Fort Barrancas until such time" as all cannon called for by the Davis Board were mounted in Fort Pickens.[138]

4. Barracks and Quarters Deteriorate

a. Troops are Withdrawn

The only soldiers posted at the Pensacola forts in March 1858, when Lieutenant Prime replaced Captain Newton as Superintending Engineer, were three ordnance-sergeants--one assigned to each of the works. The 2d U.S. Artillery band had been transferred to Fort Brooke in April 1856 and Company F, 2d U.S. Artillery, had evacuated Barrancas barracks on November 23, 1856, going aboard the ship chartered to take the unit to its new duty station at Fort Monroe.[139]

b. February 28, 1855, Fire

On February 28, 1855, 21 months before Company F sailed for Virginia, the post lost a public building and 100 pounds of

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137. Fort Barrancas, Annual Report, Fiscal Year 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

138. Ibid.

139. Returns from U.S. Military Posts, 1800-1916, NA, Microcopy M-617.

flour, when a fire destroyed the bakehouse. To prevent spread of the flames, soldiers pulled down a nearby shed belonging to Dr. Hulse.

The estimated cost of a new bakehouse, 20x15 feet, was $150.[140]

c. Newton Fails to Resume Work on the Barracks

Although it was discussed in correspondence between Newton and the Department, no funds were spent in Fiscal Year 1855 for completion of the barracks on which work had been suspended for more than four years.[141]

On September 30, 1856, Captain Newton informed the Department that, during the last 12 months, no operations had been undertaken at the barracks. As he was unaware of the Department's plans for this facility, he recommended that the barracks, not including the kitchens, be finished, and the requisite officers' quarters erected.[142]

d. Balch Complains About Maintenance of the Buildings and Grounds

Lieutenant Balch of the Ordnance Department, who had been sent to Pensacola to supervise repair of the armament, was appalled at the condition of the barracks and quarters. Writing Quartermaster General Jesup at Christmas 1856, one month after Company F had sailed, Balch pointed out that, although his position here as "a subaltern in your Department is owing to a mere accident of service and

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140. Proceedings of Board of Survey, February 28, 1855, NA, RG 92, Consolidated Correspondence File. Members of the Board were Lieutenants John Newton, A.L. Long, and J.D. Bingham.

141. Fort Barrancas, Annual Report, Fiscal Year 1855, NA, RG 77, Ltrs. Recd., Chief Engineer.

142. Newton to Totten, October 2, 1856, NA, RG 77, Ltrs. Recd., Chief Engineer.

is entirely unconnected with the special duties which give me a temporary residence at Barrancas," he felt it his duty to acquaint Jesep with the condition of the public property. Besides the pressing needs, he was prompted to take this step by a pride in his profession, for he was loath to turn over the public property, now under his charge, to a successor in its present disgraceful situation.

Reviewing the condition of the structures, Balch wrote:

Barracks: This building was a disgrace. Of the eight outside doors, two were gone and four unhinged. Many of the sash lights over the doors were broken, and several were missing. Most of the sash cords were broken. A portion of the piazza handrail was gone. Many door locks were out of order, and several were missing. The iron handrails of the stairways were badly rusted. There were several serious leaks in the roof, and the seepages had discolored the walls and injured the brickwork. Most of the paint had worn off the outside window and door frames, while that in the rooms had darkened. All rooms required clearing and whitewashing.

The kitchens were in worse condition. Half the woodwork had never been painted; two doors were off their hinges; locks missing; and glass broken.

There was "a general air of dilapidation and decay through the whole range" of brick buildings.

Stables and Fences: The stables needed some slight repairs to make them tenable. At present, the public animals were kept in the engineers' stable.

The fences enclosing the public buildings and the parade ground were in "tolerable repair." A recent storm had knocked down 200 feet which should be replaced. A fence to enclose the public grounds in front of the officers' quarters had been commenced but never finished. It should be completed.

Commanding Officer's House: The roof leaked on the ridges and about the valleys of the dormer windows, "which have been constructed with a special view apparently of passing water into the house in place" of gutters. A Christmas Eve rain had left two inches of water on the parlor floor and had soaked the plastering in many places.

Lieutenant's Quarters: The exterior and interior had been scrapped, preparatory to whitewashing before Company F, 2d Artillery, had been ordered to Fort Monroe, leaving the house unsightly. In addition, the woodwork of the front piazza was badly weathered and needed to be painted, if it were to be preserved.

Quarters No. 3: This structure was "very old." Its interior was well preserved and in "tolerable repair." The roof (old, full of holes, and moss covered) was so rotten that it would have to be replaced. One chimney was about to fall, and if not repaired, would have to be rebuilt. The exterior woodwork of doors and windows needed painting.

Hospital: The storeroom roof leaked badly, and the rain drove through the weatherboarding.

To make matters worse, the neighbors, particularly the blacks, Balch reported, had an "acquisitive disposition," and hardly had Company F vacated the barracks than "every movable article not under lock and key" was carried off.

As long as the barracks and quarters presented an air of "neglect and decay," he warned, this will continue. By keeping the fences up and the buildings repaired, the "moral effect" on these people will be favorable and serve as a check on their predatory disposition.[143]

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143. Balch to Jesup, December 25, 1856, NA, RG 92, Consolidated Correspondence File.

e. Captain Newton Urges Purchase of the Inholdings and Early Completion of the Barracks and Quarters

On January 17, 1857, more than a year before his transfer, Captain Newton reviewed for the Department problems caused by the inholdings adjacent to the barracks. Mr. Clifford's house, he wrote, fronted the finished divisions of the barracks, and his back fence was within "23 feet of the soldiers' bunks." As the backyard, besides the usual features, had a stable, it made a most obnoxious neighbor.

Dr. Hulse's house was within 27 feet of the kitchens and possessed, in the military's view, a site "unequalled for the corruption of the soldiers, in the event of its occupancy by unworthy tenants." It effectually disqualified the barracks for quarters, Newton wrote, as they rendered it unfit as an abode of decent people. Until his death, Dr. Hulse had rented only to "good people."

Mrs. Dougherty's and Mr. Oldmixon's houses, fronting the proposed west wing of the barracks, would make those divisions, when erected, uninhabitable, especially as Oldmixon used his backyard to pasture cattle.

Newton knew of no permanent barracks anywhere so "eveloped in front, flank, and rear, with residences."

The four owners, he cautioned, understood their "interests too well to permit the dwellings to fall as long as they can be maintained," and as these improvements had been appraised by the government, in the 1840s, there was little hope of a fair purchase price. Cannot an agent of the government, he inquired, be empowered to effect the purchase of these improvements, or better yet, secure writs of evictions to be served against the claimants? The latter action would "penetrate the full depth of the evil" and permit the courts to determine the validity of the titles of several others who own no improvements but claim plats upon which the barracks were constructed.

An air of urgency had been added by news that a railroad will soon link Pensacola with the "rest of the world." When this occurred, elevated tracts on the Barrancas, fronting the bay, would become very valuable as summer homes.

Pauline Gonzales, owner of the house and improvements inherited from her husband, Celestine, still wished to sell. Because her lot was next to the engineer's quarters, Captain Newton believed it would be useful to the Corps as a residence for the fort keeper. In addition, it was important to "dispossess civilians unconnected with the works for the purpose of avoiding future complications."

The officers' quarters, with the exception of the house built for the post commander in 1855, were substandard. Now that the garrison had been removed, Captain Newton recommended that the Department complete the barracks, erect permanent housing for the officers, and get rid of the inholding nuisances.[144]

General Totten, undoubtedly hoping that the completion of the quarters and barracks would eventually become the responsibility of the Quartermaster General, was unwilling to ask Congress to fund the project at this time. His first priority remained completion of the Third System forts.

f. Lieutenant Prime Calls for Purchase of Key Inholdings

Nineteen months later, on August 14, 1858, Lieutenant Prime, having replaced Captain Newton, submitted to the Department an updated estimate of the cost of acquiring the four inholdings near the barracks. They had been reappraised at:

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144. Newton to Totten, January 17, 1857, NA, RG 77, Ltrs. Recd., Chief Engineer.

Mr. Clifford's	$ 2,300
Mr. Oldmixon's	3,700
Mr. Hulse's	2,700
Mrs. Dougherty's	2,500
	$11,200[145]

He had made no estimate for completion of the barracks, because he was unaware of the intentions of the Department. He reiterated his suggestion of six weeks before that the $26,600 estimated for repair of Fort Barrancas and increasing the weight of its armament be applied to the barracks. He believed it would be "injudicious" to proceed with this work, while Fort Pickens' armament was being changed and the site of Fort McRee was endangered by beach erosion.

Prime suggested that the $26,600 could be "advantageously employed in completing the masonry of the most easterly set of quarters and finishing it in connection with the two adjacent sets already built, the finish, at present," to be such as necessary to fit them as storehouses, guardrooms, etc. The kitchens could, in his opinion, be moved farther north without taking them down. Any funds remaining should be employed to erect iron piazzas on each story, extending the length of the building.[146]

The Department's opinion was unchanged, and no steps were taken to secure an appropriation for purchasing the inholding or completing the barracks.

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145. Prime to Wright, August 14, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

146. Ibid.

5. The Line Gains Control of the Fort and the Reserve

On June 18, 1858, the soldiers returned to Pensacola Bay. The newcomers, who moved into Barrancas barracks, were Company G, 1st U.S. Artillery, commanded by Lieutenant Colonel John H. Winder, and had left Fort Dallas, Florida, eight days before.[147]

Four weeks later, on July 17, the Department directed Lieutenant Prime to "relinquish" control of Fort Barrancas and the reservation to Colonel Winder. This was done in accordance with Winder's formal request, which had the concurrence of the commanding officer, Department of the East, Maj. Gen. John E. Wool.[148]

The transfer was effected on July 31, 1858, in accordance with Special Order No. 97, Headquarters of the Army. As Colonel Winder interpreted the transfer, it carried with it all "dependencies," the military reserve and all buildings, except the Redoubt, the railway, and storehouses currently being used by the Engineers. The troops, having possession of the fort and barracks, needed the reservation "both for police purposes & for use," he explained to Lieutenant Prime. With the Redoubt nearly finished, Colonel Winder was unable to see what use the reserve would be to the Engineers.[149]

When he transmitted Winder's communication to the Department, Prime informed his superiors that "dependencies" referred to the engineer's quarters and several old buildings near Bayou Grande, which had been built with Engineer funds. These structures were needed by the Corps and should not be transferred.

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147. Returns for U.S. Military Posts, 1800-1916, NA, Microcopy M-617.

148. Wright to Prime, July 17, 1858, NA, RG 77, Ltrs. Sent, Chief Engineer.

149. Winder to Prime, August 10, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

He had no objection to Colonel Winder's exercise of police over the reserve or for "its use for any purpose needful by the troops." Prime, however, deemed it "absolutely necessary that the actual possession of the reserve . . . remain with the Engineer Dept. to prevent changes & alterations that might interfere with the defences."[150]

Acting Chief Engineer Thayer recommended to Secretary of War John B. Floyd that Special Order No. 97 be modified to leave the engineer's quarters and other buildings connected therewith and possibly the reserve in charge of the local engineer.[151]

6. Prime Assumes Additional Responsibilities and Moves to Biloxi

On September 1, 1858, Lieutenant Prime requested four months' leave to begin as soon as operations then underway at Fort Pickens shut down. He estimated this would be during the second half of October. All projects for which he was charged would then be suspended, permitting his services to be dispensed with until more money became available. If Congress, when it convened in December, voted an appropriation for either the Pensacola or Mobile fortifications for Fiscal Year 1859, he would "give up any unexpired portion" of his leave and return to his duty station.[152]

Colonel Thayer, as Acting Chief Engineer, approved Prime's request, provided he arranged his operations to insure that the

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150. Prime to Wright, August 11, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

151. Thayer to Floyd, August 21, 1858, NA, RG 77, Ltrs. Sent, Chief Engineer.

152. Prime to Wright & Prime to Cooper, September 1, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer. Samuel Cooper was Adjutant General of the U.S. Army.

public interest would not be adversely effected.[153] On being notified of this, Prime wrote the War Department that, while on leave, his address would be in care of: Edward M. Cary, Boston Massachusetts.[154]

Work dragged. On October 14, Prime advised the Department that, because of "delay in completing repair of Fort Pickens," he would be unable to avail himself of his furlough for a number of weeks.[155]

Prime was still on the Gulf Coast on January 7, 1859. On that day, he returned to Pensacola from Mobile, having accompanied Lt. Gen. Winfield Scott, the general-in-chief, on an inspection of Fort Morgan. While in Pensacola, General Scott had visited Fort Barrancas.[156]

It was late December before the work at Fort Pickens ceased and Lieutenant Prime laid off the hands. The visit of the general-in-chief had then engrossed his attention. Upon General Scott's departure, Prime wrote the Adjutant General, reminding him that he had not yet availed himself of his four months' leave. He asked that it be allowed to begin on the first day that he could leave his station consistant with the public interest.[157]

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153. Thayer to Cooper, September 11, 1858, & Wright to Prime, October 7, 1858, NA, RG 77, Ltrs. Sent, Chief Engineer.

154. Prime to Cooper, September 21, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

155. Prime to Wright, October 14, 1858, NA, RG 77, Ltrs. Recd., Chief Engineer.

156. Prime to De Russy, January 7, 1859, NA, RG 77, Ltrs. Recd., Chief Engineer. Lt. Col. René De Russy had relieved Col. Thayer as Acting Chief Engineer on December 22, 1858. General Totten spent much of 1859-60 on a reconnaissance of the Pacific Coast.

157. Prime to Cooper, January 7, 1859, NA, RG 77, Ltrs. Recd., Chief Engineer.

The Department detained Prime's letter to the Adjutant General. Informing Prime of his action, Acting Chief Engineer De Russy advised him of the death of the project engineer at Ship Island, Mississippi, Lt. Newton E. Alexander. This made it necessary to retain Prime on the Gulf Frontier for three or four months. Furthermore, De Russy believed Prime would find it more agreeable to spend the summer in the north rather than the south.[158]

On March 7, Lieutenant Prime learned that it would be "some time" before he took his already deferred leave. Two weeks before, Colonel De Russy had written, notifying him that, in addition to his duties at Pensacola and Mobile, he had been selected as Lieutenant Alexander's replacement. As such, he would be responsible for construction of the Ship Island fort. For guidance, he was to apply to Maj. P.G.T. Beauregard in New Orleans for such papers and property pertaining to the proposed works as were in Beauregard's possession.

Prime was to take post at either Biloxi or Ship Island, and proceed with "an active prosecution of operations."[159]

Acknowledging receipt of the message, Prime vacated the Barrancas engineer's quarters and traveled to Biloxi by way of New Orleans.[160]

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158. De Russy to Prime, January 25, 1859, NA, RG 77, Ltrs. Sent, Chief Engineer.

159. De Russy to Prime, February 22, 1859, NA, RG 77, Ltrs. Sent, Chief Engineer.

160. Prime to De Russy, March 7, 1859, NA, RG 77, Ltrs. Recd., Chief Engineer.

7. Prime as an Absentee Supervisory Engineer

a. Maintenance and Repairs at Fort Barrancas for Fiscal Year 1859

Lieutenant Prime returned to Pensacola from Mississippi to inspect the defenses in the fourth week of May, preparatory to drafting his Annual Report for Fiscal Year 1859. He was back in Biloxi when he filed the report. The Department was informed that Fort Barrancas "remains in good condition," and no appropriation was requested. The armament was mounted and the magazines in "good order."[161]

On reviewing Prime's Monthly Reports of Operations, the Department found that in November 1858, he had several masons and laborers repair the Water Battery magazine.[162]

b. He Again Calls for Funds to Purchase the Inholdings

When he made his Annual Reports for Fiscal Years 1859 and 60, Lieutenant Prime observed that the barracks were occupied by Company G and were in the same condition as 12 months before. "No appropriation" was "asked, as the intentions of the Dept. concerning this building" were unknown.[163]

Once again, he urged that an allotment be made for purchase of the four appraised inholdings near the barracks. Two of the houses, if acquired, would be removed and the other two converted into officers' quarters.[164]

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161. Fort Barrancas, Annual Report, Fiscal Year 1859, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the Senate of the United States, 2d Session of the 36th Congress, 1859-60 (Washington, 1861), Serial 1079, Vol. 2, p. 267.

162. Fort Barrancas, Monthly Report of Operations, November 1859, NA, RG 77, Ltrs. Recd., Chief Engineer.

163. Fort Barrancas, Annual Reports, Fiscal Years 1859 & 60, NA, RG 77, Ltrs. Recd., Chief Engineer.

164. Ibid.

c. Quartermaster Department Repairs the Engineer's Wharf and the Lighthouse Service Expands its Facilities

In March 1859, before leaving for Ship Island, Prime had notified the Department that the Engineer's wharf needed to be repaired. If the Quartermaster Department did not attend to it, the Corps would be compelled to act. When Prime returned for his short May 1859 visit, he was delighted to see that Post Quartermaster Lt. Amos Beckwith had repaired the wharf.[165]

Prime also found that the Lighthouse Service had erected a frame dwelling on Foster's Island, near Fort McRee, for the beacon keeper; a boathouse near Fort Barrancas; and a keeper's quarters adjacent to the new lighthouse.

Writing the Department, Prime urged that the Secretary of War meet with the Secretary of the Treasury to agree on boundaries beyond which the lighthouse people would not be allowed to expand their facilities.[166]

d. He Runs Afoul of Regulations

On his March 1860 visit to the Pensacola forts, Lieutenant Prime, in accordance with a request from Colonel Winder, employed a crew to repair the roof of the barracks.[167] For this he earned a reprimand. Captain Wright called his attention to Army Regulations, making the Quartermaster Department responsible for repair of

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165. Ibid.

166. Prime to De Russy, June 7, 1859, NA, RG 77, Ltrs. Recd., Chief Engineer.

167. Fort Barrancas, Annual Report, Fiscal Year 1860, NA, RG 77, Ltrs. Recd., Chief Engineer.

barracks, etc., at posts where troops were quartered, and for the Corps to attend to this matter at ungarrisoned forts.[168]

e. Colonel Winder Squeezes the Engineers

With construction closed down and Lieutenant Prime stationed at Biloxi, Colonel Winder believed that his troops could make better use of some of the reservation structures belonging to the Corps of Engineers. In June 1859, Prime was notified by Post Quartermaster Beckwith that Colonel Winder had appropriated the engineer's quarters and would assign them to one of his married officers.

Writing the Department for guidance, Prime observed that this structure had been erected by Major Chase in the early 1840s, while he had been Superintending Engineer, as an office and quarters. Since then, the engineer office had been relocated into a room at the barracks. Should this room be required by the troops, there would be no suitable building for the office, except in the engineer's quarters. Prime believed there were at Fort Monroe and other posts quarters built by the Engineers and exclusively under their control. He saw no reason to transfer the subject quarters to the Quartermaster Department.[169]

As there was no officer of the Corps stationed at Pensacola, the Department recommended that the quarters be turned over to the Quartermaster Department. Such action would enable the Corps to avoid a confrontation with Colonel Winder, which could result in a referral of the matter to Secretary of War Floyd.[170]

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168. Wright to Prime, April 30, 1860, NA, RG 77, Ltrs. Sent, Chief Engineer.

169. Prime to De Russy, June 25, 1859, NA, RG 77, Ltrs. Recd., Chief Engineer.

170. De Russy to Prime, July 12, 1859, NA, RG 77, Ltrs. Sent, Chief Engineer.

Five months later, in November 1859, Quartermaster General Jesup, at Colonel Winder's request, asked for transfer of the Barrancas stables. The Department wrote Lieutenant Prime that, with Engineer operations suspended at Pensacola, there was no objection to this transfer. There was one condition, however, that must be insisted upon--the stables would be kept in repair and be readily available to the Corps whenever construction was resumed.[171]

Prime had no objection to use by the garrison or joint occupancy of the stables, so long as such did not interfere with stabling Engineer teams.

There was, however, considerable Engineer property stored in the stables. Prime asked that it not be disturbed, unless it was deemed absolutely necessary by the Quartermaster Department. If this occurred, the property must be moved and carefully stored elsewhere.[172]

Quartermaster General Jesup was accordingly advised by Acting Chief Engineer De Russy that his people must provide for security of the property stored in the stables, if it were removed.[173]

f. Department Spends no Money on the Fort in Fiscal Year 1860

Construction of the Ship Island fort engrossed Lieutenant Prime's time and energy. In the 20 months between his May 1859 visit to Pensacola and the secession of Florida in January 1861, he

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171. Wright to Prime, November 21, 1859, NA, RG 77, Ltrs. Sent, Chief Engineer. Prime, having left Biloxi on August 26 to take advantage of his four-month leave, was in New York State at this time.

172. Prime to De Russy, November 23, 1859, NA, RG 77, Ltrs. Recd., Chief Engineer.

173. Wright to Prime, November 26, 1859, NA, RG 77, Ltrs. Sent, Chief Engineer.

had only one occasion to travel to West Florida to inspect Fort Barrancas. This was in March 1860, three months before he filed his annual reports. On July 6, from Biloxi, he submitted these documents for Fiscal Year 1860. No work had been done at Fort Barrancas, he wrote, since work was suspended on the Redoubt in the autumn of 1858. The fort, he continued, has its armament mounted, and its magazines were in good order. No appropriation was recommended for the change of armament in the Water Battery, "until completion of the more important repairs and changes at Fort Pickens."[174]

174. Fort Barrancas, Annual Report, Fiscal Year 1860, NA, RG 77, Ltrs. Recd., Chief Engineer.

VIII. THE BARRANCAS AS A CONFEDERATE BASTION

A. Crisis Focuses National Attention on Pensacola Bay

1. South Carolina Withdraws from the Union

In the summer of 1860, the Nation edged toward disaster. The Democratic party split when its leaders converged to nominate candidates for President and Vice President in the November election and to decide on its platform. The Northern wing nominated Stephen A. Douglas of Illinois for the presidency and the Southern faction John C. Breckinridge of Kentucky. The Democratic party a shambles, the victory of the Republican candidate, Abraham Lincoln, was assured. A fourth party, the Constitutional Union, also entered the field soliciting votes for its nominee, John Bell of Tennessee. Southern fire-eaters boldly declared that if Mr. Lincoln were elected, they would leave the Union.

The Buchanan Administration, unlike President Jackson when confronted by the nullification crisis in 1832-33, failed to take vigorous action to demonstrate force would be used to preserve the Union. At Pensacola, nothing was done to reinforce the garrison or ready the forts for defense. The commander of the defenses, Colonel Winder, and his second in command, Lt. Asher R. Eddy, were permitted to go on leave, as was Lieutenant Prime, the Engineer.

On November 6, Lincoln was elected President, but it would be four months before the new administration took office. Southern radicals were not prepared to compromise. South Carolina, on December 20, led the way when a state convention voted to secede. On the 26th, the United States troops in Charleston Harbor evacuated Fort Moultrie and occupied Fort Sumter. State conventions, in early January, assembled in Tallahassee, Florida, Montgomery, Alabama, and Jackson, Mississippi, to consider and vote ordinances of secession.

2. Troops Evacuate the Barrancas

The crisis found bespectacled 1st Lt. Adam J. Slemmer in command of Company G, 1st U. S. Artillery, at Barrancas barracks and responsible for defense of the Pensacola forts. These were trying days for the 31-year-old Slemmer, because of the daily alarms caused by

rumors that the forts, navy yard, and barracks were to be seized by Florida State Troops on orders from Governor Madison S. Perry. On January 5, 1861, Slemmer learned that Alabamans had taken possession of Fort Morgan. Although he received no instructions from Washington on the subject, Slemmer determined to prevent a similar coup by State authorities at Pensacola.[1]

On the morning of January 7, Lieutenant Slemmer called on Commo. James Armstrong, commandant of the Pensacola Navy Yard, to perfect plans for better securing protection of the public property for which they were responsible. Slemmer was accompanied by Lt. Jeremiah H. Gilman, his second in command, and R. H. Watts and Daniel Saint, leaders of the pro-Union employees at the yard. Additional meetings were held by these officers that evening and early on January 8. Armstrong, in absence of orders from the Navy Department, deemed it inexpedient to cooperate with the Army, despite Watts and Saint volunteering to raise 200 volunteers to assist in defense of the yard.[2]

Long before daybreak on January 8, the artillerists began to remove powder from the Water Battery magazine. Passing up the subterraneous gallery, they stored it in the fort's magazines. Lieutenant Slemmer issued orders for all the guns to be made combat ready, and at nightfall he alerted the guard. As an added security measure, the drawbridge was raised. About midnight, a squad of men (about 20) approached the sally port, seemingly intent on taking possession of the fort. Challenged by the corporal of the guard, the intruders took to their heels. They were hurried on their way by a crash of musketry

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1. The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies (73 vols., 128 parts; Washington, D.C., 1890-1901), Series 1, Vol. 1, p. 334; cited hereinafter as Official Records.

2. Ibid.; Watts to Meigs, December 6, 1865, NA, RG 92, Consolidated Correspondence File. Born in Maine, Gilman was graduated from the U. S. Military Academy in the Class of 1856 as a brevet 2d lieutenant, 1st Artillery. Gilman was promoted to 2d lieutenant on October 31, 1856.

from the guard. Their footsteps resounded on the plank walkways, as the guard double-timed back to the fort. The harmless volley was the first shot fired in what was to erupt with the bombardment of Fort Sumter into a terrible fraticidal war.

Slemmer, as a precautionary measure against the return of his unwelcomed visitors, ordered the guard doubled.[3]

In the Washington mail, on January 9, Lieutenant Slemmer received a letter from the War Department. He was to

> take measures to do the utmost in your power to prevent the seizure of either of the forts in Pensacola Harbor by surprise or assault, consulting first with the commander of the navy yard, who will probably have received instructions to cooperate with you.[4]

Upon receipt of these instructions, Lieutenant Slemmer, accompanied by Lieutenant Gilman, rushed to the navy yard to confer with Commodore Armstrong. The commodore meanwhile had called a staff meeting. Among those in attendance were Cmdr. Ebenezer Farrand, Lt. Cmdr. Henry Walke, and Lts. Otway H. Berryman and Francis B. Renshaw. Walke commanded the storeship Supply which had arrived in Pensacola Bay from Veracruz on December 7 to load stores for the U.S. squadron operating off that harbor and Berryman was captain of the armed steamer Wyandotte. Farrand and Renshaw were assigned to the navy yard. Armstrong told the officers of the orders from the Navy Department, requiring their cooperation with the Army during the emergency.[5]

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3. Official Records, Series I, Vol. 1, pp. 334-34; Jeremiah H. Gilman, "With Slemmer in Pensacola Harbor," Battles and Leaders of the Civil War, edited by Robert U. Johnson & C. C. Buel, 4 vols. (New York, 1885-87), Vol. I, p. 27.

4. Official Records, Series I, Vol. I, p. 334.

5. Henry Walke, Naval Scenes and Reminiscences of the Civil War in the United States on the Southern and Western Waters . . . (New York, 1877), pp. 1-2.

Slemmer and Gilman arrived after the meeting had broken up. They found Commodore Armstrong seemingly under the influence of Commander Farrand and other pro-secessionist officers. Guided by Farrand, Armstrong hesitated to take an active role in providing for defense of Pensacola Harbor. The recent turn of events had caused intense excitement among the employees of the navy yard and among the residents of Warrington, and these had added to the commodore's consternation. He was desirous of doing his duty, and apparently saw it clearly when in the presence of the Army officers.[6]

Armstrong, at the insistance of Slemmer and Gilman, agreed that with the limited means available, only one of the forts could be held. Fort Pickens was selected because of the number of advantages its possession imparted--command of the other forts, harbor, and navy yard, and the ease with which it could be reinforced from the Gulf. To implement this decision, Armstrong promised to make Wyandotte and Supply available by 1 P.M. to move the soldiers from the mainland to Fort Pickens.[7]

At 10 A.M., on the 9th, Lieutenant Slemmer with part of his command boarded Supply, and was ferried across the bay to Fort Pickens. There, the artillerists began to mount guns and make preparations for its defense. Lieutenant Gilman had remained behind with the rest of Company G at Barrancas barracks to complete preparations for its evacuation. At 1 P.M., Gilman, on going to the wharf, found no ships. He rushed to the navy yard, calling on Commodore Armstrong in an effort to counteract Commander Farrand's influence. On doing so, Gilman was told by the commadore that the only assistance the Navy could give was provisions and transportation of his troops to Fort Pickens.

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6. Gilman, "With Slemmer in Pensacola Harbor," Battles and Leaders, Vol. I, p. 27.

7. Official Records, Series 1, Vol. 1, p. 335.

Upon being notified of this change in plans, Slemmer ordered his men at Fort Pickens to cease work and they returned to Barrancas barracks. He then saw Commodore Armstrong, whom he accused of deceiving him. He reminded Armstrong that the Navy had promised him men and the cooperation of two warships, in addition to supplies and transportation. With his small command, 57 officers and men, Slemmer continued, he would never dream of defending a fort, designed to be held by a garrison of upwards of 1,200; that he had formulated his plans on that premise and had lost one day's time in preparing Fort Barrancas for defense.

After hearing what Slemmer had to say, Armstrong sent for his aides and told them to implement the original design.[8]

Lieutenant Berryman of Wyandotte promised to be ready to leave the dock at 5 P.M., by which time the regulars would be prepared to embark from the Barrancas wharf. As time was critical, all hands turned to placing needed public property on the wharf to facilitate its removal to Fort Pickens. The troops and navy yard employees, led by Lt. John Erwin, kept at these tasks until midnight, when a dense fog rolled in making it impossible for Wyandotte to dock.[9]

At 8 A.M., on the 10th, a large flatboat and several small craft pulled into the Barrancas wharf and the artillerymen and their gear went aboard.[10]

By 10 A.M., the troops were across the bay and disembarked on Santa Rosa Island. Lieutenant Berryman, in the

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8. Ibid.

9. Ibid.; Watts to Meigs, December 6, 1865, NA, RG 92, Consolidated Correspondence File.

10. Gilman, "With Slemmer in Pensacola Harbor," Battles and Leaders, Vol. I, p. 28.

meantime, had detailed 30 seamen from the navy yard to join Lieutenant Slemmer and assist in making preparations for defense of Fort Pickens. During the remaining hours of daylight, on January 10, most of the powder and all the fixed ammunition for the field batteries were transferred from the mainland to the island. As a final measure before abandoning the forts on the mainland, Lieutenant Slemmer had the cannon bearing on the bay spiked, because his redlegs had neither the means nor the time to dismount them. Provisions to subsist the garrison were drawn from the steamer Supply.[11]

3. Secessionists Seize the Barrancas and the Navy Yard

Ten days before, on the last of December, William H. Chase, who had resigned from the Army in October 1856 to return to his beloved Chasefield to promote railroads, had written Governor Perry of Florida. Chase, in his letter, outlined a plan for taking possession of the forts. He gave the letter to a Colonel Yonge, who planned to leave that day for St. Marks by ship. A storm delayed the vessel, and she did not leave Pensacola until January 3.

That same day, Chase was handed a dispatch from Governor Andrew H. Moore of Alabama, dated January 1, asking him to come to Montgomery. Chase started for the Alabama capital at 9 P.M. Detained by a flood at Murder Creek, he did not reach Montgomery until 5 P.M., on the 5th. At his meeting with the governor, Chase learned that orders had been issued for Alabama volunteers to seize Fort Morgan and the Mt. Vernon Arsenal.

After Chase had retired, Governor Moore sent word that Governor Parry had telegraphed that he was going to take possession of the Pensacola forts, and would like Alabama to assist in the venture.

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11. Official Records, Series 1, Vol. I, p. 336. In addition to the 57 officers and men of Company G, 1st Artillery, and the 30 sailors, there were present at Fort Pickens on the morning of January 10, the 3 ordnance sergeants from Forts Barrancas, Pickens, and McRee. Returns from U.S. Posts, 1800-1916, NA, Microcopy M-617.

Not having received any orders from his governor, Chase remained at Montgomery on the 6th. At 9:30 P.M., he finally received a telegram from Governor Perry. This was in reply to the letter just delivered by Colonel Yonge. It read, "Yes, and go ahead, without waiting for secession--prepare well--you have ample authority."

Chase left Montgomery by train the next morning and was in Mobile within 24 hours. He arranged with a Colonel Shephard to collect a force of Alabamans to proceed as soon as possible by steamer to Santa Rosa Island and take possession of Fort Pickens. Shephard hastened to organize a picked detachment.

On January 9, Chase left Mobile for Pensacola, where he arrived at 4 P.M., on the 10th, to learn that he was too late. Lieutenant Slemmer and the soldiers of Company G had occupied Fort Pickens only hours before. Satisfied that it would be impossible to take the fort without bloodshed, Chase telegraphed Colonel Shephard to hold fast.

Thus, Chase's plan had been frustrated by the storm which prevented Colonel Yonge from reaching Tallahassee until January 6 with Chase's proposal to seize the forts.[12]

Meanwhile, at Tallahassee, on January 3, delegates chosen by the people of Florida had convened to chart the course their State would pursue. After six days of debate and discussion, on January 10, an ordinance of secession was taken up as the order of business. The ordinance was adopted by a vote of 62 to 7, and the president of the convention instructed to inform the proper authorities of the other Southern states of the action Florida had taken.

A letter from U. S. Senator David L. Yulee to a member of the convention, Joseph Finegan, had important repercussions. Yulee, Colonel Chase's long time friend, pointed out:

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12. Chase to Editor, Pensacola Observer, April 10, 1861.

> The immediate important thing to be done is the occupation of the forts and arsenal in Florida. The naval station and forts at Pensacola are first in consequence. . . . The occupation of the navy yard will give us a good supply of ordnance and make the capture of the forts easier. Major Chase built the forts and will know all about them. Lose no time, for my opinion is troops will be soon dispatched to reinforce and strengthen the forts in Florida.[13]

Senator Yulee's letter had the anticipated consequences. The convention passed a resolution to

> authorize and empower the governor of the State to employ the militia of this State, and such forces as may be tendered to the State from the States of Alabama and Georgia to defend and protect the State, and especially the forts and public defenses of the State now in possession of the State, and that the governor be authorized to make all necessary arrangements for the support and maintenance of such troops and carrying on the public defense; That it is the sense of this convention that the governor should not direct any assault to be made on any fort or military post now occupied by federal troops, unless the persons in occupation of such forts and posts shall commit overt acts of hostility against this State, its citizens or troops in its service, unless directed by a vote of this convention.[14]

On January 9, the day before Florida's withdrawal from the Union, Governor Moore of Alabama had warned the convention assembled in Montgomery to determine his State's future "that Governor Perry . . . has ordered the forts [around Pensacola] to be occupied by the troops of Florida and asks aid from Alabama. The force at his [Governor Perry's] command in West Florida is small and not sufficient to take . . . the forts. Troops from Alabama could reach that point before

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13. Official Records, Series I, Vol. I, p. 442; Soldiers of Florida in the Seminole Indian-Civil and Spanish American Wars, compiled by the Board of State Instruction (Live Oak, Fla., 1903), p. 35.

14. J. J. Dickson, Confederate Military History of Florida, 12 Vols. (Atlanta, 1898), Vol. X, pp. 8-20.

the troops of East and Middle Florida."[15] Two hundred and twenty-five Alabamans, under Col. Tennent C. Lomax, were accordingly ordered to Pensacola to implement the governor's recommendation.[16]

On January 11, only hours after news had reached Pensacola that the convention had voted Florida out of the Union, Lieutenant Slemmer had an unpleasant conversation with Commander Walke of Supply. Walke explained that on the previous day, he had been ordered by Commodore Armstrong to land at Fort Pickens such stores as were required by the Army, taking receipts for them. He would then return with his ship to the anchorage off the navy yard, and unload the rest of the cargo. When Walke showed Slemmer the order, the Army officer "threw down the gun-sights" he was holding, and declared that if Walke deserted him "in obediance to that order, he would not attempt to hold the fort any longer." Walke encouraged Slemmer to do so, "promising to support him with all his command."

More bad news arrived. Lieutenant Berryman sent word that he expected to sail "this evening or tommorrow for the south coast of Cuba."[17]

Whereupon, Lieutenant Slemmer sat down and wrote Commodore Armstrong:

> I understand that it is your intention to withdraw from this fort the protection of the U.S.S. Wyandotte and the storeship Supply, contrary to the agreement between you and myself day before yesterday. I again have the honor to state, as I did to you in presence of several officers at our last interview, that without the aid of those vessels, it will be

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15. Official Records, Series I, Vol. I, p. 44.

16. Dickson, Confederate Military History, X, p. 15.

17. Walke, Naval Scenes, pp. 2-3; Official Records, Series I, Vol. I, p. 336.

utterly impossible in my opinion, for me to protect this harbor, and I shall therefore, in case this assistance is withdrawn, instantly relinquish all hopes of defending the place, and report the state of affairs immediately by a messenger to Washington. I most respectfully request an immediate answer as to whether the assistance above referred to is to be withdrawn or not.[18]

Commodore Armstrong replied

that the U.S. storeship Supply was sent to Fort Pickens by my order merely to convey the provisions you required and to return to this navy yard. The Supply is not a vessel of war, and having been sent to this station on the special service of conveying stores and coal to Vera Cruz for the vessels of the Home Squadron stationed there. It is my duty to dispatch her to that port at the earliest moment practicable, in conformity with the orders I have received from the Navy Department, from which orders I can not deviate further. The steamer Wyandotte may be retained for the purpose of cooperating with you until further orders.[19]

On the night of January 11-12, Wyandotte and Supply anchored in lee of the Fort Pickens batteries. Early on the 12th, Commander Walke received a note from Commodore Armstrong that the navy yard was besieged by Alabama and Florida State Troops. Walke showed the message to Lieutenant Slemmer. To verify this turn of events, Slemmer wrote Armstrong, "I am informed that the navy yard is besieged. In case you determine to capitulate, please send me the marines to strengthen my command." No reply came.[20]

On the morning of January 12, the land approaches to the navy yard were sealed off by seven companies of Alabama and Florida volunteers sent by Colonel Chase (now an officer in the Florida State Troops) to demand surrender of the yard. That facility was defended by

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18. Official Records of the Union and Confederate Navies in the War of the Rebellion (31 Vols.; Washington, D.C., 1895-1929), Series I, Vol. 4, p. 12; cited hereinafter as Official Records--Navies.

19. Ibid., p. 13.

20. Official Records, Series I, Vol, I, p. 326.

about 30 seamen and a detachment of 38 Marines commanded by Capt. Joseph Watson. Its defenses, upon evacuation of Fort Barrancas and the Redoubt, were non-existant. The only guns mounted at the yard were those used to salute the colors.

It was about 1 P.M. when the secessionist column, about 500 strong, arrived at the east gate and halted. Colonel Lomax of the 2d Alabama (accompanied by Maj. E. B. Marks and Adj. A. Burrows of his regiment, Richard L. Campbell, aide-de-camp to Colonel Chase, and Capt. Victor M. Randolph, late of the U.S. Navy) sent word to Commodore Armstrong that they had been ordered by Governor Perry of Florida to take possession of the navy yard. Armstrong, lacking the wherewithal for a successful defense, sent his executive officer, Commander Farrand, to conduct the commissioners to his office.[21]

When the commissioners arrived, they were introduced by Commander Farrand to Commodore Armstrong. After presenting his credentials, Colonel Lomax told Armstrong that his troops already had possession of the magazine, about one-third mile from the yard. He then read the order from Governor Perry, by whose authority he demanded immediate possession of the navy yard and its stores. Armstrong, voice trembling with emotion, declared that he had

> served under the flag of the United States in sunshine and in storm, for fifty years, loving and cherishing it as he did his heart's blood, he would strike it now together with the blue pennant, the insignia of his present command, rather than fire a gun or raise his sword against his countrymen, especially in circumstance like the present, when he was without means of

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21. J. Thomas Scharf, History of the Confederate States Navy, from its Organization to the Surrender of its Last Vessel (New York, 1887), p. 601; B. Renshaw to Editor, January 29, 1861, New York Herald; Tuscaloosa Monitor, January 19, 1861; Soldiers of Florida, p. 36. Alabama Volunteer Companies present were the Montgomery True Blues, Wetumpka Guards, Tuskegee Light Infantry, Metropolitan Guards, and Independent Rifles. The two Florida companies were the Pensacola Rifles, Capt. Edward A. Perry; and the Santa Rosa Guards, Capt. William Harrison.

defending his position, and when an attempt to do so would result in a useless loss of life and destruction of property.

Armstrong ordered Commander Farrand to have the United States flag and his blue pennant lowered. In accordance with naval practice, Farrand had the senior lieutenant, Mr. Renshaw, strike the colors. In its place was hoisted a flag of thirteen alternate strips of red and white, with a blue field, and a single large white star. Captain Randolph was placed in charge of the yard, while the Marines in the barracks were made prisoners, together with the seamen and employees.[22]

For his surrender of the navy yard, Commodore Armstrong was court martialed, convicted, and sentenced "to be suspended from duty for the term of five years, with loss of pay for the first half of said term and to be reprimanded by the Honorable Secretary of the Navy in general orders."[23]

Sentries on the parapets of Fort Pickens, upon seeing the United States flag lowered, informed Lieutenant Slemmer. Upon capture of the navy yard, everything on the mainland and Foster's Island fell into the secessionists' hands, including the large dry dock, the workshops, materials, and supplies of all sorts. Fortunately, Supply and Wyandotte, the only United States vessels in the harbor, were commanded by loyal men and were saved. Wyandotte took Supply in tow and moved out of the bay. That evening, Lieutenant Berryman sent word to Slemmer that his orders of the previous evening were to cooperate with the Army, but he must not fire a shot unless his vessel was attacked. He could offer the artillerists no assistance in case they were assaulted. The Fort Pickens

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22. Scharf, Confederate States Navy, pp. 601-03.

23. Official Records--Navies, Series I, Vol. 4, pp. 54-64.

garrison--87 officers and men--was left to depend on its own means for defense.[24]

On the mainland, the secessionists moved against known Union men. Lieutenant Erwin succeeded in reaching Supply; Saint was captured, sent out to the ships without a change of clothes, and his personal property seized by the Rebels; Watts escaped into the woods. When he emerged from hiding at the end of the month, he was allowed to return to his home on promising not to communicate with Fort Pickens or the fleet.[25]

On the 13th, the storeship Supply, under a flag of truce, tied up at the wharf. The Marines, sailors, and those employees desirous of going North were sent aboard Supply, her captain having given his parole to land them in New York. Overtures had been made to the Marines and sailors to cast their lot with the state volunteers, with the alternative of explusion if they refused.[26]

4. State Troops Take Position

While Colonel Chase and his senior officers vainly sought to reason and coerce Lieutenant Slemmer into surrendering Fort Pickens to the State of Florida, reinforcements were continually arriving to strengthen the secessionists' hand in their negotiations.

Governor John J. Pettus of Mississippi, his state having withdrawn from the Union on January 9, ordered eight companies of militia to rendezvous at Enterprise, a station on the Mobile & Ohio Railroad, 19 miles south of Meridian. The companies which assembled in

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24. Gilman, "With Slemmer in Pensacola Harbor," Battles and Leaders, Vol. I, p. 29; Official Records, Series I, Vol. I, p. 337; Returns from U. S. Posts, 1800-1916, NA, Microcopy M-617.

25. Watts to Meigs, December 6, 1865, NA, RG 92, Consolidated Correspondence File.

26. Scharf, Confederate States Navy, p. 603.

Enterprise on January 11 were to hold themselves ready to move to Pensacola to assist the Florida authorities in taking possession of the forts and navy yard.

While rendezvousing, one of the soldiers recalled, we spent most of our time

> making and listening to patriotic and inspiring speeches. At night, by the flickering light of pine-knot fires, mounted upon boxes, barrels, etc., scattered over the camp, could be seen eloquent orators, surrounded by dusky groups of enthusiastic young soldiers, whose impassioned cheers rang wildly out over the shadowy forests.[27]

On January 13, the Mississippians boarded a southbound train. Although the governor lacked authority to send them out of state, none of the volunteers held back. At Mobile, they were reinforced by three companies of Alabamans, the Marion Rifles (Capt. R. T. Royston), the Light Dragoons (Capt. Theodore O'Hara, author of "the Bivouac of the Dead"), and Captain Taylor's Mounted Rifles. The Mississippians and Alabamans boarded the steamer Oregon.

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27. Baxter McFarland, "A Forgotten Expedition to Pensacola," Publications of the Mississippi Historical Society, Vol. IX, pp. 15-18. The companies which were called out were: The Chickasaw Guards, Capt. William F. Tucker, and Lts. L. W. Galbraith, J. H. Moore, and W. C. White; Columbus Riflemen, Capt. Charles H. Abert, and Lts. William E. Baldwin, Sam D. Harris, and J. W. Benoit; Lowndes Southrons, Capt. William B. Wade, and Lts. George H. Lipscomb, T. P. Shields, and W. C. Richards; Prairie Guards, Capt. J. W. T. Hairston, and Lts. A. H. Ledbetter, James H. Hairston, and William H. Gray; Noxubee Rifles, Capt. George T. Weir, and Lts. J. H. Rives, William Longstreet, and Joseph K. Dixon; Enterprise Guards, Capt. John W. O'Ferrall, and Lts. W. S. Reynolds, Andrew E. Moody, and R. Stewart Wier; Quitman Light Infantry, Capt. J. L. Duck, and Lts. F. G. Nicholson, William A. Hughs, and J. Elbert Hardy; and Lauderdale Rifles, Capt. Constantine Rae, and Lts. William Whitaker, Laines Lasley, A. J. Crawford, and William Spinks. The Official and Statistical Register of the State of Mississippi, 1908, edited and compiled by Dunbar Rowland (Nashville, 1908), p. 423.

Casting off on the evening of the 14th, the vessel encountered rough seas as she chugged out of Mobile Bay and turned east. Many of the men suffered seasickness. When Oregon entered Pensacola Bay, she passed close to Fort Pickens, and many a volunteer blanched as he saw the garrison rush to the guns "apparently with the intention of firing into and sinking the frail craft and all on board." This, however, was only a drill on the part of the regulars. Oregon held to her course and soon docked at the navy yard. On going ashore, the Mississippians formed and marched to the Naval Hospital, which would be their quarters.[28]

The newcomers spent the next several days arranging their quarters and preparing ball cartridges. They were under orders to be ready to fall out with 50 rounds of ammunition and their rifle-muskets if the long-roll were beaten, calling them to arms.[29]

Governor Pettus, meanwhile on January 15, had informed a special session of the legislature that eight companies of volunteers had been rushed "to aid Florida and Alabama in taking possession of the forts and navy yard at Pensacola." Major Mims had been sent to Enterprise, "with instructions to provide them will all necessary camp equipage and provisions, that the sons of Mississippi might not be required to suffer more privations and hardships than are necessarily incident to the life of a soldier."[30]

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28. Tuscaloosa Monitor, January 19, 1861; McFarland, "A Forgotten Expedition to Pensacola," pp. 18-19. Aboard Oregon had been three companies of Alabamans and five companies of Mississippians--The Columbus Riflemen, Noxubee Rifles, Enterprise Guards, Quitman Light Infantry, and Prairie Guards.

29. McFarland, "A Forgotten Expedition to Pensacola," p. 20.

30. Official and Statistical Register, p. 422.

On January 17, the eight companies were organized into a regiment, of which Capt. Charles A. Abert was elected colonel; Capt. W. B. Wade, lieutenant colonel; and Samuel Butler, major.[31]

During the second half of January, the Mississippi companies drilled daily upon "the deep sand of the shore, almost blinding in its glittering whiteness." Fatigue parties were detailed to assist Colonel Lomax's Alabamans in erecting sand batteries on the Barrancas. There were regimental dress parades in the evenings, and guard mount in the mornings. Reveille became a familiar early morning sound "to the unwilling ears of drowsy soldiers who quickly conformed, however, to the unaccustomed routine." Rations were plentiful, and the Mississippians frequently feasted on fish and oysters. Within a few days, the soldiers on each side settled into "a state of watching and waiting, after which little of interest occurred--nothing save the dull routine of camp life."[32]

An Alabama soldier of Capt. R. C. Farris' Independent Rifles had remained in Montgomery, when his comrades had seized the navy yard. In the third week of January, he left home to rejoin his unit. He arrived at the terminus of the Alabama & Florida Railroad on Tuesday, the 15th. He remained there overnight. It was 8 A.M., on the 17th, when he reached Pensacola. The 11-mile march to the Barrancas, over a "very sandy road," was unusually tiresome, and it was 1 o'clock when he reported to Capt. Green Andrews at Barrancas barracks. He found the soldiers in good health but anxious to hear about the homefolks.

He learned that there were between 1,500 and 1,800 volunteers posted at the Barrancas--the Pensacola, Santa Rosa, and Greenville

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31. McFarland, "A Forgotten Expedition to Pensacola," p. 20. Capt. J. L. Duck was appointed adjutant; William H. Brown, quartermaster; Charles S. Morton and Hugh Topp, commissaries; W. D. Lyles, surgeon; and B. A. Vaughan and C. M. Dickinson, assistant surgeons.

32. Ibid., p. 20.

Guards at the navy yard; Colonel Abert's 500-man Mississippi regiment at the hospital; the Tuskegee Light Infantry, Auburn Guards, Tuskegee Zouaves, Hayneville Guards, Metropolitan Guards, Independent Rifles, and Montgomery True Blues at Barrancas barracks; and the Wetumpka Light Infantry at Fort McRee. All were in "good spirits and willing to fight when the order is given."[33]

The Alabamans' camp was pleasantly situated, and, from the barracks, they had an excellent view of Pensacola Bay and Fort Pickens. His comrades had removed the spikes from the Fort Barrancas cannon, and the fort's 42 guns, including two mortars, were ready for action. Over on Santa Rosa Island, the United States Regulars, he was told, were removing guns from the Fort Pickens channel and sea fronts and remounting them along the north curtain and the northwest and northeast bastions. Every evening, the Pickens garrison fired a cannon to remind the Southerners that the fort would be "defended to the death."

Colonel Chase, who as Superintending Engineer had built the forts, cautioned the volunteers that the more heavily armed Pickens, with her 8-inch columbiads, could "batter down Barrancas in 3 hours," and with 100 men could be held against 5,000 "killing 50 percent of them."[34]

The Mississippi and Alabama troops, so far as they were garbed, were "motley crews." Many of the companies were dressed promiscuously in grey, black, or blue trousers, with blue, grey, and red shirts of heavy flannel. Nearly all were armed with Colt's Navy revolvers in addition to their rifle-muskets. Some were not uniformed, but they were as willing to fight as the better uniformed and equipped companies.

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33. J. T. H. to Editor, January 21, 1861, found in Montgomery Weekly Mail, February 1, 1861.

34. Ibid.

When they captured the navy yard, the Alabamans and Floridians had found a large quantity of clothing, including heavy U. S. Marine Corps blue trousers, caps, coats, etc. The Independent Rifles had outfitted themselves in the trousers; the True Blues had taken the caps; the Metropolitan Guards the coats; and the Tuskegee Light Infantry the rifle-muskets. Each Alabaman also received a pair of Marine Corps socks.[35]

Cpl. J. H. Whitfield of the Montgomery True Blues, on January 27, wrote the editor of the Weekly Mail that yesterday and today were the first "fair days" we have enjoyed since our arrival on the Gulf Coast. "It had rained, rained, and rained again, and we . . . being" posted in Fort Barrancas are compelled to live in tents, there being no casemate quarters. The homefolks could, therefore, appreciate "the damp condition in which we have been placed."

"Fort Redoubt," Corporal Whitfield reported, "seems to be in unfinished state, and was unoccupied." It was about half a mile to the landward of Fort Barrancas, "and was destined to be a place of retreat, there being an immense subterraneous passage from the one to the other." (Whitfield was wrong. While there was a gallery connecting Fort Barrancas with the Water Battery, there was no passage leading from Fort Barrancas to the Redoubt. This story haunts today's park interpreter.)

Cpl. Whitfield was disenchanted by what he had seen of the Pensacola forts and navy yard, "which had tended in a great measure to bring about that 'huge bankruptcy' of the old Federal corn crib at Washington." But, he added, the "United States" is "numbered among the things that were."[36]

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35. Ibid.

36. Whitfield to Editor, January 27, 1861, found in the Montgomery Weekly Mail, January 31, 1861.

The True Blues were manning the Fort Barrancas guns, and had proved themselves "apt scholars in artillery, as well as infantry drill." Lt. John Forney, having recently resigned from the U. S. Army, had been rushed to Pensacola by Governor Moore and was daily drilling Colonel Lomax's regiment in infantry tactics. The volunteers found Forney a rigid, capable, strict disciplinarian. Lt. Charles P. Ball, who had recently resigned from the U. S. Military Academy, was exercising the men on the cannons.[37]

5. Steps are Taken to Cool Passions

In the fourth week of January, Colonel Chase was called to Montgomery to confer with higher authorities on possible steps to be taken to compel the United States forces to yield Fort Pickens. The fire-eaters' ardor had been chilled by a January 18 telegram from a powerful group of Southern senators. It read, "We think no assault should be made. The possession of the fort is not worth one drop of blood to us. Measures pending unite us in this opinion. Bloodshed may be fatal to our cause. Signed by Senators Mallory, Yulee, Slidell, Benjamin, Iverson, Hemphill, Wigfall, Clay, Fitzpatrick, and Davis."[38]

On January 24, Colonel Chase, now desirous of avoiding any unfortunate collisions between the opposing forces, wrote Lieutenant Slemmer:

> I have given strict orders this morning that no citizen or soldier should be permitted to pass from this side towards Fort Pickens, or to land on Santa Rosa Island, and now I inform you of the fact, and also that I shall use every effort to have my

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37. Ibid.

38. Official Records, Series 1, Vol. I, pp. 444-45. In the 36th Congress these men represented the following states: Stephen R. Mallory and David L. Yulee, Florida; Judah P. Benjamin and John Slidell, Louisiana; Louis T. Wigfall and John Hemphill, Texas; Alfred Iverson, Georgia; Jefferson Davis, Mississippi; and Clement C. Clay and Benjamin Fitzpatrick, Alabama.

orders executed. I have just been informed that some four or five men started on a fishing excursion on the island, and as they must have been ignorant of my orders just issued, I would request that if they have landed on the island they may be sent back.

Any collision growing out of persons going over to the island or near Fort Pickens would be most unfortunate in the present state of affairs, and I would request you to join me in preventing it; and to this effect I would also request that persons in boats may be warned off, and if any should land, they should be ordered to re-embark. This should be done in a way to prevent angry feeling between the parties.[39]

Lieutenant Slemmer sent Lieutenant Gilman to the navy yard to make arrangements for procuring the garrison's mail and fresh beef. Before the day was over, Gilman returned with the mail and a note from Colonel Chase, stating that in the future it would be delivered without delay.[40]

Replying to Colonel Chase's second communication, Slemmer observed:

It gives me much pleasure to learn of your order with reference to the passage of boats and men to Fort Pickens and Santa Rosa Island from the yard and vicinity. I have given strict orders to allow no boats to land, and in all cases of boats approaching the island I am notified of the fact.

This morning I was informed by my sentinels that a boat with four men was approaching the island above the fort and from the navy yard. I immediately sent and had them apprehended, saw the men myself, and directed that they be re-embarked for the navy-yard.[41]

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39. Ibid.

40. Ibid., p. 353; Gilman to Haskin, February 12, 1875, found in William L. Haskin, The Story of the First Regiment of Artillery, from its Organization in 1861, to January 1st, 1876 (Portland, Me., 1879), p. 500.

41. Official Records, Series I, Vol. 1, p. 340.

Lieutenant Gilman was back on the mainland on official business on the 28th. Visiting Barrancas barracks, he found the quarters occupied by Alabama State Troops. He encountered considerable good will, and was told that efforts to solve the crisis might succeed and if so, no "further hostilities would be attempted." He asked and received permission to secure Colonel Winder's and Lieutenant Eddy's private property and to transfer it to the fort. He also was accompanied back to Santa Rosa Island by the company laundresses, who had been left behind on January 10.[42]

On January 31, after the emergency had passed, Brig. Gen. Charles Clark of the Mississippi Army arrived from Jackson to make a study of the situation. As both sides were observing the armed truce, which had been in effect since the occupation of the navy yard and Forts Barrancas and McRee, General Clark saw no need for Colonel Abert's regiment to remain at Pensacola, especially as the limited funds for its maintenance had been exhausted. General Clark accordingly, on February 1, mustered out the eight companies. Four days later, four of the units--the Chickasaw Guards, Prairie Guards, Lauderdale Rifles, and Quitman Light Infantry--embarked on the steamer Dick Keyes for Mobile, from where they traveled by rail to their home counties. The other four companies broke camp on February 6 and reached their homes on the 7th and 8th.[43]

B. The Belligerents Watch and Wait

1. Agreement is Effected to Preserve the Status Quo

On January 21, 1861, nine days after surrender of the Pensacola Navy Yard, the U. S. War Department ordered preparation of an expedition for relief of Fort Pickens. Capt. Israel Vodges was to embark Company A, 1st Artillery, on the powerful sloop-of-war Brooklyn,

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42. Gilman to Haskin, February 12, 1875, found in 1st Regiment of Artillery, p. 500.

43. McFarland, "A Forgotten Expedition to Pensacola," p. 21.

at Fort Monroe, Virginia.[44] The same day, Flag-Officer Garrett J. Pendergast, commander of the Home Squadron, anchored off Veracruz, notified the Navy Department that he had ordered the sailing frigate Sabine and sailing sloop St. Louis to Pensacola.[45]

Brooklyn, having taken aboard Company A (two officers and 86 enlisted men), sailed from Hampton Roads under sealed orders on January 24. Capt. Samuel Barron of the U. S. Navy reached Pensacola in advance of the reinforcements. He informed Lieutenant Slemmer that Brooklyn was en route with Vodges' company and that Macedonian, St. Louis, and Sabine were expected. The warships were not to cross the bar lest they be fired on, and thus precipitate a fraticidal war. Brooklyn, however, was to land Vodges' company on Santa Rosa Island.[46]

On being informed that reinforcements were en route to Fort Pickens, Stephen Mallory, who upon secession of Florida had withdrawn from the U. S. Senate, telegraphed Senator John Slidell of Louisiana:

> We hear the Brooklyn is coming with reinforcements for Fort Pickens. No attack on its garrison is contemplated, but, on the contrary, we desire to keep the peace, and if the present status be preserved, we will guarantee that no attack will be made upon it, but if reinforcements should be attempted, resistance and a bloody conflict seem inevitable. Should the Government thus attempt to augment its force . . ., our whole force--1,700 strong--will regard it as a hostile act. Impress this upon the President, and urge that the inevitable consequence of reinforcement under present circumstances is instant war.[47]

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44. Official Records, Series I, Vol. 1, p. 353.

45. Official Records--Navies, Series I, Vol. 4, pp. 67-69.

46. Gilman to Haskin, February 12, 1875, found in 1st Regiment of Artillery, p. 500.

47. Dickson, Confederate Military History--Florida, Vol. X, pp. 20-23; Official Records, Series I, Vol. 1, p. 354.

Senator Slidell laid Mallory's message before President Buchanan. The President, not wanting to precipitate a clash which would lead to war and snuff out a last chance for compromise, agreed to a modus vivendi, regarding reinforcement of Fort Pickens, which was incorporated in an order to Captain Vodges, dated January 29:

> In consequence of the assurances received from Mr. Mallory in a telegram of yesterday to Messrs. Slidell, Hunter and Bigler . . . that Fort Pickens would not be assaulted, and an offer of such assurance to the same effect from Colonel Chase, for the purpose of avoiding a hostile collision . . . you are instructed not to land the company on board the Brooklyn unless said fort shall be attacked. . . . The provisions necessary for the supply of the fort you will land. The Brooklyn and other vessels of war on the station will remain, and you will exercise the utmost vigilance and be prepared at a moment's warning to land the company at Fort Pickens.[48]

Lt. Haldimand S. Putnam, intrusted with delivery of this important message, reached Pensacola on February 5, the day before Brooklyn appeared off the bar.

Brooklyn arrived off Santa Rosa Island on the 6th, and Captain Vodges learned from Lieutenant Putnam of the order of January 29 preventing the landing of his command. Lieutenant Slemmer told Captain Vodges that at the time he had occupied Fort Pickens, there had been only 40 cannon in position, and now, after four weeks' hard work, there were 54. There were in the fort 57 enlisted men of Company G and 31 sailors. The latter, "untrained and insubordinate," would be of little use in event of attack. Fifty-seven gun casemates were unarmed, and most of their embrasures covered with common wooden shutters, which presented a scant obstacle to the foe.

Captain Vodges directed Lieutenant Slemmer, although materials and tools were lacking, to barricade all embrasures.

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48. John G. Nicolay, The Outbreak of Rebellion (New York, 1881), pp. 55-62; Official Records, Series I, Vol. 1, pp. 355-56.

Ordnance supplies and ammunition were in short supply. There were no projectiles for the columbiads, no cartridge bags, and no flannel. Had it been public policy to place a fort in a defenseless condition, it could not have been done more effectively. There was neither a surgeon nor bunks for the hospital or troops. Although there were plenty of provisions for the present, Captain Vodges urged that desiccated vegetables be sent to Santa Rosa Island.

When he relayed this grim news to Washington, Captain Vodges complained that all the advantages of the modus vivendi were on the side of the secessionists. He urged that steps be taken to further reinforce Fort Pickens.[49]

Captain Vodges selected Lieutenant Gilman to carry his dispatches to the War Department. Lt. Loomis Langdon, with the approval of Colonel Chase, was landed from Brooklyn and filled Gilman's billet. Gilman completed his mission and was back at Fort Pickens on February 25.[50]

Lieutenant Slemmer, following his discussions with Captain Vodges, redoubled his efforts to place Fort Pickens in a defensible condition. The limited means available, however, continued to plague the Federals. Twenty-four more guns were mounted. While making the rounds on February 11, Slemmer observed Colonel Chase's men mounting a battery of 8-inch columbiads west of the lighthouse to rake the fort's two northern bastions and the connection curtain. Slemmer protested to Chase, who replied, "I do not deem the erection of batteries on this side as aiming at an attack on Fort Pickens; but . . . I will give orders for the discontinuance of the erection of the battery."[51]

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49. Official Records, Series I, Vol. 1, pp. 357-58.

50. Gilman to Haskin, February 12, 1875, found in 1st Regiment of Artillery, p. 502.

51. Official Records, Series I, Vol. 1, p. 359.

Outside the harbor, the United States slowly built up a formidable naval force under the command of Capt. Henry A. Adams. By February 19, this fleet consisted of Sabine, St. Louis, and Brooklyn. In addition, Wyandotte, now anchored inside Pensacola Bay and flying a flag of truce, was allowed by state authorities to transport coal and water from the navy yard to the ships outside the bar. If Florida authorities curtained this source, these items would have to be obtained from either Key West or La Habana--eight or ten days distant by sail.

Adams' ships remained at anchor or underway close enough to the bar to communicate by signal with Wyandotte. Whenever a south-easterly gale blew, it was necessary to run offshore. A storm on February 10 dispersed the fleet, driving some of them as far west as Mobile Point. Adams feared that Colonel Chase would take advantage of one of these gales and attempt to storm Fort Pickens before he could land reinforcements. In case of necessity, Adams prepared to put ashore, in addition to Vodges' command, 200 men from Sabine, 140 from Brooklyn, and 50 from St. Louis.[52]

2. Confederate Government Assumes Responsibility

In mid-February, a government was organized that would share with the governors of Florida and Alabama responsiblity for affairs in Pensacola Bay. During the first week of the month, a convention assembled in Montgomery, Alabama, not to consider whether the hazard of secession was to be entered upon, but to organize a Southern government. Even so, the Montgomery meeting was not an all-Southern gathering, for at its assembly (February 4, 1861), it included representation from only six of the 15 slave states (South Carolina, Alabama, Georgia, Mississippi, Florida, and Louisiana).

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52. Official Records--Navies, Series I, Vol. 4, p. 85; Cornelius Cronin, "Reminiscences of Cornelius Cronin, Gunner, U.S. Navy,"

The atmosphere at Montgomery was one of excitement and elation, accompanied by the bustle of office-seeking and the stir of restless men maneuvering for position. Three principal functions were performed by the convention: It made a constitution for the Confederate States; it chose a provisional president and vice president; and it acted as a provisional legislature for the new government pending regular congressional elections. Jefferson Davis of Mississippi was elected provisional president on February 9. He was inaugurated two days later, taking the oath with high resolve, and selected his cabinet. The provisional legislature passed an initial body of laws, which, in many instances, were but the re-enacting of those passed at Washington; commissioners were appointed to treat with the government of the United States; negotiations were set afoot to bring other states within the fold; and in this manner, the "new nation" became a going concern.[53]

3. Southerners Strengthen Their Defenses

In mid-February, while the Confederate government was being organized and the modus vivendi provided some guarantee against attack, the Alabama Volunteers rushed to Pensacola in early January were replaced by companies mustered into state service for 12 months. When Captain Andrews' Montgomery True Blues left the Barrancas, they marched as an escort to a train of 17 wagons loaded with hundreds of barrels of powder removed from the navy yard magazine and being transferred to Montgomery. They reached Garland, the temporary terminus of the railroad, on the 20th. The road from Pensacola to Garland, Corporal Whitfield characterized as one of the worst in the south. On Friday, the 22d, the powder was loaded into railroad cars, and the rest of the trip home was made in relative ease.[54]

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53. J. G. Randall, The Civil War and Reconstruction (New York, 1953), pp. 212-13.

54. Whitfield to Editor, February 20, 1861, found in Montgomery Weekly Mail, February 22, 1861. In addition to the 500 barrels of powder removed to Alabama, there remained in the navy yard magazine 600 pounds of cannon powder and 3,500 pounds of small-arms powder.

When the True Blues left Fort Barrancas, there were emplaced in the fort and its Water Battery eleven 32-pounders, three 8-inch seacoast howitzers, two 8-inch columbiads, eight 24-pounders, four 18-pounders, two 12-pounders, eight 24-pounder flanking howitzers, and two 10-inch mortars.

Nearby in Sand Battery A were two 8-inch columbiads.[55]

In late February, the newly organized Confederate War Department sent Lt. Samuel H. Lockett, who had resigned from the U. S. Engineers on February 1, 1861, to inspect and report on the Pensacola Bay defenses. The 24-year-old graduate of the U.S. Military Academy first visited Fort Barrancas, which he found consisted of two parts--"the older Spanish part being a semi-circular work for barbette guns." The new defense on the bluff, besides mounting cannon in barbette, was flanked by a "scarp and counterscarp gallery." This fort, he reported, was in good condition, but had one weakness--it presented "a large surface of exposed brickwork." This could be partially compensated for by "covering the lower work with sand and making embrasures for its guns."

The Barrancas cannon were in good condition. There was no shortage of shot, shell, implements, tools, and powder. Cartridges, however, were in demand.[56]

The Redoubt, Lockett reported, was not very tenable, because it contained too much exposed brickwork.

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55. Montgomery Weekly Mail, February 25, 1861.

56. Lockett to Walker, March 4, 1861, Samuel Henry Lockett Papers, found in the Southern Historical Collection at the University of North Carolina Library, Chapel Hill, N.C. Leroy P. Walker of Alabama was President Davis' first Secretary of War.

Although he had been told that Fort McRee would be "untenable," Lockett did not agree. On examining it, his attention was called to cracks in the masonry, but he concluded that these would not preclude McRee from its mission in defense of the channel, which it commanded with its twenty-two 42-pounders, twelve 8-inch columbiads, twenty-four 32-pounders, sixty-four 24-pounders, and three 10-inch columbiads. Like Fort Barrancas, it was well supplied with implements and ammunition. The only shortages were cartridges and 8-inch columbiad projectiles. The troops posted at the Barrancas and the ladies of Pensacola were making artillery cartridges, while shot was being cast at the navy yard foundry. Fort McRee was garrisoned on the day of Lockett's visit by Captain O'Hara's 50-man company, which was 150 less than should be posted there.[57]

At the time of his inspection, three sand batteries were being erected on the Barrancas. Battery A at the new lighthouse and Battery B at the old lighthouse mounted 8-inch columbiads, which were registered on Fort Pickens and bore on the channel. Battery C, to be armed with 10-inch columbiads, was positioned to fire on the salient of Fort Pickens' northwest bastion, the flanks of the northeast and tower bastions, and the channel. As the latter occupied a commanding position, Lieutenant Lockett expected it to play an important role if force were necessary to dislodge the regulars from Fort Pickens.[58]

Pvt. L. L. Rumph of the Perote Guards was at the Barrancas at this time. Writing his father on March 10, he noted that the Perote Battery (C) was nearly completed. "The misfortune," he continued, "is we have to make defenses and help move cannon for other

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57. Ibid.

58. Ibid.

companies." They were required to work daily, except Sundays, on the sand batteries.[59]

The sand batteries were being erected with such skill as "to be able to do great execution with much safety to the occupants." There were round-the-clock working parties. Colonel Forney seemed omnipresent in his efforts to strengthen the defenses of the bay. A correspondent assured his readers that "a hostile vessel shall never enter this harbor, if there is any arguments in grape shot to prevent her."[60]

To counter these emplacements, Lieutenant Slemmer and his regulars on Santa Rosa Island were throwing up a sand battery bearing on the navy yard.

4. 1st Alabama Infantry Occupies the Barrancas

The one-year companies were organized as the 1st Regiment of Alabama Volunteers at Barrancas barracks in late February. At an election, Henry D. Clayton was chosen colonel; I. G. W. Steedman, lieutenant colonel; and Jere N. Williams, major.[61]

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59. Rumph to father, March 10, 1861, found in "Letters of a Teenage Confederate," edited by Henry E. Starx and Brooks Thompson, Florida Historical Quarterly, Vol. 38, No. 4, p. 340.

60. Memo to Editor, March 12 & 14, 1861, Montgomery Weekly Mail, March 22, 1861.

61. Edward Y. McMorries, History of the First Regiment Alabama Volunteer Infantry, C.S.A.. (Montgomery, 1904), p. 61. The companies constituting the regiment were: the Eufaula Pioneers, Capt. John Clark; Eufaula Rifles, Capt. Alpheus Baker; Perote Guards, Capt. George W. Dawson; Wilcox True Blues, Capt. I.G.W. Steedman; Alabama Rifles, Capt. J. H. Johnson; Clayton Guards, Capt. Jere N. Williams; Guard of the Sunny South, Capt. Y. D. Conyers; Tallapoosa Rifles, Capt. J. D. Meadows; Rought and Ready Pioneers, Capt. A. H. Owens; and Red Eagles, Capt. Ben L. Posey. The staff included: S. H. Dent, adjutant; Henry R, Shorter, commissary; L. F. Johnson, quartermaster; J. D. Caldwell, surgeon; and Walter Curry, assistant surgeon.

Colonel Clayton's 1st Alabama, about 600 strong, was quartered at the time of Lieutenant Lockett's visit in and around Barrancas barracks. The troops were in good health, worked with a will, and within a short time would doubtless be ready for almost any emergency.[62]

The guns of Fort Barrancas and the sand batteries throughout most of March were manned by soldiers of the 1st Alabama, while the Pensacola and Santa Rosa Rifles continued to occupy the navy yard. The Redoubt was used by the Confederates as an arsenal.[63]

C. Rebels Gird for the Struggle

1. General Bragg Takes Command

The Confederate War Department moved promptly to place an officer in whom it had confidence in charge of the forces gathered in and around Pensacola. On March 1, 1861, Colonel Chase resigned his command to accept appointment as major general of Florida State Troops.[64]

Colonel Forney assumed command until relieved on March 11 by Brig. Gen. Braxton Bragg.[65] An old Army man, graduate of the U. S. Military Academy, Mexican War hero, and friend of President Jefferson Davis, Bragg had been ordered to Pensacola on March 7.[66] It was a popular choice. A correspondent reported that all were delighted with General Bragg's appointment, not because Colonel Forney had failed

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62. Montgomery Weekly Mail, March 15, 1861.

63. Ibid., April 5, 1861.

64. Official Records--Navies, Series I, Vol. 4, p. 215; Soldiers of Florida, p. 324.

65. Official Records, Series I, Vol. 1, p. 449.

66. Ibid., p. 448.

in any way, but it was taken as a demonstration that the Confederacy recognized the importance of Pensacola.[67]

General Bragg had a reputation in the 3d U. S. Artillery as a good organizer and stern disciplinarian. On the 15th, the volunteers were put on notice that there was hard work ahead. A General Order was read at formations, announcing that to perfect them in the use of "their arms and prepare them for the important services" ahead, regular drills will begin immediately. Every office was expected to ready himself at once for "an intelligent discharge of all the duties of his station, and all soldiers" were exhorted to devote themselves to the "acquirements of knowledge so essential to the success of the glorious cause on which we are engaged."

Henceforth, there would be twice a day drills for the troops. Once a day, the officers would be assembled for special instructions in tactics and regulations.

The particular duties associated with roll calls and guard in camp and garrison would be strictly enforced by Colonel Forney, an equally rigid disciplinarian.[68]

A schedule of formations was announced for these times: reveille, 5:30 A.M.; breakfast, 6:30 o'clock; sick call, 7; guard mount, 7:30; morning drill, 8:30; recall, 10; dinner call, 12 noon; afternoon drill, 3:30; recall, 5; retreat, 6; and tattoo, 9 P.M. Troops would be

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67. Memo to Editor, March 12, 1861, found in Montgomery Weekly Mail, March 22, 1861.

68. Gen. Order No. 2, March 15, 1861, NA, RG 109, General and Special Orders Issued March 11, 1861-January 27, 1862, Army of Pensacola.

formed under arms at reveille, retreat, and tattoo, ready for action. All officers were to be present at these formations.[69]

General Bragg, having taken these preliminary measures, was soon hard at work with his customary vigor and attention to detail organizing an effective fighting force. Calls were made upon the governors of Alabama, Mississippi, Louisiana, Georgia, and Florida for more than 5,000 additional troops. Forney was appointed inspector-general, and under his supervision a vigorous training program instituted. Capt. Hypolite Oladowski, Bragg's chief of ordnance, perfected plans for more effective use of the cannon sighted on Fort Pickens.[70]

When he inspected the camp of the 1st Alabama, General Bragg saw that many of the messes had black cooks, while men had been hired to do the laundry and other irksome fatigue duties. Each soldier drew as his daily ration a pound each of beef and baker's bread. These were occasionally supplemented by boxes of food from home.

Many of the companies had been organized in the months since the John Brown raid in October 1859, and had become proficient in company drill, but they had had no experience in battalion drill. Colonel Forney's drills were rapidly correcting this deficiency. Military regulations were enforced, with penalties for violations. Sentries were posted around the camps and along the bay. No ingress or egress was permitted without a pass; no intoxicants were allowed within the lines.

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69. Gen. Order No. 16, April 10, 1861, NA, RG 109, General and Special Orders Issued March 11, 1861-January 27, 1862, Army of Pensacola.

70. Official Records, Series I, Vol. 1, p. 449. Capt. Oladowski replaced R. L. Sweatman, former employee of the Corps of Engineers, who had been acting as Ordnance Officer.

From reveille to tattoo, everything was done to the tap of the drum. Guards were constantly bringing in one or more prisoners to be confined to the guardhouse. Raw troops and their officers both had a difficult time until the former learned that a "soldier's first and highest duty is to obey orders, and the latter how to command."[71]

On their arrival at the Barrancas, no two companies of the 1st Alabama were uniformed alike. As a rule, each company had two uniforms, a full dress and a fatigue. The former was of quality material, that of the Perote Guards, costing $50 a suit. It was of full style, heavy grey cassimere, trimmed with blue, three rows of buttons in front of coat, and red plumes tipped with white. This uniform, the company had bought at its organization, each member paying for his own. The fatigues, a gift from the ladies of Perote when the company left for the point of danger, were of very dark heavy-weight cassimere, trimmed with light grey, with a single row of buttons, and frock skirts.

About July 1, the regiment was furnished by the ladies of Alabama with uniforms. They were blue jeans, frock skirt reaching to the knees, and a single row of buttons down the front.[72]

On March 16, Capt. Ben L. Posey's Red Eagles of the 1st Alabama occupied the Barrancas Redoubt, relieving Captain Austin's Company (the Warrington Light Infantry) of Florida Volunteers who moved into the Marine barracks. There, they replaced the Santa Rosa Guards, who returned to Milton to be mustered out.[73]

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71. McMorries, History of the First Regiment, pp. 64-65.

72. Ibid., p. 23.

73. Gen. Order No. 3, March 16, 1861, NA, RG 109. General and Special Orders Issued by the Army of Pensacola; Memo to Editor, March 22, 1861, found in Montgomery Weekly Mail, March 29, 1861.

There was an accident at the Redoubt on March 25. A soldier of the Red Eagles, on guard, was leaning on his loaded rifle-musket. In shifting positions, his foot struck the trigger, causing the piece to discharge, the ball shattering his arm so badly that it had to be amputated. Two days later, on the night of the 27th, there was a more terrible accident. Another soldier of the War Eagles, when challenged by a sentry, failed to give the countersign. He was shot and mortally wounded.[74]

On the evening of March 16, Colonel Steedman and a detachment from the Wilcox True Blues, previously alerted, cast off from the navy yard in an open boat. They had been told that the captain of the schooner Cary planned to supply Wyandotte with coal and other stores. Steedman and his men challenged and boarded the schooner practically under the bows of the U. S. warship. The Alabamans, after verifying that Cary was transporting contraband, took her to the navy yard. Colonel Steedman thus brought in the Confederacy's first prize.[75]

2. Thousands of Volunteers Join General Bragg

General Bragg's call for 5,000 troops had been apportioned by the War Department as follows: 1,000 infantry from Georgia, 1,000 from Alabama, 1,000 from Louisiana, 1,500 from Mississippi, and 500 from Florida. The organization of the companies was to be that as furnished by the states, but under no circumstance was the number of privates to be less than 50 per company. If the companies came singly--or organized into battalions or regiments--into service, Bragg was to muster them into the Confederate Army with such officers as had been furnished by the states. Field officers were to be elected by the companies or appointed by the respective governors.

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74. Montgomery Weekly Mail, April 5, 1861.

75. Ibid.

To assist Bragg and his staff in this task, the War Department forwarded tables of organization for infantry regiments, and cavalry and artillery companies as established by law.[76]

First to arrive, reporting on March 26, was a company of Georgians from Atlanta led by Capt. G. W. Lee. They relieved Captain O'Hara's company as the Fort McRee garrison. O'Hara's Alabamans returned to Mobile to be mustered out.[77]

The Calhoun Greys reached Warrington on Saturday, the 30th, and were quartered at the Marine barracks. To impress the newcomers, Colonel Clayton, on the last day of the month, turned out his 1st Alabama on the Barrancas parade ground. "They made quite a warlike display," an observer reported, "and went through the exercises of the drill in quite a soldierly manner."

Before the day was over, a company of Louisiana Zouaves stole Clayton's thunder. Led by Capt. Alfred Coppens, the Louisianians landed at the navy yard from the steamer Kate Dale. Their colorful and picturesque uniforms commanded the attention of both soldiers and civilians, as they marched to their quarters in the Marine barracks.[78]

To provide quarters for the expected influx, the 1st Alabama prepared to vacate the Barrancas barracks area. A new camp site was selected near the bay, midway between Fort Barrancas and the Perote Battery. This area was cleared of underbrush, and the tents pitched a short distance from the beach in full view of Fort Pickens. One company, the Eufaula Pioneers, did not make the move, as they were designated the Fort Barrancas garrison.

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76. Official Records, Series I, Vol. 1, p. 454.

77. Montgomery Weekly Mail, April 5, 1861; General Order No. 9, March 28, 1861, NA, RG 109, General and Special Orders Issued by the Army of Pensacola.

78. Nemo to Editor, April 1, 1861, found in Montgomery Weekly Mail, April 5, 1861.

A soldier recalled that the "tents, with arbors of seaweed in front for shade, afforded a delightful retreat from the stale old barracks, but the warm spring brought clouds of mosquitoes, and fleas of prodigious size, and bloodthirsty intent became as numerous as the sands of the seashore."[79]

On April 7, General Bragg mustered the 1st Alabama into Confederate service. It thus became the first regiment, not only from Alabama but from any other state, of the Confederacy.[80]

Upon receipt of General Bragg's call for 1,500 Mississippians, Governor Pettus, acknowledging the request, wrote Secretary of War Leroy P. Walker, "The organization of the Army of Mississippi is not yet complete. Thirty or forty companies have been mustered into service. The material of which our volunteer army is composed, I think, will not enlist in the regular army of the Confederate States."

He was assured by the War Department that the troops were not destined for the regular establishment, but for the provisional army, which would be enlisted for 12 months and could select their own officers.

Six weeks before, the Mississippi State Convention had adopted an ordinance to regulate the military system of the state, which was a revision of the Law of 1860. It provided for the constitution of a force consisting of a division organized into two brigades, each brigade comprising two regiments of two battalions. This force was the Army of Mississippi.[81]

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79. McMorries, History of the 1st Regiment, p. 21.

80. Gen. Order No. 14, April 7, 1861, NA, RG 109, General and Special Orders Issued by the Army of Pensacola.

81. Mississippi Register, pp. 420, 423-24.

Orders were issued for 20 companies of the Army of Mississippi to proceed by rail from their camps of instruction to Mobile. By April 4, the Alabama city was crowded with Mississippians. At 1 P.M., six companies of the "southern regiment" (the Madison Rifles, Jackson Mississippi Rifles, Yazoo Minute Rifles, Hill City Cadets, Bahala Rifles, and Claiborne Rifles), led by Capt. Joseph R. Davis of the Madison Rifles, boarded the steamer Kate Dale; five companies (the Lowndes Southrons, Southern Avengers, Durant Rifles, Ben Bullard Rifles, and Rankin Rifles), commanded by Capt. W. B. Wade of the Southrons, took passage on Dick Keyes. Earlier in the day, the same vessels had transported across Mobile Bay and landed at the terminus of the Mobile & Great Northern Railroad, the ten companies of the "northern regiment" (the DeSoto Irrepressibles, Marshall Home Guards, Lamar Rifles, DeSoto Guards, Lafayette Guards, Senatobia Invincibles, and Panola Guards), Brig. Gen. Christopher H. Mott commanding. The Mississippians, 1,300 strong, were to march the 42 miles from the landing to Pensacola.[82]

On April 7, the Mississippians, having reached Pensacola the day before, were shuttled by water to the navy yard. They made the "welken ring" as they came ashore. The steamer Tom Murray made two trips with about 1,100, and a schooner came down with another 200. The Mississippians boasted that they would "rout every vestige of the aggressor or die in the effort."[83]

Within 24 hours, Kate Dale reached the navy yard from Mobile with another 200 Mississippians, the rear echelon of the two regiments with the baggage.[84]

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82. Montgomery Weekly Mail, April 12, 1861.

83. Nemo to Editor, April 8, 1861, found in the Montgomery Weekly Mail, April 12, 1861.

84. Nemo to Editor, April 9, 1861, found in the Montgomery Weekly Mail, April 19, 1861.

Many of the newcomers were quartered for the time being in the sail loft, which had been turned into a barracks.[85]

On April 11, the two regiments held elections, and Capt. James R. Chalmers of the DeSoto County Irrepressibles was elected colonel of the "northern regiment," which was redesignated the 9th Mississippi Infantry, and Capt. Seaburne M. Phillips of the Yazoo Minute Rifles of the "southern regiment," which was redesignated the 10th Mississippi Infantry. General Bragg, on April 17, announced that these two regiments had been received into Confederate service three days before. They were the first Mississippi commands mustered into the Confederate Army.[86]

Two weeks before, on April 4, a company, the Cherokee Greys, had reached Warrington from north Alabama. This boosted to 14 the number of companies of Alabama troops in and around the Barrancas.[87]

On Sunday, April 7, the schooner Southern Independence arrived at the navy yard with another company of Louisiana Zouaves. Later in the day, the towboat Gunnison out of Mobile chugged into the bay past Fort Pickens, towing the schooner May with 200 barrels of powder and other stores. The Zouaves, on going ashore, marched through the navy yard, where they drew a crowd. They had a

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85. Montgomery Weekly Mail, April 5, 1861.

86. Mississippi Register, pp. 582-85, 595-99. 3d Lt. James L. Autry of the Home Guards was elected lieutenant colonel and Capt. Albert R. Bowdre of the Senatobia Invincibles, major of the 9th Mississippi, while Capt. Joseph R. Davis of the Madison Rifles was elected lieutenant colonel and Edward H. Gregory, major of the 10th Mississippi, Among officers of the Mississippi Army who accompanied the brigade to Pensacola were Maj. Gen. Charles Clark, acting Adjutant General James Lovell, and Brig. Gen. Christopher H. Mott.

87. Nemo to Editor, April 5, 1861, found in Montgomery Weekly Mail, April 12, 1861.

vivandiere at their head, and were clothed in the French fashion. The "red bags," as they called their uniforms, "looked remarkably well, while their superiority in drill was acknowledged by all."

A schooner brought down from Pensacola a Georgia company, and at 5 P.M., Tom Murray steamed down the bay with another company of Georgians. Dick Keyes arrived from Mobile during the night with two companies and more supplies. This caused a correspondent to wax, our force grows "truely gigantic in proportions," more than "4,000 men, and still they come from Alabama, Georgia, Louisiana, and Mississippi. These brave men know that the hour has come when the South expects every man to do his duty."[88]

On April 9, there was an alert in the Confederate camps, when the Fort Pickens morning gun was answered by one from a ship outside the bar. It was rumored that the 50-gun steam frigate, Minnesota, had arrived to reinforce the fleet hovering off the Santa Rosa Island coast.[89]

Bragg's army continued to grow. On the 10th, another 600 soldiers, most of them from Georgia, arrived.[90] The streets of Warrington and Pensacola were crowded with soldiers, and the bay had never been busier with shipping plying constantly between the city, navy yard, and forts. Wherever a person turned on the morning of the 11th, drays were seen hauling furniture and family belongings away from Warrington. The inhabitants, satisfied that the modus vivendi was about to end in bloody fighting, were fleeing the feared carnage.[91]

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88. Nemo to Editor, April 9, 1861, found in ibid., April 19, 1861.

89. Ibid.

90. Nemo to Editor, April 11, 1861, found in ibid. There were, he reported, 1,900 Mississippians organized into 22 companies; 1,400 Alabamans constituting 15 companies; two companies of Louisiana Zouaves, 200 strong; and 700 Georgians.

91. Ibid.

The health of the soldiers, although a few cases of typhoid had been reported, was good. What was especially encouraging was that these cases were mild and most of the men, responding to good nursing, quickly recovered and rejoined their commands.[92]

Lt. Henry L. Ingraham and a few Confederate Marines reached Pensacola in the first week of April and reported to General Bragg. Ingraham's orders were to organize several companies of Marines for duty at the navy yard.[93]

General Bragg, with the rapid growth of his army, reshuffled several units to take advantage of their skills. Captain Lee's company of Georgians, Fulton County mechanics, were pulled out of Fort McRee on April 7 and sent to the navy yard. Hereinafter, they constituted a corps of artisans subject for duty with the various departments. They were replaced at McRee by three companies of Mississippians.[94]

On April 4, every department of the navy yard, except the machine shop, was turned over by the State of Florida to the War Department.

This change was not welcomed by the mechanics and laborers, who had not received any pay since before the seizure of the yard on January 12. To make matters worse, General Bragg announced that he was reducing their wages. He also increased the labor force by hiring men willing to work for less than the prevailing wages.

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92. Nemo to Editor, April 5, 1861, found in ibid., April 12, 1861.

93. Montgomery Weekly Mail, April 5, 1861. By act of Congress of the Confederate States on March 16, 1861, a Corps of Marines had been provided for. Scharf, Confederate Navy, p. 769; Ralph W. Donnelly, The History of the Confederate States Marine Corps (Washington, 1976), pp. 2, 11-12.

94. Gen. Orders Nos. 13 & 15, April 7 and 10, NA, RG 109, General and Special Orders Issued by the Army of Pensacola.

Since capture of the yard, the workmen had been employed unspiking cannon, building carriages, dismounting and mounting guns, etc. They and their families accordingly had to draw on their savings to survive. Now the first act of the Confederate authorities, they protested, was to reduce their wages and to induce others to take employment at the new wage scale.

On the morning of the 5th, the mechanics walked off the job when General Bragg announced at the bell post that, hereinafter, the machinists, carpenters, blacksmiths, etc., would be paid $2 per day and one ration.[95]

Secretary of the Navy Stephen Mallory, a resident of Pensacola, spent a few hours in the area on Saturday, the 7th. He called on General Bragg and then spent a short time with Nemo, a correspondent for the Montgomery Weekly Mail. Mallory told Nemo that General Bragg had explained that the announced wages were the highest allowed by the War Department. While this might be true, Nemo allowed, workmen were not soldiers, and their pay should not be pegged to that of the military. If their services were required, he protested, they had a right to "receive the usual rates customary in this neighborhood independent of any regulations in the army."[96]

Mallory also told Nemo that as soon as the Fort Pickens problem was resolved, the steamer Fulton would be completed and two larger vessels constructed at the navy yard for the Confederate Navy.[97]

General Bragg again flexed his muscles on April 10 and 11. On the former, he issued a general order, calling attention to the

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95. Nemo to Editor, April 5, 1861, found in Montgomery Weekly Mail, April 12, 1861.

96. Nemo to Editor, April 9, 1861, found in ibid., April 19, 1861.

97. Ibid.

"frequent disorders in camp, resulting from the use of intoxicating liquor." This made it mandatory to prohibit its "introduction," and hereinafter no intoxicants would be allowed within five miles of the Barrancas camps. Any liquor found after 24 hours from the date of this order was to be destroyed.[98]

Bragg was as good as his word. On April 11, a detachment of Louisiana Zouaves led by Lieutenant Cobb of the 1st Alabama raided several homes, whose residents had continued to bootleg hard liquor to soldiers in violation of General Bragg's orders. A number of barrels were seized and stove in, allowing the rotgut to seep into the ground. Nemo, while allowing that this was rather arbitrary, agreed that it was better that a few should "suffer" rather than that the soldiers be debased.[99]

D. The United States Throws Down the Gauntlet

1. The U. S. Reinforces Fort Pickens

By April 12, 1861, the 5,000 officers and men of Bragg's Army of Penscola, most of whom had never been away from home, had begun to assimulate the rudiments of soldiering. Bragg and his staff had moved heaven and earth in their efforts to strengthen the defenses of Pensacola Bay. The forts would be difficult for the Union to reoccupy, and in the future would menace Fort Pickens. The Federals protested against continuation of these efforts, but Bragg, unlike his predecessor, Colonel Chase, refused to halt efforts to fortify the area. After each protest, the Confederates seemingly redoubled their efforts, and the Yankees expressed fears that the forts could only be repossessed at a fearful cost.[100]

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98. Gen. Order No. 16, April 10, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

99. Nemo to Editor, April 12, 1861, found in Montgomery Weekly Mail, April 19, 1861.

100. Official Records, Series I, Vol. 1, p. 365.

Bragg was omnipresent. In cooperation with Col. William J. Hardee, commander at Fort Morgan, a reconnaissance was undertaken preparatory to opening of a new line of communications between Mobile and Pensacola. It was hoped that an easier and less exposed route could be developed between these key points by utilizing water and land transportation, via Bon Secours, Bear Creek, and Perdido Bay, thus eliminating a long, slow overland trek from Blakely.[101]

Soon after his March 4, 1861, inauguration, President Abraham Lincoln's advisors brought to his attention the isolated condition of Fort Pickens. At a cabinet meeting on March 29, it was decided to reinforce the fort.[102]

An expedition was outfitted in early April, and sailed from New York City aboard the steamer Atlantic before daybreak on the 6th. Later in the day, the steam warship Powhatan (16 guns) left the Brooklyn Navy Yard bound for the same destination.

In Washington, that same day, Secretary of the Navy Gideon Welles called for Lt. John L. Worden of subsequent Monitor fame. Welles told Worden to hasten to Pensacola with dispatches for Capt. Henry A. Adams, who, as senior officer, commanded the U. S. warships cruising the Florida and Alabama coasts near Fort Pickens. The substance of these orders was that Fort Pickens would be immediately reinforced.[103] Worden departed Washington by train the next morning and reached Pensacola about midnight on April 10. Such a gale was blowing the next day that Worden was unable to deliver his dispatches to

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101. Ibid., pp. 453-54.

102. Nicolay, Outbreak of Rebellion, p. 51.

103. Official Records--Navies, Series I, Vol 4, p. 111.

Adams until the afternoon of April 12.[104] Upon receipt of Welles' instructions, Adams prepared to reinforce Pickens, first notifying Captain Vodges of the changed situation.

About 2 A.M., on April 13, the exhausted garrison welcomed Captain Vodges' Company A, 1st Artillery, and 110 Marines led by Lt. John C. Cash who came ashore in boats through the surf. Fort Pickens was reinforced, and the modus vivendi of January 29 was now a scrap of paper.[105] Although the U. S. forces on Santa Rosa Island did not learn about it for several days, Confederate batteries in Charleston Harbor at 4:30 A.M., on April 12, had opened fire on Fort Sumter. The Civil War had begun.

Captain Vodges, once his men were ashore, feared General Bragg would counter by landing a force on Santa Rosa Island east of the fort. To deter the Confederates from such a maneuver, Wyandotte and Brooklyn anchored to sweep this exposed area with broadsides.[106] Bragg, as expected, assumed that Worden had brought the dispatches effecting the reinforcement of Fort Pickens, and ordered his arrest. Worden was apprehended and incarcerated for several months.[107]

The day after the landing, it was reported to Captain Vodges that a small boat had landed at the wharf under a flag of truce, and that the bearer, Capt. Robert C. Wood, wanted an interview with the commander of the post. Upon Vodges' arrival at the dock, Wood informed him that he had a verbal message from General Bragg. Wood stated, "I

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104. Ibid., p. 137. For a detailed account of Worden's mission, the reader should consult "Lincoln's Courier: John L. Worden's Mission to Fort Pickens," edited by James F. Jones, Florida Historical Quarterly, Vol. XLI, No. 2, pp. 145-53.

105. Official Records--Navies, Series I, Vol. 4, pp. 115-17.

106. Ibid., pp. 115-17.

107. Ibid., p. 118.

was directed by General Bragg to inquire why the armistice in respect to re-enforcing Fort Pickens has been violated by throwing re-enforcements into it."

Vodges replied, "I have never been a party to any armistice; I have been sent by the General Government to take command of the post, and have entered under the orders of the General Government." Wood, turning to Lieutenant Slemmer, remarked, "I was directed to inquire of the former commanding officer why the armistice has been violated."

Slemmer answered, "I have always obeyed the orders of my superiors." The interview then ended.[108]

More troops were coming. The steamer Atlantic arrived off Santa Rosa Island on the evening of April 16. The commander of the relieving force, Col. Harvey Brown, met with Captain Adams, who promised naval assistance in landing his command. To hoodwink General Bragg, Brown determined to put his force ashore immediately. Atlantic anchored about two miles east of Fort Pickens, and three-quarters of a mile off-shore. Here the landing area would be screened from the Rebels' view by dunes paralleling the beach. During the night of the 16th and the morning of the 17th, Brown landed his battalion. About the hour the last of the soldiers were coming ashore, Powhatan arrived and boldly stood toward the bar, as if her captain were determined to precipitate a clash. She, however, backed off before the guns of Fort McRee opened fire.[109]

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108. Official Records, Series I, Vol. 1, p. 378.

109. Edwin C. Bearss, "Civil War Operations in and Around Pensacola," Florida Historical Quarterly, Vol. XXXIX, No. 3, pp. 239-40.

2. Bragg Fails to Strike Back

Spies were active in Washington. On April 6, the day the expedition sailed from New York Harbor, the Confederate War Department warned General Bragg that the United States had "determined to re-enforce Fort Pickens, and troops are now leaving for that purpose."[110]

Three days before, Bragg had asked his government for authority to attack, if the United States violates its "agreement not to re-enforce."[111]

Secretary of War Walker had replied, "Do you mean by 'attack' the opening of your guns upon the fort or upon the ships? If the former, would your operations be confined to battering the fort?"[112]

General Bragg replied, pointing out that his telegram asking if he might attack had been predicated on several circumstances: (a) a strong easterly wind had come up and if it continued, United States warships would be unable to hold their positions off Santa Rosa Island; (b) Maj. Zealous Tower, of the Engineers, had joined the garrison, in violation of the agreement not to reinforce; and (c) there was reason to believe that the Fort Pickens troops were "greatly demoralized." Satisfied that the Lincoln administration and some of its agents were "acting in bad faith towards us," Bragg reasoned that the Confederacy was "absolved from all obligations" under the modus vivendi of January 29. But, as this was a political matter, he deemed "it prudent to ask the consent of the Department before acting on so important a matter."

Because of a shortage of cartridge-bags and ordnance stores, Bragg was unprepared to bombard Fort Pickens. The only

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110. Official Records, Series I, Vol. I, p. 456.

111. Ibid., p. 455.

112. Ibid., p. 456.

"attack" he could undertake at the moment was a "sudden dash, distracting the enemy by a false attack, and scaling" the fort's ramparts from an opposite direction. "The weakness of the garrison, and the ardor and ignorance" of his troops, would likely spell success for such a venture.[113]

On the 7th, Bragg informed his War Department that he would "fire upon any re-enforcements to Pickens unless ordered" otherwise. He had sent to Mobile for cartridge-bags, but had no money to pay for them. Indeed, he had received no funds since taking command of the Army of Pensacola.

The storm had ended, and, contrary to Bragg's expectations, the warships rode it out.[114] Thus, one of the conditions which Bragg considered necessary to insure the success of an attack had not materialized.

General Bragg, nevertheless, prepared to strike. He would employ treachery to place a storming party inside Fort Pickens on the night of April 10 before it could be reinforced. His plans, however, were frustrated.

On the 9th, R. H. Watts, a Union sympathizer, was told by one of Boyakin Williams' servants that Ord. Sgt. Elias H. Brodie had agreed to betray the fort for $50,000 and a commission in the Confederate Army. As he was closely watched, Watts sent a lady to relay this news to Mrs. Richard Wilcox, wife of a navy yard watchman. Wilcox was of Northern birth and was a friend of the Union.

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113. Ibid., pp. 456-57.

114. Ibid., p. 457. On the 9th, the War Department sent Bragg $40,000 by one of his staff officers. Ibid., p. 459.

On the morning of the 10th, Wilcox waited anxiously for the mail boat to come over from Fort Pickens. As soon as it arrived, Wilcox escorted the non-commissioned officer in charge, as was customary, to the office of yard commandant Duncan L. Ingraham. After giving permission to the Union soldier to proceed to Warrington to pick up the mail, Ingraham called Wilcox aside and told him, "Be careful with your charge today, let no one communicate with him." These words confirmed what Wilcox had heard.

As soon as they were out of sight, Wilcox told the non-commissioned officer to warn Lieutenant Slemmer to prepared for the worst. The Rebels, he explained, "would cross that night at twelve o'clock to surprise the fort, and that one of his own sergeants was in the plot and in communication with two rebel citizens of Warrington."

The non-commissioned officer, on returning to Fort Pickens, told Lieutenant Slemmer of Wilcox's warning. Slemmer, after having Sergeant Brodie arrested and sent aboard Brooklyn, called for Major Tower. Satisfied that General Bragg planned to attack, Slemmer asked Tower to spend the night ashore. Tower agreed, as everything was foreboding. Martial law had been proclaimed by Bragg, "stores closed, and boats & vessels collected on the East side of the Navy Yard." To further complicate matters, the night was black and stormy.

The garrison stood a 100 percent watch on the night of April 10. Major Tower and Lieutenants Slemmer and James M. Whittemore made the rounds from 9 o'clock to 5 A.M., "rousing up the men & keeping them to their posts & watching."

Major Tower's fears were for the embrasures. There was but one man to each and one extra to each flank. A corporal and 6 men were on picket at the sally port, and the rest on the ramparts.[115]

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115. Watts to Meigs, December 6, 1865; Richard Wilcox, "How Fort Pickens, Florida, was saved from the Rebels, April 11, 1861," Incidents of the War, NA, RG 92, Consolidated Correspondence File. Tower to Totten, April 17, 1861, NA, RG 77, Ltrs. Recd., Chief Engineer.

Meanwhile, a picked force of Confederates--250 men from the 9th Mississippi led by Capt. Thomas W. Harris of the Marshall Home Guards, 50 soldiers of the 10th Mississippi, and 200 troops from other units--assembled at the navy yard at 11 P.M. There, they were to embark in small boats to cross to Santa Rosa Island. Colonel Forney, who was to lead the attack, saw that the men had no caps for their rifle-muskets. What had to be done would be executed with cold steel.

Before the time to embark arrived, it was learned that the United States troops had been alerted. The attack was suspended and then called off, as the man stood in ranks, anxiously waiting. Before returning to their camps at daybreak, Colonel Forney complimented them, remarking that they "could do anything."[116]

3. Confederates Look to Their Defenses

Secretary of War Walker, on the 12th, the day the Confederates opened fire on Fort Sumter, telegraphed Bragg that Lieutenant Worden had left Montgomery for Pensacola with dispatches. He was to be intercepted. The Secretary's communication, however, arrived too late. Notifying his government of this, Bragg warned that Fort Pickens would be reinforced before morning and there was nothing he could do to prevent it, the foe having frustrated his plan to surprise the garrison.[117]

Earlier in the day, General Bragg had moved to concentrate Colonel Clayton's 1st Alabama. The company posted at the Warrington Battery was to join the regiment on the Barrancas. It was replaced at the battery by a company of Georgians.

Officers in charge of the batteries were urged "to spare no exertions in putting them in complete readiness and perfecting their

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116. Montgomery Weekly Mail, April 26, 1861.

117. Official Records, Series I, Vol. 1, p. 459.

men in the management of the guns." Working parties were to be turned to round-the-clock, being relieved every six hours. A commissioned officer was in charge of each fatigue party.[118]

On April 15, two days after Fort Pickens was reinforced by Vodges' command, General Bragg redeployed and reorganized his little army. Three more companies of the 1st Alabama were ordered to join the company at Fort Barrancas. Colonel Steedman was placed in charge of the battalion garrisoning that stronghold.

The troops and batteries defending the Barrancas were divided into three divisions: the first to include those west of the lighthouse, except those at Fort McRee; the second, those between the lighthouse and the marine hospital; and the third, those in Warrington and at the naval yard.

Each company was to draw 20 rounds of ammunition per man, and the company commanders admonished to see that it was "carefully preserved."[119]

On the night of the 16th, Colonel Brown's battalion landed on Santa Rosa Island. Next morning, Bragg received a message from Brown reading:

> I have the honor to inform you that I have arrived at this post, and that I shall, unless assailed, act only on the defensive, and make only such disposition of my forces as is necessary to protect them from any enemy, foreign or domestic. I have also to inform you that no movement of the troops of my command or of United States vessels in this vicinity will have any other than a defensive object, unless we shall unhappily be

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118. General Order No. 17, April 12, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

119. General Order No. 18, April 15, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

compelled to act offensively, repelling aggression against the flag, persons, or property of our country.[120]

In reply to Brown's message, Bragg proclaimed martial law in the area, and prohibited all intercourse between the mainland and the Federals.[121]

After the debarkation of Brown's men, affairs became tenser along the opposing works, frowning at each other across the bay. On April 22, General Bragg made an unannounced visit to the sand battery manned by Captain Posey's company of the 1st Alabama, and found all the officers absent. To make an example of this neglect which endangered the entire army, Bragg ordered Colonel Clayton to relieve Posey's company and have it camp near headquarters, where it would be subject to rigid discipline. The Alabamans were replaced at the battery by a company of Mississippi artillerists.[122]

Next, Bragg cracked down on the riotous conduct of his men when visiting Pensacola. Hereinafter, passes to leave camp to spend the day in town would be signed by the brigade commanders. Even then, not more than six soldiers from each of the three brigades into which the army was organized were to do so, and then they were to be accompanied by a commissioned officer. While absent from his unit, no soldier was to carry a weapon of any kind.[123]

General Bragg also took action to curb the practice of soldiers and correspondents, such as Nemo, who were writing letters to

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120. Official Records, Series I, Vol. 1, p. 380.

121. Ibid., p. 464.

122. General Order No. 26, April 23, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

123. General Order No. 29, April 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

editors for publication, describing day-to-day activities in the army. If this continued, Bragg threatened to "suspend all mail facilities." In announcing this, the general noted, it is hoped the "impudence of a few indiscreet persons will not bring so severe a deprivation on the army."[124]

This order, to the consternation of historians, resulted in the disappearance from newspapers of letters to editors, giving graphic accounts of what was happening in and around Pensacola.

Although the modus vivendi was no longer operative, no fighting erupted as both sides strengthened their positions to be ready whenever hostilities came to Pensacola Bay. On the night of May 5, Confederate engineers placed obstructions in the channel between Forts Pickens and McRee. These obstacles, it was hoped, would prevent the Federal fleet from forcing its way into the harbor.[125] To solve a difficult logistical problem, the Confederates rushed to completion, by the second week in May, the Florida & Alabama Railroad.[126] Over this supply artery, Bragg received a number of powerful siege guns and mortars. He ordered these heavy weapons emplaced in five positions his engineers had recently completed. At this time (May 1861), Bragg viewed shortages of cartridges and cartridge-boxes (forty dead men) as his most serious problem. In March, requisitions had been made upon the Baton Rouge Arsenal for these items, but no response was received. Bragg now dispatched one of his staff officers to Louisiana to expedite the matter.[127]

Under the supervision of Lt. Joseph Wheeler, recently resigned from the U. S. Army, the 1st Alabama was turned to erecting

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124. Ibid.

125. Official Records, Series I, Vol. 1, p. 467; Dickson, Confederate Military History of Florida, p. 26.

126. Official Records, Series I, Vol. 1, p. 407. At the time the Confederates opened fire on Fort Sumter, this railroad, running northeastward to Montgomery, had not been completed.

127. Ibid., p. 465.

additional, and strengthening the older, sand batteries along the heights west of Barrancas barracks: the Red Eagles for two mortars in rear of Fort Barrancas; the Rough and Ready Pioneers for two 32-pounders in the depression between the fort and the old lighthouse; the Perote Guards for one 8- and three 10-inch columbiads at the old lighthouse (Battery B); the Alabama Rifles for two 10-inch mortars between the Perote Battery and the new lighthouse; and the Clayton Guards for two 10-inch rifled guns at the new lighthouse (Battery A).

These units were assisted by daily fatigue details from other companies of the 1st Alabama. Most of the cannon for these batteries were obtained by dismounting and removing guns from Forts Barrancas and McRee; others were brought over from the navy yard; while a few were shipped in from other forts, navy yards, and arsenals seized by state forces. The guns were moved to the batteries on skids. After they were mounted, artillery drill accelerated. The scarcity of heavy artillerists in the Confederate Army necessitated training the 1st Alabama as both artillery and infantry.[128]

In addition to the five sand batteries manned by the 1st Alabama, there had been completed and armed by mid-May five other emplacements, with work underway on three more. The most important of these were at the navy yard, in rear of the Warrington church, and at Barrancas barracks.[129]

Upon the May transfer of the Confederate government from Montgomery to Richmond, Virginia, Pensacola, where the opposing forces were apparently checkmated, became, in President Davis' eyes, a strategic convenience, not a necessity. Consequently, three of the regiments (one from Alabama and two from Georgia) and the battalion of

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128. McMorries, History of the 1st Regiment, pp. 20-21.

129. Rumph to father, May 12, 1861, "Letters of a Teenage Confederate," p. 340.

Louisiana Zouaves which General Bragg had mustered into service and trained were detached from his army for service in Virginia.[130]

On June 26, the Union force holding Fort Pickens and the western end of Santa Rosa Island was strengthened by arrival of the 6th New York Infantry. Two days later, General Bragg alerted his troops to this, and warned that the foe now possesses the power to assume the offensive against "our extended lines." Although confident of repulsing an attack, Bragg cautioned, we must be on the "alert at all hours and under all circumstances." As the 6th New York was presumed to be composed of urban toughs, Bragg called attention to this as proof of the Lincoln administration's intentions. "Pillage, plunder, and pollution will be our part, should we permit these mercenaries to contaminate our soil," Bragg exhorted. If they did their duty, however, there could be no doubt of the result.[131]

Concerned about a possible attack on the detached battalion led by Maj. W. L. Salisbury of the 5th Georgia posted at the Narrows on Santa Rosa Sound, General Bragg recalled it. Evacuating the Narrows, the battalion returned to the depot on East Bay, where Salisbury disbanded his command, the infantry companies reporting back to their parent units--the 9th Mississippi and 5th Georgia--and Captain St. Paul's battery to the 3d Brigade.[132]

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130. Official Records, Series I, Vol. 1, p. 468.

131. General Order No. 67, June 28, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

132. General Order No. 68, June 28, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

E. Soldiering on the Barrancas

1. Disciplining the Troops

To celebrate Independence Day, the cannon of Fort Barrancas fired a national salute of 11 guns at noon on July 4.[133]

News of the Confederate victory at Manassas on July 21 led General Bragg to issue a General Order. At noon on the 24th, to commemorate the battle, an 11-gun salute was fired from Fort Barrancas. The troops, being excused of duty from that hour till tattoo, celebrated the occasion.

Bragg, although a strict disciplinarian, was moved to pardon and restore to duty all prisoners, whether under sentence or awaiting court martial.[134]

To enforce discipline, officers were frequently detailed to sit on court martials. A number of enlisted men were found guilty of such offenses as drunkeness, disobediance of orders, stealing public property, and sleeping on guard duty. Several officers were convicted of disobedience or neglect of orders. Enlisted personnel judged guilty of the first three of these offenses were sentenced to various terms in the guardhouse and to wear a 12pound cannonball and chain affixed to their ankles. At first, those convicted of sleeping on post were given similar sentences. During the summer and until mid-October, those found guilty of this offense were given the death penalty, but were pardoned by General Bragg. In November, Bragg, to discourage a practice which endangered the army's security, determined to inflict the court's penalty.

On November 6, he reviewed and confirmed the death sentences of Pvts. Newton J. Mullins of Company E, 10th Mississippi, who

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133. General Order No. 73, July 3, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

134. General Order No. 84, July 24, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

in addition to sleeping on post had been convicted of assaulting a commissioned officer, and Charles Lappin of Company C, 1st Louisiana. Two days later, between 8 and 12 o'clock, these men's units were formed, and Privates Mullins and Lappin executed by firing squads, while their comrades looked on.[135]

Despite orders drastically limiting the number of passes given to soldiers to visit Pensacola, the sale of intoxicating liquors to troops doing so "became intolerable." More than one-half the "labors" of the court martials resulted from this offense, as well as the only military executions. On December 3, General Bragg, in calling attention to this, observed, "we have lost more valuable lives at the hands of whiskey sellers than by the balls of our enemies." He deemed this a reflection on himself, because he had promised to return the men of his army "to the mothers, wives, and sisters who have cheerfully sent them forth to repel the invader in as good a moral condition as he received them." To accomplish this, he would "dry up the fountain which supplies this stream of pollution," which his best efforts had heretofore failed to control.[136]

2. Sickness Takes a Terrible Toll

Commencing in May and continuing until after the first frost, there were large numbers of men on sick call. The most common complaints were malarial and typhoid fevers, measles, and jaundice. Despite strict enforcement of sanitary regulations, the latter two became epidemics.[137]

Col. Stirling A. M. Wood, who in August commanded the brigade posted on the Barrancas, reported that in the 7th Alabama

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135. General Order 135, November 6, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola. Mullins was from Columbus, Miss., while Lappin had been a New Orleans blacksmith.

136. General Order No. 134, December 3, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

137. McMorries, History of the 1st Regiment, p. 25.

Infantry, there are 200 on the sick list; in the 1st Alabama, 324 out of 917 were sick; while in the Georgia Battalion the proportion was not so great.[138]

On May 25, Private Rumph of the 1st Alabama's Perote Guards wrote his father:

> We have had a good deal of sickness in our camp for the last few weeks. Dr. Billy Crossley has been very sick with chill & fever nearly every man in the company that had any predisposition to them had had them. The Measles has surrounded our camp.[139]

Four weeks later, Private Rumph informed his father that "½ of our company are down with Diarhea & other diseases & the well ones come on guard 1 day on & 2 off."[140]

In mid-July, Rumph was felled by measles. For two weeks, he was too sick to write. When he did on July 25, he reported that there were more than 100 men hospitalized with measles. Never had he seen such a "sickly time." With more than 300 men on sick call in the 1st Alabama, the Perote Guards, out of 90 men on the rolls, mustered only 35 for duty.

All hands, he continued, were "becoming monstrously tired of this hot climate, fleas, flies & mosquitos." He was fearful of a relapse.[141]

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138. Official Records, Series I, Vol. 1, p. 470.

139. Rumph to father, May 25, 1861, found in "Letters of a Teenage Confederate," p. 341.

140. Rumph to father, June 16, 1861, found in ibid., p. 342.

141. Rumph to father, July 25, 1861, found in ibid., p. 343.

Rumph's fears were justified. Stricken by typhoid fever before he regained his strength, he died on August 13.

According to the regimental historian of the 1st Alabama, many of his comrades felt that "too much drilling in the hot sun while closely laced up from hip to chin in heavy woolen uniforms, was responsible for so much sickness." As many of the volunteers were unaccustomed to manual labor, some believed there was an element of truth to this reasoning. This hardening process subsequently paid dividends, because it undoubtedly saved many lives in the regiment at Island No. 10, "when exposure and duties were so much greater, where the new recruits suffered such terrible fatality, while the volunteers of '61 passed through the fire ordeal of after campaigns with comparatively slight loss."

From June through October, the Marine Hospital, a "magnificent" three-story brick structure, surrounded by a brick wall, was filled with sick Confederates. It was staffed by the Sisters of Charity who, dressed in black and wearing white sun-bonnets, moved about the wards and halls on their missions of mercy. Patients who died were carried from the hospital to the "dead house" for burial or shipment home. In 1861, at Pensacola, the latter was the rule. To soldiers, unaccustomed to the horrors of war, the situation was most unpleasant. One was heard to remark, "A man can die and be buried here with the least ceremony and concern I ever saw." While at the Barrancas, the 1st Alabama buried or sent home in zinc caskets 40 of its soldiers.[142]

There were other hazards such as venomous snakes. In late May, Chief Musician Parkyn of the Clinch Rifles from Augusta, Georgia, found a small banded snake which he believed was harmless. Picking it up, he allowed it to coil around his arm. Suddenly, it turned

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142. McMorries, History of the 1st Regiment, pp. 24-25.

on him, biting him between the knuckles, once on each hand. Not knowing that he had encountered a deadly coral snake, Parkyn handed it to a friend and retired to his quarters. His friend pocketed the snake.

Several hours later, soldiers, in passing Parkyn's tent, heard strange noises. On investigation, they found Parkyn's tongue so swollen that he could only gasp. He died within a few hours. His friend, hearing of what had occurred, removed the snake from his pocket and killed it.[143]

F. War Heats Up

1. Burning of "Judah"

Despite the tensions and stresses engendered by a confrontation which had continued for nearly three-quarters of a year, it was mid-September before the first blood was shed at Pensacola. Confederate naval authorities at this time were fitting out the schooner Judah as a privateer. She was armed with a pivot and four broadside guns. While being prepared for sea, she was moored to the wharf at the navy yard and protected by a heavy gun emplaced ashore.[144] The senior Union naval officer present, on being informed of this, determined to destroy Judah before she could put to sea. He ordered an expedition readied. Its mission would be a midnight raid to prevent Judah from sailing.[145]

In the darkness of September 13-14, four small boats cast away from U.S.S. Colorado. The raiding force consisted of about 100 sailors and Marines commanded by Lt. John H. Russell. With oars muffed, the raiders approached Judah about 3:30 A.M.[146] The

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143. Montgomery Weekly Mail, June 7, 1861.

144. Dickson, Confederate Military History of Florida, p. 26.

145. Official Records--Navies, Series I, Vol. 16, p. 670.

146. Ibid.

Confederate sailors, forewarned, greeted the Federals with a volley of musketry as they neared the vessel. Led by Lieutenant Russell, sword in hand, the bluejackets and Marines clambered aboard Judah. After a brief struggle, they captured the privateer. The crew of Judah, stiffened by rapidly arriving reinforcements, rallied on the wharf and opened a savage fire upon the raiders.[147]

Lieutenant Russell, upon capturing Judah, ordered Lt. John G. Sproston to take a party and search out and spike the gun emplaced nearby. They were hindered in their search by inky blackness. When at last discovered, fortunately for the Federals, only one man, a Marine, was posted at the gun. He pointed his musket at Lieutenant Sproston but was shot by Gunner's Mate John D. Barton before he fired. The gun, a 10-inch columbiad, was spiked, and the raiders brought off its tampion as a trophy.[148]

Lieutenant Russell, by this time, had fired Judah, and the schooner blazed. The expedition had, in less than fifteen minutes, accomplished all its objectives. They now re-embarked and rapidly pulled away from the navy yard. The Confederates, aroused, opened fire with canister upon the rapidly disappearing Federals.

At daybreak, the four small boats were hoisted aboard Colorado. The raiders had accomplished their mission with the loss of 3 killed and 13 wounded. The defenders lost 3 killed and an undetermined number wounded. The burning of Judah is deserving of remembrance as the first Civil War encounter in Florida in which there was loss of life.[149]

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147. Ibid., p. 671.

148. Ibid.; Donnelly, History of the Confederate Marine Corps, pp. 16-17.

149. Official Records--Navies, Series I, Vol. 16, pp. 671-75; Dickson, Confederate Military History of Florida, pp. 26-27.

2. General Bragg Reviews his Army

On the 19th, five days after the destruction of Judah, General Bragg reviewed his army. Several days before, all the underbrush had been cleared from an area about half a mile square in the piney woods, a mile north of the new lighthouse.

The troops were formed at 10 A.M., in light marching order, ready for field service. It was a fearfully hot day with no breeze. A soldier recalled, the sun "burned our feet through our shoes. We stood in this position about an hour facing the sun with our long blue jeans, coats buttoned tightly up to our chins, while we enjoyed the luxury of being reviewed by the general and his staff."

After General Bragg had passed along the front, he took position at one corner of the clearing while the army led by Brig. Gen. Daniel Ruggles, the senior brigade commander, marched in review. Bragg sat his horse, cap in hand, his head bared to the sun. The march by took about an hour by which time a number of men had been felled by the heat. This was the only full dress review held by General Bragg at Pensacola, for which the soldiers were thankful. As one remembered, for several weeks we had been looking forward to this event, "anticipating a big time; but as a pleasure affair, the whole performance was a stupendous failure."[150]

3. Battle of Santa Rosa Island

The Judah raid failed to goad General Bragg into a rash attack on Fort Pickens. The Mexican War hero, in the throes of reorganizing his command, bided his time. The four brigades constituting his little army were consolidated and reduced to two.

This task completed, Bragg on the night of October 9-10, 1861, landed 1,000 men on Santa Rosa Island. The Confederates came

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150. McMorries, History of the 1st Alabama, pp. 23-24; General Order No. 99, September 16, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

ashore on the bay side about four miles east of Fort Pickens. After forming into three columns, they advanced westward and surprised and routed from their camp a battalion of the 6th New York. Colonel Brown responded to the attack on the New Yorkers' camp with alacrity. At daybreak, Union troops advanced from Fort Pickens to engage the Rebels. The Confederates, having failed to reach any of the Union sand batteries east of the fort, withdrew to the point where they came ashore. They reboarded their vessels without difficulty, but disaster threatened when a howser became entangled in one of the ship's propellers. Before they could clear the screw, the Federals came up on the double and opened fire on the crowded transports. The Confederates now cut the obstruction away and the vessel drifted free.

The battle of Santa Rosa Island was over. In this engagement, the Confederates reported a loss of 18 killed, 39 wounded, and 30 missing and presumed prisoners of war. Colonel Brown listed his losses as 14 killed, 29 wounded, and 24 prisoners. Both Bragg and Brown issued communiques, which can be largely discounted, claiming victory in the battle.[151]

4. November 22-3 Bombardment

Colonel Brown, angered by the Rebel raid, thundered that "an insult so gross to the flag of my country" can "not by me be passed unnoticed," and he "designed immediately to take appropriate notice of it." He proposed a joint Army-Navy attack on the Confederate harbor defenses.[152]

The Navy, its attention engrossed by a setback at Head of Passes at the mouth of the Mississippi, would not be ready to cooperate

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151. Official Records, Series I, Vol. VI, pp. 441-62. For detailed accounts of the battle of Santa Rosa Island, the reader should consult E.C. Bearss, "Civil War Operations in and Around Pensacola," found in The Florida Historical Quarterly, Vol. XXXVI, No. 2, pp. 144-54; and J.L. Larkin, "Battle of Santa Rosa Island," Florida Historical Quarterly, Vol. XXXVII, Nos. 3 & 4, pp. 372-76.

152. Official Records, Series I, Vol. VI, p. 469.

with the Army until the fourth week of November. Brown, accordingly, had to postpone his revenge.

On the mainland, the Confederates, in the days following the Santa Rosa Island fight, reorganized their command. The Department of Alabama and West Florida was constituted with General Bragg as its head.[153] On October 22, Bragg left Pensacola for a tour of inspection of his department.

He traveled to Mobile and, accompanied by Brig. Gen. Jones M. Withers, the commander of the District of Alabama, spent several days overseeing the defenses of Mobile Bay.[154] Bragg returned to his headquarters after an absence of six days and wrote Adjutant General Samuel Cooper:

> I arrived here yesterday from Mobile, and find no change to report. The enemy is in a constant state of excitement on Santa Rosa, and has frequent alarms. He has moved artillery up . . . the island to our landing place of the late expedition. General Withers' command needs much to put it in an efficient condition. He has about 4,200 troops which should be increased to 6,000--mostly raw, and inefficiently organized, armed, and equipped, and very destitute of military instructors. The position of Forts Morgan and Gaines and Grant's Pass are occupied by his best troops, about 2,000. The two senior officers commanding at the forts are very competent but sadly addicted to drinking and, therefore, unsafe for those exposed positions.[155]

Rumors of the impending departure of an expedition commanded by Maj. Gen. Benjamin F. Butler, from New England, bound for the Gulf of Mexico had reached General Bragg.[156] He sent a telegram

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153. Ibid., p. 751.

154. Ibid., pp. 755-56.

155. Ibid., p. 757.

156. Ibid., p. 758.

to Adjutant General Cooper requesting, "In view of the heavy expedition now on its way South we should develop all our resources. One regiment here and one at Mobile can be armed by using arms of the sick and disabled. Can they be sent from Huntsville?"[157]

Two days later, Bragg was informed by Judah P. Benjamin, the Acting Secretary of War, that, "You are authorized to take two of the Alabama regiments from Huntsville, to be armed with the spare arms at Mobile and Pensacola."[158] Next day, the 5th and 8th Mississippi Regiments encamped at Camp Pettus, near Enterprise, Mississippi, were ordered to Pensacola. As many men of these two units were recovering from a siege of measles (the bane of the 1861 recruits), it was thought by the War Department to be imprudent to send them to Virginia or Kentucky at this season.[159] As additional reinforcements for his department, Bragg ordered the 22d and 23d Alabama Regiments, recently organized at Montgomery and equipped by private enterprise, to Mobile.[160]

Bolstered by these reinforcements, Bragg now had an efficient force of about 7,000 men concentrated in and around Pensacola, with 9,000 additional troops in the Mobile area. He received further favorable news on November 11, when it was reported that the Mobile & Pensacola Railroad was completed.[161] Bragg considered its logistical support as equivalent to 3,000 additional soldiers. The Confederate authorities, however, continued to be embarrassed by a critical shortage

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157. Ibid.

158. Ibid., p. 761. Col. T. H. Watts' 17th Alabama arrived at Pensacola from Huntsville on November 16.

159. Mississippi Official and Statistical Register, pp. 550-79.

160. Official Records, Series I, Vol. VI, pp. 764-65.

161. Ibid., p. 766.

of firearms. Many of the recent arrivals at Pensacola and Mobile were unarmed or at best equipped with shotguns.[162]

On November 14, General Bragg had the 1st Florida, less Gee's and Crapp's companies which remained at the navy yard, take position at Deer Point. There, the regiment established an entrenched camp and emplaced several cannon.[163]

By the evening of November 21, the Union Navy was ready to cooperate with Colonel Brown in a bombardment of the Confederate forts and sand batteries. The crews of the steam frigates Richmond (22 guns) and Niagara (12 guns) had lightened ship and sanded the decks.

At 10 A.M., November 22, as Colonel Brown watched, the Fort Pickens signal gun, mounted near the flagstaff, was fired and a red flag positioned on the Tower Bastion. The bombardment began. The guns of Batteries Lincoln, Cameron, and Totten opened upon the steamer Time (Bradford) and the gunboat Nelms, berthed at the navy yard wharf. A 10-inch columbiad, manned by Capt. A. C. Van Benthuysen and his Marines, emplaced on the stone wharf was designated a secondary target. Battery Scott fired on Fort McRee and the Lighthouse batteries to support the naval attack upon those positions. The guns of Fort Pickens blanketed all the Rebel works.[164]

Upon discharge of the signal gun, Niagara stood in toward shore, followed by Richmond. Both ships came to anchor with springs on

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162. Ibid., p. 770.

163. General Order No. 128, November 14, 1861, NA, RG 109, General & Special Orders Issued by the Army of Pensacola.

164. Ibid., pp. 469-73; Closson to Haskin, January, 1875, found in First Regiment of Artillery, p. 359. The steamer Ewing had been renamed Nelms to honor Lt. Llewellyn A. Nelms and the steamer Time, Bradford to honor Capt. Richard Bradford. Both these officers had been killed in the battle of Santa Rosa Island. McMorries, History of the 1st Regiment, p. 28.

their cables about two miles from Fort McRee. They then opened fire. The captain of Niagara, seeing that the shells were falling short, ordered his ship to close to a distance of one and three-quarters miles. From this station, fire was resumed with marked effect, many of the shells falling upon the fort and its water battery.[165]

A storm of shells burst among the startled and unsuspecting Confederates. Rebel Marines, manning the 10-inch columbiad at the stone wharf, after firing several shots, deserted their piece. Time was repeatedly struck, finally getting away late in the afternoon under cover of a rain and wind storm. Nelms, being a small vessel, escaped at once. Having accomplished their initial firing mission, the commanders of Batteries Lincoln, Totten, and Cameron turned their guns and mortars upon Forts McRee and Barrancas, the Lighthouse batteries, Wheat's battery, and the Church batteries. The last named of these was exceptionally annoying to the Federals because of the power and accuracy of its shells. The projectiles hurled by the 10-inch columbiads against the Rebel works were well directed and seemed to be effective, but the fire of the rifled James 42-pounders emplaced in the Fort Pickens casemates was not.[166]

Confederate batteries in the neighborhood of the navy yard, upon which the Federal attack had burst with fury, were manned by Brig. Gen. Richard H. Anderson's 2d Brigade. Within a few minutes, his men had recovered from their surprise and returned a vigorous fire. To conserve ammunition, General Bragg ordered his men to regulate and reduce their fire.[167]

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165. Official Records--Navies, Series I, Vol. 16, p. 775.

166. Official Records, Series I, Vol. VI, p. 474; Donnelly, History of the Confederate States Marine Corps, pp. 18-20.

167. Official Records, Series I, Vol. VI, p. 494.

In a bold attempt to overwhelm the Rebel cannoneers of Fort McRee and its water battery, the Federals now turned their four 10-inch siege mortars, the 13- and 12-inch seacoast mortars at Battery Totten, and the two 42-pounder smoothbores and 8-inch columbiads mounted on the northwest channel front of Fort Pickens on Fort McRee.[168] It was hoped that these batteries, in cooperation with the guns of Niagara and Richmond, would destroy that fort.

Fort McRee, the weakest of the Confederate defenses and the most exposed, was garrisoned by Mississippians and Georgians led by Col. John B. Villepigue. The fort, although it had been reinforced with sandbags, had long been a source of concern and anxiety to General Bragg and his engineers. They were horrified when Niagara, navigating a channel unfamiliar to them, approached and took position from where she hammered McRee's southwest face, which had not been reinforced. Three times during the long afternoon, the woodwork of Fort McRee burst into flame, threatening to drive out the occupants. The fires were as often extinguished. To add to the Rebels' peril, their magazines were laid bare to the enemy's shells which exploded around them. An unexpected hazard was encountered, when a wooden structure to the windward was fired. Sparks showered from the burning building threatening momentarily to detonate the magazines. Colonel Villepigue was wounded. He, however, refused evacuation to a less exposed position. His coolness and example inspired his men with confidence, and they held a position which, at times, seemed untenable.[169]

By 3:15 P.M., the Fort McRee water battery ceased replying to the Federals and shortly, thereafter, the barbette guns of Fort McRee were silenced. Encouraged, the Federals redoubled their

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168. Ibid., p. 474.

169. Ibid., p. 492; McMorries, History of the 1st Regiment, p. 29.

efforts. The fire of the fort's casemate guns gradually slackened and by 5 P.M. was muted.[170]

Richmond, of lighter draft than Niagara, took a position nearer shore. Here, she anchored far to the rear of Fort McRee and its water battery. Confederate guns, consequently, could not be brought to bear. For several hours, Richmond pounded the Rebel works unhindered. By mid-afternoon, the Southerners succeeded in emplacing a masked rifled battery among the sand dunes of the mainland and opened fire. The Confederates were efficient artillerists and soon had Richmond's range. Flag Officer William W. McKean, aboard Niagara, saw the Confederates hit Richmond several times, and signaled Capt. Francis B. Ellison " to drop out of line of fire."

About 6 P.M., a squall came up out of the northwest, causing a fall in the tide. Niagara touched bottom. McKean had the ship weigh anchor as quickly as possible and stand out into deeper water for the night.[171]

While the attack on Fort McRee was at its height, men of the 1st Alabama on the Barrancas, looking to the southwest, dimly saw through the clouds of smoke and sand the outline of the two-tiered fort. On one occasion, a soldier in the Perote Battery recalled:

> Simultaneous volleys raked the outer walls and parapets of the fort, wrapped it in flames of bursting shells, sent huge timbers and massive pieces of . . . [masonry] flying through the air, swept away the flagstaff and demolished a section of wall on the right. As dimly seen from our position, the whole structure seemed to bulge and sink to the earth in one general conflagration and gigantic heap of ruins. There was a momentary suspense of firing along the Confederate lines, as men stood in breathless excitement and gazed with the eagerness of despair at what appeared the final doom of the fort.

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170. Official Records--Navies, Series I, Vol. 16, p. 775.

171. Ibid., p. 776.

> "McRee is gone up," murmured some. Nobody denied or doubted it. A moment later, a friendly breeze partially lifting the smoke revealed only a part demolished, the rest standing firm. This gave some relief, but a moment later, it was noticed that the flag had disappeared. "The fort has surrendered," they now said. But, these words were hardly spoken when the large garrison banner with broken staff and torn with shot was seen slowly ascending the wall. Then a mighty shout of Confederates, heard above the din of artillery and sounding like the distant murmur of many waters, rang along the bending shore from Fort McRee to the navy yard.[172]

The Federals' shot and shell, although they made McRee a living hell, did little damage to Fort Barrancas and the sand batteries. The latter were protected by sandbags, while the former was shielded by mounds of sand thrown up against the exterior slopes of its sea fronts. The guns of the fort and its Water Battery were protected by sandbag traverses and embrasures.[173]

Darkness brought a welcomed respite to a bombardment that had lasted more than eight hours. General Bragg believed, "For the number and caliber of guns and weight of metal brought into action it will rank with the heaviest bombardments in the world." Dwellings in Pensacola seven miles away had trembled with the effect, and immense numbers of dead fish floated on the bay, stunned by the concussions.

Some of the gunners' noses were bloodied, while the roar of the cannons was reportedly heard as far away as Montgomery and Union Springs.[174]

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172. McMorries, History of the 1st Regiment, pp. 29-30.

173. Ibid., p. 30. On pages 86 and 87 of Volume I, Miller's Photographic History of the Civil War, are found photographs of Fort Barrancas and the Perote Battery made while they were manned by the 1st Alabama.

174. Official Records, Series I, Vol. VI, p. 460; McMorries, History of the 1st Regiment, p. 30.

The Federals made use of the cover afforded by darkness to replenish their magazines with powder, shot, and shell. On the mainland, General Bragg's battered command exerted itself to shore up sagging defenses. Staff officers were dispatched to the various works, and, except from Fort McRee, returned with satisfactory and encouraging messages. Fort McRee, they reported, was exposed in front, flank, and reverse, with half of its armament dismounted and magazines exposed. Colonel Villepigue notified Bragg that he was unable to return the enemy's fire and proposed to blow up and abandon the fort. Bragg, upon reflecting on the effect its loss would have on the morale of his men as well as the enemy, resolved to hold Fort McRee to the bitter end. Maj. Thomas M. Jones of the Engineers, accompanied by a large fatigue party, was rushed to Villepigue's assistance. By morning, the Confederates had made major repairs. Traverses were erected, and a number of guns remounted.[175]

On November 23, at 10 o'clock, Colonel Brown ordered a resumption of the bombardment. Gun captains of the 10-inch columbiads and rifled 42-pounders were directed to maintain a rate of fire of one shell every fifteen minutes. The mortars were discharged at half hour intervals.

Afloat, there was a fresh wind from the northwest. Flag Officer McKean did not consider it wise to again employ Richmond, as a shell from the masked battery had opened a bad break on her starboard quarter.[176] Niagara got underway, stood in, anchored in four fathoms of water, and opened fire. Rebel gunners in the Fort McRee water battery returned her fire vigorously. The tars saw that their shells were falling short, and endeavored to close with Fort McRee. Because of a reduction

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175. Official Records, Series I, Vol. VI, pp. 490-91; Official Records--Navies, Series I, Vol. 16, p. 776.

176. Official Records--Navies, Series I, Vol. 16, p. 778.

in the depth of the water, caused by the change in the wind, this was impossible. All the while, shells were falling thick and fast about Niagara. At 3:30 P.M., McKean deemed it his duty to withdraw his ship.[177]

The guns of Fort McRee were silenced by the pinpoint accuracy of Colonel Brown's artillerists. Hammered by the Federals, all the Confederate batteries, except one gun in the Fort McRee water battery and the powerful armament emplaced on the heights between the new lighthouse and Fort Barrancas, ceased firing for about two hours.[178]

Even so, a soldier in the 1st Alabama recalled:

> Frequently, several shells would explode almost simultaneously in or above a single battery, and the men would take refuge in their "rat holes" for protection. But these "rat holes," covered with coarse, loose sand to a depth of about four feet, were places of fancied rather than real security. They offered good protection against small fragments of shells, but we are confident that a shell from a mortar would have penetrated without any difficulty.[179]

About 2 P.M., the Federals began throwing hot shot and shell into the deserted villages of Warrington and Woolsey. At 2:30, a house in the southwest section of Warrington was fired, either by Battery Lincoln or Cameron.[180] Flames spread to the nearby church steeple. From there, the conflagration was transmitted to other buildings along the street until probably two-thirds of the village was destroyed. Shortly thereafter, fires were kindled in Woolsey, the village to the north of and

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177. Ibid., p. 776.

178. Official Records, Series I, Vol. VI, p. 475. Among the batteries silenced were Wheat's and the Church batteries, Fort Barrancas, and all the guns on the waterfront.

179. McMorries, History of the 1st Regiment, p. 31.

180. Official Records, Series I, Vol. VI, p. 478.

adjoining the navy yard. The yard, too, received its share of attention from powerful Union batteries. Many of its buildings were struck and the hot shot fired one structure.[181]

In accordance with instructions issued by General Anderson, troops not needed to man the batteries retired from the navy yard and its vicinity at the beginning of the attack and took position behind the north wall. There, they held themselves ready to oppose a landing.[182]

At dark, the Yankee guns ceased fire, but the mortars continued to harass the Rebels until 2 A.M. On the Confederate side, the men of Captain Posey's company of the 1st Alabama, manning the two 10-inch mortars, shelled the Federals throughout the night.[183]

During the two-day bombardment, the Federals expended nearly 5,000 rounds of ammunition and the Rebels about 1,000. Both commanders issued reports making extravagant claims of damages to the foe, and belittling their own losses. Bragg's report reads monotonously like those of many Allied and Axis commanders in World War II. He would have one believe that about the only structures the trained artillerists of Brown's command hit were churches, hospitals, and "abodes of the humble people." Damage to the Southern fortifications, while not as extensive as that caused by the Rebel bombardment of Fort Sumter or the Federal shelling of Fort Pulaski, was considerable. This was because of several factors--the dispersed character of the fortifications, extending from Fort McRee in the west to the navy yard in the east, and, excepting Forts McRee and Barrancas and the Redoubt, the Rebel works were of sand and log.

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181. Ibid., p. 491.

182. Ibid., pp. 494-95.

183. McMorries, History of the 1st Regiment, p. 32.

Confederate shot and shell had fallen in great numbers about the exterior batteries and within the Fort Pickens parade, but killed and wounded only a few bluecoats. There were the usual number of brushes with death, as shells either failed to burst, or, when exploding, the fragments harmlessly buried themselves in the sand or masonry. The guns and magazines of the exterior batteries and fort were shielded by traverses and bombproofs, while the white Santa Rosa sand, packed in bags, afforded a ready means of repair. The interior of the works had been "so skillfully and solidly secured by the blindages," erected under Major Tower's direction, that the two-day bombardment left them "as good as new," in spite of a number of scars on the Fort Pickens brickwork and iron buried in the sand.[184]

Another factor in the Union success, besides the large scale use of sand and logs to protect and reinforce the masonry defenses, was the superiority of the Federal redlegs, a majority of whom had seen service in the "Old Army," and had served a lengthy apprenticeship at the big guns. The recently recruited Confederate artillerists' rate of fire was about one-fifth that of the Federals. In face of the concentrated and accurate shelling by Brown's cannoneers, the Southerners' counter fire was, at times, silenced.[185]

Claims and counterclaims make it difficult to render a fair evaluation as to the material damages each side suffered during the two-day bombardment. Bragg reported his casualties at 7 killed and 33 wounded.[186] The Federals lost 2 killed and 13 wounded.[187] Defective

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184. Closson to Haskin, January 1875, found in First Regiment of Artillery, pp. 359-61; Returns from U.S. Posts, 1800-1916, NA, Microcopy M-617. 185. A consensus by trained Civil War officers was that an artillerist could not be improvised in a day but that time and tuition were necessary to make one.

186. Official Records, Series I, Vol. VI, p. 490.

187. Ibid., p. 470; Official Records--Navies, Series I, Vol. 16, p. 776.

fuses and absence of smokeless powder, fixed ammunition, and high explosive bursting charges contributed to the small number killed and wounded in relation to the number of projectiles expended.

G. Confederates Cut Their Commitments

1. Girding for the Next Test

The bombardment caused the opposing commanders to tighten security. On November 28, General Bragg sought to forward mail to Confederate prisoners held by the Yankees. Colonel Brown refused to receive the letters and disdained to state his reasons for so doing. He was not as "courteous and amiable" as he had been after the battle of Santa Rosa Island. Later in the day, a small yawl attempted to enter the bay from the fleet, a privilege heretofore accorded the Federals as, until November 22, Rebel vessels had been allowed to dock at the navy yard without interference. Fire was opened, and the crew hurriedly abandoned their vessel and swam for shore.[188]

On December 3, Union forces led by Brig. Gen. John W. Phelps reoccupied Ship Island, Mississippi. This island, lying 12 miles off the Mississippi coast, provided an ideal base for units of the Federal fleet blockading the mouths of the Mississippi River. In addition, a serious threat to Mobile was posed with the Northerners in possession of the islands flanking Mississippi Sound. Secretary of War Benjamin accordingly inquired of General Bragg, "whether General Withers had taken any measures to defend Mobile against a coup de main via Pascagoula?"[189]

Bragg replied on December 11:

> The danger to Mobile which you suggest is provided for. Mounted men are stationed at the points where the enemy might land, with instructions to report any hostile demonstration, and

188. Official Records, Series I, Vol. VI, pp. 771-72.

189. Ibid., p. 774.

> all our infantry out of the forts and light artillery are in readiness for concentration on any point, and the telegraph could secure re-enforcements from here [Pensacola] in ten hours.[190]

Despite the loss of Ship Island, the Pensacola garrison was weakened during the first week of December by dispatch of the 7th Alabama Infantry Regiment to East Tennessee.[191] All the while, Bragg continued to be plagued by his old bugaboo--a shortage of arms. At this time, nearly 3,000 men in the Department of Alabama and West Florida were without weapons.[192]

Ten days before, on the arrival of the 5th and 8th Mississippi Infantry at Pensacola, Bragg had complained that he now had "four new regiments, 3,000 men, at least, with only about 600 efficient arms between them." These units were promised a "rigid course of instruction." Whenever arms were provided, he informed the War Department, he would be "able to spare a considerable portion of my gallant little army for more active services."[193]

On November 27, Bragg lost the services of Capt. Reuben T. Thom's company of Marines, which were called to Richmond by Secretary of Navy Mallory. This was the third such draft made on him by Mallory. While it was a "pleasure to discipline and instruct" the Marines, it was becoming increasingly difficult to arm and accoutre them. In addition, although Bragg had called for several young naval officers to command his two steam gunboats, Secretary Mallory had seemingly ignored his needs. The two vessels were accordingly officered by landsmen.[194]

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190. Ibid., p. 779.

191. Ibid., p. 777.

192. Ibid.

193. Ibid., p. 771.

194. Ibid., pp. 772-72. Capt. George Homes' company of Marines had been transferred from Pensacola to Savannah in mid-September.

Besides the chronic arms shortage, another problem arose to plague the Confederates. The enlistment term for many of the 12-month men would expire early in the new year. Just as progress was being made in enlisting these men, the Confederate Congress, on December 11, passed the "Bounty and Furlough law." This Act granted a bounty of $50 and a furlough of 60 days, with transportation to and from his home, to any soldier who would enlist for two or three years or for the duration of the war. By way of further enducement, the troops were promised that on reenlisting, at the end of their original tour of duty, they would have the right to reorganize themselves into companies, battalions, and regiments, and to elect their officers. This feature, Maj. Gen. Emory Upton subsequently described as "an act to disorganize and dissolve the Provisional Army." The bounty enducement was extended to all State Troops willing to enlist for more than two years in Confederate service and to all volunteers recruited for three years or the duration of the war.[195]

General Bragg found that men who had been satisfied with competent field officers were "now torn and tossed about by the intrigues of designing men, seeking their own advancement or revenge upon others who have made them do their duty."[196] Discord now reigned where harmony had prevailed. Many of the most capable officers, Bragg felt, would "be sacrificed to this fell spirit."[197]

He believed that if the "Bounty and Furlough Law" had not been enacted, he would have been able to secure the reenlistment of 5,000 of the 6,000 12-month men posted in and around Pensacola. Con-

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195. Albert B. Moore, Conscription and Conflict in the Confederacy (New York, 1924), pp. 6-7.

196. Official Records, Series I, Vol. VI, p. 784.

197. Ibid.

fronted by the confusion engendered by this act, he felt that if 2,000 signed up for another enlistment, it would be extraordinary.[198]

The Confederate government's continued satisfaction with Bragg's conduct of affairs in the West Florida-Alabama region was expressed in a letter from Secretary of War Benjamin on December 27. On offering Bragg command of the newly constituted Trans-Mississippi District, Benjamin wrote:

> You have so thoroughly and satisfactorily prepared the defenses at the latter point [Pensacola] that we scarcely believe another attempt will be made on your defenses, and hope that by sending Kirby Smith to take your place, if you should leave, that important point will be successfully defended.[199]

News of a Federal raid upon Biloxi, Mississippi, on the last day of the year caused Benjamin to rescind this offer to Bragg.[200]

After the bombardment of November 22-23, General Bragg ordered construction of new batteries on Oak Island, Deer Point, and at the mouth of Bayou Grande. By the end of the year, these emplacements had been completed and armed with 10-inch columbiads. These additional fortifications strengthened the Confederates' position in the Pensacola Bay area.[201]

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198. Ibid.

199. Ibid., pp. 788-89. Benjamin had replaced Walker as Secretary of War in mid-September. A Floridian, Edmund Kirby Smith was a graduate of the U.S. Military Academy. He had resigned from the Army on March 3, 1861, and was commissioned a colonel of cavalry in the Confederate States Army. In June, he was promoted to brigadier general and was severely wounded at First Manassas on July 21, 1861.

200. Ibid., p. 794. On December 31, Flag-Officer McKean had been informed that a Rebel steamer was anchored near Biloxi. He dispatched Comdr. Melaneton Smith with the steamers Water Witch, New London, and Henry Lewis to capture her. But, upon reaching Biloxi, Smith discovered that the steamer had been removed. He demanded surrender of the town. The command was complied with, and a detachment of seamen and Marines landed, a small sand battery destroyed, and two guns, a 9-pounder and a 6-pounder, brought off.

201. Ibid., p. 674.

2. January 1-2 Bombardment

The next clash in Pensacola Bay was precipitated by the Confederates. On January 1, 1862, about 3 A.M., a small steamer was imprudently brought into the wharf at the navy yard within range of the Federal guns. This was the first instance of a boat of any class putting in at the navy yard since the November 22-23 bombardment. Colonel Brown viewed it as sheer bravado or an attempt by the Rebels to draw his fire. He ordered his heavy guns to open upon the steamer. After three projectiles landed nearby, the vessel pulled hurriedly away from the dock. One of the Southern siege guns briefly returned the Yankees' fire--then all was quiet.[202]

On the mainland, General Anderson was in command of the Confederate forces in the absence of General Bragg, who was inspecting the defenses of Mobile Bay. Anderson, having celebrated the New Year, was drunk. Forgetful of the demonstrated superiority of the Yankee artillerists, Anderson alerted the Rebel batteries to be prepared to fire. Three-quarters of an hour after the initial firing had ceased, the Confederate big guns boomed.

The Yankees vigorously replied, using only their heaviest guns. Their rate of fire was much slower than in November but more accurate. Convinced by experience of the difficulty of destroying or burning the forts or the navy yard buildings at extreme range with explosive projectiles, the Federals employed rock fire and carcasses. By 9 P.M., a large fire was burning in the navy yard. Within an hour, the whole firmanent was illuminated as a large and valuable warehouse, full of public property, burned. From this hour, except for a harrassing fire maintained by Union mortars, their big guns stood mute. At 2 A.M., the mortars, too, ceased firing and at 4 A.M., January 2, upon the return of

202. Ibid., pp. 495-96.

an irate General Bragg, the Confederate cannoneers secured their pieces.[203]

In assessing the results of the second bombardment, one is satisfied that in this exchange, like that of November 22-23, the Confederates came off second best. Undoubtedly, the principal factor contributing to their continued inferiority was because the majority of the Federal artillerists were regulars. A second reason was the continued shortage of powder and shot which embarrassed the Southerners and limited target practice.

Colonel Brown observed that the Rebels' fire on January 1-2 was not as accurate as in November, and that few projectiles struck the walls or entered Fort Pickens. The Federals reported two men slightly injured.[204] Though the Confederates did not have any killed or wounded, considerable damage was caused by the navy yard fire.[205] Probably of greater importance, the Confederates expended a large quantity of ammunition that was almost impossible to replace.

A final upshot of the affair was General Dick Anderson's relief from duty. General Bragg informed Adjutant General Cooper, "I . . . urge on the Department my request for a second in command here who . . . can be trusted with this army in my necessary absence."[206]

3. Confederates Get Ready to Abandon Pensacola Bay

Despite General Bragg's forebodings, the effects of the "Bounty and Furlough Law" were not as drastic for his army as feared.

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203. Ibid., pp. 495-98.

204. Ibid., p. 496.

205. Ibid., pp. 497-98.

206. Ibid., p. 498.

Its evil consequences were in a great part ameliorated through the cooperation of J. Gil Shorter, who had been recently inaugurated as governor of Alabama, and the people on the home front, who, as a rule, urged their relatives and neighbors to remain with the army. Many of the troops who had gone on leave had rejoined their units on the expiration of their furloughs. Bragg, to encourage reenlistment of the 12-month men, visited the camps of the various units to personally exhort them.[207]

Despite the success of the reenlistment campaign, Bragg continued to fret, with good reason, about the effect the reorganization would have on the units and whether the men would choose competent field officers. He accordingly cautioned Secretary of War Benjamin:

> The great question now is to keep up their organization [the units] for one of our well organized and instructed regiments, under good officers, is worth any two which could be made up of a heterogenous mass fresh from the country, and they require but half the number of arms.[208]

As General Bragg considered the 1st Alabama one of his best regiments, and as he needed trained artillerists, he was agreeable to permitting the men to reenlist for two years . . . Three companies--the Eufaula Pioneers, Eufaula Rifles, and Red Eagles--declined to reenlist, however, and their places were taken by Capt. W. H. Pruitt's company from Barbour County, Capt. C. C. Knowles' company from Macon County, and Capt. John F. Whitfield's company from Autauga and Montgomery Counties. Of the seven companies reorganized, about one-half the personnel reenlisted; the remainder claimed their discharges. When elections were held, I. G. W. Steedman was elected colonel and S. L. Knox, major. No lieutenant colonel was elected, because, despite a number of ballots, no one received a majority.

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207. Ibid., p. 806.

208. Ibid.

On January 17, the men of the 1st Alabama, who had reenlisted, received 30-day furloughs, and caught the first northbound train.[209]

The arrival of an experienced artillerist in the person of Brig. Gen. Samuel Jones, Dick Anderson's replacement, from Virginia, enabled General Bragg to reorganize his department. On January 27, Bragg divided the 16,000 troops under his command into two armies: The Army of Mobile and the Army of Pensacola. General Withers retained command of the former and General Jones assumed charge of the latter.[210]

Southern disasters in Kentucky and Middle Tennessee in the period January 19-February 16 had sweeping repercussions in all parts of the Confederacy. On February 8, two days after the loss of Fort Henry on the Tennessee River, General Bragg received a message from Secretary of War Benjamin reading:

> The President desires that you will as soon as possible send to Knoxville all the troops you can spare from your command without immediate danger, and he hopes that the number will be at least four regiments. The condition of affairs in Kentucky and Tennessee demands from us the most vigorous effort for defense, and General A. S. Johnston is so heavily outnumbered, that it is scarcely possible for him to maintain his whole line without large additional re-enforcements.[211]

Foreseeing the advance of Union timberclads up the Tennessee River to sever the vital Memphis & Charleston Railroad, Bragg rushed a regiment by rail to north Alabama. This was in addition to the four regiments that entrained for Knoxville.[212] Morale in Bragg's department was chilled further on February 16, when rumors of the loss

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209. McMorries, History of the 1st Regiment, pp. 32-33.

210. Official Records, Series I, Vol. VI, pp. 815, 816, 820.

211. Ibid., p. 823.

212. Ibid., p. 894.

of Fort Donelson were received. The fall of that bastion guarding the Cumberland River was confirmed in a telegram from Secretary Benjamin to Bragg two days later. Bragg was informed, "the President desires that you proceed as promptly as possible to withdraw your forces from Pensacola and Mobile and hasten to the defense of the Tennessee line. In doing this, of course, the first care will be to save, as far as possible, all our artillery and munitions of war."[213]

The War Department proposed to withdraw all Southern forces from Pensacola--as a weak garrison would invite capture--but to leave an "effective garrison" in the forts guarding the entrance to Mobile Bay. The continued occupation of these forts, it was believed, would defer for an extended period a movement against Mobile.[214]

Bragg was to entrain all his forces in Mobile, as well as those in Pensacola, and send them north on the Mobile & Ohio Railroad to the Tennessee border. At Corinth, where the Mobile & Ohio intersected the Memphis & Charleston Railroad, the Rebels were to detrain and await further orders. Heavy rains had washed out a number of bridges on the Mobile & Ohio, and troop movements were temporarily forestalled. By February 27, however, repairs had been effected and the troop transfers commenced.[215]

On February 28, General Bragg, at the urgent request of Gen. P. G. T. Beauregard, decided to accompany his troops to Corinth.[216] General Jones, as senior officer, would command the

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213. Ibid., p. 828.

214. Ibid.

215. Ibid., p. 826.

216. Ibid., p. 834. In January 1862, Beauregard had been ordered to the Mississippi Valley as second in command to Albert Sidney Johnston.

department during Bragg's absence.[217] Before leaving for north Mississippi, Bragg informed Jones that he was to

> make all disposition at the earliest moment, working day and night, to abandon Pensacola. Send to . . . [Mobile] all the heavy shell guns, rifle guns, and carriages, etc., complete, with the ammunition for them; all other supplies to Montgomery.
>
> This movement should be made with all the secrecy possible; removing your guns at night, and masking the positions, taking the most advanced first. Keep sufficient troops in position to deceive the enemy until all is ready.
>
> I desire you particularly to leave nothing the enemy can use; burn all from Fort McRee to the junction with the Mobile Road. Save the guns, and if necessary destroy your gunboats and all other boats. They might be used against us. Destroy all machinery, etc., public and private, which could be useful to the enemy; especially disable the sawmills in and around the bay and burn the lumber. Break up the railroad from Pensacola to the Junction, carrying the iron up to a safe point.[218]

4. Confederates Hold Pensacola Bay with Reduced Forces

The Rebel evacuation of Pensacola continued to be hampered by damage caused to the railroads by heavy rains and local flooding. By late February, the 1st Alabama had reassembled at the Barrancas. Of the 1,000 men on the rolls, nearly two-thirds were newcomers. The regiment did not remain long. On March 5, the Alabamans broke camp and boarded trains on the first stage of their journey to Island No. 10. General Jones, on the same day, asked and received permission to retain at least one regiment (the 27th Mississippi) at Pensacola a few days beyond the deadline fixed by General Bragg for the withdrawal of the military from the area. Jones justified this request on his belief that the Santa Rosa Island Federals were unprepared "to attack this place at present."[219]

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217. Ibid., p. 826.

218. Ibid., p. 835.

219. Ibid., pp. 838, 840; McMorries History of the 1st Regiment, p. 33.

To relieve some of the strain on the overworked railroads, General Jones had the steamer Time loaded with naval stores. If it became necessary to speed the evacuation, the shallow-draft steamer was to be run up the Escambia River, as far as possible. From there, the stores would be hauled by wagons to the nearby Alabama & Florida Railroad to be shuttled elsewhere. The gunboats, which the navy had under construction near Milton, were to be taken up the Escambia to the head of navigation.

Lt. Col. W. K. Beard, with two companies of the 1st Florida, moved out of their Deer Point camp at 8 P.M., on March 10, to implement the scorched earth policy mandated by General Bragg. They embarked on the steamer Tom Murray. They reached Miller's Mills on East Bay at 11 P.M. Not wishing to injure persons unaware of the object of his mission, Colonel Beard waited until morning before putting his men ashore. After landing and setting fire to the mills, the Confederates reboarded Tom Murray and proceeded up Blackwater River. Occasionally, soldiers were landed to set fire to sawmills and stacks of lumber piled near the landings. The mission of destruction was continued until the head of navigation was reached at Jackson Morton's plantation. From there, Beard's task force returned to Milton and burned the two gunboats, when it was discovered that they could not be towed across the bar at the mouth of the Escambia. Leaving Milton, Beard and his people traveled up the Escambia, burning all public property encountered. A large quantity of ship timber, which could not be burned, was cut adrift. On March 15, from Bluff Springs, near the Alabama line, Colonel Beard reported the successful accomplishment of his mission.[220]

By March 13, Confederate strength in and around Pensacola had been reduced to the extent where General Jones

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220. Official Records, Series I, Vol. VI, pp. 859-60, 890-94. The gunboat being built by F. G. Howard was still on the stocks, while the one being built by Ollinger & Bruce had been in the water about ten days. Also destroyed were four steamboats and a number of sailing vessels.

transferred his headquarters to Mobile. Col. Thomas H. Jones of the 27th Mississippi assumed charge of the Rebel troops, as they continued their orderly and unhurried evacuation.[221]

The failure of the Federals to seize the initiative caused Confederate hopes of retaining Pensacola to soar. General Jones informed Bragg:

> Colonel Jones wrote me on the 16th . . . that all was going on well; that the new troops, though unarmed, were full of energy and zeal, and he adds, "With the army I now have, had I arms, I could defy the attempt of the enemy to dislodge me." Since he wrote, the governor of Alabama has sent him 300 arms, and I have strong hope of being able to send him a sufficient number to arm nearly all the new troops. I am more and more convinced that the enemy's force in the Gulf, and especially on Santa Rosa, has been greatly over-estimated. When I left Pensacola only 96 tents could be seen on the island. The season for operations on a large scale on the Gulf is fast passing away, and if we can hold our ground a month or two longer all may yet be well on the Gulf Coast.[222]

General Jones' decision to delay evacuation of Pensacola earned Bragg's approval. Writing Jones on March 28, Bragg, demonstrating a keen appreciation of problems confronting the Confederate military in the Lower Mississippi Valley, observed:

> Our defenses on the Mississippi are very imperfect, and require all the guns we can command. Will you please hurry forward those behind. There were in all at least twenty heavy shell guns, besides 8-inch howitzers and rifle guns. Half were ordered via Memphis and the other half to New Orleans. But seven have yet reached Memphis. Please urge them forward. You will change the destination of those to New Orleans, . . . and send them to Jackson, Miss., to be used on the river near Vicksburg.

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221. Ibid., p. 856.

222. Ibid., p. 862.

> It is perfectly useless to send guns to New Orleans. If we lose the river, New Orleans must fall; . . . no defense can save it; . . . the railroads would be cut immediately, and starvation would do its work.[223]

Responding to Bragg's letter, the Pensacola Confederates dismounted and rushed ten 10-inch and seven 8-inch columbiads, nine seacoast howitzers, four rifled guns, and two 8-inch howitzers to Jackson, Mississippi.[224] These guns were thus available, when the decision was made to defend the Mississippi River at Vicksburg.

The Santa Rosa Island Federals, on February 22, had received a new commander. Turning over his responsibilities to Brig. Gen. Lewis G. Arnold, Colonel Brown boarded a New York-bound ship.[225]

From blacks slipping across the bay in small boats, General Arnold first learned of "our very important success in Kentucky & Tennessee." He, however, discounted their stories that the Confederates were evacuating the Pensacola area. Writing the War Department, Arnold observed:

> As my position is a defensive one, on an island, I am perfectly helpless for any offensive movement requiring water transportation for 50 men without naval cooperation. I have not under my command a dispatch steamer or sail vessel, and have scarcely enough surfboats to land stores for the command.[226]

The sloop-of-war Vincennes, of the Head of Passes debacle, was the only warship off Santa Rosa Island, but she was a sailing vessel and worse than useless for operations within the bay.

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223. Ibid., p. 867.

224. Ibid., p. 869.

225. Ibid., p. 436.

226. Ibid., p. 705.

In the second week of January 1862, Secretary of the Navy Welles had made an administrative change in the Gulf. He divided the Gulf Blockading Squadron into two commands, the Eastern and Western Gulf Blockading Squadrons. The Western Gulf Blockading Squadron, assigned the task of opening the Mississippi from its mouth, was entrusted to Capt. David G. Farragut, while Flag-Officer McKean assumed responsibility for the Eastern Gulf Blockading Squadron.

February 2 found Farragut aboard his flagship Hartford heading out into the Atlantic from Hampton Roads. After 18 days at sea, Hartford arrived off Ship Island. Here, Farragut met Flag-Officer McKean, the necessary transfers were made, and the next day Farragut formally assumed command of his new station.[227]

General Arnold, desirous of taking advantage of the Confederates' discomforture, wrote Farragut on March 15. He called attention to his inability to conduct offensive operations without naval cooperation. Arnold proposed that with the aid of several gunboats a landing be effected at Town Point. He viewed Town Point as the key to Pensacola Bay. Elaborating this issue, he wrote:

> The Rebels have, and will have, entire control of the bay and inner harbor as long as they hold . . . [Town Point] and their line of forts and batteries; but if we can take this point, your gunboats can pass out of range of their heaviest guns--from Four Mile Point, on Santa Rosa Island to Milton on the mainland--which would enable you to capture or destroy all the rebel steamers and sail vessels in those waters, and more perfectly blockade the harbor of Pensacola.[228]

Farragut, preoccupied with his forthcoming attack on the forts guarding the Mississippi River approaches to New Orleans, turned down Arnold's gunboat request.[229]

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227. Alfred T. Mahan, Gulf and Inland Waters (New York, 1883), p. 52.

228. Official Records, Series I, Vol. VI, p. 711.

229. Ibid., p. 712.

General Arnold, at the end of March, sent a combat patrol eastward along Santa Rosa Island. Before daybreak, on April 1, the Federals, at a point 40 miles east of Fort Pickens, shelled and broke up a Rebel camp on the mainland. They then returned to Fort Pickens.[230]

5. Defeats at Shiloh and New Orleans Doom Pensacola

The attack on the camp goaded Governor Shorter of Alabama into writing the Confederate Secretary of War. "Pensacola is," he argued:

> next to Norfolk, the most important point on our entire seaboard to hold at this time. To the Yankee Government its importance, in view of their manifest designs, is incalcuable. They want a spacious and safe harbor far south for their vast naval armament. Here they have it. It is the only one in the Gulf to which their large ships can find access. When they get it, there is the spacious bay to ride in, the navy-yard to repair at, the fine hospital, and other appointments, which cost the Old Government millions of dollars.
>
> This great and important point can be securely held with 5,000 men, properly armed and trained, against any force the Yankee Government can detach for its capture.
>
> But we are now ill provided, and if provisions be not made, and that soon, our comparatively naked condition will be known to the invaders, and they will make a stroke at us and take us I fear, almost without show of resistance.[231]

The Secretary of War, replying, assured Governor Shorter that the government "fully appreciates the importance of Pensacola, and has been making every possible effort to arm troops for its defense."[232] But, in view of acute shortages of war material then existing in the south, the Confederate government was unable to furnish the arms and accoutrements requested by Shorter.

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230. Ibid., pp. 50001.

231. Ibid., pp. 870-71.

232. Ibid., p. 873.

While telegraph wires hummed with messages regarding the evacuation of Pensacola, grim news came from West Tennessee. At Shiloh, on April 6-7, Confederate legions had been repulsed in what, up to then, was the bloodiest battle in which American arms had participated. In the two-day holocaust, many units recently stationed in the Department of Alabama and West Florida played valiant roles. The long months of vigorous training under General Bragg enabled his "corps" to acquit itself honorably.

Before another three weeks had passed, the Confederacy suffered another body blow. Flag-Officer Farragut's fleet, having entered the Mississippi, attacked the twin masonry forts, Jackson and St. Philip, 70 miles below New Orleans. The Confederate commander at New Orleans, Maj. Gen. Mansfield Lovell, frantically telegraphed General Jones to rush him some big guns for defense of the Mississippi. To assist the New Orleans defenders and to deceive the Santa Rosa Island Federals, the Pensacola Confederates, under cover of darkness, removed a number of their columbiads, replacing them with fierce looking Quaker guns. It was too late, however. On April 24, General Lovell telegraphed, "The enemy has passed our forts. It is too late to send any guns here; they had better go to Vicksburg."[233]

Col. T. M. Jones, on learning of the loss of New Orleans, concluded that with his limited means of defense, made more critical by the dismounting and transfer of nearly all his big guns, it would be impossible to continue to hold Pensacola Bay. He determined on his own initiative to begin evacuating the remaining heavy artillery and war materiél.[234] He thus gained an edge on his superiors. Three days later, on April 27, he received a telegram from the War Department,

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233. Ibid., pp. 661, 882, 883.

234. Ibid., p. 660.

directing him "to remove at once all Government property, including guns, munitions of war, etc., not necessary for present service."[235]

On receipt of these instructions, round-the-clock fatigue details were organized to insure removal of the cannon and public property. All the powder and most of the large shot and shell were removed; the small sized shot was buried. Most of the valuable machinery, including large quantities of copper, lead, brass, and iron, even the gutters, lightning rods, window weights, bells, and pipes, were removed from the navy yard, the Barrancas, and the three masonry forts.[236]

6. Confederates Evacuate the Area

On the afternoon of May 7, 1862, the Pensacola Confederates were informed that Comdr. David D. Porter, with a number of mortar schooners and gunboats, was off Fort Morgan. Some of Porter's junior officers suspected that the Rebels were evacuating their stronghold guarding the eastern approach to Mobile Bay. To test this thesis, the steamer Clifton ran in under the guns of Fort Morgan. Ten shots were fired at the impudent vessel, before the captain could extricate her from her embarrassing situation. Porter, satisfied that the Rebels were not evacuating the forts and seeing that the sea was becoming quite rough, ordered all his vessels, except his flagship, Harriet Lane, to return to Ship Island.[237]

News of Porter's activities off Fort Morgan was a goad to the hard working Pensacola Confederates. On the 8th, the 8th Mississippi rushed to Mobile. Colonel Jones now issued eleventh hour

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235. Ibid., p. 884.

236. Ibid., p. 661.

237. Richard S. West, The Second Admiral (New York, 1937), p. 147; Official Records--Navies, Series I, Vol. 18, pp. 478-79.

instructions for the evacuation to his subordinates. During the night of May 8, all the sick and personal baggage were sent off. To deceive the Yankees, sentries were posted on the beach as usual on the evening of the 9th. Under cover of darkness, the Confederates marched from their camps, taking the road to Oakfield. One hour after departure of the main column, the sentinels were withdrawn and took the same route.[238]

Previously, Colonel Jones had assigned five companies of cavalry to implement a scorched earth policy. Grim horsesoldiers took their stations. At 11:30 P.M., upon a pre-arranged signal, two blue lights were shown by Cols. T. M. Jones and John R. F. Tatnall from the cupola of the Marine Hospital and answered by similar signals from the navy yard and Forts Barrancas and McRee. The troopers commenced their work.[239] Hardly had the signals been extinguished before the public buildings, tents, and seemingly everything that was combustible from the navy yard to Fort McRee were enveloped in sheets of flames. Residents of Pensacola, seven miles away, could easily read a newspaper. Jones' orders were to destroy everything that might be useful to the foe. Explosive shells, wood, and other combustibles were intermixed with large piles of coal stored in the navy yard before they were fired. This would discourage attempts to extinguish the fires.[240]

Having received orders not to destroy any private property, the Confederates' scorched earth policy in Pensacola was limited. A large turpentine factory with a quantity of resin, the quartermaster storehouse, several small craft, and three steamers used as picket boats were fired. In addition, the torch was put to two privately owned steamers, Mary and Helen. The light-draft steamboat Turel was loaded with valuable stores and machinery and proceeded up the Escambia

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238. Official Records, Series I, Vol. VI, p. 660.

239. Ibid., pp. 660-61.

240. Ibid.

River to a point beyond the Federals' reach. Casemates and galleries of Fort McRee and the storerooms of Fort Barrancas, previously filled with old lumber and shells, were fired.[241]

The Rebels, their work of destruction completed, withdrew from the area. The demolition teams rejoined their comrades at Oakfield, six miles north of Pensacola. Five companies of cavalry covered the Confederate retreat up the Alabama & Florida Railroad toward Pollard, Alabama.[242]

7. United States Forces Re-occupy the Area

Across the bay, a few minutes before midnight, General Arnold was aroused by the officer-of-the-day, who informed him "that Fort McRee, the navy-yard, Marine Hospital and Barracks, and several other buildings, and two Rebel steamboats were on fire."[243] As the fires had broken out simultaneously, Arnold assumed that the origin was arson. In a vain attempt to curb incendiarism ashore and put the Rebels to flight, the Federal gunners opened fire. Arnold called for his aide-de-camp, Lt. Richard H. Jackson. The aide was told to board the schooner Maria A. Wood, proceed to Pensacola, and demand the surrender of the city of its civil authorities. By 5:30 A.M., Maria A. Wood had arrived off the city, and a boat bearing Lieutenant Jackson was sent ashore under a flag of truce. Acting Mayor John Brosenham delivered the city into Federal hands, and Maria A. Wood returned to Fort Pickens.[244]

At 2 A.M., on May 10, 50 miles to the west, Harriet Lane's lookout reported a brilliant light illuminating the sky in the

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241. Ibid., p. 662.

242. Ibid.

243. Ibid., p. 658.

244. Ibid., pp. 658-59; Official Records--Navies, Series I, Vol. 18, p. 481.

direction of Pensacola. Commander Porter ordered Harriet Lane eastward at forced draught. She steamed into Pensacola Bay on the course Porter had plotted the previous year for Powhatan. Without communicating with Fort Pickens, Porter proceeded up the bay to Pensacola. En route, Harriet Lane encountered Maria A. Wood returning to Santa Rosa Island. A shot was fired across Maria A. Wood's stern. Porter was informed by Acting Master Anthony Chase, of the schooner, that Lieutenant Jackson had stolen the commander's thunder and had already received the city's surrender. Nevertheless, Porter, forgetting that General Arnold had no ships to transport men to the mainland, continued up the bay to Pensacola. It was mid-afternoon before Porter returned to Fort Pickens to assist the Army.[245]

Harriet Lane now became a ferry. By 3 P.M., she had landed 400 men of Companies A, F, and L, 1st Artillery; Company C, 2d Artillery; Companies C and E, 3d Infantry; two field pieces, their teams, and some baggage carts in the neighborhood of the navy yard. Once upon the mainland, Arnold's troops wasted no time hoisting "Old Glory" over the navy yard, Forts Barrancas and McRee, and Barrancas Barracks.[246]

On May 12, 1862, Arnold's command took formal possession of Pensacola. The only opposition encountered by the Federals during their march from Fort Barrancas occurred when some Rebel horsemen fired on the advance guard. The march into the city was led by Col. Billy Wilson's 6th New York, preceded by the "regimental goat neatly labeled in red paint"; a battery of mountain howitzers drawn by quartermaster mules, with a detachment of regulars, followed; and the

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245. West, Second Admiral, p. 147; Official Records--Navies, Series I, Vol. 18, p. 479.

246. Official Records, Series I, Vol. VI, p. 658; West, Second Admiral, p. 147; Gouverneur Morris, The History of a Volunteer Regiment: Being a Succinct Account of the Organization, Services and Adventures of the Sixth Regiment, New York Volunteers . . . (New York, 1891), p. 74-5; Returns for U.S. Posts, 1800-1916, NA, Microcopy M-617.

75th New York brought up the rear of the 1,000-man column. Entering Pensacola, General Arnold formed his troops in a square around the flagstaff in the plaza and raised the "stars and stripes." As the colors shot to the top of the staff, the only loyalists to make a demonstration were blacks. If there were any pro-Northern whites in the town, they suppressed their emotions. One could never tell when Federal troops might be withdrawn, and Secessionists knew how to be most unpleasant toward acknowledged Unionists in their midst.[247]

Survey parties rapidly totaled the damage caused by the Confederates' scorched earth policy. Colonel Jones' demolition teams had done an excellent job on the navy yard. Commander Porter wrote, "The yard is a ruin." Despite these evil tidings, Porter was able to report a number of facilities that could possibly be salvaged.[248] General Arnold informed the Secretary of War, "Fort Barrancas is very little injured by the fire and Barrancas Barracks not at all. Fort McRee is seriously damaged, Marine Hospital destroyed, and several storehouses in the navy-yard . . . burned."[249]

After sixteen months, the United States was again in possession of the forts and other public property seized by Southern forces on January 12, 1861. Fort Pickens had been as isolated and as vulnerable to attack and capture as Fort Sumter, but affairs in Florida

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247. West, Second Admiral, pp. 147-48; Closson to Haskin, January 1875, found in First Regiment of Artillery, p. 360; Morris, History of a Volunteer Regiment, p. 74.

248. Official Records--Navies, Series I, Vol. 18, p. 482. The stone wharf could still be used, and would hold a large amount of coal. The armory stood, as did the chimney to the smithery, the new casting shop, and new storehouse; the shears were injured near the top but capable of being repaired, as were several pile drivers. There were some chains still in the yard, eight buoys for the channel, five or six anchors, a quantity of ready-made ironwork and a number of piles of 32-pound shot. The diving bells were in good order.

249. Official Records, Series I, Vol. VI, pp. 568-69.

were conducted more judiciously by both parties. Except for a few musket shots exchanged in the second week of January, tense weeks of watchful waiting continued for nine months.

On September 14, five months after the surrender of Fort Sumter, occurred the first clash in the Pensacola area in which blood was shed. One month later, the battle of Santa Rosa Island was fought. In this engagement, many of the vices and virtues of the recently organized volunteer armies were revealed.

The bombardments of November 1861 and January 1862 underscored the superiority of Federal artillery over the Confederates. At Pensacola, this can be attributed to several factors: trained and seasoned cannoneers, and an unlimited supply of powder and projectiles.

Following defeats at Forts Henry and Donelson and the loss of Middle Tennessee, the Confederate command was compelled to re-evaluate its commitments. To bolster sagging defenses in north Mississippi and West Tennessee, key bases had to be yielded. Pensacola, having become a strategic convenience rather than a necessity, was ordered abandoned and the forces assembled for the defense of Mobile and New Orleans weakened.

Governor Shorter of Alabama, along with Rebel commanders on the spot, correctly gauged that Pensacola Bay was the best anchorage on the Gulf and urged the Confederate War Department to hold the area. A near bankrupt and predominately agrarian people, lacking many of the tools of war, were unable to defend all their key bases in face of Union power afloat. Ten days after occupation of New Orleans by General Butler's soldiers, Pensacola was abandoned by the Confederates. By mid-May 1862, the only vital area on the Gulf Frontier still held by the South was Mobile. The entrance to Mobile Bay, however, could be easily blockaded.

IX. YEARS OF ACTION BUT LITTLE STRUCTURAL CHANGE

A. The Barrancas as a Union Stronghold

1. The Garrison: May 1862-March 1863

The tide of war which had caused the Confederacy to abandon Pensacola turned in the summer of 1862. Taking the offensive along a 1,000-mile front, Southern armies rolled back the Federals. In a series of battles beginning with Antietam on September 17 and ending with Perryville on October 8, the Union stemmed the Rebel surge.

During this period, as well as in the ensuing months of 1862 and into 1863, the Pensacola area was largely ignored by the belligerents. The Barrancas was garrisoned by three companies in the weeks following its evacuation by the Rebels and occupation by the Federals. Companies G and I, 6th New York Infantry, were posted in the Redoubt and Company H, 2d U.S. Artillery, at Fort Barrancas. As senior officer, Capt. Frank H. Larned of Company H was in command of these fortifications.

After tending to their military and fatigue duties, the soldiers of the 6th New York found time to stage "private and public theatricals, such as would have pleased a . . . Bowery audience, and afford great amusement to everybody." The regiment had a surplus of talent. There were fellows who could sing, lads who could "breakdown and jig," stagehands, and a producer, Lt. Virginius Vangieson. The performances at the "Sixth Regiment Zouave Theater" before large integrated audiences were received enthusiastically.

The 75th and 91st New York Infantry, being from up-state, afforded a marked contrast to Col. William Wilson's Sixth. The latter was composed of "close-knit, active, hard city boys," while the former units were made up of "heavy, healthy, strong" country boys. At first, relations were strained and there were a number of brawls. But, after a while, passions cooled and the units developed a healthy espirit.

During the months following the occupation of the Barrancas and Pensacola, there was a succession of officers assigned to

command the Department of Florida. General Arnold, in September, was ordered to New Orleans. His replacement, Colonel Wilson, gave way, in October, to Brig. Gen. Neal Dow "of temperance legislation notoriety." Many of the soldiers, both regulars and volunteers, considered Dow a crank, "much given to issuing temperance advice."

Not long after Dow's arrival, Maj. Gen. Benjamin F. Butler, commander of the Department of the Gulf, spent several days at Pensacola. A review was held for Butler's benefit. Impressed with the "hard, sinewy look" of the 6th New York, Butler ordered the regiment transferred to Louisiana.[1]

In accordance with General Butler's orders, Companies G and I, 6th New York, evacuated the Redoubt and rejoined their regiment aboard a New Orleans-bound ship. Their place at the Redoubt was taken on November 15 by Companies C and E, 91st New York Infantry, sent down from Pensacola. Company C remained at the Redoubt for three weeks, returning to Pensacola on December 5. On the day after Christmas, Company E was also withdrawn from the Barrancas, rejoining the 91st New York on a vessel en route to New Orleans. The New Yorkers were replaced at the Redoubt by Company H, 28th Connecticut Infantry, which was headquartered at Pensacola.[2]

2. Establishment of the Barrancas Enclave

Then, in mid-January 1863, General Dow was recalled to New Orleans, leaving Col. Issac Dyer of the 15th Maine in command of Union forces in the District of West Florida. Maj. Gen. Nathaniel P. Banks, who had replaced General Butler as commander of the Department of the Gulf, in the late winter of 1863 prepared to take the offensive in Louisiana. To strengthen his field army, preparatory to advancing on

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1. Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617; Morris, History of a Volunteer Regiment, pp. 75-83.

2. Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617.

Alexandria and Port Hudson, Banks determined to reduce his commitments in and around Pensacola. The town and picket line guarding its approaches would be evacuated and the troops concentrated in the forts guarding the entrance to Pensacola Bay and at the Barrancas. By retaining possession of these three small enclaves, the Federals would retain control of egress and ingress into Pensacola Bay, denying its use to blockade runners and afford protection to the navy yard.

The previous August, Rear Admiral David G. Farragut, following the recoil of his deep-water squadron from Vicksburg, had visited the navy yard. He found that, despite the Confederates' demolitions, most of its facilities, with much hard work, could be made operable. Orders were issued to reopen and staff the yard as the repair depot for his West Gulf Blockading Squadron. Commo. William Smith was named commandant of the yard, and within a few months it was again an important base.[3]

In February 1863 Colonel Dyer had warned Commandant Smith to be on guard against an attack by 5,000 to 6,000 Confederate cavalry. For defense of the navy yard, in event the Rebels overpowered the three companies posted at Fort Barrancas and the Redoubt, Smith had 22 Marines and eight worthless landsmen. When Smith called on Admiral Farragut for reinforcements, the admiral replied that the Rebels, if they attacked in force, could overpower 150 Marines as easily as 30. The best defense, he noted, was to anchor Potomac, Anderson, and Sam Houston so they could sweep the wall with their broadsides.[4]

Evacuation of the Pensacola perimeter was commenced by Colonel Dyer's brigade on March 17. Most of the 1,000 to 1,200 civilians, who had remained in Pensacola following the Union occupation,

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3. Official Records--Navies, Vol. 19, pp. 163, 164, 193, 400.

4. Ibid., p. 609.

accompanied the troops to the Barrancas. While this operation was in progress, a fire broke out on Palafox Street, destroying several buildings and other property. This increased the discomforts and confusion of "evacuation-week." Within 48 hours, there were other and more destructive fires, undoubtedly set by arsonists, gutting another 30 to 40 houses.

To move the public property and household furnishings of civilian dependents of the military kept large fatigue parties engaged for a week. On the 22d, when Eastern Queen, the only steamer available, pulled away from one of the Pensacola wharves, she left a melancholy scene. Less than 100 persons, principally women and children, had chosen to remain. Among them was the Spanish Consul, J. Marino, whose neutral flag, a Union soldier reported, "afforded protection for frequent rebel marauding parties, who rode in and out of the city at pleasure."[5]

On arrival at the Barrancas, soldiers of the 28th Connecticut and 15th Maine camped on the grounds of the Marine Hospital among the majestic live oaks. On March 28, Colonel Dyer redeployed the units assigned to garrison the forts. Companies D and K, 15th Maine, were brought across the bay from Fort Pickens and relieved Company H, 28th Connecticut, in the Redoubt. Company H, 2d U.S. Artillery, as it had since May 1862, continued to be responsible for Fort Barrancas.

The Maine men remained at the Redoubt until June 18, 1863, when they were replaced by Companies C and I, 7th Vermont Infantry, brought over from their camp on Santa Rosa Island. The next day, the 15th Maine boarded the steamship Crescent chartered to return it to Louisiana. On Sunday, the 20th, the ship steamed out of Pensacola

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5. Henry A. Shorey, The Story of the Maine Fifteenth: Being a Brief Narrative of the More Important Events in the History of the Fifteenth Maine Regiment . . . (Bridgton, Me., 1890), pp. 27-34; Official Records, Series I, Vol. XV, pp. 698-99.

Bay, and as she passed between Forts Pickens and McRee, the garrisons and Maine men exchanged cheers and jeers.[6]

3. General Asboth Comes to the Barrancas

In the late summer of 1863, the Confederates organized, at Pollard, Alabama, on the Alabama & Florida Railroad, 50 miles north of Pensacola, a brigade of Alabamans consisting of two infantry regiments (the 57th and 61st), two cavalry regiments (the 6th and 7th), and two batteries of artillery (Tarrant's and Clanton's). This force was commanded by Brig. Gen. James H. Clanton.[7]

Early in October, General Clanton led his men southward and, on the afternoon of the 8th, the Alabamans attacked Union pickets covering the approaches to the Barrancas. After a brisk skirmish, the estimated 200 Rebels retired into the woods. Next day, they returned and engaged the pickets near the Redoubt with musketry. The Federals blazed back with small arms and a few howitzer rounds, while the crew of the mortar schooner John Griffith, anchored off the mouth of Bayou Grande, cast loose their 6-inch gun and loaded their 13-inch mortar. They then shelled the woods north of the bayou.

On the 8th, the Confederates had captured Ens. Robert M. Clark and Sylvester Comither, a cook from John Griffith, who had gone ashore to get out spars for their schooner. They were taken before General Clanton, who was heard to say that his men were after the blacks of the 14th Regiment Corps d'Afrique; "that he would not fire on the

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6. Shorey, Story of the 15th Maine, pp. 34-34; Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617. The 28th Connecticut had left the Barrancas by steamboat on May 10 for Barre's Landing, Louisiana.

7. Official Records, Series I, Vol XXVI, Pt. II, pp. 339-40.

white pickets, but that every black picket that could be seen would be shot."[8]

To add to the Federals' problems, several cases of yellow fever were reported.

General Banks, in view of the threat to the Union position at the Barrancas and the Pensacola naval base, named a senior officer, Brig. Gen. Alexander S. Asboth, to command the District of West Florida. A Hungarian and associate of Lajos Kossuth in the 1848 revolution, he had fled to America. Named a brigadier general by Maj. Gen. John C. Frémont in 1861, Asboth had led a division with credit at Pea Ridge. Asboth's appointment had also been dictated by the need to have a senior officer at the Barrancas who was familiar with diplomatic niceties. Four weeks before, a patrol sent from the Barrancas to Pensacola by Col. William C. Holbrook, who as senior officer commanded the district, had captured eight Confederates at the home of Spanish Vice-Consul Marino. The vice-consul vigorously protested this "violation of the sanctity of the Spanish flag" in strongly worded letters to Colonel Holbrook and the Spanish minister in Washington.[9]

Traveling by ship from New Orleans, Asboth reached the Barrancas in early November. Warned that General Clanton planned a converging attack on his command with one column advancing from Pollard and the other by way of Bonsecours Bay, General Asboth, on the 24th, placed the brigade on the alert. Colonel Holbrook was to divide his infantry into three detachments, to relieve each other every 24 hours. The first relief would be posted along the entrenchment line between Fort Barrancas, the Redoubt, and Bayou Grande, and along the bayou to

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8. Official Records--Navies, Series I, Vol. 20, pp. 617-19. The 14th Regiment Corps d'Afrique had been transferred from Port Hudson to the Barrancas in October 1863.

9. Official Records, Series I, Vol. XXVI, Pt. I, pp. 743-48.

picket post No. 5, "in adequate squads, in places easiest to be crossed or most exposed to an attack." The second relief was to "rest on their arms in their respective camps," prepared to march to the point of danger at the first alarm. The third relief was to consitute a reserve and camp guard.

The alarm would be the firing of "two blanks in rapid succession from any of the guns" of Fort Barrancas or the Redoubt, but only on orders of Captain Larned. At this signal, the forces resting on their arms would take post along the entrenchments and Bayou Grande, and the reserve would be formed awaiting orders.

Colonel Holbrook was to position two field pieces between the Redoubt and Bayou Grande to assist the cannon of the Redoubt in commanding the crossings of the swamp. Two more field guns were to be unlimbered at picket post No. 5 to sweep Bayou Grande at its narrowest point, not commanded by the gunboats moored off the mouth of the Bayou. These four cannon would be manned by men detailed as artillerists from the 7th Vermont and 14th Regiment Corps d'Afrique.

Men of Company M, 14th New York Cavalry, were to be divided into three squads which were, in turn, to patrol the picket line.

A 60-man fatigue party, organized into 20-man squads, each in charge of a commissioned officer, would be turned to strengthening the "entrenched and stockaded line" between the bay shore and the Redoubt. The opening in the line near Fort Barrancas was to be "properly protected against a cavalry dash." Acting Quartermaster John Q. Dickinson was to provide the fatigue party with tools, and to reinforce it with mechanics and 25 hired laborers.

By early December, General Asboth was satisfied that Confederate troop movements on the Alabama & Florida Railroad were defensive-oriented. The alert was cancelled, and Asboth sent three companies to briefly reoccupy Pensacola. On November 27, the general traveled to Pensacola on the steamer George Peabody and reconnoitered

the town and its approaches. He found most of the houses deserted and the streets grown up in "weeds and bushes." The few residents were strongly pro-Confederate.[10]

4. Physical Condition of the Fortifications and Post During the War's Third Winter

Capt. John C. Palfrey, the senior construction engineer on the Gulf Coast, was ordered to Pensacola Bay in December 1863 by Chief Engineer Totten to inspect and report on the condition of Fort Pickens. While there, he visited the Barrancas. On doing so, he saw that the armament of the Spanish Battery, removed by the Rebels before their May 1862 evacuation, had not been replaced. He observed that the 13 masonry front-pintle platforms were in good repair, as were the magazines.

Writing General Totten, Palfrey urged that "thirteen suitable guns with their carriages" be sent to the Barrancas and emplaced in the battery. A satisfactory armament would be seven 8-inch seacoast howitzers and six 42-pounders or 13 30-pounder Parrotts mounted on siege carriages. The latter would be preferrable in event the Confederates employed their interior lines to mass an overwhelming force against the Union defenders, and compelled a hurried evacuation by sea.[11]

The post, in the winter and spring of 1864, included these structures for which the Quartermaster Department was responsible:

(a) Storehouse--This 16x20-foot, 2-room, frame structure, built by the Rebels, was at the foot of the Fort Barrancas glacis. The north room served the garrison as a commissary store, while the south room was a carpenter shop.

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10. Ibid., pp. 815, 822.

11. Palfrey to Totten, December 21, 1863, NA, RG 77, Ltrs. Recd., Chief Engineer.

(b) Bakehouse--A 22x16-foot frame building, 80 yards south of the storehouse, it had been erected by the Federals. It was currently being used as a quartermaster storehouse.

(c) Quarters for black employees--Sixty yards east of the bakehouse was a 2-room, 30x15-foot, frame structure occupied by blacks working for the post quartermaster.

(d) Quartermaster stables--This 13x50-foot structure, built by the garrison, was 90 yards southeast of the blacks' quarters. There were two 10x13-foot rooms at opposite ends of the stables for forage and harness.

(e) Laundresses' Quarters--The laundresses for Company H, 2d U.S. Artillery, were quartered in a frame house, 250 yards east of the blacks' quarters. The house was 18x50 feet, with two rooms and a central hall. Behind the house, and connected to it by an arcade, was a 16x15-foot kitchen.

(f) Brick barracks--The 195x36-foot, three-story barracks had survived the Confederate occupation and bombardments. The 15 rooms, commencing on the right, were occupied: No. 1, ground floor, by District Quartermaster Breckinridge; No. 2, second floor, by Colonel Holbrook of the 7th Vermont Infantry; No. 3, third floor, by hospital for 14th Regiment, Corps d'Afrique; No. 4, ground floor, Acting Assistant Adjutant-General's office; No. 5, second floor, hospital for regulars and volunteer cavalry; No. 6, third floor, Lieutenant E.S. Sprague, A.A.A.G.; No. 7, ground floor, operating room, 7th Vermont hospital; No. 8, second floor, hospital, 7th Vermont; No. 9, third floor, Surg. Enoch Blanchard of the 7th Vermont; No. 10, ground floor, issue room for District Commissary; No. 11, second floor, District Commissary office; No. 12, third floor, Provost Marshal's office; Nos. 13-15, on the ground, second, and third floors, commissary storerooms.

(g) Brick outbuildings belonging to barracks--No. 1, the ground floor, served as a kitchen and mess hall for hospitalized soldiers from Company H, 2d Artillery, 14th Regiment Corps d'Afrique, and U.S. cavalry; second floor as quarters for black laundresses; No. 2, ground floor, as cookhouse and messhall for sick from the 7th Vermont hospital and the second floor as quarters for black laundresses; No. 3, ground floor, as cookhouse and messrooms for provost marshal and officers of the 7th Vermont, while the second floor quartered black laundresses and servants; and No. 4 was occupied by the 7th Vermont sutler.

(h) Civilians' quarters--One hundred yards east of the barracks, a 60x20-foot, 5-room frame house occupied by three black families.

(i) Officers' quarters--One hundred and fifty yards east of the barracks was a 4-room, log house, with detached kitchen. Quartered in it were Lt. Col. David B. Peck of the 7th Vermont and the District Quartermaster Joseph C. Breckinridge.

(j) Headquarters, District of West Florida--One hundred yards south of the log quarters was a 5-room, frame house, 68x48 feet, with a detached kitchen. It was occupied by General Asboth.

(k) Quarters--Fifty feet west of the general's quarters was a 6-room, 51x30-foot, frame dwelling. Two of the rooms were occupied by Assistant Commissary of Subsistence R.G. Porter. The remaining rooms served the laundresses of Company H, 2d Artillery, as quarters. This dwelling had two outbuildings--a dining room and kitchen--both used by the laundresses.[12]

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12. Breckinridge to Quartermaster General, undated, NA, RG 92, Consolidated Correspondence File. Joseph C. Breckinridge was acting assistant quartermaster for the post in the winter of 1863-64.

Before the war was over, General Asboth had his troops erect two structures adjacent to his headquarters. Attached to the frame building's west elevation was a 30x40-foot frame addition, while north of the detached kitchen, a 16x30-foot building was raised. Neither of the new structures were ceiled, lathed, or plastered inside.

In the summer of 1865, the post lost one of the quarters when the frame house occupied by the commissary of subsistence was destroyed by fire.[13]

5. Defeatism and War Weariness Sap the Effectiveness of Clanton's Brigade and Gives the Federals a Respite

By early January 1864, the Federals had enlisted more than 120 whites for the cavalry regiment, General Asboth proposed to organize at the Barrancas. On the 10th, he sent 50 soldiers, all he could spare, aboard the steamer Bloomer and the schooner Buchanan. They were to proceed up Santa Rosa Sound to East Pass and into Choctawhatchee Bay, with a three-fold mission: to collect and bring back "refugees willing to enlist" in the Union army; to capture the Rebel schooner Champion said to be loaded with cotton and preparing to run the blockade; and to seize any other shipping found in the bay.[14]

The Army's amphibious expedition ended in frustration when the naval officer at East Pass refused to permit Bloomer to cooperate. The Navy, not wishing to share the prize money, then captured Champion, while the Army returned to the Barrancas.[15]

Asboth at this time called on General Banks to send from New Orleans 200 cavalry horses and equipments to mount his Florida

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13. Seymour to Adjutant General, August 3, 1867, NA, RG 92, Consolidated Correspondence File.

14. Official Records, Series I, Vol. XXXV, Pt. I, pp. 453-54.

15. Ibid., p. 274.

recruits and ready them for service in the field. The department quartermaster could spare only 40 horses, and, even if more could be sent, there was no forage. Until such time as sufficient mounts could be provided, Asboth was to continue to organize, drill, and discipline his recruits.[16]

The post commissary being short of beef, General Asboth, on January 23, sent Colonel Holbrook with 20 men of Company M, 14th New York Cavalry, across Bayou Grande to round up cattle. About four miles north of the bayou, the bluecoats encountered a mounted Confederate patrol. Colonel Holbrook shouted, "Charge!" and ten Rebels, with their horses and arms, were captured in a spirited chase. The Federals lost one mount.[17]

The easy success can be attributed to the disaffection which had all but destroyed morale in General Clanton's brigade. Learning that a large number of men in the 57th and 61st Alabama planned to lay down their arms and return to their homes, Maj. Gen. Dabney H. Maury, the Confederate commander of the Department of the Gulf, intervened. On December 28, the 61st Alabama was ordered from Pollard to Montgomery. His action came too late. On January 5, 1864, 60 men of the 6th Alabama Cavalry, posted at Fifteen-Mile Station, mutinied and refused to go on outpost duty. They were surrounded and disarmed. Along with ten ringleaders from the 61st Alabama, they were sent to Mobile under guard and in irons, with the recommendation that they "ought to be shot."[18]

On learning of the extent of defeatism in Clanton's brigade, Southern authorities determined to transfer the units to distant

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16. Ibid., pp. 454, 459-60.

17. Ibid., p. 274.

18. Official Records, Series I, Vol. XXVI, Pt. I, pp. 545-57.

parts of the Confederacy. This was rapidly accomplished. By February 1, the only unit of Clanton's brigade remaining in the area was the 7th Alabama Cavalry.

The need to rush troops to Meridian, Mississippi, in early February, to oppose the advance eastward from Vicksburg of Maj. Gen. William T. Sherman's columns, prevented General Maury from immediately replacing Clanton's people. By mid-February, the crisis in Mississippi had passed, and two brigades--William A. Quarles' Tennessee and Claudius W. Sears' Mississippi--were sent to Pollard.

6. Confederate Build-up Alarms the Federals

Whereupon, the Confederates manning the picket lines between the Escambia and Blackwater became increasingly aggressive. Fifty-man patrols visited Pensacola every other day. This made it increasingly difficult for deserters and refugees to reach the Barrancas.

To add to General Asboth's problems, the Navy recalled the gunboat that had been anchored to command the mouth of Bayou Grande with its cannon. After vainly protesting, Asboth redeployed his brigade to prevent a Rebel force from crossing the bayou at the ford near its mouth and outflanking the Barrancas line.[19]

On the evening of February 19, fires broke out in Pensacola and raged throughout the night. Next morning, General Asboth visited the town, accompanied by two companies of infantry and a detachment of cavalry, and the flames were brought under control and extinguished. Although Vice-Consul Marino and Acting Master Henry C. Wade of the U.S. Navy believed the conflagration had started accidentally, Asboth disagreed. He pointed out that: Rebel cavalry had been in the town that day; the fires had broken out at several places

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19. Official Records, Series I, Vol. XXXV, Pt. I, pp. 479-80.

simultaneously; of the 32 buildings destroyed, all belonged to people living within the Union lines; the two usable wharves had caught fire near their heads, several hundred feet from shore, while the two deteriorated and worthless wharves had escaped the fires; and turpentine was found poured over the lower wharf, next to where heavy timbers were still burning.[20]

Premature news that the mighty Rebel ironclad Tennessee, by use of camels, had succeeded in passing Dog River Bar and gaining Mobile Bay provided a new dimension to General Asboth's problems. Fears were voiced by Admiral Farragut that Tennessee and the other vessels of the Confederate Mobile squadron would debouch from the bay, pass his blockading ships, and make for Pensacola Bay. On being alerted to this possibility, General Asboth, on March 2, issued orders for the officers in charge of Forts Barrancas and Pickens to stop any vessels from crossing the bar until their identity could be established.[21]

Meanwhile, the number of recruits at the Barrancas had reached 300. No horses, arms, or accoutrements, however, had been received for these people. Nor had Asboth received funds to pay the first installment of the men's enlistment bounty. Becoming frustrated, Asboth called this situation to General Banks' attention.[22]

On April 2, General Asboth was notified that several Rebel horsemen had approached the picket line west of Fort Barrancas. He alerted Capt. Adolph Schmidt to take 30 men of his Company M, 14th New York Cavalry, and investigate. Riding out the Pensacola road, the New Yorkers, after passing the lighthouse, spotted horse tracks in the sand. Following them around the head of Bayou Grande, the bluecoats soon overtook the Rebels' rear guard.

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20. Ibid., p. 490.

21. Official Records, Series I, Vol. XXXV, Pt. II, pp. 4, 6.

22. Ibid., p. 4.

Alerted to the New Yorkers' approach, the Confederates, a detachment of the 7th Alabama Cavalry, wheeled into line to cover the bridge across Cow Ford Creek. Crossing the narrow bridge by twos, the Federals charged with drawn sabers. The Southerners opened fire, killing four horses and wounding two men. Before they could reload, the bluecoats were upon them. A hand-to-hand fight ensued, the New Yorkers besting and scattering the Alabamans. In a three-mile pursuit down the Pensacola road, the Federals, at a cost of another man wounded, captured 1st Lt. M.F. McClintock and ten enlisted men of the 7th Alabama.[23]

On April 10, word reached General Asboth that the Rebels had concentrated about 10,000 men at Pollard for an attack on the Barrancas lines. They were said to have a ponton train for bridging Bayou Grande. Word of this threat to the Union enclave was relayed to Commo. William Smith at the navy yard.[24]

Within 72 hours, two black cooks, who had deserted Col. Henry Maury's 15th Confederate Cavalry, reached the Barrancas with news that their regiment had camped on the night of the 12th at Seven-Mile Station. Colonel Maury had boasted to his men that they would breakfast at the navy yard on the 14th.

Another 600 Rebel cavalry and 200 to 300 infantry were said to be at Fifteen-Mile Station.

Later in the day, a report was received that ten companies of Confederate cavalry were within three miles of the head of Bayou Grande.

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23. Official Records, Series I, Vol. XXXV, Pt. I, pp. 385-87. In the running fight, the Federals claimed that they killed or wounded another 15 Alabamans.

24. Official Records, Series I, Vol. XXXV, Pt. II, pp. 47-48.

When he forwarded this information to Commodore Smith, General Asboth expressed the wish that the Navy have "hot pills ready" for the foe.[25]

By April 16, Union scouts and spies were reporting that detachments from Colonel Maury's 15th Confederate had occupied Turner's Mill, four miles west of Pensacola, and Jackson's Bridge, over Bayou Chico Creek, within two miles of Bayou Grande. Patrols were daily reconnoitering the approaches to the Barrancas line, while 500 infantry were said to be en route to reinforce Colonel Maury. Beacuse of this threat, Commodore Smith closed the naval hospital at the yard, sending the medical personnel and patients aboard ship.

Asboth relayed this bleak information to General Banks. He pointed out that with 10,000 Confederates at Pollard, and the "distribution of troops" in an arc from the head of Choctawhatchee Bay to the camps at McDade's Pond, Seven-Mile Station, and to the mouth of the Perdido, his force was in danger of being momentarily overwhelmed. His handful of men, he warned, was "entirely inadequate to secure a long resistance to a ten-fold superior force." To meet this danger, he must be reinforced with two regiments of infantry and one of cavalry.[26]

General Banks was having worse problems. His Red River Expedition was ending in defeat and dissention. At Mansfield, on April 8, Banks' advance had been mauled. Banks lost his nerve, and his columns, harrassed by a small Confederate force, retired to Alexandria. There, on May 4, he was handed Asboth's April 16 letter. Because of his difficulties, Banks was unable to send the number of reinforcements requested. He would, however, dispatch a newly organized black regiment.

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25. Ibid., p. 53.

26. Ibid., pp. 56-57.

Asboth was urged to hold his position at the Barrancas "to the last extremity," and if compelled by superior numbers to evacuate, he was to withdraw to Santa Rosa Island and Fort Pickens. The latter was to be defended at all costs.[27]

The crisis, however, had passed. On April 10, Sears' Mississippi Brigade had left Pollard for Montgomery. This reduced the Confederate forces in and around Pollard to three infantry brigades--Brig. Gen. James Cantey's Alabama, Daniel H. Reynolds' Arkansas and North Carolina, and William A. Quarles' Tennessee. Two cavalry regiments, the 15th Confederate and 7th Alabama, had been advanced to man the picket line covering the Barrancas and the vital railroad connecting Mobile Bay with Montgomery, which passed through Pollard. In the fourth week of April, Cantey's brigade departed Pollard for Rome, Georgia. It was followed by first Reynolds' and then Quarles', as the Confederate high command stripped General Maury's Department of the Gulf of troops to reinforce Gen. Joseph E. Johnston's Army of Tennessee in northwest Georgia. On May 5, General Sherman's "Army Group" had advanced from its camps in the Chattanooga area and a titanic struggle with Johnston's army ensued.

On April 23, General Asboth learned that General Cantey, with most of his troops, was en route to northwest Georgia. Colonel Maury's 15th Confederate was still at Seven-Mile Station. During the past several days, Union pickets had fired on Rebel scouts seeking to reconnoiter the Barrancas line, and on two occasions, Navy guardboats off the mouth of Bayou Grande had shelled lurking Confederates.[28]

At this time, Asboth lost a veteran unit. On the 23d, Company H, 2d U.S. Artillery, evacuated Fort Barrancas, which had been

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27. Ibid., p. 84.

28. Ibid., p. 64.

its home for more than 23 months and boarded a New York-bound steamship. The artillerists were replaced as the Fort Barrancas garrison by Company G, 7th Vermont Infantry. Col. David B. Peck of the Vermont unit relieved Captain Larned as officer in command of the two Barrancas forts. Companies C and I, 7th Vermont, continued to be responsible for defense of the Redoubt.[29]

By May 9, Confederate forces in West Florida and around Pollard had been slashed to the 1st Alabama Infantry (who as heavy artillery had manned the big guns and mortars at the Barrancas in the first year of the war), the 15th Confederate Cavalry at Seven-Mile and Fifteen-Mile Stations, and six companies of the 7th Alabama Cavalry picketing between the Perdido and the Yellow Water Rivers.[30]

The Federals, during this period, had finally reinforced General Asboth's command. The 82d U.S. Colored Troops arrived from Port Hudson by way of New Orleans in May. They were followed in July by the 25th U.S. Colored Troops.[31]

7. Farragut's Victory at Mobile Bay Removes a Threat to the Barrancas

On May 17, after many false alarms, the Rebel ironclad Tennessee, assisted by camels, finally crossed Dog River Bar, and, on the 24th, she dropped down the bay and anchored within three-quarters of a mile of Fort Morgan. There, she rendezvoused with the other vessels of Rear Admiral Franklin Buchanan's squadron--Gaines, Selma,

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29. Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617.

30. Official Records, Series I, Vol. XXXV, Pt. II, pp. 88-89.

31. The 82d U.S. Colored Troops had been organized at Port Hudson in April from the 10th Regiment Corps d'Afrique. The 25th U.S. Colored Troops had been organized and mustered into Federal service at Philadelphia between January 3-12, 1864. In mid-March, the regiment was transported by steamboat to New Orleans.

Morgan, and Baltic. According to deserters and refugees reaching the Union lines from Mobile, Admiral Buchanan planned to employ his fleet to raise the blockade of Mobile Bay and then attack New Orleans or Pensacola Bay.[32]

To protect Pensacola Bay against the Rebel fleet, General Asboth, in early June, secured from Admiral Farragut 16 heavy guns for "temporary" use at the forts. Four 150-pounder Parrotts were to be emplaced at Fort Pickens, four 9-inch Dahlgren smoothbores at Fort Barrancas, one 100-pounder Parrott and two 11-inch Dahlgren smoothbores at the "Spanish Battery," and four 20-pounder and one 18-pounder Parrotts in the Redoubt.

After the guns had been landed but before all were mounted, Asboth received a note from Farragut, calling on him to reserve, if not already mounted, two 150-pounder Parrotts and all the 100-pounders for Maj. Gen. Edward R.S. Canby, commander of the newly constituted Military Division of West Mississippi. Whereupon, Asboth detained two 150-pounder Parrotts at the Fort Pickens wharf and prepared to dismount the 100-pounders.

Canby now changed his mind, and orders were given to mount the guns as planned.[33]

On May 25, General Asboth, accompanied by 30 men of Company M, 14th New York Cavalry, forded Bayou Grande at its mouth to reconnoiter the Pensacola road. Two miles up the road from the crossing, at Jackson's Bridge, they encountered and scattered a Rebel outpost, capturing four horses, with saddles, and several weapons. The enemy, however, escaped into the swamps.

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32. Official Records, Series I, Vol. XXXV, Pt. II, p. 102.

33. Ibid., pp. 149-50.

Asboth and his people then returned to the Barrancas line by a circuitious route that took them around the head of the bayou and west almost to the Perdido. From several civilians questioned, they learned that Colonel Maury and his 15th Confederate were at Fifteen-Mile Station (Camp Gonzales).[34]

Encouraged by the success of this forced reconnaissance into the countryside north of Bayou Grande and west of the Barrancas line, and reports that most of the Rebel troops in west Florida and south Alabama had been withdrawn to reinforce either General Johnston's Army of Tennessee locked in combat with General Sherman's "Army Group" on the approaches to Atlanta or to northeast Mississippi to defend the Mobile & Ohio Railroad, General Asboth, on July 4, proposed a daring cavalry raid to General Canby. If given a force of 2,000 well-mounted and armed men, he would land from steamers in St. Andrews Bay and advance to Columbus, Georgia, returning to the Barrancas by way of Montgomery and Pollard. The major hitch was that at the Barrancas, he only had one company of mounted troops--the 80 men of the 14th New York Cavalry. His six companies of the 1st Florida Cavalry had neither arms nor horses. These men, he informed General Canby, had "all entered my lines from rebeldom and enlisted in the U.S. Army with the fervent desire to revenge under the Union flag all the wrongs inflicted upon them and their families by the rebels."[35]

General Canby labeled Asboth's proposal interesting, but he believed Asboth had underestimated the strength of the foe and the number of Union cavalry required to accomplish such a daring raid into the heart of the Confederacy.[36]

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34. Official Records, Series I, Vol. XXXV, Pt. I, pp. 398-99.

35. Official Records, Series I, Vol. XXXV, Pt. II, pp. 165-66.

36. Ibid.

On July 21, General Asboth was given an opportunity to hit the Confederates. He left the Barrancas with 1,100 infantry, cavalry, and artillery. His mission was to establish contact with a column led by Maj. Gen. Lovell H. Rousseau, which had left Decatur, in north Alabama, to smash the Montgomery & West Point Railroad. One of the options left to Rousseau had been to make for Pensacola Bay after accomplishing his mission.

Advancing up the abandoned right-of-way of the Alabama & Florida Railroad, Asboth's people, on the 22d, routed the Rebels of the 7th Alabama Cavalry from their encampment at Fifteen-Mile Station. Here, it was learned that Rousseau, after destroying 24 miles of the Montgomery & West Point Railroad, between Chehaw and Opelika, had marched northeast to join Sherman's "Army Group" before Atlanta. On the 23d, Asboth, after advancing to within two miles of Pine Barren Bridge where his cavalry skirmished with the Confederates, prepared to return to the Barrancas. Nightfall on the 24th found the Federals encamped at Gunboat Point. The next morning, they recrossed Bayou Grande and arrived at the Barrancas, having marched 72 miles without the loss of a man.[37]

In the first week of August, the Federals moved against the forts guarding the entrance to Mobile Bay. On the 5th, Admiral Farragut took his fleet across the bar, fought his way by Fort Morgan, and defeated Admiral Buchanan's fleet. Among the Confederate ships captured was the ironclad Tennessee. The Barrancas Federals learned of this victory at noon on the 6th, when the gunboat Metacomet reached the navy yard, with the wounded and prisoners from yesterday's fight.

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37. For a detailed study of Asboth's expedition and Rousseau's raid see: Bearss, "Asboth's Expedition up the Alabama and Florida Railroad," Florida Historical Quarterly, Vol. XXXIX, October 1960, No. 2; and Bearss, "Rousseau's Raid on the Montgomery and West Point Railroad," The Alabama Historical Quarterly, Vol. 25, Spring & Summer 1963, Nos. 1 & 2.

On the same day, the steamer Merrimac arrived from New Orleans with a welcomed reinforcement, the 1st Battalion, 2d Maine Cavalry. The transport with the 2d Battalion had been delayed, having run aground at Southwest Pass as she was clearing the Mississippi River.[38]

While the Federals celebrated Farragut's victory and the end of their anxiety centered on an attack by Tennessee and her consorts, Confederate cavalry, on the evening of the 7th, was seen at the Gonzales house at the mouth of Bayou Grande. They were shelled by Union artillery from the Barrancas as well as by the gunboats. Before retiring, the Southerners burned the buildings, although Gonzales was in the Rebel army.[39]

The steamer Mississippi showed up with the missing Maine battalion on the 8th. Disembarking at the navy yard, the troopers and their mounts rejoined the 1st Battalion. Relaying this news to General Canby's New Orleans headquarters, General Asboth announced that he would cross the Perdido on the 9th with 1,000 men (cavalry, infantry, and two cannon) and cut communications between Fort Morgan and Mobile.[40]

His plans, however, were frustrated, when he was unable to secure a tug to handle the scows and barges needed to shuttle his men across the Perdido. On the 12th, he received a note from a Mr. Clapp that his tug had been repaired and would be ready to start for the Perdido in the morning. If true, Asboth would cross his column on the evening of the 13th, and move along the beach toward Bonsecours Bay

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38. Official Records, Series I, Vol. XXXV, Pt. II, pp. 323-24.

39. Official Records, Series I, Vol. XXXV, Pt. I, pp. 424-25.

40. Official Records, Series I, Vol. XXXV, Pt. II, p. 228.

the following day, breaking up Rebel camps in the area below Fish River.[41]

As rescheduled, Asboth left the Barrancas shortly after daybreak on the 13th with 1,400 men. A 12-mile march through a marshy countryside, much of it inundated by recent rains, brought the Federals to an abandoned Confederate camp on the narrow neck between the Perdido and the Gulf. Here, they spent the night. At daybreak on the 14th, Asboth's pickets brought in three deserters. They told Asboth that the Rebel cavalry had abandoned Camps Withers and Powell, as well as the Bonsecours saltworks, and were concentrating at Pine Barren Bridge, east of the Perdido. They also stated that 5,000 Federal troops had landed on Mobile Point and were investing Fort Morgan.

In view of this information and learning that Clapp's tug had not kept its rendezvous, General Asboth determined not to cross the Perdido. Countermarching his column, he returned to the Barrancas, arriving at 4 P.M.

On the 15th, Asboth found that his decision to return had been correct. Word of his march to the Perdido, with most of his command, had reached the Confederates, and they planned to take advantage of his absence to attempt a dash on the Barrancas line. About the hour that his column was reentering their camps, the Rebels were moving into position near the head of Bayou Grande. On being advised of Asboth's return, Colonel Maury called off his attack and returned to his camp at Pine Barren Bridge.[42]

On August 20, six days after his return from the Perdido, General Asboth wrote General Canby's headquarters that deserters and

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41. Ibid., pp. 232-33.

42. Official Records, Series I, Vol. XXXV, Pt. I, pp. 426-27.

refugees were still arriving at the Barrancas. These people corroborated rumors that the Rebels had evacuated their camps between Fort Morgan and Bonsecours Bay, which Brig. Gen. Richard L. Page had boasted he would defend until the last man. The cavalry from these camps had been ordered to Perdido Mill and Pine Barren Bridge.[43]

Despite Page's brave words, he surrendered Fort Morgan to the Federals on August 23.

Meanwhile, on August 9, Asboth lost his most experienced unit, the 7th Vermont Infantry. A three-year regiment, the Vermonters' time in service was about to expire. Companies C, G, and I were relieved of duty in the Barrancas fortifications and sent aboard the steamship Hudson. The ship was to take the regiment to New York City from where the men were to proceed to their homes. Their replacements in the fortifications were Companies A, D, F, and G, 25th U.S. Colored Troops, commanded by Lt. Col. F.L. Hitchcock.[44]

8. Barrancas Federals Seize the Initiative

To capitalize on the dismay caused by the loss of the forts guarding the entrance to Mobile Bay and the evacuation of Atlanta, General Asboth left the Barrancas on September 18 with a mounted column to carry the war into Washington and Jackson Counties and to release Union prisoners said to be confined at Marianna.[45]

During this 16-day raid, in which Union horsemen rode more than 400 miles, there were fights with the Rebels at Euchee Anna Courthouse on the 23d and at Marianna on the 27th. General Asboth, in

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43. Official Records, Series I, Vol. XXXV, Pt. II, p. 253.

44. Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617.

45. Official Records, Series I, Vol. XXXV, Pt. II, pp. 283, 285-86; Official Records, Series I, Vol. XXXV, Pt. I, pp. 443-45.

the latter clash, was seriously wounded. With Asboth incapacitated, General Canby named Bvt. Brig. Gen. Joseph Bailey, a distinguished engineer and one of the few Union heros of the Red River Expedition, to be temporary commander of the District of West Florida.[46]

The change in commanders brought no shift in policy. In mid-October, General Bailey sent a detachment of the 19th Iowa Infantry and the 1st Florida Cavalry (Union) aboard the steamer Planter and into Blackwater Bay. Then, in the fourth week of the month, 700 men of the 2d Maine Cavalry, 1st Florida Cavalry (dismounted), 19th Iowa, and 25th, 82d, and 86th U.S. Colored Troops, marched from the Barrancas to Milton, drove the Confederates from the town, and seized a large supply of lumber.[47]

On November 11, the force garrisoning the Barrancas fortifications was increased from four to five companies when Company H, 25th U.S. Colored Troops, reported to Colonel Hitchcock. Eleven weeks later, on January 26, 1865, Company G was withdrawn from the forts and sent to relieve Company I on outpost duty. Company I rejoined Companies A, C, D, and F in the masonry works.[48]

General Bailey, in late October, organized the units assigned to the District of West Florida, except the eight companies of the 25th U.S. Colored Troops, into three commands. For service in the field, there were Col. Ladislas L. Zulavsky's 1st Brigade and Col. Ephraim W. Woodman's 2d Brigade. Assigned to the former were the 82d and 86th U.S. Colored Troops and two companies of the 25th U.S. Colored Troops, while the 2d Brigade included the 2d Maine Cavalry and

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46. Official Records, Series I, Vol. XXXV, Pt. I, pp. 443-45.

47. Ibid., pp. 445-46, 447-50. The 19th Iowa Infantry had been sent to the Barrancas in mid-August from Camp Parapet, Louisiana.

48. Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617.

six companies of the 1st Florida Cavalry. Not brigaded, but also based at Camp Barrancas, were the 19th Iowa Infantry, a detachment of the 7th Vermont Infantry, and Company M, 14th New York Cavalry.

In late November, General Bailey was detached and ordered to Baton Rouge to participate in a cavalry raid directed against the Mobile & Ohio Railroad. He was replaced as district commander by Brig. Gen. Thomas J. McKean, a sextugenarian, and veteran of the Second Seminole and Mexican Wars.

Soon after General McKean reached Pensacola Bay, he received orders to send a column to capture Pollard and tear up the Alabama & Florida and Mobile & Great Northern Railroads. Federal interest in these railroads had been aroused by the advance of Confederate Gen. John B. Hood's Army of Tennessee to the gates of Nashville. While Hood's army, which had been mauled at Franklin on November 30, partially invested Nashville, Union forces headed by Maj. Gen. George H. Thomas massed for a counterblow.

To hamstring Rebel efforts to reinforce Hood's army from Mobile, General McKean placed Col. George D. Robinson in command of a flying column consisting of the 82d, 86th, and 97th U.S. Colored Troops, and the 2d Maine Cavalry.[49]

Leaving the Barrancas on December 13, the Federals reached Pollard on the 16th. After establishing and manning a line of outposts, the bluecoats burned the depot and other public buildings, and a large amount of public property, including forage, camp and garrison equipage, etc. Several miles of track were overturned. Rails were wrenched loose from the ties, heated, and twisted. Several railroad bridges, including the one over the Little Escambia, were burned.

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49. The 97th U.S. Colored Troops had been ordered from Mobile Point to the Barrancas in November.

On their return march, the Federals were pursued and overtaken by a Confederate force led by hard-driving Brig. Gen. St. John R. Liddell. There was a running fight from the Little Escambia to Pine Barren Creek, during which the Federals lost 17 killed and 64 wounded. General Liddell then called off the chase, and the bluecoats, having accomplished their mission, returned to the Barrancas on the 19th.

Meanwhile, General Thomas had taken the offensive, and, in the two-day battle of Nashville, had routed Hood's army. The Confederates, hounded by Union cavalry, abandoned their invasion of Middle Tennessee and retreated into northeast Mississippi.[50]

One week later, on Christmas Eve, a patrol from the 2d Maine Cavalry captured eight Confederates and a number of horses near Milton.[51]

9. Strengthening the Barrancas Line

In the autumn of 1864, preparatory to concentrating his forces for an attack on Mobile, General Canby determined to strengthen the Union positions guarding Pensacola Bay. As this would involve the Third System fortifications, Capt. Miles D. McAlister, Canby's chief engineer, delegated the responsibility to Captain Palfrey.

The steamboat which brought Captain Palfrey from New Orleans to the Barrancas was on a tight schedule, so he could devote only one-half day to reconnoitering the ground and determining the works' trace. He saw that in 1863 a crude line of rifle-pits, between the Redoubt and Fort Barrancas, had been thrown up by the U.S. Volunteers as a defense against a dash by Rebel cavalry. Palfrey left word with

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50. Official Records, Series I, Vol. XLIV, p. 449; Official Records, Series I, Vol. XLI, Pt. IV, pp. 847, 863, 876.

51. Official Records, Series I, Vol. XLI, Pt. IV, p. 932.

Capt. E.H. Newton of the 98th U.S. Colored Troops to change the trace and returned to New Orleans.

Soon thereafter, Captain Newton was ordered to strengthen these earthworks. Large fatigue details were turned out in the winter of 1864-65. Captain Newton, however, failed to change the trace. When Captain Palfrey returned to Pensacola in July 1865, the war had ended. He found that Captain Newton had completed a strong line of earthworks from Fort Barrancas to Bayou Grande. A redan, embrasured for eight field guns with a service magazine, anchored the right flank of the line on the bayou. Fronting the rifle-pits and the redan, north and south of the Redoubt, was a ditch. The exterior slope of the parapet north of Fort Barrancas to within several hundred yards of the Redoubt had been revetted with logs. Work had been commenced on a line of rifle-pits to close the gap between the Spanish Battery and the beach. This section of the line was embrasured for four field pieces. In the weeks since work had been suspended, the sod revetment of these embrasures had eroded and was sloughing.[52]

Palfrey (now a brevet lieutenant colonel) saw that these earthworks added to the strength of the masonry forts and ordered them surveyed. After this was done and he had studied the maps and drawings, Palfrey observed that there was commanding ground north of Bayou Grande, from which enemy artillery could take the right flank of the recently completed defense line in reverse. To cope with this, Palfrey directed Captain Newton to have three traverses thrown up. But, with the troops being rapidly mustered out and no immediate threat to the Nation's security, the local commander was unwilling to detail any fatigue parties for work on temporary fortifications.[53]

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52. Palfrey to Delafield, September 12, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer; "Plan and Sections of Earthwork in the Neighborhood of Fort Barrancas, Florida, built by Captain Newton," NA, RG 77, Dr. 79, Sheet 63.

53. Palfrey to Delafield, September 12, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

In February 1865, to strengthen the Barrancas line, fourteen 8-inch siege howitzers, two 30-pounder Parrotts, and six 20-pounder Parrotts were transferred from Santa Rosa Island to the mainland.

On checking the magazines, Colonel Palfrey found that those at Fort Barrancas had a maximum capacity of 600 barrels of powder; the "ordinary capacity" was 352 barrels, while there were currently stored within 162 barrels, each filled with 100 pounds of black powder.

The Redoubt magazines had a maximum capacity of 288 barrels, an "ordinary capacity" of 168 barrels, while there were only 23 barrels on hand.[54]

10. General Asboth Resumes Command of the District

Information reaching the Barrancas in mid-January 1865 indicated that the Confederates, as they had nine months before, had concentrated about 9,000 men in and around Pollard, probably divided between there, Bluff Springs, Escambia Bridge, and Canoe Station. They were said to have repaired the damage done to the railroad and through trains were again running between Tensas Station and Montgomery. Fortifications were being thrown up to guard the approaches to Tensas Station and Blakely. Rebel camp rumors warned of an advance northward from Pensacola Bay by a strong Union column.

When he relayed this news to General Canby at New Orleans, General McKean announced that he was planning to send an expedition into the country beyond Choctawhatchee Bay to secure 500 to 700 horses to remount his cavalry.[55]

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54. Palfrey to Delafield, June 16, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

55. Official Records, Series I, Vol. LXI, Pt. I, pp. 576-77.

To counter this Rebel build-up, General Canby determined to redeploy his troops holding the enclaves at Pascagoula, Mississippi, the Barrancas, Mobile Point, and Dauphin Island. Maj. Gen. Gordon Granger, commanding the District of West Florida and South Alabama, moved to implement this policy. Preparations were made to evacuate Pascagoula and to concentrate the division led by Brig. Gen. Christopher C. Andrews at Pensacola Bay. Garrisons for the Mobile Bay and Pensacola forts were designated, and General McKean directed to complete and strengthen the Barrancas line. Fort Barrancas was to be held by two companies of the 6th Michigan Heavy Artillery; the Redoubt by one company from the same regiment; Fort Pickens by three companies, 25th U.S. Colored Troops; and the Barrancas line by seven companies, 25th U.S. Colored Troops, and the dismounted men of the 2d Maine and 1st Florida Cavalry. Granger, personally, did not agree with this policy because it gave the Confederates time to reorganize and recoup. A concentration at Pensacola would only "delay and embarrass us when our preparations for moving are completed."[56]

Meanwhile, the units at the Barrancas (the 25th, 82d, 87th, and 97th U.S. Colored Troops, and the 2d Maine and 1st Florida Cavalry) had been reorganized into the 3d Brigade of Granger's division.[57]

By this time, General McKean's scouts were reporting that the Confederates had 10,000 men, including 2,500 cavalry, camped along the railroad between Pollard and Tensas Station.[58] This was an increase of 1,000 in a week. Then, on February 1, reports reached General McKean that the foe had further reinforced his force at Pollard, and it

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56. Ibid., pp. 580-81, 594.

57. Ibid., p. 578. On December 6, the 19th Iowa was sent to Dauphin Island, while in February, Company M, 14th New York Cavalry, was ordered to rejoin the regiment in Louisiana.

58. Ibid., p. 583.

now numbered 15,000.[59] During the same period, the Union force at the Barrancas had been augmented by the arrival of General Andrews and his 3d Brigade from New Orleans.[60]

General Asboth, having recovered from his wounds and reporting for duty, was directed to proceed to the Barrancas and resume command of the District of West Florida.[61]

Before leaving New Orleans for Florida, Asboth, in the interest of efficiency, recommended that: (a) the 82d and 86th U.S. Colored Troops be consolidated under Colonel Zulavsky of the 82; (b) the six companies of the 1st Florida Cavalry be consolidated with the four companies of the 2d Florida Cavalry posted in the District of Key West; (c) if Pensacola were to be reoccupied that Capt. E.H. Newton and an assistant be placed in charge of laying out fortifications for its defense and that two of the four wharves be rebuilt; (d) that Pensacola and the Barrancas be connected by telegraph; (e) his command be provided with two small steamers adapted to navigating Santa Rosa Sound and the rivers discharging into Pensacola Bay; (f) a scheduled steamboat service be established between New Orleans and Pensacola, with stops at Fort Pike, Ship Island, and Mobile Bay; (g) orders be given to the quartermaster for shipment of 100 beef cattle to the Barrancas for immediate issue, until more cattle could be requisitioned during raids into the hinterland; and (h) he be given instructions governing relations with the residents of Warrington and Woolsey and the refugees housed on the naval reserve.[62]

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59. Ibid., p. 627.

60. Ibid. The 24th Indiana, 34th Iowa, and 114th Ohio had landed on January 27 and the 83d Ohio on February 1. They were joined by the 97th Illinois and 69th Indiana on the 3d.

61. Ibid., p. 563.

62. Ibid., pp. 686-87.

Department headquarters approved consolidation of the 82d and 86th U.S. Colored Troops, subject to General Granger's approval. The consolidation of the 1st and 2d Florida Cavalry would have to be deferred for the time being as impracticable because of geography. Troop movements now underway made it impossible to authorize the fortification of Pensacola, stringing the telegraph line, or reconstructing the wharves. These would be dependent on the possible reoccupation of Pensacola. With all shipping committed, this was not the time to establish a line of steamers between Pensacola Bay and New Orleans. Asboth's call for 100 cattle was referred to the chief commissary. All civilians in the district were declared subject to the jurisdiction of the military.[63]

General Asboth reached the Barrancas on February 15 and formally resumed command of the district from General McKean.[64]

11. The Barrancas Serves as a Staging Area for Steele's Column

There were busy days ahead as General Canby marshaled troops and supplies for his campaign aimed at the capture of Mobile and the destruction of General Maury's army. When they took up the advance, Union columns would be operating out of two staging areas--one at the Barrancas and the other at Mobile Point. Maj. Gen. Frederick Steele, a West Point classmate of U.S. Grant and veteran of the Vicksburg and Arkansas Campaigns, was ordered to Pensacola Bay in late February to lead the troops that were to converge on Mobile from that area.

Steele landed at the Barrancas in a fog on the last day of the month. While working parties unloaded a ponton train, Steele met

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63. Ibid., pp. 707-08.

64. Ibid., p. 724.

with Generals Asboth and Andrews at the former's headquarters. Although Asboth was desirous of taking the field, Steele saw that he weighed only 140 pounds and was very frail. He needed to be assisted onto his horse. Once mounted, however, Asboth experienced no "inconvenience in riding at a furious rate for several hours."[65]

When the columns moved out, Lt. Col. Andrew B. Spurling, of the 2d Maine Cavalry who was also familiar with the region, would be Steele's choice to lead his mounted arm.

On March 10, General Granger directed General Andrews to occupy Pensacola with two of his brigades. Upon doing so, he was to have his men repair the central wharf. This would be needed for landing Brig. Gen. Thomas J. Lucas' Cavalry Brigade upon its arrival from New Orleans, as well as locomotives, rails, rolling stock, and workmen being sent to Pensacola Bay to reopen the Alabama & Florida Railroad north to Pollard.

As of March 2, all ingress and egress through the Barrancas lines ceased, except for military purposes. All sailboats, fishing smacks, etc., were closely watched, and not allowed to ascend the bay beyond Pensacola.[66]

Asboth was distressed, on the 3d, when Brig. Gen. John P. Hawkins of the First Division, U.S. Colored Troops, informed him that his command included the 25th and 86th U.S. Colored Troops. Hawkins wished them to be relieved from duty at the Barrancas so they could report to him and readied for the field.[67]

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65. Ibid., p. 790.

66. Ibid., pp. 819-20, 886.

67. Ibid., p. 838.

Replying, Asboth informed Generals Steele and Hawkins that the 25th U.S. Colored Troops garrisoned Forts Barrancas and Pickens, the Redoubt, and guarded Gunboat Point, at the mouth of Bayou Grande. The 82d and 86th U.S. Colored Troops were completing the fortified line between the beach and Bayou Grande, and it was important that this be done before the XIII Corps took the field. Moreover, the 6th Michigan Heavy Artillery had not arrived as scheduled, and there were no redlegs to man the 17 cannon emplaced along the Barrancas line and in the works at Gunboat Point.[68]

General Steele, on reviewing the situation, agreed to let Hawkins have one of the three regiments now, and the other two as soon as the 6th Michigan Heavy Artillery arrived.[69]

The commander of Hawkins' 1st Brigade, Brig. Gen. William A. Pile, to whose unit the three regiments had been assigned, was depressed by this situation. On the 5th, he complained that the regiments were still pulling garrison duty, General Asboth having refused to release them. No efforts had been made to prepare them for the hard marches ahead, while their small-arms were reportedly "defective and a large part of their equipment condemned as worthless." It would, he believed, be impossible to ready these regiments in the 10 to 15 days remaining. Although anxious to campaign against the Rebels, he had no desire to lead "a brigade of four small regiments with no opportunity to properly organize and equip them."[70]

Pile's complaint resulted in orders for the 82d and 86th U.S. Colored Troops to immediately report to him. They were to be brigaded with the 73d U.S. Colored Troops. The 25th U.S. Colored--the

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68. Ibid., pp. 838-39.

69. Ibid., p. 838.

70. Ibid., p. 847.

6th Michigan Heavy Artillery being retained with the army at Mobile Point and Dauphin Island--would remain with General Asboth and continue to garrison the forts and the Barrancas line.

On March 16, General Canby notified General Steele that a 9,000-man column would advance out of the Mobile Point staging area the next morning, turning the Confederate positions at Bonsecours Bay and Fish River. Steele's column was to begin its march on Sunday, the 19th, preceded by Lucas' cavalry. He was to advance north to Pollard, holding his position there until Spurling's cavalry had destroyed the Alabama & Florida Railroad as far as Greenville. Steele would then join Canby's army which was pushing up the east side of Mobile Bay.

Steele was to take with him as little transportation as possible. The soldiers were to carry five days' rations in their haversacks, and another five days' in the wagons. Until units of the 6th Michigan Heavy Artillery arrived, it would be necessary to leave one or two of General Hawkins' regiments to garrison the Barrancas.[71]

On March 18, in accordance with these orders, General Asboth turned over to General Steele the 82d and 86th U.S. Colored Troops, and the mounted battalions of the 2d Maine and 1st Florida Cavalry. This reduced his command to the 25th U.S. Colored Troops garrisoning the forts, and the dismounted men from the two cavalry regiments. This was, he protested to General Canby, too small a force "to provide properly for my long-extended picket line and the daily details for fatigue duty with the quartermaster's and commissary departments." Moreover, the earthworks from the beach through Fort Barrancas to the Redoubt were unfinished, while the completed defenses from the Redoubt to Bayou Grande were unguarded and the cannon not manned.[72]

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71. Official Records, Series I, Vol. XLIX, Pt. II, pp. 7-8.

72. Ibid., pp. 27-28.

12. The Barrancas and the Mobile Campaign

General Asboth's protest was ignored, and, on the 19th, Hawkins' division broke camp at daybreak and took up the march for Pensacola, via the beach road. Fording Bayou Grande near Gunboat Point, the men took off their "shoes and whatever other clothing may be necessary to keep them dry."[73] At Pensacola, Hawkins' blacks rendezvoused with Andrews' division and Lucas' cavalry.

On the 20th, as scheduled, Steele's column marched from Pensacola, taking the Pollard road. A driving rain set in, drenching the troops and animals and turning the roads into ribbons of mud. To keep the artillery and wagons rolling, it was necessary to resort to corduroying. The area's streams surged over their banks. Reaching Pine Barren Creek on the 23d, the Federals found the bridge gone. It took the pioneers all the next day to replace it with a 300-foot structure, supported on hand-driven piles. On the 25th, General Lucas' cavalry brigade, screening Steele's advance, engaged and drove Confederate skirmishes from behind a line of log breastworks on a narrow ridge commanding Cotton Creek, over which the road passed.

Steele told Lucas to push rapidly ahead and get possession of the bridge over the Big Escambia. Approaching Mitchells Creek, the bluecoats saw that the Rebels had partially destroyed the bridge. Forging ahead, the Federals drove the Southerners from a second roadblock.

At Bluff Springs, commanding the crossing of Canoe Creek, the Confederates of the 6th and 8th Alabama Cavalry, under

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73. Ibid., p. 27. On the 20th, Companies G, H, and K, 25th U.S. Colored Troops, posted along the Barrancas line, reported to Colonel Hitchcock. Eight companies of the regiment (A, C, D, F, G, H, I, and K) were now at the Barrancas and two companies (B and E) at Fort Pickens.

General Clanton, had dismounted and deployed into a skirmish line. Lucas' men surged across the creek, routing the Alabamans. One hundred and twenty-nine Confederates, including a seriously wounded General Clanton, were captured in this fight. Lucas' cavalrymen pursued the Rebels up the road toward the Escambia. Not realizing that the bridge had been swept away by the flood, several of the Alabamans jumped their horses into the surging river. From a field work on the east bank, Confederate cannoneers shelled the Union horsesoldiers. General Lucas brought up the 2d Battery, Massachusetts Light Artillery. Unlimbering their Napoleons, the redlegs quickly dislodged the foe. A detachment from the 31st Massachusetts came up on the double and, crossing the Escambia, seized a bridgehead.[74]

The next day, the 26th, General Andrews' division crossed the Escambia and occupied Pollard. There, they were joined that evening by Colonel Spurling with more than 800 cavalry. Spurling and his men had landed at Creigler's Mills, on the east side of the Blackwater, from the steamer Matamoras at 6:30 A.M., March 21. Marching by way of Andalusia, Alabama, Spurling's command struck the Alabama & Florida Railroad, five miles above Evergreen, a little before midnight on the 23d. The telegraph was cut and the track torn up. At 4:30 A.M., on the 24th, a train en route to Montgomery from Pollard was thrown from the rails. Two hundred and forty minutes later, a Pollard-bound train was captured and destroyed. Pushing on by way of Evergreen, the Federals reached Sparta at 4 P.M., where they ripped up track and burned six box cars and the depot. From Sparta, the column marched on the 25th to Brooklyn and on the following day to Pollard.[75]

On the 23d, while his men were bridging Pine Barren Creek, General Steele sent a message back to the Barrancas for General

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74. Official Records, Series I, Vol. XLIX, Pt. II, pp. 279-80, 302-03. Union losses in the day's fighting were 3 killed and 3 wounded.

75. Ibid., pp. 281, 309-10.

Asboth to load a small steamer with five days' rations and send it up the Escambia.[76] The messenger, Maj. C.S. McEntree, reached the Barrancas on the morning of the 24th. Both Planter and Matamoras were absent at the time, and it was the evening of the 24th before the latter returned.

A round-the-clock working party was turned out by General Asboth, and, by daybreak on the 25th, Matamoras pulled away from the Barrancas wharf with five days' rations for Steele's command. Aboard, in addition to the crew, were 100 dismounted cavalrymen of the 2d Maine and a pilot familiar with the Escambia. Unfortunately for the Federals, Matamoras was unable to pass the bar at the mouth of the Escambia and was compelled to return to the navy yard.[77] High waters following the recent rain storms had caused the bar to shift and build-up.

The countryside about Pollard was destitute of supplies, so General Steele, on the 26th, was compelled to place his command on one-fourth rations. This situation continued until the 31st, when the column reached Stockton where the troops found large quantities of corn and a grist mill. Here, Steele halted for 24 hours to obtain a supply of meal.[78]

From Stockton, Steele, on April 1, pushed on and drove the Confederates into their works covering Blakely. Contact was established with the units of General Canby's army which had advanced from Mobile Point. Since leaving the Barrancas on March 20, Steele's main column had marched about 100 miles. Seventy miles of this route

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76. Official Records, Series I, Vol. XLIX, Pt. I, p. 70.

77. Official Records, Series I, Vol. XLIX, Pt. II, pp. 90, 96.

78. Official Records, Series I, Vol. XLIX, Pt. I, p. 285.

was "over swamps and quicksands, 50 of which they had corduroyed and bridged."[79]

Steele's command on the right of Canby's army was to invest the Rebel works covering Blakely, while General Granger's on the left operated against the Confederate defenses of Spanish Fort.

General Asboth, in the meantime, had renewed his efforts to supply Steele's column by way of the Escambia. At daybreak on the 29th, the general left the Barrancas aboard Matamoras with five days' rations for Steele's people. They succeeded in forcing the vessel's bow across the bar at the eastern channel, but could not get the stern across. Returning to the Barrancas, Asboth dispatched a tug at daybreak on the 30th with a barge to lighten Matamoras. Soon thereafter, he received news that Steele's column had marched from Canoe Station for Blakely on the 28th, and the relief expedition was recalled.[80]

On establishing contact with Canby's army, Steele's troops were supplied by the army quartermaster from Mobile Point.

Early in the second week of April, General Asboth established a courier line between the Barrancas and General Canby's headquarters, near Blakely. Posts were manned at Bayou Chico Creek, Seven-Mile House, Thirteen-Mile House, Perdido Mills, Greenwood, Martin Durant's, John Kee's, and Starke's Wharf.[81]

General Asboth, meanwhile, had sent a foraging party to Bagdad. It returned on the evening of the 8th with 105 cattle, 2 horses, 5 Rebel deserters, 5 black recruits, and "2 noted rebel citizens."[82]

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79. Ibid., pp. 282-83.

80. Official Records, Series I, Vol. XLIV, Pt. II, p. 168.

81. Ibid., pp. 212-13, 307.

82. Ibid., p. 307.

On the 9th, exciting news reached the Barrancas via the courier line: General Canby's troops had stormed Spanish Fort and Blakely, capturing several thousand prisoners, while in far-away Virginia, the Rebels had evacuated Richmond and Petersburg. Before another 72 hours slipped by came word that the foe had evacuated Mobile on the night of the 11th.

In the third week of April, Asboth's command was further diminished when the 61st U.S. Colored Troops were ordered to Blakely to report to General Hawkins' division, and the detachments of the 2d Illinois Cavalry, 1st Louisiana Cavalry, and 31st Massachusetts Mounted Infantry left behind by General Lucas, to Mobile. The men, their mounts, and gear were to travel by ship from Pensacola Bay to Starke's Landing.[83]

13. Collapse of the Confederacy Brings New Problems

On April 17, the guns in the harbor forts roared out a 200-gun salute in honor of the surrender, eight days before, of General Robert E. Lee's Army of Northern Virginia to forces led by Lt. Gen. U.S. Grant at Appomattox Court House.[84]

On April 18, rumors reached the Barrancas that President Jefferson Davis was headed for Saint Marks, from where he hoped to take passage on a blockade runner for the Trans-Mississippi. To prevent this, as well as to scatter the 3,000 to 4,000 Rebel troops said to be in an around Tallahassee, General Asboth urged that he be sent with 2,000 cavalry and a flying battery.[85] General Canby was unable to spare the necessary cavalry to undertake the projected raid.

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83. Ibid., pp. 365-66. The 61st U.S. Colored Troops had been sent to the Barrancas from Morganza, Louisiana, in late March.

84. Ibid., p. 368.

85. Ibid., pp. 404-05.

Both the military and civilians were stunned on the 20th by news of President Lincoln's assassination. As a mark of sorrow and respect, all public offices were closed on the 21st, the flags half-masted, and half-hour guns fired from sunrise to sunset and minute guns from noon until 1 P.M.[86]

General Clanton, on April 22, wrote General Asboth from Pollard, reporting that he had so far recovered from his wounds received in the Canoe Creek fight and that he was ready to travel to Milton. He expected to arrive there on Wednesday, the 26th. There, he would board the first boat for the Barrancas. He would be accompanied by two other wounded officers who had also been paroled by General Steele.[87]

Reports reaching the Barrancas at this time indicated that the 15th Confederate Cavalry was being reorganized at Pollard, while Capt. Joseph C. Keyser with 100 men was expected at Milton. As Clanton was known to be a gentleman, Asboth did not believe that he would permit himself to be party to a plot. Nevertheless, Asboth proceeded with caution.[88]

At daybreak on the 26th, 250 Union cavalrymen, leaving their horses behind, boarded Matamoras.[89] Casting off, the steamer pulled away from the Barrancas wharf and headed up the bay. At Milton, the Federals, on going ashore, learned that Captain Keyser and a few men had been there the previous day, bullying citizens who wished to take the oath of allegiance. General Clanton was found at Bagdad, and with his two traveling companions, evacuated to the Barrancas when Matamoras returned.[90]

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86. Ibid., p. 422.

87. Ibid., p. 451.

88. Ibid., p. 450.

89. Ibid., p. 470.

90. Ibid., p. 498.

On April 29, General Canby authorized General Asboth to accept the surrender of Rebel forces in the District of West Florida. On doing so, the officers and men were to be paroled until duly exchanged or released from the obligations of their parole by the United States government. Duplicate rolls of those surrendering would be prepared. Arms, ammunition, and accoutrements were to be turned over to officers designated by General Asboth. Paroled Confederates would be permitted to return to their homes "with the assurance that they will not be disturbed by the authorities of the United States so long as they continue to observe the conditions of their paroles." Surrendered property would not include the side-arms or private horses or baggage of officers.[91]

Then, on May 4, Lt. Gen. Richard Taylor surrendered the Confederate forces in his Department of Alabama, Mississippi, and East Louisiana to General Canby. Meanwhile, General Johnston had surrendered his forces to General Sherman at Durham Station, North Carolina.

To prevent the escape by sea of President Davis and members of his cabinet who were known to be fleeing across Georgia, Asboth was alerted to have the routes leading to the Gulf Coast heavily patroled.[92]

On May 10, reports were received that the Rebel ram Stonewall was en route to Pensacola Bay to assist the Davis party in its efforts to reach the Trans-Mississippi. To prevent this, the Forts Barrancas and Pickens garrisons were alerted to be ready to keep the ironclad from crossing the bar. Simultaneously, they were to stop and search any private vessels seeking to leave the bay.[93]

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91. Ibid., p. 522.

92. Ibid., p. 563.

93. Ibid., pp. 715-16.

Meanwhile, 250 miles to the northeast, near Irwinville, Georgia, President Davis was intercepted and captured by Union cavalry. Stonewall had sailed from New Providence in the Bahamas on the 6th for La Habana, where she dropped anchor on the 11th.

General Asboth had learned that the citizens of Santa Rosa County planned to convene at Milton, on May 5, to consider and act on the President's amnesty proclamation. To afford protection and to keep order, 200 men of the 2d Maine Cavalry boarded the steamer Matamoras at the Barrancas and landed at Milton.[94]

On May 10, to further his policy of extending protection to "loyal people" and their property, General Asboth declared Pensacola and Milton military posts. Each was to have a 60-man garrison. 1st Lt. W.L. Richmond of the 2d Maine Cavalry was named provost marshal at Pensacola and 1st Lt. L.W. Rowlay of the 1st Florida Cavalry at Milton.[95]

Taking advantage of the protection afforded by the battalion of Mainemen, 600 persons, some having traveled 100 miles, assembled at Milton to take the oath. They were destitute of provisions, and General Asboth saw that they were issued five days' rations. In addition to these people, large numbers of families were daily returning to Pensacola and Milton, "with a view to regain their former occupations."[96]

On May 15, news reached the Barrancas that Tallahassee and Saint Marks had been surrendered to Union forces six days before, along with the gunboat Spray. Relaying this information to General Canby, General Asboth reported that there were still several hundred

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94. Ibid., pp. 612-13.

95. Ibid., p. 716.

96. Ibid., p. 731.

mounted "rebel desperados" west of the Choctawhatchee who, although included in Dick Taylor's surrender, were still in arms against the United States. Their principal rendezvous were near Marianna, Florida, and Elba, Alabama. To supress these people and compel them to lay down their arms, thus relieving the inhabitants of the Florida panhandle from depredations of partisans and Union deserters, Asboth requested the return to his command of the mounted battalions of the 2d Maine and 1st Florida.[97] On May 21, orders were accordingly issued detaching the two battalions from duty with the XVI Corps in central Alabama, and ordering them to return to west Florida.

On May 19, General Canby ordered establishment of a post at Appalachicola, to be attached to General Asboth's District of West Florida. The new post was to be garrisoned by the 82d U.S. Colored Troops and the 161st New York Infantry, currently stationed in and around Mobile.[98]

The transport N.P. Banks reached Pensacola Bay on the 24th from Mobile to be followed on the 30th by George Peabody with the 82d U.S. Colored Troops. On the last day of the month, the two transports, accompanied by the supply vessels Tampico, Hussar, and Clyde, cast off from the Barrancas for Appalachicola. They were convoyed by the gunboat Itasca. General Asboth traveled with the expedition. During his absence, Colonel Woodman was in charge at the Barrancas.[99]

The run along the coast was uneventful, and the vessels dropped anchor off Appalachicola at 9 A.M., on June 1. The better part of four days was required to land the troops and their supplies. On the

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97. Ibid., pp. 797-98.

98. Ibid., p. 844.

99. Ibid., pp. 936-37.

morning of the 5th, General Asboth returned to Pensacola Bay with all the vessels except Tampico. Colonel Zulavsky, as senior officer, assumed command of the new post.[100]

On May 24, a number of west Floridians convened in Pensacola to take preliminary measures for organizing a civil government. Among the ringleaders was Joseph D. Wolfe, formerly a captain in the 25th U.S. Colored Troops, who had been discharged for the good of the service.[101]

B. Garrisoning the Barrancas During the Post-War Years

1. Troops Come and Go

With the end of the Civil War, the United States rushed to demobilize. First, however, many of the regiments and batteries from General Canby's army were rushed to Texas as a stern reminder to Napoleon III of France that now was the time to withdraw his troops from Mexico. Other units were needed to garrison military posts in the former Confederate States. This resulted in frequent changes in the units assigned to the Barrancas in the immediate post-war years.

Four companies of the 1st Indiana Heavy Artillery arrived from Mobile on June 26, 1865. Companies F and L were sent to the Barrancas to relieve the 25th U.S. Colored Troops of the responsibility of garrisoning Fort Barrancas and the Redoubt, while Companies I and M were landed on Santa Rosa Island and replaced Companies B and E, 25th U.S. Colored Troops, at Fort Pickens. As senior officer, Maj. John W. Day of the Indiana regiment replaced Colonel Hitchcock as commander of the Barrancas defenses.[102]

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100. Official Records, Series I, Vol. XLIX, Pt. I, pp. 567-68.

101. Official Records, Series I, Vol. XLIX, Pt. II, pp. 867, 889.

102. Ibid., p. 1038.

Company L, 1st Indiana Heavy Artillery, remained at Fort Barrancas until September 19 when it was relieved by Company G, 25th U.S. Colored Troops, and sent to Fort Pickens. Sixteen days later, on October 7, Company F of the Indiana regiment was replaced by Companies B and E, 25th U.S. Colored Troops. At the same time, Lt. Col. J.W.H. Reisenger of the 25th relieved Major Day as commander of the Barrancas defenses.

The three companies of the 25th remained at Fort Barrancas and the Redoubt until November 25, when they were relieved by a 54-man detachment from the 2d Maine Cavalry commanded by 1st Lt. T.A. Rrann. Colonel Reisenger and the officers and men of the 25th U.S. Colored Troops boarded a Philadelphia-bound ship, where they were mustered out on December 6.

On December 6, 1865, the Mainemen were relieved by Companies G and I, 82d U.S. Colored Troops. The former occupied Fort Barrancas and the latter the Redoubt. Six months later, with the rapid reduction of the Army to a peacetime establishment, the garrison at the Barrancas was slashed to one company. On May 17, 1866, Company G was transferred to Saint Marks, and Company I now garrisoned both the Redoubt and Fort Barrancas. The 82d U.S. Colored Troops were mustered out in early September.

The Barrancas was now garrisoned by Company E, 5th U.S. Artillery, which had arrived from Key West in April, 1866. The company was quartered at Barrancas barracks, with a detachment assigned to Fort Pickens. Following the mustering out of the blacks and their white officers, no troops were quartered in Fort Barrancas and the Redoubt. Responsibility for security of these masonry works was entrusted to Ord.-Sgt. Martin Canovan.[103]

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103. Returns from U.S. Posts, 1800-1916, NA, Microcopy M-617.

Battery E remained at Pensacola Bay for 35 months. On March 1, 1869, the steamship Rapidan docked at the Barrancas and landed the officers and men of Battery G, 3d U.S. Artillery. Until mid-February, this unit had been stationed at Fort Warren, Massachusetts. While the newcomers moved their gear into Barrancas barracks, the artillerists of Battery E went aboard Rapidan. On the 6th, she sailed for Boston Harbor where the battery was to take post at Fort Independence.[104]

2. Improvements to the Quarters and Barracks

On August 3, 1867, Maj. Truman Seymour who commanded the post urged that changes be made to provide his unit with accommodations for two more officers. Currently, he pointed out, he was occupying the commanding officer's quarters (which were old but in tolerable order); the "very old" log dwelling north of his quarters housed Capt. Henry J. Gansevoort; the old frame house southwest of the barracks was occupied by 1st Lt. John R. Brinckle and the post surgeon; and the sutler's shop was being rehabilitated as a lieutenant's quarters.

To provide housing for the second lieutenants, Major Seymour proposed to relocate the two stout buildings added to the headquarters complex by General Asboth. The one attached to the west elevation would be moved to the site of the house burned two years before and the other would be relocated midway between his quarters and Captain Gansevoort's. The interiors of these structures would be lathed and plastered.[105]

Major Seymour's proposal was approved and implemented by the enlisted men in the autumn of 1867.

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104. Ibid.

105. Seymour to Adjutant General, August 3, 1867, NA, RG 92, Consolidated Correspondence File.

During Fiscal Year 1870, at the request of the post commander, the superintending engineer employed a small force to construct a protecting wall at the west end of Barrancas barracks. Next, masons and laborers "finished-off" the building's end walls, which had never been completed.[106]

C. Peacetime Army Loses Several Promising Engineers

1. Captain Palfrey Leaves the Service

Upon surrender of the Trans-Mississippi Confederates in the fourth week of May 1865, Captain Palfrey of the Engineers was ordered to Texas with General Granger's XIII Corps. On June 30, Palfrey, who was considering leaving the Army, asked General Granger for permission to return to New Orleans so he could attend to his duties as engineer in charge of the masonry fortifications. There, he wished to remain while awaiting action of the War Department on the enclosed resignation of his appointment as lieutenant colonel of volunteers and acting inspection-general of the XIII Army Corps.[107]

General Granger vetoed Palfrey's return to New Orleans, "as the exigencies of the service are so great at present."[108] Undaunted by this rebuff, Palfrey wrote Chief Engineer Richard Delafield.[109]

He explained that, when he had accepted his appointment to headquarters, XIII Corps, he had been assured by General Canby,

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106. Reese to Humphreys, July 30, 1870, NA, RG 77, Ltrs. Sent, Chief Engineer.

107. Palfrey to Emery, June 30, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer. Maj. F.W. Emery was A.A.G., District of Texas.

108. Fifteen months before, the United States Army had lost General Totten who had died of pneumonia. Delafield, a West Point graduate of the Class of 1818 and the Corps' next senior officer, had succeeded Totten as Chief Engineer. Warner, Generals in Blue, pp. 117-18.

109. Granger to Palfrey, June 30, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

General Granger's immediate superior, his new duties would not interfere with his performing those of supervising engineer for the Gulf Frontier forts. Since then, however, the XIII Corps had been transferred from Mobile Bay to Texas, and it was no longer possible for him to wear two hats.[110] He had, therefore, resigned his staff position with the XIII Corps, but it had been rejected.

To enable General Delafield to understand his position, Palfrey explained that he had been appointed to the staff during the Mobile Campaign. Now that the fighting was over, and the principal duties of the XIII Corps would be "civil or political," he judged "the exigencies of the service rather require that I should attend to the Permanent works in my charge than that I should remain in garrison with troops in Texas."[111]

General Delafield went to bat for Captain Palfrey. On July 25, he recommended to the Adjutant General that Palfrey's resignation as lieutenant colonel be accepted, because his services were urgently needed as engineer in charge of the forts guarding the approaches to Pensacola, Mobile, and New Orleans.[112]

Palfrey, by the time his resignation as lieutenant colonel had been accepted by the War Department, had determined to leave the Army. He submitted his resignation. When several weeks passed and he heard nothing further on the subject, he telegraphed the Chief Engineer, requesting "to know when I am to expect an order to transfer public

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110. Palfrey to Emery, June 30, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

111. Palfrey to Delafield, July 1, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

112. Delafield to Palfrey, July 25, 1865, NA, RG 77, Ltrs. Sent, Chief Engineer.

property and to leave New Orleans." His resignation, he noted, "was unconditional and its delay is doing me great injury."[113]

The Department's difficulty in finding a replacement for Palfrey was caused by almost one-half of the Corps' officers being on detached duty and not subject to its orders.[114] Palfrey's telegram, however, brought results. On September 13, he was directed to turn over to Capt. John M. Wilson his duties relating to Ship Island and the New Orleans forts and to Capt. William E. Merrill responsibility for the seacoast defenses of Pensacola and Mobile Bays.[115]

Two weeks before, on August 29, Delafield had notified Captain Merrill that the resignation of Captain Palfrey had left the Corps without an engineer for the defenses of the approaches to Pensacola, Mobile, and New Orleans. Secretary of War Edwin M. Stanton had accordingly designated Merrill to be project superintendent at Pensacola and Mobile.[116]

Merrill, a native of Wisconsin, had graduated No. 1 in the Class of 1859 from the U.S. Military Academy. Commissioned a brevet second lieutenant in the Corps of Engineers, Merrill went south as assistant engineer for construction at Forts Pulaski, Jackson, and Clinch. On September 11, 1860, he was ordered to West Point as assistant professor of engineering. Ten months later, Merrill was sent into the field as assistant engineer for the Department of the Ohio. Merrill rose

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113. Palfrey to Delafield, August 26, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

114. Delafield to Palfrey, August 14, 1865, NA, RG 77, Ltrs. Sent., Chief Engineer.

115. Delafield to Palfrey, September 13, 1865, NA, RG 77, Ltrs. Sent, Chief Engineer.

116. Delafield to Merrill, August 29, 1865, NA, RG 77, Ltrs. Sent, Chief Engineer.

rapidly in rank as the war progressed, serving in both the western and eastern campaigns. By July 2, 1864, he was a major in the U.S. Veteran Engineers and assigned to the Army of the Cumberland.[117]

Captain Palfrey, on learning that Captain Merrill would be detained by his present assignment, turned the papers relating to Pensacola and Mobile Bays over to Captain Wilson and started for Massachusetts. Reaching Boston on October 21, Palfrey notified the Department that all future correspondence should be addressed to him there.[118]

2. Captain Merrill's Four and One-Half Months on the Gulf Coast

It was mid-December 1865 before Captain Merrill finished his assignment with the Railroad Board. Traveling from Nashville to New Orleans, Merrill met with Captain Wilson and reviewed the files left for him by Captain Palfrey. He was disappointed to discover no funds for any of the forts in his charge and "a number of outstanding debts." He was unable to give exact figures, he informed General Delafield, but Captain Wilson had estimated the deficiency at Fort Morgan at $15,000. Wilson knew of no debts charged to the Barrancas forts.

Merrill, before leaving for Pensacola, requested the Department to transfer to him "such sums . . . for the works under my charge as will suffice to clear them of debt and enable me to carry on such operations as the Engineer Department may direct."[119]

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117. Cullum, Biographical Register, Vol. II, p. 481.

118. Palfrey to Delafield, October 9 & 21, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

119. Merrill to Delafield, December 15, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

Merrill reached Pensacola Bay and established his headquarters at the Barrancas a few days before Christmas. On inspecting the fortifications, which were garrisoned by a battalion of the 82d U.S. Colored Troops, he saw that an angle of the Redoubt's scarp was "undermined and in danger of collapsing."[120]

There was no money to pay the workmen at Forts Pickens and Morgan, let alone funds to underwrite repairs to the Redoubt. Disgusted by this situation and foreseeing scant opportunities for rapid advancement in a peacetime Army, Captain Merrill, on December 23, had applied for a six-month leave to enable him "to perfect arrangements for leaving the service." The condition of his "private affairs" dictated such action on his part.[121] General Delafield referred Merrill's application to the Secretary of War.

When four weeks passed and he heard nothing about his application, Merrill reminded the Department that "even if I succeed in my present endeavors to leave the service, I am unwilling to leave my successor as helpless as I am."[122]

Soon afterwards, Merrill was notified by the Adjutant General that he could obtain a six-month leave on submission of his resignation. Consequently, on February 23, he wrote Chief Engineer Delafield that he would adopt this procedure and desired to be relieved of his duties on the Gulf Frontier.[123]

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120. Delafield to McAlester, May 10, 1866, NA, RG 77, Ltrs. Sent, Chief Engineer.

121. Merrill to Delafield, December 23, 1865, NA, RG 77, Ltrs. Recd., Chief Engineer.

122. Merrill to Delafield, January 27, 1866, NA, RG 77, Ltrs. Recd., Chief Engineer.

123. Merrill to Delafield, February 23, 1866, NA, RG 77, Ltrs. Recd., Chief Engineer.

This cut the red tape. On March 19, General Delafield wrote Captain Merrill that he was to turn over to Capt. Miles McAlester his Pensacola and Mobile Bays responsibilities.[124]

When no letter of resignation was received in Washington, General Delafield telegraphed Captain McAlester on March 29, advising him that he was not to relieve Captain Merrill until the Adjutant General was in possession of this document.[125] This troubled Merrill because he had pledged himself "to tender his resignation as soon as I could close my accounts with the United States." Even if he had "repented of this step," he considered himself "honor-bound to present my resignation in accordance with my pledge."

His object in adopting this course was to secure for himself "an uninterrupted six months leave" to get started in business.[126]

On April 19, 1866, Captain Merrill was notified by General Delafield that his resignation had been accepted. After being relieved by Captain McAlester, he was to come to Washington to settle his accounts that had been disallowed by the 3d Auditor.[127]

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124. Delafield to Merrill, March 19, 1866, NA, RG 77, Ltrs. Sent, Chief Engineer.

125. Delafield to McAlester, March 29, 1866, NA, RG 77, Ltrs. Sent, Chief Engineer.

126. Merrill to Delafield, March 31, 1866, NA, RG 77, Ltrs. Recd., Chief Engineer. Merrill's letter of resignation, addressed to Adjutant General Lorenzo Thomas, was dated March 31. His resignation was to take effect six months after its receipt.

127. Delafield to Merrill, April 19, 1866, & Merrill to Thomas, March 31, 1866, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer.

D. Enter Capt. Miles McAlester

1. Captain McAlester Relieves Captain Merrill

Merrill's replacement, Michigan-born Captain McAlester, had graduated from the United States Military Academy as No. 3 in the Class of 1856. Commissioned a brevet second lieutenant in the Corps of Engineers, McAlester was ordered to Fort Taylor as assistant engineer. From 1857 to 1858, he was detailed to the Board of Engineers for Atlantic Coast Defenses. He spent the next three years as superintending engineer for the defenses of the Narrows to New York Harbor. During the Civil War, McAlester served in 1861 and 62 with the Army of the Potomac, and on October 30, 1862, was assigned to duty as Chief Engineer, Army of the Ohio. From September 1863 to June 1864, he was at the Military Academy as principal assistant professor of engineering. He returned to the field in June 1864 as Chief Engineer of the Military Division of West Mississippi. McAlester emerged from the war a brevet brigadier general and captain of Engineers.[128]

On January 1, 1866, Captain McAlester had relieved Captain Wilson as engineer in charge of the defenses of New Orleans and of construction of the fort on Ship Island. General Delafield, in mid-March, cautioned McAlester that the House of Representatives had reduced his request for funding construction of the Ship Island fort in Fiscal Year 1867 to $10,000. With Congress seemingly adverse to making big appropriations for the coastal forts, McAlester must restrict the force and materials currently on hand, "so that the labors may at any time be promptly discontinued with the least practical detriment to the works." The construction force would be reduced as rapidly as circumstances would allow, and no new engagements made until the Department knew what Congress intended.[129]

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128. Cullum, Biographical Register, Vol. II, pp. 419-20.

129. Delafield to McAlester, March 21, 1866, NA, RG 77, Ltrs. Sent, Chief Engineer.

Acknowledging this message on March 28, Captain McAlester outlined what he expected to accomplish in fiscal year 1867 at each of the forts under his supervision. Nothing would be done at the Barrancas as there was no approved program.[130]

In late April, Captains McAlester and Merrill traveled to Pensacola, where the former formally relieved the latter of his responsibilities for the Pensacola and Mobile Bay defenses. McAlester then returned to his New Orleans headquarters.[131]

2. McAlester Submits Two Annual Reports

In accordance with procedures, Captain McAlester, on August 10, submitted his annual report for Fiscal Year 1866 for the Barrancas fortifications. During the past 12 months, the Department had not spent any funds on Fort Barrancas, the Spanish Battery, or the Redoubt. These works, except for cracks in the masonry of the fort and the redoubt caused by decay of the foundation grillages resulting in unequal settlement, were in good condition. The gun platforms (excepting three front-pintle barbette, not yet reinforced in the fort; eleven in the old Spanish Battery without traverse irons; and two in the same situation in the Redoubt) were in "serviceable order."

So far as Captain McAlester could ascertain, no projects would be undertaken by the Department at the Barrancas in Fiscal Year 1867.[132]

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130. McAlester to Delafield, March 28, 1866, NA, RG 77, Ltrs. Recd., Chief Engineer. On the previous day, McAlester had notified the Department of receipt of its March 19 letter directing him to relieve Captain Merrill of responsibility for the Pensacola fortifications and Fort Morgan. McAlester to Delafield, March 27, 1866, NA, RG 77, Ltrs. Recd., Chief Engineer.

131. Delafield to McAlester, April 19, 1866, NA, RG 77, Ltrs. Sent, Chief Engineer.

132. McAlester to Delafield, August 10, 1866, NA, RG 77, Ltrs. Recd., Chief Engineer.

When he submitted his annual report for Fiscal Year 1867, Captain McAlester reiterated that the general condition of the Barrancas fortifications was good, with the exception of "the cracks which have long existed in the scarp of the Fort and Redoubt." The magazines and gun platforms were in serviceable order, except for the deficiencies previously reported.

No projects were contemplated in Fiscal Year 1868 beyond "such repairs as may be deemed essential" for preservation of the defenses.[133] Consequently, no appropriation for the Barrancas was requested.[134]

On July 1, the only military personnel assigned to Fort Barrancas, the Redoubt, and the old Spanish Battery were Ordnance-Sergeant Canovan and an assistant. Their orders were to admit no person, military or civilian, unless accompanied by an Army or Navy officer. Stationed at the nearby barracks was about 80 officers and enlisted men of Battery E, 5th U.S. Artillery.[135]

Captain McAlester, before the end of September 1867, learned that he would soon be relieved of his responsibilities as superintending engineer for the defenses of Pensacola and Mobile Bays and the Ship Island fort. He would, however, remain on the Gulf Frontier and continue to exercise his duties as superintending engineer

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133. McAlester to Humphreys, September 21, 1867, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 39th Congress (Washington, 1867), Serial 1285, Vol. 3, p. 429.

134. McAlester to Humphreys, September 18, 1867, NA, RG 77, Ltrs. Recd., Chief Engineer.

135. McAlester to Humphreys, July 1, 1867, NA, RG 77, Ltrs. Recd., Chief Engineer.

for the defenses of New Orleans and improvements to navigation of the mouth of the Mississippi.[136]

E. Major Prime's 19 Months as Senior Engineer

1. Prime Returns to the Gulf Coast and Prepares a Program

McAlester's replacement would be Maj. Frederick E. Prime, who had returned to duty from an extended leave. On reporting to Bvt. Maj. Gen. Andrew A. Humphreys, the distinguished engineer and Army of the Potomac Corps commander who had replaced General Delafield as Chief Engineer, Prime learned that he had been named Senior Engineer on the Gulf Frontier and ordered to Mobile.[137]

Major Prime reached Mobile from New York on November 26, 1867. He spent the next several weeks getting organized and inspecting the Mobile Bay defenses, the Ship Island fort, and the Pensacola works. On his return to Mobile from Pensacola in mid-December, Prime advised the Department that at Fort Barrancas: (a) a fence should be erected to protect the glacis slopes, as the old fencing had been destroyed during the war; (b) the scarp would have to be repaired at a few points, and these might be more extensive than anticipated; (c) the southwest "extremity of the counterscarp wall needed to be repaired where the grillage had rotted and the sand had blown away from under it"; and (d) some of the woodwork should be painted.

At the Redoubt, the breast-height wall of the covered way needed to be repaired in several places. The work should be fenced, the one there in 1860 having disappeared. Bridge planking should be renewed and gates for the entrance fashioned and hung, as "part of the composition gratings for the magazine windows" had been stolen. The

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136. Cullum, Biographical Register, II, p. 255; Military Service Registers of Officers of the Engineer Corps, 1857-1894, NA, RG 77.

137. Humphreys to Prime, September 1, 1867, NA, RG 77, Ltrs. Sent, Chief Engineer.

pintle stones and most of the traverse stones for the work were on hand and could be positioned to replace the wooden platforms. These traverse stones were of the "old circular pattern 12 inches square in cross section."

The parapet of the Redoubt, Major Prime continued, had been raised four feet higher than General Totten had intended by merlons to form embrasures for the barbette guns, and the exterior slope "steeped so as to procure a greater thickness." This had resulted in an increased thrust on the scarp. To prevent damage to the masonry, Prime recommended that the surplus embankment, especially where the scarpwall had commenced to yield, be removed. This earth could be used to complete the glacis which should then be seeded in Bermuda.[138]

To effect these improvements, along with those required at Fort Pickens, Prime asked authority to employ an overseer at $125 per month.[139]

On Christmas Eve, General Humphreys approved the proposals and directed Prime to prepare necessary estimates.[140]

2. Prime and Suter Prepare and Submit Their Estimates

Major Prime prepared and submitted the fencing estimates first. He called for:

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138. Prime to Humphreys, December 14, 1867, NA, RG 77, Ltrs. Recd., Chief Engineer.

139. Ibid.

140. Humphreys to Prime, December 24, 1867, NA, RG 77, Ltrs. Sent, Chief Engineer.

Fort Barrancas--	2,780 feet of fencing		
	330 posts, 8"x10"x8'6"		
	825 rails, 6"x1½"x18'		
	165 top rails, 10"x1½"x18'		
The Redoubt--	2,350 feet of fencing		
	260 posts, 8"x10"x8'6"		
	650 rails, 6"x1½"x18'		
	130 top rails, 10"x1½"x18'		
Total--	590 posts, 26,746 feet, B.M.		
	1,475 rails, 19,912 feet, B.M.		
	295 top rails, 6,537 feet, B.M.		
	Cypress @ $40 per thousand		$2,127.80
	200 days' labor at $1.25	$250.00	
	50 days' carpentry at $3	150.00	
	1,000 pounds nails at $.06	60.00	
	Hauling from wharf to work	200.00	
			$2,787.00[141]

The Department, after reviewing the figures, approved expenditure of the sum requested for fencing the two works to protect the glacis.[142]

Assisted by Capt. Charles R. Suter, Prime next prepared estimates for repair of Fort Barrancas and the Redoubt. Since 1866, Captain Suter had been on duty as assistant engineer for survey of the upper Mississippi River. On January 16, 1868, he had been ordered to report to Major Prime for temporary service on the Gulf Coast. To assist with this task, Prime, on December 23, had asked the Department for the latest file drawings of the two works. When none were forthcoming, he repeated this request on February 20.[143]

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141. Prime to Humphreys, January 23, 1868, NA, RG 77, Ltrs. Recd., Chief Engineer.

142. Humphreys to Prime, January 31, 1868, NA, RG 77, Ltrs. Sent, Chief Engineer.

143. Prime to Humphreys, December 23, 1867, & February 20, 1868, NA, RG 77, Ltrs. Recd., Chief Engineer.

By March 3, Prime and Suter had finished and forwarded the estimates. The approved repairs to Fort Barrancas were estimated at:

Cutting grass, weeding slopes & glacis	$ 200.00
Repairs, foundation SW angle of counterscarp	150.00
Repairs, b-h wall of fort--removing shot furnace	250.00
Repair of parapet	150.00
Fence	1,510.73
Wooden shutters to close embrasures in counterscarp	100.00
Locks & composition gratings for magazines & repair of machinery of drawbridge	150.00
	$2,510.73
Contingencies	489.27
TOTAL	$3,000.00

The cost of repairing and completing the Redoubt was placed at:

Fence	$1,277.07
Laying 8 sets barbette platforms @ $300 each (8 braces, 6 pintle stones, 40 pieces of traverse stone on hand) and irons for same (supposed to be old irons on hand)	2,400.00
Removing upper part of parapet to glacis	1,000.00
Repairs, b-h wall of covered way & main work	200.00
Repairing side arch of entrance, & covering inner large arch of entrance and roofing in same	500.00
1 main gate, 2 side doors for entrance, hinges, etc.	300.00
Planking & repairing bridge	150.00
Completing cunette (about ½ still incomplete)	1,000.00
Regrading ditch	400.00
Filling in & grading & grassing glacis	1,000.00
	$8,227.07
Contingencies	772.93
TOTAL	$9,000.00

In a covering letter, Major Prime informed General Humphreys that at this time it was not proposed to repair "any of the cracks in the scarps or counterscarps" of Fort Barrancas and the Redoubt.

At the Spanish Battery, he continued, only the two platforms on the right had their traverse irons. The top of the breast-height wall was in bad condition. No improvements, however, were programmed for this battery.

To supervise workmen at the Barrancas, Prime asked authority to employ a foreman at $3 per diem.[144]

On March 11, Chief Engineer Humphreys approved the estimates and allotted funds for all the projects proposed, except one. The proposal to position the eight sets of permanent barbette platforms at the Redoubt would be deferred until the "sufficiency of the present platform structure is determined by the tests now in progress." The proposal to remove the Fort Barrancas shot furnace was sanctioned without comment.

The Department was also agreeable to the hire of a foreman at the stipulated wage.[145]

3. Improvements to the Redoubt Executed in Fiscal Year 1868

On March 11, 1868, Captain Suter and a force of masons and laborers began work at the Redoubt. Excess earth was removed from the superior slope of the parapet and used to grade the ditch, and raise the parade to its designed elevation. Next, the breast-height wall of the work was repaired, excepting the recesses for the eight cannon, which, though cracked in places, were not touched, as the rebuilding of the platforms had been deferred. Masons also completed the masonry of the sally port and one-half the brick cunette, the concrete foundation of which had been poured before the war. Such other repairs to the scarp,

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144. Prime to Humphreys, March 3, 1868, NA, RG 77, Ltrs. Recd., Chief Engineer.

145. Humphreys to Prime, March 11, 1868, NA, RG 77, Ltrs. Sent, Chief Engineer.

counterscarp, and breast-height wall of the covered way were made as required. Nothing, however, was done to the cracks that had opened in the masonry of the scarp wall.

Shutters were built to close the flank embrasures, while gates for the sally port were made, hung, and painted. The standing portion of the bridge and the draw were rebuilt, while the machinery was rehabilitated.

Laborers graded and sodded the two caponniers; graded and sodded the ditch so far as necessary; and built the fence, except the entrance gates. They positioned all the rails, except one-fifth of the top rails.

Four days before the end of Fiscal Year 1868, Captain Suter was detached, having been ordered to Cincinnati.

During Fiscal Year 1869, Major Prime proposed to employ the balance of the allotment, $4,280.95, to: (a) complete the fencing; (b) outfit the magazines (position woodwork, install copper gratings and netting in doors and ventilators, replace two inner doors, and put on four locks); and (c) continue the sodding of the slopes.[146]

4. Repairs Made to Fort Barrancas in Fiscal Year 1868

In May 1868, Major Prime turned a work force to at Fort Barrancas. By June 30, the breast-height wall of the main work was repaired and the superior slope of the parapet regraded and sodded. Necessary repairs were made to the foundation of the southwest angle of

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146. "Report of Operations at Advanced Redoubt Barrancas . . . for the fiscal year ending 30th June 1868," July 28, 1868, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives, During the 3d Session of the 40th Congress (Washington, 1869), Serial 1368, Vol. 3, pt. 2, p. 17.

the counterscarp. All fence posts were set and about one-half the rails positioned. The southern extremity of the glacis and ditch were graded and sodded, and the west branch of the ditch regraded. The shot furnace was dismantled.

In Fiscal Year 1869, it was proposed to complete the fence and gate; rebuild the "permanent part of the bridge"; replace the gratings and nettings in the magazines and ventilators; secure five locks for the magazine doors; overhaul the drawbridge machinery; build a new door for the gallery leading to the Spanish Battery; and regrade and plant in Bermuda the slopes of the glacis.[147]

5. Department Establishes a Policy for Maintenance of the Barrancas Line

On December 21, 1867, Major Prime, following an inspection of the Barrancas defenses, wrote the Department. He wished to know if his responsibility extended to the "temporary works," particularly the line of entrenchments anchored by Fort Barrancas and the Redoubt.[148]

Chief Engineer Humphreys accordingly informed Prime that the "perishable" or wooden parts of the entrenchments would be allowed to decay. The rifle-pits and redan were to be retained for prompt "renovation in the event of war."[149]

6. Updating the Drawings

On March 5, 1868, Chief Engineer Humphreys called on his Superintending Engineers to provide the Department with drawings of

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147. "Report of Operations at Fort Barrancas . . . for the fiscal year ending 30th June 1868," July 28, 1868, NA, RG 77, Ltrs. Recd., Chief Engineer.

148. Prime to Humphreys, December 21, 1867, NA, RG 77, Ltrs. Recd., Chief Engineer.

149. Humphreys to Prime, January 2, 1868, NA, RG 77, Ltrs. Sent, Chief Engineer.

each of the permanent defenses for which they were responsible. Sheet No. 1 was to contain a map with a scale of one inch to fifty feet, with "the horizontal curves of the ground on which would be established the trace and outlines of the works, including all dependent batteries." Sheet No. 2 was to exhibit a plan of the works, at a scale of one inch to twenty-five feet, and, if need be, to contain delinations of such portions of the works as the casemate tiers, scarp, counterscarp, galleries, etc., as might clutter the principal plan, if included thereon. Sheet No. 3 was to include sections and profiles, scaled one inch to ten feet, sufficient to exhibit general construction details.

A tracing of each of the aforementioned drawings was to be forwarded to the Department, but not at the same time as the original.

Any and all drawings belonging to the fortifications, exhibiting the subject details or the manner in which the defenses had been built or were to be constructed, copies of which were not already on file at Engineer Headquarters, were to be transmitted as soon as practicable. To make the records "more perfect," it was General Humphreys desire that original drawings be forwarded and tracings retained for use at the works.[150]

Responding to the circular, Major Prime, in mid-February 1869, transmitted to the Department two tracings of the Redoubt and three of Fort Barrancas.[151]

The plans of the former were titled "Advanced Redoubt of Fort Barrancas: One Half Masonry--One Half Barbette Drawn under the Direction of Bvt. Col. F.E. Prime . . ."; and "General Section Through

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150. Humphreys to Prime, March 5, 1868, NA, RG 77, Circulars and Office Memoranda, 1861-1871.

151. Prime to Humphreys, February 10, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

Middle of Redoubt . . ."; while those of the latter were labeled "Fort Barrancas--Barbette Surveyed under the Direction of Bvt. Col. F.E. Prime . . ."; "Fort San Carlos de Barrancas Horizontal Section Through Loop Holes . . ."; and "Fort San Carlos de Barrancas Cross Sections and Elevations." (Copies of these plans--Dr. 79, Sheets 64-68--are on file at Gulf Islands NS.)[152]

7. Congress Compels the Department to Retrench

The 3d Session of the 40th Congress, meeting in the winter of 1868-69, refused to make an appropriation for construction of fortifications. The only monies to fund operations of the Department on the Nation's coastal defenses for Fiscal Year 1870 would be that allotted by the Chief Engineer from the general appropriation for care and preservation of fortifications and contingencies. To enable him to evaluate needs, before making any allotments for the next fiscal year, Chief Engineer Humphreys, on May 1, 1869, called on his project engineers for estimates of expenditures needed for maintenance of the defenses under their supervision in the period May 1, 1869-June 30, 1870.[153]

On May 11, Major Prime reported that, for the final two months of the fiscal year, he needed for Fort Pickens $140--$60 for sundries and $40 per month for pay of the fort keeper. To fund operations of his office, during these two months, $400 was required. This item was to be charged against all the works for which he was responsible--Forts Barrancas, Pickens, McRee, Morgan, and Gaines, and the fort on Ship Island.

In Fiscal Year 1870, he proposed to limit disbursements at Fort Pickens to such as "may be required for preservation of slopes,

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152. Prime to Humphreys, March 9, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

153. Humphreys to Prime, May 1, 1869, NA, RG 77, Ltrs. Sent, Chief Engineer.

cutting grass, weeding, etc.," and such further operations as may be ordered for "continuation of work commenced" on the 15-inch gun platforms.

For preservation and protection of the fort in Fiscal Year 1870, there must be budgeted $40 per month for pay of the keeper and cost of his rations. In addition to the fort keepers, stationed at all the works except Fort Barrancas, Prime employed in his office, one clerk at $125 per month and an overseer at Fort McRee. If operations were shut down during the year, the clerk could be laid off.[154]

F. Captain Damrell as Acting Superintending Engineer

1. Damrell Takes Charge

Before Major Prime learned what his allotment would be in the forthcoming fiscal year, he received a leave of absence on May 15. His replacement was Capt. Andrew M. Damrell. A native of Massachusetts, Damrell had graduated No. 12 in the Class of 1864 from the U.S. Military Academy. Commissioned a first lieutenant, he was assigned to duty as an engineer with the Army of the Cumberland. He emerged from the war a brevet major. On August 8, 1865, Damrell was ordered to Willetts Point, New York, and on July 2, 1866, was named assistant engineer for construction of the fort at Sandy Hook. Fourteen months later, he was ordered to West Point as commander of the Engineer Detachment and instructor in Practical Military Engineering. On October 26, 1868, Captain Damrell had reported to Major Prime as his assistant.[155]

2. Projects Accomplished at the Barrancas in Fiscal Year 1869

To Captain Damrell fell the task of preparing the annual report for Fiscal Year 1869. During the past 12 months, he informed the

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154. Prime to Humphreys, May 11, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

155. Cullum, Biographical Register, Vol. II, p. 603.

Department, workmen at Fort Barrancas had completed the fence, the bridge, and masonry repairs. Gratings and ventilators had been positioned in the magazines.

A recent inspection of the fort revealed that the walls and floor of the sally port and the adjoining casemate on the west were in bad condition; the brickwork, in places, had been cracked by fires set by the Rebels when they evacuated the area in May 1862; the stairway in the gallery leading to the Spanish Battery was in "bad order"; the counterscarp gallery arch on the north front was badly cracked; the scarp walls at "each angles on both sides were cracked through from top to bottom"; and the earthen slopes and parade were in "poor condition."

Several carpenters had been employed and had repaired doors and woodwork in the Spanish Battery. Unlike the fort, the battery was in good condition, although its armament left much to be desired.

Carpenters and laborers at the Redoubt had finished the fence and the magazines' woodwork, installed the magazine ventilators and gratings, and repaired the bridge, while bricklayers had repointed the masonry.

Deficiencies noted by Captain Damrell included: (a) arches of three gun recesses had given way; (b) much of the brickwork needed repointing; (c) two of the angles of the counterscarp wall were cracked; and (d) the counterscarp gallery was filled with rubbish.

Because of the bleak financial outlook, the only projects proposed by Captain Damrell for Fiscal Year 1870 consisted of policing the rubbish, grading the slopes, and repairing the masonry.[156]

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156. "Annual Report for Fort Barrancas, Advanced Redoubt and Spanish Battery for the fiscal year ending June 30, 1869," undated, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 41st Congress (Washington, 1870), Series 1413, Vol. 2, p. 17.

3. Army Calls for Repair of the Glacis and Slopes

Meanwhile, a letter from Maj. H.G. Gibson of the 3d U.S. Artillery, dated May 25, 1869, had reached the Engineers' Mobile office. The major, who commanded the Barrancas garrison, complained about the condition of the glacis and parapet slopes of Fort Barrancas. The former had been damaged by "guns being overhauled over it, and the latter by washing of water." Repair of the sodding and grading was necessary, but his troops were too few and unacclimated to undertake the project during the summer months.

Consequently, Gibson suggested that the Engineer Department fund the project. Such action would also benefit the community, as there was much unemployment, and there were men willing to work for little more than their rations.[157]

Captain Damrell, after informing Major Gibson of the grim financial picture, asked him to submit priorities and estimates. Gibson replied that the glacis was in worse condition than the slopes, and could be repaired for about $250.[158]

On July 7, Captain Damrell forwarded Major Gibson's letters to the Department, along with a request to spend $250 for hire of labor to repair the glacis.

According to Major Prime's records, there remained, unexpended on the books, $686.42 from the $3,000 allotted on March 11, 1868, for repair of Fort Barrancas.[159]

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157. Gibson to Prime, May 25, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

158. Gibson to Damrell, July 1, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

159. Damrell to Humphreys, July 7, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

The Department promptly authorized repair of the glacis and slopes, as it was important that serious erosions be prevented.[160]

4. Department Calls on Its Superintending Engineers to Charge More Projects to "Preservation"

On July 17, the Department notified its Superintending Engineers that as the appropriation for "Contingencies" was much reduced for Fiscal Year 1870, they, where appropriate, would charge maintenance- and protection-oriented projects to the appropriation for "Preservation." Remittances already authorized would be made upon requisition.[161]

Captain Damrell, not understanding what was desired, inquired, do the funds turned over to me by Major Prime "belong to 'specific appropriation' for the works?" He also wished to know whether he would continue to make "expenditures from amount remaining on hand for payment to Fort Keepers, etc.," or if he should apply for remittances from the appropriation for "preservation and necessary repairs for the fortifications" to fund this activity.[162]

Writing Captain Damrell, Chief Engineer Humphreys explained that for a number of years there had been no "specific appropriation" for any of the works under your supervision, except for the fort on Ship Island. The funds received from Major Prime were from the general appropriation for "Contingencies of Fortifications." The object of the July 17 Circular was to spare the appropriation for "Contingencies" whenever that for "Repairs, etc." could be applied. It was not intended that funds already drawn from the former appropriation

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160. Humphreys to Damrell, July 14, 1869, NA, RG 77, Ltrs. Sent, Chief Engineer.

161. Humphreys to Damrell, July 17, 1869, NA, RG 77, Ltrs. Sent, Chief Engineer.

162. Damrell to Humphreys, July 30, 1869, NA, RG 77, Ltrs. Recd., Chief Engineer.

be returned to the Treasury or their expenditure for legitimate projects be stopped.

As Prime had been allotted funds from "Contingencies," Damrell would, unless otherwise instructed, continue to utilize them until they were exhausted. In the future, in making estimates, he would include sufficient information to enable the Department to judge whether the funds should be allocated from the appropriation for "Contingencies" or the "Preservation and Repair of Fortifications," or both.[163]

G. Major Reese's Ten Months as Superintending Engineer

1. Reese Reports for Duty

Major Prime, while on leave, was reassigned. He would not return to the Gulf Frontier. His replacement was Maj. Chauncey B. Reese, no stranger to the area. A New Yorker and classmate of Captain Merrill, Reese had graduated from the U.S. Military Academy as No. 4 in the Class of 1859. Commissioned a brevet second lieutenant of Engineers, Reese was ordered to Alabama as assistant engineer at Fort Gaines. From January to November 1861, he served at Forts Jefferson and Pickens. Reese, on returning to Washington from Florida, fought with the Army of the Potomac until the summer of 1863, first as commander of an engineer company, then a battalion. After a brief tour of duty on the Sea Islands, near Charleston, Reese, on April 29, 1864, became Chief Engineer, Army of the Tennessee. Reese emerged from the war a brevet brigadier general of volunteers and a major of Engineers.[164]

Major Reese reached Mobile on November 19, 1869, and relieved Captain Damrell as engineer in charge of the defenses of Pensacola and Mobile Bays and of the fort on Ship Island. Damrell reverted to his former billet as assistant engineer for these defenses.

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163. Humphreys to Damrell, August 12, 1869, NA, RG 77, Ltrs. Sent, Chief Engineer.

164. Cullum, Biographical Register, Vol. II, pp. 482-83.

2. Maintenance and Protection in Fiscal Year 1870

In the late winter of 1869-70, Major Gibson called upon Major Reese to construct four wooden shot beds at Fort Barrancas. The beds would vary in size: the interior measurements of the smallest being 4'8" by 4'8" and the largest 14'10" by 4'9".[165]

Major Reese, on forwarding this correspondence to Washington, reported that the beds could be fashioned for about $35 each. The Department was agreeable to this expenditure, and the shot beds were built and the projectiles stacked before summer.[166]

When Major Reese filed his annual report for Fiscal Year 1870, he listed the Department's expenditure at the Barrancas at $1,287.47. The fortifications, despite this, were in the same general condition as 12 months before.

During the year, the cannon of Fort Barrancas and the Spanish Battery had been dismounted, the Ordnance Department having determined that they were obsolete. In reporting this to Chief Engineer Humphreys, Major Reese noted that the vacant platforms were "not adapted to the reception of guns of heavier calibres."[167]

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165. Caravan to Gibson, March 5, 1870, NA, RG 77, Ltrs. Recd., Chief Engineer.

166. Reese to Humphreys, March 10, 1870, & Casey to Reese, March 15, 1870, NA, RG 77, Ltrs. Recd., Chief Engineer.

167. Reese to Humphreys, Annual Report of Operations at the Barrancas for Fiscal Year 1870, July 30, 1870, NA, RG 77, Ltrs. Recd., Chief Engineer.

To fund operations at the Barrancas in Fiscal Year 1871, Chief Engineer Humphreys allotted $200 from the appropriation for "Contingencies."[168]

3. Major Reese Dies

On September 23, 1870, 33-year-old Major Reese died of yellow fever at Mobile. Once again, Captain Damrell took charge of the office pending selecting and arrival of Reese's replacement.

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168. Humphreys to Reese, September 17, 1870, NA, RG 77, Ltrs. Sent, Chief Engineer.

X. THE FORTIFICATIONS FROM 1870 TO THE CONVENING OF THE ENDICOTT BOARD

A. Colonel Simpson as Superintending Engineer, 1870-1872

1. Maintenance and Protection in Fiscal Year 1871

Chief Engineer Humphreys selected one of the Corps' senior officers as Major Reese's replacement. The new superintending engineer for the defenses of Pensacola and Mobile Bays and the fort on Ship Island would be Lt. Col. James H. Simpson. He had graduated from the U.S. Military Academy as No. 18 in the Class of 1832. Commissioned a brevet second lieutenant, he was assigned to the 3d Artillery. After service in the Second Seminole War, Simpson, in July 1837, was commissioned a first lieutenant in the Topographical Engineers. On August 12, 1861, he was commissioned colonel of the 4th New Jersey Volunteer Infantry, and led his regiment in McClellan's Peninsula and Seven Days' Campaigns. Simpson resigned his volunteer commission and returned to duty with the Engineers in August 1862. On June 1, 1863, he was promoted lieutenant colonel of Engineers.[1]

There would be scant work on the fortifications in Fiscal Year 1871, Colonel Simpson's first on the Gulf Frontier. On September 17, 1870, five days before Major Reese's death, the Department had allotted from "Contingencies" $200 for maintenance and protection of Fort Barrancas during the next nine months.[2]

Consequently, no maintenance projects were instituted at the Barrancas fortifications by the Engineers in the year ending June 30, 1871.[3]

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1. Cullum, Biographical Register, Vol. I, pp. 405-06.

2. Humphreys to Reese, September 17, 1870, NA, RG 77, Ltrs. Sent, Chief Engineer.

3. Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 42d Congress (Washington, 1872), Serial 1504, Vol. 2, p. 21.

2. Maintenance and Protection in Fiscal Year 1872

On March 10, 1871, the Department notified Colonel Simpson that President U.S. Grant had signed into law on the 3d an act appropriating for "Contingencies of Fortifications" $250,000. He would submit, as soon as practicable, an estimate of the sum needed from this appropriation in Fiscal Year 1872 for each of the "defensive works" under his supervision.[4]

Colonel Simpson, after reviewing the bleak financial situation and condition of the Gulf Frontier forts, wrote Chief Engineer Humphreys that, in the forthcoming fiscal year, he needed at Forts Pickens and Barrancas for the keeper's salary, for repairs, and for their proportion of the pay of his clerk and messenger, $1,800.[5]

On May 17, Chief Engineer Humphreys approved the requested allotment.[6]

Again, as during the previous 12 months, no maintenance projects were undertaken at Fort Barrancas and the Redoubt. When he submitted his annual report for Fiscal Year 1872, Colonel Simpson noted that these defenses were in the "same condition as previously reported."[7]

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4. Casey to Simpson, March 22, 1871, NA, RG 77, Ltrs. Sent, Chief Engineer.

5. Simpson to Humphreys, May 1, 1871, NA, RG 77, Ltrs. Recd., Chief Engineer.

6. Humphreys to Simpson, May 17, 1871, NA, RG 77, Ltrs. Sent, Chief Engineer.

7. Executive Documents, Printed by Order of the House of Representatives, During the 3d Session of the 42d Congress (Washington, 1873), Serial 1559, Vol. 2, Pt. 2, p. 19.

3. Maintenance and Protection in Fiscal Year 1873

a. General Humphreys Makes an Allotment

On June 22, 1872, the Department notified Colonel Simpson that President Grant had signed into law an act passed by Congress appropriating $250,000 for "Contingencies of Fortifications." According to procedures, Simpson was to submit, as early as feasible, an estimate of sums needed from this appropriation in Fiscal Year 1873 for the defensive works for which he was responsible.[8]

On July 27, Colonel Simpson wrote the Department that for Forts Barrancas and Pickens, during the subject period, he needed $1,800 for the keeper's salary, their proportion of the clerk's and messenger's pay, and ordinary repairs.[9]

The Department telegraphed Colonel Simpson that he had been allotted from "Contingencies" $1,100 for Fort Pickens and $1,200 for Fort Barrancas. This sum included $460 authorized the previous day for securing the ordnance stores against theft.[10]

b. Providing for the Security of the Ordnance Storerooms

On July 31, Colonel Simpson had written Chief Engineer Humphreys that Lt. James A. Burbank, the commanding officer at Barrancas barracks, had warned that the ordnance property at Forts Barrancas and Pickens was liable to be stolen and there had already been thefts. To curb this, it had been recommended that at Fort Barrancas

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8. Casey to Simpson, June 22, 1872, NA, RG 77, Ltrs. Sent, Chief Engineer.

9. Simpson to Humphreys, July 27, 1872, NA, RG 77, Ltrs. Recd., Chief Engineer.

10. Casey to Simpson, August 8, 1872, NA, RG 77, Ltrs. Sent, Chief Engineer.

four heavy doors be hung to close the embrasures. According to an estimate by Augustus Jones, who was familiar with the structures, cost of the Barrancas doors would be $300 and the Fort Pickens work $160--$75 for the partition and door and $85 for repairs to the embrasures.

Colonel Simpson, on referring ths subject to General Humphreys, had suggested that this work might be the responsibility of the Quartermaster or Ordnance Departments, rather than the Corps of Engineers.[11]

General Humphreys, however, determined that the project would be handled by his Department, and included necessary funds in the annual allotment for maintenance and protection of the Pensacola forts.[12]

c. Colonel Simpson Transfers

On January 1, 1873, Colonel Simpson was relieved as superintending engineer by Lt. Col. W.F. Raynolds. Raynolds, in turn, was replaced by the office's long-time assistant, Captain Damrell, on April 7. Damrell, therefore, had the task of drafting the annual report for Fiscal Year 1873, accounting for expenditure of $1,345 in Departmental funds. During the past 12 months, Damrell informed General Humphreys, the only project charged to the Engineers at Fort Barrancas was for making and hanging four doors in the galleries of the counterscarp. Grass and weeds had been mowed by the garrison.[13]

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11. Simpson to Humphreys, July 31, 1872, NA, RG 77, Ltrs. Recd., Chief Engineer.

12. Humphreys to Simpson, August 7, 1872, NA, RG 77, Ltrs. Sent, Chief Engineer.

13. Executive Documents, Printed by Order of the House of Representatives for the 1st Session of the 43d Congress (Washington, 1874), Serial 1598, Vol. 2, Pt. 2, p. 20.

B. Captain Damrell's First Two Years as Superintending Engineer

1. Damrell Learns About the Bureaucracy

On March 22, 1873, Major Raynolds, three weeks before he was relieved, informed General Humphreys that there was "no special work" programmed at the Pensacola Bay forts. The only expenditures anticipated in Fiscal Year 1874 were for pay of the fort keepers, and such incidental cleaning up and light repairs as may be required. To provide for maintenance and protection of the five works (Forts Barrancas, Pickens, Morgan, and Gaines, and the fort on Ship Island) for which the Mobile office was responsible, Raynolds estimated that $1,600 would be the average required for each.

As it was impossible to anticipate the extent of repairs which might be required at each of the forts, Major Raynolds recommended that the amount asked for be allotted in gross, or $8,000 for the five.[14]

Major Raynolds had transferred by the time Chief Engineer Humphreys replied. As Fort Barrancas was garrisoned, he informed Captain Damrell, Raynolds' successor, the Department questioned making an allotment from the "Contingency Appropriation" for its maintenance in Fiscal Year 1874.[15]

Echoing his predecessor, Captain Damrell asked that the allotment for fortifications, under his supervision, be "a general one, without specifying a particular amount for each." If this were impossible, and it was deemed adviseable to exclude Fort Barrancas, he urged that an additional sum be allotted for Fort Pickens, to be applied to Fort Barrancas for any repairs or work that may be needed during the next 12

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14. Raynolds to Humphreys, March 22, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer.

15. Casey to Damrell, June 2, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

months, and called for by the post commander, as had occurred in Fiscal Year 1873.[16]

On June 2, the Department replied. It could not accept Damrell's reasoning because Chief Engineer Humphreys, desirous of economizing, believed that where posts were garrisoned, the troops should watch the government property belonging to all departments. Damrell would review the subject, reporting "whether there are any circumstances that will prevent this oversight of the property by the garrison," which would compel the Corps to hire a watchman to prevent loss of its gear. If he considered a watchman necessary, he was to report the sum needed for his wages, along with the amount required for general repairs. In addition, he would give the monetary value of the subject property and his opinion as to "whether it may not be better economy to sell or transfer it to some other Engineer work or to some other Department of the Army."[17]

Captain Damrell dropped the subject, thereby accepting the Department's dictum as to the employment of fort keepers.

In mid-July, Chief Engineer Humphreys asked Damrell to explain why his estimate of funds for contingencies was submitted for the entire year, rather than in monthly installments as needed to fund operations of his office.[18]

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16. Demrell to Humphreys, May 27, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer.

17. Casey to Damrell, June 2, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

18. Casey to Damrell, July 22, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

In explanation, Captain Damrell observed that he had merely followed the form used by Colonel Simpson, which had been approved by the Department on October 4, 1872.[19]

Replying, the Department gave no explanation of the rationale for the change in policy, but asked Damrell to forward estimates for fortifications under his supervision for which allotments had been made from "Contingencies" for one month at a time, stating the amount required for each defense. If it were necessary to make an estimate for a period in excess of one month, reasons must be cited.[20]

2. The "Virginius" Affair Momentarily Revives Interest in Coastal Defenses

In the autumn of 1873, a crisis threatened war between the United States and Spain. On October 31, the United States merchantman Virginius was intercepted on the high seas off the coast of Jamaica by the Spanish gunboat Tornado. Virginius was suspected by the Spanish government of carrying arms and men to assist Cuban forces rebelling against the mother country. Virginius was brought into a Cuban port, and her American captain, 36 crewmen, and 16 passengers summarily executed. The victims included a number of United States citizens. Public indignation compelled the Grant administration to prepare for war to avenge the massacre and free Cuba from Spanish tyranny.

On November 21, the War Department alerted Captain Damrell, along with other Gulf and Atlantic coast superintending engineers, "to use all possible dispatch in preparing all your works so as to be able to place every available gun now at them in the best positions

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19. Damrell to Humphreys, July 22, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer.

20. Humphreys to Damrell, July 28, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

for defense from sea-attack." It was believed that the forts contained more platforms than there were guns ready to mount. If, however, this were not the case, they were to proceed to position necessary platforms, and, if after doing so, they still had unexpended funds on hand, they were to continue "to strengthen and increase the extent of the defenses in accordance with approved plans."

They were to report immediately: (a) the amount of funds available for each work; (b) the additional sums required to finish and put down needed platforms for the "disposable guns at your works"; and (c) the additional amount needed for "erection and preparation of such positions" as you deem "indispensible for an efficient defense."

Damrell and his fellow engineers were authorized to employ "wooden platforms or any others that can be procured in the shortest time."[21]

Failing to receive a prompt reply from Damrell as to the sum required to place the five works under his supervision in condition to resist naval attack, Chief Engineer Humphreys telegraphed on December 1, "How much will you want?"[22]

On December 3, Captain Damrell replied, "at least $63,000.[23]

Captain Damrell, meanwhile, had replied to the Department's November 21 letter. He reported that for the works under his supervision, he had on hand $5,513, of which $146.98 was in the Fort

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21. Casey to Damrell, November 21, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

22. Casey to Damrell, December 1, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

23. Damrell to Humphreys, December 3, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer.

Barrancas account. To finish and lay wooden platforms for the "disposable guns" at his forts, he needed $53,400, of which $3,200 should be programmed for Fort Barrancas. To fund construction of fortifications deemed "indispensable for an efficient defense (including approved plans for modification and extension of old works)" required one million dollars, to be divided equally between Pensacola and Mobile Bays.[24]

On December 6, Damrell was notified by the Department that he could secure needed wooden platforms from Capt. C.H. Howell at New Orleans.[25] When he checked with Captain Howell, Damrell was advised that Howell could not furnish the platforms. Informing the Department of this, Damrell announced that, if provided with the ironwork, he could have his people construct the platforms.[26]

General Humphreys replied immediately. On December 10, he telegraphed that Captain Howell would soon receive from Lt. Col. John Newton of the New York Agency, three centre-pintle and 37 front-pintle platforms for 15-inch guns. Nine of these would be shipped to New Orleans on the 17th, and, thereafter, nine per week until the entire number had been sent.

Damrell was to contact Captain Howell, as the New Orleans defenses only required ten of the platforms, and ascertain "if he can let you have the kinds of platforms you wish for your 15-inch gun carriages." If Howell could not, Damrell was to secure necessary platforms on his own. If irons did not come with the platforms, he was

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24. Damrell to Humphreys, November 28, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer.

25. Casey to Damrell, December 6, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

26. Damrell to Humphreys, December 8, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer.

27. Casey to Damrell, December 10, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

to order them from Colonel Newton. All other platforms needed for his five forts, Damrell must obtain.

To fund the emergency program at Damrell's forts, General Humphreys had allotted $30,000, one-half the sum requested, from "contingencies."[27]

Work that commenced on receipt of General Humphreys' November 21 communication ceased, and the hands were laid off in early January 1874, upon delivery of a telegram from the Department. The Comptroller of the Treasury had ruled, Damrell was informed, that the $30,000 allotted from "contingencies," on December 10, was no longer available. If he were funding programs from this sum, he was to stop work at once, paying off liabilities incurred up to the date of receipt of the January 6 order with funds from the subject allotment.[28]

A peaceful resolution of the Virginius affair had resulted in the suspension of the program. It was established that Virginius was owned by Cuban revolutionaries and was illegally registered; that she had been carrying arms to Cuba; and was fraudulently flying the "stars and stripes." Although Spain refused to punish her officers who had carried out the seizure or salute the United States flag, she released Virginius' survivors and paid an indemnity of $80,000 to families of the American victims.

During the six weeks that the crisis had been at its height, preparations were made for construction at Fort Barrancas of four 4-inch front-pintle platforms, and for mounting two 100-pounder and two 200-pounder Parrott rifles. Materials were stockpiled, but no mortar, brick, or earth had been removed by January 6 when the order was received to suspend operations.

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28. Casey to Damrell, January 6, 1874, NA, RG 77, Ltrs. Sent, Chief Engineer.

Then, in March, the 24-pounder flank defense howitzers emplaced in the counterscarps were dismounted by the troops and their carriages broken up. At Fort Barrancas, this involved eight howitzers and at the Redoubt, five. This reduced the mounted armament of Fort Barrancas to two 10-inch seige mortars on iron carriages and at the Redoubt to zero. At the fort, but not emplaced, were two 100-pounder and two 200-pounder Parrotts and their iron carriages, and eight 24-pounder flanking howitzers.[29]

3. Maintenance and Protection in Fiscal Year 1875

On May 18, 1874, Captain Damrell submitted estimates of sums from the appropriation for "contingencies" required to fund operations for Fiscal Year 1875 at each of the defense works under his charge. For salary of the keeper at Forts Barrancas and Pickens; their share of the pay of the clerk and messenger for the Mobile office; and for ordinary repairs, he needed $1,800.[30]

When he made his allotments, Chief Engineer Humphreys budgeted $1,800 for Forts Barrancas and Pickens for pay of the keeper, etc.[31]

Accordingly, operations were confined during the year ending June 30, 1875, to care and preservation of the public property.

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29. Annual Report, Fort Barrancas, Fiscal Year 1874 and Damrell to Humphreys, April 5, 1874, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives for the 2d Session of the 43d Congress (Washington, 1875), Serial 1636, Vol. 3, p. 25. At Fort Barrancas, the 24-pounder flank defense howitzers were dismounted from positions Nos. 1-8, and at the Redoubt positions Nos. 1-3, 6 and 7.

30. Damrell to Humphreys, May 18, 1874, NA, RG 77, Ltrs. Recd., Chief Engineer.

31. Casey to Damrell, June 12, 1874, NA, RG 77, Ltrs. Sent, Chief Engineer.

When he filed his annual report for the fiscal year, Captain Damrell informed the Department that Fort Barrancas was "in about the same condition as at the date of the last annual report."[32]

C. Project for Modification of Fort Barrancas

1. The "Alabama Claims" Result in Preparation of an Emergency Plan

On November 11, 1871, Chief Engineer Humphreys notified the Board of Engineers for Fortifications that he wished it to "take up, in such order and such time as the other duties entrusted to you will permit, the consideration of the modifications needed in the defense" of 14 works, including Fort Barrancas. The Board was to advise the Department "of the order and the time" at which it would tour the listed forts. Engineer officers in charge of the subject defenses would be members of the Board, when the forts for which they were responsible were under review.[33]

The Department, on notifying Colonel Simpson of this project, directed him to expedite the deliberations of the Board by entering upon a study of the subject, giving to it all the time and thought that can be spared from your present duties. It was desired that he be prepared, then asked, to present to the Board "projects in detail for all changes to existing works, and for any new works" that he considered "indispensible." In this respect, he was reminded that torpedoes as a means of coastal defense were now important, as was the employment of mortar and barbette batteries.[34]

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32. Annual Report, Fort Barrancas, Fiscal Year 1875, NA, RG 77, Ltrs. Recd., Chief Engineer. During the year the Department had expended on the fort $100.

33. Casey to Board of Engineers, November 11, 1871, NA, RG 77, Ltrs. Sent, Chief Engineer.

34. Casey to Simpson, November 11, 1871, NA, RG 77, Ltrs. Sent, Chief Engineer.

Because of the threat of war with Great Britain over the "Alabama Claims," the Board of Engineers rushed to complete an emergency plan. On January 6, 1872, the Board of Engineers called on Chief Engineer Humphreys. They presented notes "setting forth the methods proposed" for placing in a "temporary condition of defense" Forts Barrancas, Pickens, McRee, Morgan, Gaines, Taylor, Jefferson, Pulaski, Moultrie, and Sumter.

Wherever likely to be employed against ironclads, the Board informed General Humphreys, 15-inch Rodmans were to be mounted. To be efficient, they were to fire solid shot propelled by 100-pound powder charges.[35]

The Board pointed out that the largest class of ironclads (those drawing more than 23 feet) would be unable to pass Pensacola Bar. Currently, there was only one 15-inch Rodman mounted at Pensacola, and it was emplaced in Fort Pickens' Tower Bastion. To beef up that fort's firepower, the Board recommended emplacement of three more 15-inch shellguns in Pickens.

In preparing plans to meet the national emergency, the Board next considered Fort Barrancas. Situated to cover the "turn of the channel," they saw that it could direct its guns upon enemy warships from their passage of the bar till they reached the vital navy yard.

One of the dismounted Fort Pickens 15-inch Rodmans was to be sent across the bay and emplaced on its front-pintle carriage on either the east or west angle of Fort Barrancas to permit "its fire parallel to Fort McRee and the navy yard shore." If there were insufficient space for the huge Rodman in these salients, it was to be mounted in a temporary work on the nearby bluff.

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35. Board to Humphreys, January 6, 1872, NA, RG 77, Ltrs. Recd., Chief Engineer.

If there were any available 10-inch Rodmans or rifled 100-pounders, they could be placed on the bluff on temporary wooden platforms.

The cost of transferring the Fort Pickens gun and carriage to the Barrancas and mounting it was estimated at $5,000.

The Board placed much stress on torpedoes, a weapon employed by the Confederates with considerable success during the recent war.

They rejected use of electric torpedoes designed to explode on contact as too sophisticated and requiring too elaborate an apparatus to be obtained in haste. Instead, they called for electrical torpedoes fired from shore by an operator. They could be either tensional galvanic or electro-magnetic. The project, in addition to the torpedoes, must include careful local arrangements for triangulation and signaling.

Minimum charges were to be 50 pounds of dynamite or gun cotton, or 200 pounds of the "best force rifle sporting powder." If gun powder were used and, because of the emergency there was insufficient time to prepare iron casings, old barrels, encased in flour barrels, filled in with roofing cement could be employed. The torpedoes were to be anchored with mushroom anchors or blocks of stone, weighing at least 500 pounds, and positioned from 25 to 30 feet below the surface.

When the object was to help protect a fort, the torpedoes were to be placed about 300 feet apart on a one-half mile circle. To close a channel, they were to be positioned about the same distance apart on one or more lines, where they could be covered by shore batteries.

Of the harbors studied, the Board was of the opinion that torpedo defenses were most needed at Pensacola, Charleston, and Key West. They might also be employed with advantage at the entrance to Mobile Bay.

The Board believed that 20 torpedoes at each of these harbors would suffice. At $1,000 a torpedo, this required an allotment of $60,000 for Pensacola, Key West, and Charleston.[36]

The urgency soon passed and there was no need to implement the Board's emergency plan. The dispute over the extravagant claims for indirect damages advanced by the United States before the Geneva Tribunal, which threatened to scuttle the Treaty of Washington, had been compromised when it was agreed to rule out indirect damages. The American agent, on behalf of the Grant administration, consented to this, and with "great relief," word came that the suspended discussions had been resumed.

2. The "Virginius Crisis" Galvanizes the Board Into Action

Upon the passing of the emergency, the Board could devote its energy to formulating plans for modification of the Nation's seacoast defenses in view of Civil War lessons.

In the autumn of 1872, Colonel Simpson traveled to New York City for a meeting of the Board.

On October 21, he reviewed and signed the reports and plans prepared by the Board for modification of the defenses of Mobile Bay. He also announced his concurrence with the Board's views regarding the Pensacola Bay defenses. The latter report and plans, however, had not been finalized. He accordingly wrote Chief Engineer Humphreys that he had been obliged to defer signing them, and had asked that, when completed, they be forwarded to him at Mobile.[37]

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36. Notes, Torpedoes, Board of Engineers, January 6, 1872, NA, RG 77, Ltrs. Recd., Chief Engineer.

37. Simpson to Humphreys, October 21, 1872, NA, RG 77, Ltrs. Recd., Chief Engineer. Simpson left New York City on October 23 for Mobile.

Nothing more was heard of the modification proposal until the Virginius crisis. The threat of war with Spain caused Chief Engineer Humphreys to write Col. John G. Barnard, senior member of the Board of Engineers for Fortifications. The Board, Humphreys directed, would, at the "very earliest practicable moment, prepare projects and estimates of cost of the modification of Fort Pickens" and other works in Pensacola harbor. These studies were to be submitted to the Department without delay.[38]

Colonel Barnard convened the Board in New York and it resumed consideration of the plans which had been under discussion. Agreeing on what should be done, the Board submitted a preliminary report.

The Board pronounced Fort Barrancas too small to receive many guns of large caliber. Members, therefore, concluded to emplace "all that may be required for the position in an exterior battery." They recommended immediate construction of a large linear barbette battery for ten guns on the bluff just west of the fort. The two channel fronts of Fort Barrancas would be "arranged for mortars."

Guns in the Barrancas Battery (designated No. 5), unlike those in Batteries Nos. 1 and 2 on Santa Rosa Island and Batteries Nos. 3 and 4 on Foster's Bank, not being subject to enfilade or reverse fire, would be placed in pairs with a horizontal traverse of 120 degrees.[39]

General Humphreys submitted the report to Secretary of War William Belknap on February 16, 1874, with his recommendation that it

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38. Casey to Barnard, December 4, 1873, NA, RG 77, Ltrs. Sent, Chief Engineer.

39. Board of Engineers to Humphreys, December 10, 1873, NA, RG 77, Ltrs. Recd., Chief Engineer. The report of the Board was signed by Cols. John G. Barnard, Zealous B. Tower, Horatio G. Wright, and George W. Cullum.

be approved. Secretary Belknap sanctioned the study, subject to such changes in details by the Chief Engineer as in the course of construction may be found advisable.[40]

It was August before the collateral documents (plans and estimates) were prepared by the Board. These items, along with a copy of the report prepared by the Board and approved by Secretary of War Belknap, were transmitted to Captain Damrell by General Humphreys for his information and guidance in construction of the works whenever Congress funded the project.[41]

D. Garrisons Come and Go

1. 3d U.S. Artillery Garrisons the Post

Battery G, 3d U.S. Artillery, garrisoned the Barrancas on the arrival of the seventh decade of the 19th century. On February 24, 1870, Major Gibson turned out the troops for the regimental commander--Bvt. Brig. Gen. Thomas W. Sherman. After spending two days on post, General Sherman returned to his Key West headquarters.

On January 14, 1871, the number of troops at the Barrancas was tripled by arrival of a replacement battalion--4 officers and 122 enlisted men. Eight days later, the newcomers turned out and were marched to the wharf. There, they boarded the steamer Lavaca, chartered to take them to Fort Jefferson.

Meanwhile, Fort Barrancas lost long-time Ord.-Sgt. Charles Canavan, who exchanged billets with Fort Scammel, Maine, Ord.-Sgt. Alfred Paxson.

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40. Belknap to Humphreys, February 16, 1874, NA, RG 77, Ltrs. Recd., Chief Engineer.

41. Casey to Damrell, August 10, 1874, NA, RG 77, Ltrs. Sent, Chief Engineer. Copies of the subject plans are on file at the Florida Unit of Gulf Islands NS.

To bring the battery up to its authorized strength, it was reinforced in mid-March 1872, by 29 recruits. Five months later, on August 22, Battery M, 3d U.S. Artillery, reached the Barrancas by ship from Fort Jefferson. Lt. James M, Lancaster, as senior officer, relieved Lieutenant Burbank as commander of Barrancas barracks. On September 10, Battery L arrived from Fort Jefferson, and its commanding officer, Capt. Erskine Giddings, took charge of the post.

Reconstruction politics were especially volitile in Louisiana, and, on November 4, the voters were scheduled to go to the polls. To keep a semblance of order, Batteries G and M were rushed to New Orleans on October 28. The War Department, meanwhile, had determined to rotate several of its regiments. The 1st Artillery, currently stationed in the Middle Atlantic states, was to be redeployed to the Gulf Frontier. Upon arrival of the 1st Artillery, the 3d would be recalled and assigned to garrison various New York Harbor defenses. Preparatory to making the change, Batteries G and M were recalled from New Orleans. Leaving Jackson Barracks, they returned to the Barrancas by rail, arriving on November 7.

Concurrently, their relief was converging on the Port of New York. From Fort Ontario came Battery A, from Madison Barracks, Battery F, and from David's Island, Battery L. These men and their gear boarded the steamer Magnolia which sailed on the 9th. Although plagued by machinery trouble which caused the ship to return to Dry Tortugas for repairs, the men of Maj. John M. Brannan's battalion of the 1st Artillery landed at the Barrancas on the 27th. As soon as they had disembarked, Batteries G, L, and M, 3d Artillery, boarded Magnolia.[42]

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42. Returns for Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727; Returns for U.S. Military Posts, 1800-1916, NA, Microcopy M-617. Battery G was to garrison Fort Hamilton, Battery L, Fort Wood, and Battery M, David's Island.

2. Yellow Fever Savages Brannan's Battalion, 1st U.S. Artillery

Batteries F and L, 1st Artillery, remained at Barrancas barracks one week. On December 4, 1872, they embarked on a New Orleans-bound ship, landing the next day and were quartered in the state house. The troops had been called in by the U.S. marshal to help keep order between rival political factions. They remained in the Crescent City until January 26, 1873, when they returned to Pensacola Bay.

Early in May, there were more political difficulties in Louisiana, and once again troops were rushed in. Batteries A and L left the Barrancas on May 9 aboard Amelia, reaching the Louisiana city the next afternoon. Two months later, on July 9, the artillerists returned to their duty station aboard Lizzie.[43]

Yellow fever ravaged the Gulf Coast during the late summer. In September, the dreaded plague claimed its first Pensacola casualty.

On the 25th, three cases were reported to Dr. George M. Sternberg--one, a prisoner in the guardhouse; another, a soldier in the barracks; and the third, a patient in the hospital. On the 29th, Major Brannan ordered his command across the bay to Fort Pickens, where it was isolated. Brannan, Dr. Sternberg, and a small detachment remained at the post to protect the public property.

The fever was confined to the barracks, and "though for want of fresh" victims, it was not severe. It lasted into November, and out of the small detachment which remained on the mainland, there were 18 cases and six deaths.

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43. Ibid. Batteries A and L were first quartered in a building on Magazine Street. They next camped on Annunciation Square where they remained until May 20 when they were ordered to Jackson Barracks.

The last victim was felled at a season of the year when, according to the doctors, all danger had passed. There had been no cases for many days, and there had been several frosts. Major Brannan, therefore, deemed it safe to withdraw his battalion from Fort Pickens. Orders to this effect had been issued when Ordnance-Sergeant Paxson at the Barrancas was stricken and died on November 12. This postponed the return of the garrison from Santa Rosa Island until the end of the month.[44]

Sergeant Paxson was replaced as ordnance-sergeant by Thomas Carroll.

On January 4, 1874, the garrison was increased to four batteries by arrival of Battery M, 1st Artillery, from Fort Jefferson. This unit had left its former station on New Year's Day aboard the schooner Matchless.[45]

In September 1874, yellow fever again struck the Pensacola area. There were posted at Barrancas barracks at this time Batteries A, F, L, and M, 1st Artillery. On the 7th, the first case was reported at the navy yard. As soon as this was learned at the barracks, the troops, with the exception of Maj. John M. Brannan, Capt. Loomis Langdon, Dr. George M. Sternberg, and a detachment, were evacuated and sent across the bay to Fort Pickens. On the 11th, Lt. James M. Ingalls was returned from Santa Rosa Island, sick with the fever, which he was presumed to have contracted a few nights before while walking in the vicinity of the naval hospital. He was nearly a month recovering. On September 17,

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44. Langdon to Haskin, December 5, 1878, found in 1st Regiment of Artillery, pp. 382-83.

45. Returns for Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727; Returns for U.S. Military Posts, 1800-1916, NA, Microcopy M-617.

Batteries F, L, and M were ordered from Fort Pickens to New Orleans, in anticipation of election riots. Lt. E.K. Russell remained at Fort Pickens with Battery A, until December 1, when the unit returned to the Barrancas.

Soon after arrival of the battalion in New Orleans, the fever broke out there. Cold weather soon came, and none of the troops were felled. Meanwhile, there was an interesting development at the Barrancas. Private Tobin of Battery A was detailed as a nurse in the hospital. On the night of November 6, after there had been several frosts, he went into Warrington and spent the night at a "low groggery." While outdoors the weather was cold, the temperature in the tavern was not permitted to drop below freezing. The next day, Tobin was down with yellow fever.

Two of the three batteries rushed to New Orleans in September returned to the Barrancas in late November and early December. Battery L arrived on the 30th and Battery M on the 4th. The latter, on November 3, had been sent from the Crescent City to Mobile Point, where it remained for the next 30 days. Battery F, Lt. L.H. Chamberlain commanding, rejoined Major Brannan's battalion on May 22, 1875, having left Jackson Barracks, Louisiana, the previous day.[46]

For the third consecutive year, yellow fever struck the post in 1875. Unlike the previous years, it appeared first at the garrison, when on July 21, it was announced that six people had been stricken. The first victim had been felled three days before, but Dr. Sternberg failed to positively diagnose the symptoms.

Earlier that summer, vessels with fever on board had been quarantined in Pensacola Bay, but this was a frequent occurrence in most

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46. Langdon to Haskin, December 5, 1878, found in 1st Regiment of Artillery, p. 383; Returns from U.S. Posts, 1800-1916, NA, Microcopy M-617.

southern ports and there was no alarm. In addition, the quarantine station was more than nine miles from the Barrancas at the Live Oak Plantation.

When the plague was identified, preparations were made by Major Brannan to evacuate most of his battalion to Fort Pickens, as had been done in 1873 and 1874. By noon on the 22d, the shift had been effected. There remained at Barrancas barracks, Major Brannan and his family, Capt. Alanson M. Randol and his family, Captain Langdon, Dr. Sternberg, and 30 enlisted men, including the ordnance-sergeant, hospital steward, male nurses, attendants, and the men on sick call. Besides these, there were 32 women and children belonging to soldiers' families and four servants.

The first person stricken, on July 18, had been a laundress; the next was Commissary-Sergeant Correll on the 19th; and then Mrs. Correll on the evening of the 20th. That same night, three men from Battery M were felled while asleep in their barracks. On the morning of the 21st, another man in Battery M was attacked, just as Dr. Sternberg made the dread announcement. Within several hours, a sergeant from Battery A, two laundresses, and a child reported at the hospital with "yellow jack." By late afternoon, Captain Randol's infant son, Clarence, was feverish. The next day, the 22d, there were 16 new cases, many of whom were returned from Fort Pickens, the haven of refuge.

Employed to assist Post Surgeon Sternberg were three civilian physicians: Drs. Mandeville, Solomon, and Carson. The first two were assigned to the Barrancas and the latter to Fort Pickens. Before the end of July, Dr. Sternberg was taken ill, and Dr. Herron of Pensacola employed. Surgeon Harvey Brown was ordered to the area from Fort Jefferson and assumed charge of the hospital. Here, as at Dry Tortugas, two years before, the War Department "gave carte blanche, not only for medicines and necessaries but even for luxuries for the sick."

The first death was Sergeant Correll on July 22. His wife died on the 24th, as did Clarence Randol. That evening, Lt. James M. Ingalls, his wife having been seized by the fever, returned with his family to the Barrancas. Before morning, their youngest child, Hilda, was down, and on the 27th, their 13-year-old son, Arthur. By the evening of the 25th, there were 30 new cases, not counting Captain Randol's little daughter taken with fever the same day her brother died.

On July 26, Lt. George W. Deshler sickened. He was evacuated to the mainland, where he died in his quarters on the 28th. That same night, Mrs. Ingalls expired and three days later, her son, Arthur. Eight enlisted men of Battery M, two laundresses, and a child, who had escaped the plague when at Fort Jefferson in 1873, were victims. Of these, three died--Sergeant Evans, Mrs. Bracken, and Willie Henry, the son of the company's 1st sergeant.

The last death, which occurred on August 15, was J.W. Keogh. He was superintendent of the National Cemetery. Neither he nor his wife had had the fever, but they both refused evacuation to Santa Rosa Island. Mr. Keogh personally assisted Captain Langdon in burying the victims until the 8th, after which there were no more deaths until the 15th, when Mr. Keogh was laid to rest. Mrs. Keogh was felled on the 14th, but she recovered.

In the garrison, there were 76 cases, and of these 30 died, including women and children.[47]

The battalion returned from Fort Pickens on November 29. After the plague, the troops were delighted to learn that the regiment

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47. Langdon to Haskin, December 5, 1878, found in 1st Regiment of Artillery, pp. 384-87; Returns from U.S. Posts, 1800-1916, NA, Microcopy M-617.

was to be rotated. On December 14, 1875, the steamer General Meade dropped anchor in Pensacola Bay. Aboard the vessel was their relief, Maj. Truman Seymour's battalion of the 5th U.S. Artillery--Batteries B, I, L, and M. Seymour's battalion had sailed from New York Harbor 11 days before.

As soon as the 5th Artillery had disembarked, Major Brannan and the redlegs of Batteries A, F, L, and M, 1st Artillery, boarded General Meade. On December 18, she cast off, and the men of the 1st Artillery, after three years and three weeks, bid Florida goodbye. Their new assignment would be to garrison the Boston Harbor forts.[48]

3. The 5th Artillery's 66 Months at Pensacola

The War Department, as a precautionary measure in 1876, pulled most of Major Seymour's battalion out of the Barrancas in June. On the 8th, Battery I went into camp on the north side of Bayou Grande, 3 miles from the barracks. They were joined by Battery M on the 15th, Battery B on the 17th, and the hospital detachment on the 29th. Their bivouac was designated Camp Morgan in honor of the late Bvt. Brig. Gen. C.H. Morgan of the 4th U.S. Artillery. Battery L spent the sickly season at the Barrancas.

The three batteries (B, I, and M) and the hospital detachment broke up the camp in the third week of October and returned to the barracks. On the last day of the month, Battery L left the post by train for Camp Marianna, where the artillerists remained until November 16, when they rejoined the battalion.[49]

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48. Returns from U.S. Posts, 1800-1916, NA, Microcopy M-617; Returns for Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727.

49. Ibid.

Early in the morning of April 29, 1877, officers and men of Battery I said farewell to their friends and boarded a steam launch for the ride up the bay to Pensacola. There, they boarded the train that took them to their new duty station in Charleston, South Carolina.

Two months later, on June 22, on approach of the fever season, Battery B was shifted by launch and rail to Camp Barrancas, near Sellers Station, on the railroad north of Pensacola. They were joined on the 26th by Battery M, and on the 29th by Lt. Wells Willard, the battalion laundresses, and 13 men of Battery L. In mid-July, another 7 men of Battery L arrived at the camp from the Barrancas.

On July 26, Batteries B and M broke camp and marched to Sellers Station, where they boarded the railroad coaches that were to take them to Newport Barracks, Kentucky. They detrained there the next day. From Newport, the artillerists proceeded on August 2 to Wilkes-Barre, Pennsylvania, where there had been violence in the coalfields.

During the remainder of the summer and into October, Battery L, divided into two small detachments, garrisoned the camp and the barracks.

The sickly season over, Camp Barrancas was broken up in mid-October. Battery L and the hospital detachment returned to the barracks on the 17th. Four days later, on the 21st, Batteries B and M were relieved from duty at Wilkes-Barre and marched to the depot, where they entrained. They rejoined their comrades at Barrancas barracks on the last day of the month.

On February 8, 1878, the battalion welcomed a detachment of 54 recruits. Maj. Henry W. Closson (who had replaced Major Seymour as post commander the previous year) assigned 19 recruits to Battery B, 14 to Battery L, and 21 to Battery M.

Maj. Gen. Winfield S. Hancock, commander of the Military Division of the Atlantic, and Bvt. Brig. Gen. J.M. Cuyler, the Division's chief medical officer, spent February 6 in the Pensacola area. Hancock inspected the fortifications and Cuyler the barracks.

On June 5, the battalion was reinforced by 3 field musics and one blacksmith from Fort Columbus, New York. Then, in accordance to policy, Major Closson, on June 22, pulled most of his troops out of the Barrancas. During the day, officers and men of Batteries B, L, and M completed a move to a camp at Cantonment, on the railroad, 15 miles north of Pensacola. The nearest post office was Powellton, one mile down the track. Major Closson, Commissary and Quartermaster Lieutenant H.J. Reilly, and 21 enlisted men remained at the barracks. In July, two of the enlisted men joined the battalion at Cantonment. This boosted the force there to 8 officers and 90 enlisted men.[50]

The camp, the yellow fever season over, was broken up in early November. Battery L and the hospital detachment returned to Barrancas barracks on the 5th, Battery M on the 6th, and Battery B on the 8th.

An important visitor spent two days at the Barrancas in February 1879. He was Gen. William T. Sherman, commander of the U.S. Army and Civil War hero. Sherman landed at the post wharf at 7 A.M., on the 18th, from the steamer Laurel. He inspected the troops, barracks, and forts, and reboarded Laurel at 5 A.M., on the 20th, to resume his tour of the Department of the South.

Three months later, on May 22, the troops and facilities were inspected by Department commander Brig. Gen. Christopher C. Augur.

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50. Ibid.

To escape the sickly season, the battalion was ordered for the first time to McPherson Barracks, near Atlanta. Travel was to be by train. Battery L left the post on June 11, Battery M on the 12th, and B on the 13th. Battalion commander Closson and the post quartermaster remained at Barrancas barracks until June 28, when they took the boat to Pensacola and boarded an Atlanta-bound train.

The redlegs returned from McPherson Barracks on November 21, 1879. But, when they did, Battery M did not accompany Batteries B and L. It remained at the Georgia station. Fort Barrancas thus became a two-battery post.

On the approach of summer, Major Closson learned that his troops this year were to spend the yellow fever months at Little Rock, Arkansas. Evacuating Barrancas barracks, on June 22, the battalion was taken to Pensacola by boat, where it entrained for the ride to Arkansas. The officers and men were back at the post on November 22, 1880.

Storms on February 1 and 9, 1881, wrecked the post storehouse, several small boats, and the wharf head. Chief Quartermaster, Department of the South, Charles G. Sawtelle, spent June 8 at the post. On the 10th, there was a thunderstorm, and lightning struck quarters No. 8 occupied by Capt. W.E. Van Reed, causing considerable damage to the house, kitchen, and cistern. On June 25, Batteries B and L evacuated Fort Barrancas. Transported up the bay to Pensacola by boat, they were transferred by rail to McPherson Barracks.

Batteries B and L did not return to Pensacola at the end of the sickly season. They, along with other units of the 5th Artillery, in mid-November, were transferred to New York City, to garrison the harbor forts.[51]

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51. Ibid.

4. Battalion of the 3d Artillery Returns to Pensacola for 44 Months

The 3d U.S. Artillery exchanged stations with the 5th. The three batteries slated for service at the Barrancas--Battery B from Fort Niagara, Battery E from Fort Wadsworth, and Battery K from Plattsburg Barracks--rendezvoused in New York City. There, on November 12, 1881, they boarded the steamer Louisiana. Disembarking at New Orleans one week later, they rode the New Orleans & Mobile Railroad eastward to Pensacola. On the 20th, the battalion, commanded by Capt. A.C. Wildrick, took post at their new station.

Yellow fever was reported in Pensacola on August 29, 1882, and the battalion hurriedly evacuated the post, boarding May Morgan. The steamer took the artillerists around to Mobile Bay and up the Alabama River to Mount Vernon Barracks. They remained at the barracks until December 9, when led by battalion commander Capt. J.L. Tiernon, the 5 officers and 86 enlisted men reboarded May Morgan.

Upon arrival at the Barrancas, they saw that the September 9 hurricane had demolished the building housing the offices of the post quartermaster and commissary, destroying furniture, books, and papers. Two of the iron guy wires supporting the garrison flagstaff had parted, while several trees had been uprooted.

On March 30, 1883, Maj. Gen. Henry J. Hunt spent the day inspecting the battalion and barracks and visiting the forts.

No chances were taken that summer. On June 25, the battalion (7 officers and 81 enlisted men), having packed their gear, boarded the train for Atlanta. A detachment (3 officers and 6 men) remained at the Barrancas. In mid-August, several of the Marine guard at the navy yard were stricken by yellow fever. As the Marine Hospital was only 300 yards from the post, the detachment, on the 19th, was evacuated across the bay to Fort Pickens. There, they remained until the last day of November. On December 11, the battalion departed Atlanta by rail and reached Pensacola at daybreak next morning, from where the troops were shuttled by boat to the Barrancas.

The battalion remained at Barrancas barracks until mid-September 1884. Then, to escape a threatened outbreak of fever, Batteries B, E, and K left the Barrancas at 10:30 A.M., on the 11th, aboard the steamer E.E. Simpson for Pensacola. There, they entrained for Atlanta, where they arrived the next day. The battalion spent the next three months at nearby Camp Mitchell. On December 7, the battalion boarded railroad coaches and returned to Florida, reoccupying their quarters and barracks at the Barrancas the next evening.[52]

5. Colonel Langdon and Two Batteries of the 2d Artillery Garrison the Post

The War Department, in the late spring of 1885, decided to have the 3d and 2d Artillery switch stations. On the morning of May 30, Battery B left the Barrancas for Newport Barracks, where it arrived the next evening. Battery K departed Pensacola by rail on June 2 and Battery E, 24 hours later, for Washington, D.C. They had been re-assigned to the barracks there. Batteries B and H, 2d U.S. Artillery, destined to garrison the Barrancas, had left Washington Barracks for Florida on the last day of May. They arrived at their new station on June 2. For the battalion commander, Lt. Col. Loomis Langdon, it was a homecoming, because in 1861-62 he had served under Colonel Brown at Fort Pickens and in the early 1870s he had been at Fort Barrancas as a captain in Major Brannan's battalion.[53]

The two-battery battalion, as was the practice, evacuated the barracks on July 24 and went into bivouac at Camp Mitchell, Georgia, the next day. Four months later, on November 29, Colonel Langdon and his men packed their gear and marched to the depot, where they

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52. Ibid.

53. Returns for Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727.

entrained. Reaching Pensacola late the next afternoon, the artillerists were taken to the Barrancas by boat.[54]

E. Captain Damrell's Final Years as District Engineer

1. Maintenance and Protection in Fiscal Year 1876

On March 10, 1875, the Department called on its district engineers to submit estimates for sums required from the appropriation for "Contingencies of Fortifications" for "care and preservation" of the works under their superintendence in Fiscal Year 1876.[55]

Replying, Captain Damrell reported that he needed $900 to fund operations at Fort Barrancas and the Redoubt during the 12 months ending June 30, 1876. A portion of this money would be used for pay of the district fort keepers, clerks, and messenger.[56]

The Department allotted the requested funds on May 20.[57]

No Engineer money was spent for maintenance or repair of the Barrancas fortifications during the fiscal year. The only funds disbursed, beyond those for personal services, were for preservation of Engineer property.

During the year, the two 10-inch siege mortars and their iron carriages and beds were removed to the barracks to facilitate drill.

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54. Ibid.

55. Humphreys to Damrell, March 10, 1875, NA, RG 77, Ltrs. Sent, Chief Engineer.

56. Damrell to Humphreys, April 12, 1875, NA, RG 77, Ltrs. Recd., Chief Engineer.

57. Casey to Damrell, May 20, 1875, NA, RG 77, Ltrs. Sent, Chief Engineer.

This left at "the fort 12 guns and 4 carriages, none of which were mounted."[58]

2. Maintenance and Protection in Fiscal Year 1877

a. The Allotment

On June 20, 1876, the Department notified Captain Damrell that President Grant had signed into law an act passed by the Congress, appropriating $100,000 for "Contingencies of Fortifications." He, in accordance with procedures, would submit as soon as possible estimates of the sums required from this appropriation for the forts under his supervision, "stating clearly the items of application."[59]

Captain Damrell reported that, in Fiscal Year 1877, he needed $8,550 from "Contingencies." Of this sum, the Barrancas fortifications were to be allotted $450 as their share of office rent, salaries of clerks, draughtsmen, etc., and $200 for ordinary repairs.[60]

On July 21, the Department wrote Captain Damrell that, from "Contingencies," he had been allotted for Fort Barrancas and its Redoubt $200 for "ordinary repairs."[61]

Shortly thereafter, General Humphreys decided on a bureaucratic change. On August 2, he wrote his district engineers that

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58. Annual Report, Fort Barrancas, Fiscal Year 1876, NA, RG 77, Ltrs. Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives for the 2d Session of the 44th Congress (Washington, 1877), Serial 1743, Vol. 2, Pt. 2, p. 25.

59. Casey to Damrell, June 26, 1876, NA, RG 77, Ltrs. Sent, Chief Engineer.

60. Damrell to Humphreys, July 1, 1876, NA, RG 77, Ltrs. Recd., Chief Engineer.

61. Casey to Damrell, July 21, 1876, NA, RG 77, Ltrs. Sent, Chief Engineer.

the July 21 allotments were to be charged to the act, approved June 20, "for the protection and repair of fortifications," rather than the appropriation for "Contingencies."[62]

b. Garrison Salvages Brick from Fort McRee

Major Seymour of the 5th U.S. Artillery, during the winter of 1875-76, sent working parties to Foster's Bank to salvage and stack brick from Fort McRee, preparatory to its removal to the Barrancas. The brick would be used to complete the walkways fronting the officers' quarters and for repair of other structures.

On July 24, a fatigue party began loading the bricks for shipment to the Barrancas. The fort keeper from Fort Pickens put a stop to this on the 26th, when he told Major Seymour that the bricks belonged to the Engineers and could not be removed. Whereupon, Seymour wrote Captain Damrell, explaining that, if his men had not salvaged the bricks, they would soon be either buried in the sand or covered by the sea. He could see no "impropriety in making use of these fragments for public service," so long as they were not collected and used by the Engineer Department. Major Seymour accordingly desired authority to remove about 50,000 bricks from Foster's Bank.[63]

Captain Damrell, on forwarding Seymour's letter to the Chief Engineer, recommended that the request be approved.[64]

General Humphreys, in turn, bucked the correspondence to Secretary of War James D. Cameron. On doing so, he

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62. Casey to Damrell, August 2, 1876, NA, RG 77, Ltrs. Sent, Chief Engineer.

63. Seymour to Damrell, July 26, 1876, NA, RG 77, Ltrs. Recd., Chief Engineer.

64. Damrell to Humphreys, August 1, 1876, NA, RG 77, Ltrs. Recd., Chief Engineer.

pointed out that Fort McRee had been abandoned for many years, because efforts to keep the sea from encroaching on it had been unsuccessful. Since then, the fort had been "gradually washing into the sea and the cost of tearing it to pieces and recovering the materials . . . would be more than the worth" of those saved.[65]

Secretary Cameron approved the request by Major Seymour to salvage and remove up to 50,000 bricks from the ruins of Fort McRee.

c. Fortifications' Small Allotment is Transferred

No money was expended by the Corps of Engineers on the Barrancas fortifications during the fiscal year. On April 19, 1877, the $200 allotted for "ordinary repairs" was transferred by the Chief Engineer's Office to Fort Gaines.[66]

3. Maintenance and Protection in Fiscal Year 1878

a. The Barrancas Gets No Allotment

On March 26, 1877, the Department, by circular letter, advised its district engineers that President Grant had signed, on the 3d, an act appropriating $100,000 for "Protection, Preservation and Repair of Fortifications" in Fiscal Year 1878. They would submit estimates of money needed for the works under their charge having no special appropriation.[67]

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65. Humphreys to Cameron, August 7, 1876, NA, RG 77, Ltrs. Sent, Chief Engineer.

66. Casey to Damrell, April 19, 1877; Annual Report, Fort Barrancas, Fiscal Year 1877, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives for the 2d Session of the 45th Congress (Washington, 1878), Serial 1795, Vol. 3, p. 21.

67. Casey to Damrell, March 26, 1877, NA, RG 77, Ltrs. Sent, Chief Engineer.

4. Maintenance and Protection in Fiscal Year 1879

a. The Allotment

On April 23, 1878, the Department wrote Captain Damrell that, by an act approved by President Rutherford B. Hayes in mid-March, Congress had appropriated $100,000 for "Preservation and Repair of Fortifications" in Fiscal Year 1879. Once again, Damrell would prepare and forward estimates of sums needed for maintenance of the defenses for which he was responsible.[72]

Captain Damrell asked $22,840 for the fortifications in his district. Out of this preposterous sum, the Barrancas defenses were to receive $200 for "ordinary repairs."[73]

The Department, confronted with nationwide responsibilities, was compelled to drastically pare Damrell's estimates. On June 27, Chief Engineer Humphreys notified Damrell that he had been allotted $6,850 for preservation and repair of the five Gulf Coast forts. He would provide Washington with data on the breakdown of this sum.[74]

After reviewing and evaluating his needs, Damrell budgeted $800 for "ordinary repairs" to Fort Barrancas and its Redoubt.[75]

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72. Twining to Damrell, April 23, 1878, NA, RG 77, Ltrs. Sent, Chief Engineer.

73. Damrell to Humphreys, May 7, 1878, NA, RG 77, Ltrs. Recd., Chief Engineer.

74. Twining to Damrell, June 27, 1878, NA, RG 77, Ltrs. Sent, Chief Engineer.

75. Damrell to Humphreys, July 2, 1878, NA, RG 77, Ltrs. Recd., Chief Engineer.

Captain Damrell replied, informing the Department that he required an allotment of $10,790 from the subject appropriation. From this figure, he would program $400 for "ordinary repairs" to the Barrancas fortifications.[68]

Chief Engineer Humphreys, after receiving, abstracting, and reviewing his district engineers' requests, on May 19 allotted Captain Damrell $4,000 for the defenses for which he was responsible. Because this was more than $6,000 below the sum asked, Damrell was to inform the Chief Engineer of its proposed distribution.[69]

Damrell accordingly divided the $4,000 to include $200 for Fort McRee, $990 for Fort Pickens, $1,090 for Fort Morgan, $860 for Fort Gaines, and $860 for the Ship Island fort. This left no money for repairs at Fort Barrancas and the Redoubt during the next fiscal year.[70]

b. Emergency Repairs are Made to the Bridges and Stairs

One hundred and thirty dollars, however, had to be transferred by the Chief Engineer from "Contingencies" for repair of the wooden bridges and stairs in the fort and at the Redoubt in the spring of 1878.[71]

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68. Damrell to Humphreys, April 18, 1877, NA, RG 77, Ltrs. Recd., Chief Engineer.

69. Casey to Damrell, May 19, 1877, NA, RG 77, Ltrs. Sent, Chief Engineer.

70. Damrell to Humphreys, May 22, 1877, NA, RG 77, Ltrs. Recd., Chief Engineer.

71. Twining to Damrell, March 15, 1878; Annual Report, Fort Barrancas, Fiscal Year 1878, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer; Executive Documents, Printed by Order of the House of Representatives for the 3d Session of the 45th Congress (Washington, 1879), Serial 1844, Vol. 3, p. 24.

b. No Repairs are Made, but the Garrison Mounts Three Mortars

The $800 was held in reserve because no work was accomplished on the Barrancas fortifications during these 12 months. When he inspected the defenses in June 1879, Captain Damrell found them in the same condition as at the time of his last annual report.

During the year, the garrison had mounted two 10-inch and one 8-inch mortars on wooden platforms on the Fort Barrancas parade.[76]

5. Maintenance and Protection in Fiscal Year 1880

a. Department Calls for Estimates

Congress, by an act approved by President Hayes on March 3, 1879, again appropriated $100,000 for "Preservation and Repair of Fortifications" in Fiscal Year 1880. District engineers were notified by circular letter to submit, at their earliest opportunity, estimates of sums needed from this appropriation for care of fortifications. They were cautioned that "no larger sum should be estimated for any work than will strictly be necessary for expenditure for that" defense in the fiscal year.[77]

Captain Damrell accordingly cut his request for maintenance and protection funds for Fiscal 1880 from $22,840 to $16,040 and those for Fort Barrancas from $800 to $600. All the latter was earmarked for "ordinary repairs."[78]

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76. Annual Report, Fort Barrancas, Fiscal Year 1879, NA, RG 77, Ltrs. Recd., Chief Engineer.

77. Elliot to Damrell, March 14, 1879, NA, RG 77, Ltrs. Sent, Chief Engineer.

78. Damrell to Humphreys, March 17, 1879, NA, RG 77, Ltrs. Recd., Chief Engineer.

b. General Wright Replaces General Humphreys as Chief Engineer

An administrative change delayed the Department's reply. In June 1879, Horatio G. Wright, Civil War hero and a senior officer in the Corps, replaced General Humphreys, who had retired after 52 years of service, 13 of them as Chief Engineer. It was July 28 before the Department notified Damrell that he had been allotted $5,000, about one-third the sum asked, for care of the works under his supervision in Fiscal Year 1880. He would inform the Department how he proposed to program this sum among his five forts.

General Wright, at this time, cautioned his superintending engineers that requests for maintenance and protection funds for the current fiscal year exceeded $130,000, and seemingly did not include many items the Department believed necessary for repair and preservation of the fortifications. He urged that no more of the amount allotted be expended than "is absolutely necessary," so that any surplus, however small, might be applied to "emergent and important cases elsewhere."

A review of the files had revealed, to his distress, that "more of this appropriation is expended on salaries of Assistant Engineers, Overseers, and Clerks, the forage of public animals, and other similar continuous expenditures, than would seem necessary," while there is no "construction in progress."

Hereinafter, General Wright wanted these rules observed: (a) no assistant engineer, overseer, or clerk would be employed, no vessel or boat engaged, and no public animals retained, except in special circumstances where their services were required. Any men falling into these categories were to be discharged, any boats laid up or disposed of, and any public animals sold. (b) Fort keepers at ungarrisoned works were to be required, as part of their job, to cut the grass on the parapets and glacis, and to scrape and paint the embrasure irons and other ironwork liable to rust. (c) Salaries paid the fort keepers were in some instances higher than necessary, especially when

their use of public quarters and land for gardens was taken into account.[79]

When he reprogrammed, Captain Damrell allotted no funds for the Barrancas.[80]

c. Captain Damrell Reviews the Construction Situation

When he made his annual report for Fiscal Year 1880, Captain Damrell reviewed, for Chief Engineer Wright, the situation at Fort Barrancas and the Redoubt. Since the Civil War, he noted, "operations had been confined to necessary repairs to masonry, slopes, and woodwork." In 1874, construction of four 4-inch front-pintle platforms, for mounting heavier armament, had been commenced. Work, however, had been suspended before much progress was made, and none of the platforms had been completed.

Plans and estimates had been prepared by the Board of Engineers for construction of an exterior battery for heavy guns, on the bluff west of the fort. No appropriation, however, had been voted by Congress. To begin construction of this battery, Damrell called for a $50,000 appropriation for Fiscal Year 1882.

The fort's mounted armament consisted, as it had for the past several years, of two 10-inch and one 8-inch mortar on wooden platforms. On hand, but not emplaced, were two 200- and two 100-pounder Parrotts and their iron carriages, and eight 24-pounder flank howitzer tubes.[81]

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79. Elliot to Damrell, July 28, 1879, NA, RG 77, Ltrs. Sent, Chief Engineer.

80. Damrell to Wright, August 5, 1879, NA, RG 77, Ltrs. Recd., Chief Engineer.

81. Annual Report, Fort Barrancas, Fiscal Year 1880, NA, RG 77, Ltrs. Recd., Chief Engineer.

6. Maintenance and Protection in Fiscal Year 1881

a. General Wright Alters the Allotment Procedures

In 1880, Congress appropriated $100,000 for "Protection, Preservation and Repair of Fortifications" for the fiscal year ending June 30, 1881.[82] Captain Damrell accordingly submitted his estimates of monies needed to fund operations at the five forts during the 12 months, beginning July 1. When five months passed and he received no word regarding his allotments, he, on October 30, wrote General Wright. He would like to know the amounts allotted for his defenses.[83]

General Wright answered, informing Damrell that no allotments would be made in Fiscal Year 1881 from the subject appropriation. Calling attention to a circular of August 12, Wright pointed out that he had made a change in the allocation procedure.[84] Henceforth, requests for management and protection money would be separated from those for maintenance. District engineers would employ funds appropriated for "Protection, Preservation and Repair" to meet monthly salaries of their employees, such as fort keepers. Whenever repairs had to be made at any installation, "a special report" of the work required, along with a detailed estimate of the cost, would be forwarded to the Department for approval.[85]

On February 28, 1881, the Chief Engineer called on his superintending engineers for reports of funds required for "ordinary expenses" for fortifications between now and June 30. They would also

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82. Wright to Damrell, May 27, 1880, NA, RG 77, Ltrs. Sent, Chief Engineer.

83. Damrell to Wright, October 30, 1880, NA, RG 77, Ltrs. Recd., Chief Engineer.

84. Elliot to Damrell, November 4, 1880, NA, RG 77, Ltrs. Sent, Chief Engineer.

85. Elliot to Damrell, August 12, 1880, NA, RG 77, Ltrs. Sent, Chief Engineer.

submit necessary projects for protection and preservation of the works and their estimated cost.[86]

Captain Damrell wrote the Department that the money on hand on "account of the fortifications" was sufficient for "ordinary expenses" to June 30. To fund operations for "protection and preservation" at Forts Morgan and Gaines and the Ship Island fort, he asked for and was allotted $3,708.[87]

b. Major Closson Prods the Corps into Repairing the Fencing

The Department, however, was soon compelled to reprogram. Major Closson, the post commander, complained through channels that the fencing enclosing the Fort Barrancas and Redoubt glacises was in bad condition, and several sections had fallen. Many of the posts were rotten, along with much of the railing. According to records, Major Closson continued, these fences had been erected by the Engineers to protect the slopes from cattle, a problem that still plagued the Army.

Closson had called on Post Quartermaster Reilly to prepare estimates of costs of repairs to the fencing. Reilly reported that it would be $240.75 for materials and labor.[88]

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86. Elliot to Damrell, February 28, 1881, NA, RG 77, Ltrs. Sent, Chief Engineer.

87. Damrell to Wright, March 16, 1881, NA, RG 77, Ltrs. Recd., Chief Engineer.

88. Closson to A.A.G., Dept. of the South., March 7, 1881, NA, RG 77, Ltrs. Recd., Chief Engineer. Reilly called for 95 red cedar half posts, 2,000 feet juniper board, and 150 pounds of 10# nails, in addition to 20 days' work by one carpenter and a laborer.

After ascertaining that the fort and Redoubt were outside that portion of the reservation pertaining to the barracks and quarters, Army Headquarters forwarded the correspondence to the Chief Engineer. Before allotting $250 to fund repair of the fencing, General Wright contacted Captain Damrell who certified that it was necessary.[89]

Captain Damrell, the money in hand, lost no time in having the rotten fencing replaced. This was the only work done at Fort Barrancas and the Redoubt by the Engineers during the fiscal year. The post was garrisoned so the troops were responsible for weeding the slopes, cutting grass, cleaning drains, and minor repairs.[90]

7. Maintenance and Protection in Fiscal Year 1882

Captain Damrell and his fellow district engineers were advised by circular letter on June 18, 1881, that Congress had passed an act, appropriating $175,000 for "Protection, Preservation and Repair of Fortifications" in Fiscal Year 1882. They would report, without delay, the funding needed for "ordinary expenses" for the works in their charge during the next 12 months. In accordance with the recent administrative change, they would document needed repairs and the estimated costs thereof.[91]

When he submitted his estimates, Captain Damrell ignored the Barrancas. He called for projects budgeted at $9,881 for the other four works in his district.[92]

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89. Elliot to Damrell, April 28 & May 12, 1881, and Damrell to Wright, May 3, 1881, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer.

90. Annual Report, Fort Barrancas, Fiscal Year 1881, NA, RG 77, Ltrs. Recd., Chief Engineer.

91. Elliot to Damrell, June 18, 1881, NA, RG 77, Ltrs. Sent, Chief Engineer.

92. Damrell to Wright, August 11, 1881, NA, RG 77, Ltrs. Recd., Chief Engineer.

The Department, after tabulating and reviewing all requests for funds from the appropriation for "Protection, Preservation and Repair," allotted $9,981 to Damrell for his five forts.[93]

Once again, there was minimal maintenance of the fortifications. Fatigue parties detailed by the post commander did little more than weed the slopes, cut grass, and police the area. The Engineers, during the 12 months, spent the remainder of the May 1881 allotment on fence repairs.[94]

8. Maintenance and Protection in Fiscal Year 1883

On June 2, 1882, the Chief Engineer's Office notified Captain Damrell that President Chester A. Arthur had approved an act appropriating $175,000 for "Protection, Preservation and Repair of Fortifications" in Fiscal Year 1883. He would report, before July 1, the funds necessary for "ordinary expenses" at his five defenses. In addition, he was to detail projects, with estimates, required for upkeep of these forts.[95]

It was late July before Captain Damrell compiled and forwarded the desired data to Washington. His program called for $2,736 for ordinary expenses at the five works. But of this sum, all but $96 was designated for pay of the keepers at Forts Pickens, Morgan, and Gaines, and the fort on Ship Island. In addition, he called for money to fund these projects: Fort Pickens--$250 for repair of buildings and cisterns and $7,100 for rebuilding wharf and railway; Fort Morgan--$4,067

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93. Elliot to Damrell, August 17, 1881, NA, RG 77, Ltrs. Sent, Chief Engineer.

94. Annual Report, Fort Barrancas, Fiscal Year 1882, NA, RG 77, Ltrs. Recd., Chief Engineer.

95. Elliot to Damrell, June 2, 1882, NA, RG 77, Ltrs. Sent, Chief Engineer.

for brush and stone apron; Fort Gaines--$6,918.15 for new wharf; and $3,491 for jetties to protect the site of the Ship Island fort.[96]

While awaiting word on how his requests had fared, Captain Damrell received welcomed news. He learned that on September 15, after 15 years as a captain, he had been promoted to major. Soon thereafter, he was apprised that Chief Engineer Wright had allotted $6,303 for maintenance and protection of the works under his supervision from the appropriation for "Preservation and Repair" in the fiscal year ending June 30. This was the sum requested, less the monies for the Forts Pickens and Gaines wharves and the Ship Island jetties. These projects were to be held in abeyance until the spring of 1883, when they were to be re-evaluated in view of the Department's nationwide commitments and available funding.[97]

Early in March 1883, the Department, as was its practice, called on its district engineers for data as to whether they would have any unobligated funds for Fiscal Year 1883. Major Damrell answered that no money could be spared from his present allotment.[98]

No money having been appropriated nor allotted for the Barrancas fortifications, maintenance was limited during the year to mowing and weeding the slopes and glacis by the garrison.[99]

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96. Damrell to Wright, July 25, 1882, NA, RG 77, Ltrs. Recd., Chief Engineer.

97. Elliot to Damrell, September 19, 1882, NA, RG 77, Ltrs. Sent, Chief Engineer.

98. Wright to Damrell, March 10, 1883, NA, RG 77, Ltrs. Sent, Chief Engineer.

99. Annual Report, Fort Barrancas, Fiscal Year 1883, NA, RG 77, Ltrs. Recd., Chief Engineer.

9. Maintenance and Protection in Fiscal Year 1884

a. The Barrancas Fortifications Fail to Get an Allotment

On March 20, 1883, General Wright notified his district engineers by circular that President Arthur had approved an act of the last session of the 47th Congress, appropriating $175,000 for "Protection, Preservation and Repair" of fortifications in Fiscal Year 1884. They, in accordance with procedures, would transmit to the Department two sets of figures--those needed for "ordinary expenses," along with estimates for projects required for upkeep of the defenses entrusted to their care.[100]

Major Damrell, on May 30, forwarded the desired estimates. On doing so, he failed to ask for any money for either Fort Barrancas or the Redoubt.[101]

b. Chief Engineer Newton Requires More Substance to the Annual Reports

On March 6, 1884, the Army lost its Chief Engineer. General Wright, having reached his 64th birthday, was retired. He was succeeded by Brig. Gen. John Newton, who as a captain, had been superintending engineer of the Pensacola Bay defenses from 1855 to 1858.

General Newton promtly changed the format of the annual reports. Hereinafter, the district engineers would, in making them, detail structural failures and needed repairs, rather than confining themselves to general statements, i.e., the fort is in the same general condition as at the time of the last annual report. They would also provide data on gun platforms, the number, how many completed, and the number ready to receive their armament.

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100. Wilson to Damrell, March 20, 1883, NA, RG 77, Ltrs. Sent, Chief Engineer.

101. Damrell to Wright, May 30, 1883, NA, RG 77, Ltrs. Recd., Chief Engineer.

When he filed his annual report for Fiscal Year 1884, Major Damrell noted that the current condition of Fort Barrancas is: (a) the "brick arches and inner walls of the scarp gallery are badly cracked, the arch of the counterscarp gallery has parted along the key bricks throughout its entire length"; and (b) the arches and walls near the magazines in the counterscarp are cracked so as to cause leakage, rendering the magazines unserviceable for storage of ammunition. The remainder of the brickwork was in fair condition.

The woodwork of the bridge crossing the ditch was badly decayed and would have to be replaced in the near future.

For some unknown reason, he failed to report any structural failures associated with the Redoubt.

Damrell listed the condition of the gun platforms:

<u>At Fort Barrancas</u>
2-inch front-pintle platforms, low traverse stones
completed--10; not completed--10
Casemate platforms for 24-pounder howitzers
completed--8

<u>In the Water Battery</u>
2-inch front-pintle platforms, low traverse stones
completed--2; not completed--11

<u>At the Redoubt</u>
Platforms for 24-pounder howitzers
completed--8

Mounted in the works were: two 4½-inch rifled guns, three 10-inch siege mortars, two 8-inch siege mortars, and three 8-inch

siege howitzers. On hand but not mounted were two 200- and two 100-pounder Parrotts, and their chassis and carriages.[102]

F. Captain Hoxie Replaces Major Damrell as District Engineer

1. Department Constitutes the Montgomery District

On July 11, 1884, Chief Engineer Newton advised Major Damrell that Congress, on the 5th, had authorized and President Arthur had approved an appropriation of $175,000 for "Protection, Preservation and Repair of Fortifications" in Fiscal Year 1885. He would report as soon as possible the sums needed for pay of the fort keepers. At a future date, he would be called on for estimates of funds required for maintenance and repair.[103]

There was no fort keeper at the Barrancas defenses, because, unlike the other works in the Mobile District, it was garrisoned. Major Damrell accordingly ignored it when he submitted the requested estimates.[104]

Then, on July 24, General Newton called on his district engineers for "a definite and clear description of the parts of the various works," under their charge, requiring "repair and preservation, omitting . . . the portions which . . . would be useless after the modification of the fortifications."[105]

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102. Annual Report, Fort Barrancas, Fiscal Year 1884, NA, RG 77, Ltrs. Recd., Chief Engineer.

103. Wilson to Damrell, July 11, 1884, NA, RG 77, Ltrs. Sent, Chief Engineer.

104. Damrell to Newton, July 16, 1884, NA, RG 77, Ltrs. Recd., Chief Engineer.

105. Wilson to Damrell, July 24, 1884, NA, RG 77, Ltrs. Sent, Chief Engineer.

A bureaucratic change made by the Corps of Engineers prevented the Barrancas fortifications from getting any funds from this source in Fiscal Year 1885. On August 30, 1884, Major Damrell's zone of responsibility was redefined. West Florida was detached from the Mobile Engineer District and assigned, along with Alabama and Georgia, to the newly constituted Montgomery Engineer District. Capt. Richard L. Hoxie was placed in command of the new district. Appointed to the U.S. Military Academy from Iowa in 1864, Hoxie had graduated No. 3 in the Class of 1868. He was commissioned a second lieutenant in the Corps of Engineers and assigned to the Engineer Battalion at Willetts Point. On July 3, 1870, Hoxie was ordered to Massachusetts as assistant engineer for Boston Harbor. He was promoted first lieutenant soon afterwards.

For 24 months, beginning in July 1872, Hoxie was on duty in the west with the Wheeler Expedition. On July 3, 1874, Hoxie reported for duty as Chief Engineer of the District of Columbia, and on July 25, 1878, he was named assistant to the Engineer Commissioner for the District. On August 16, 1884, Hoxie, now a captain, was ordered to Montgomery. In addition to the Pensacola defenses, he would be responsible for harbor and river surveys and improvements.[106]

When Major Damrell submitted his estimates for maintenance projects, in response to General Newton's circular of July 24, he only listed Forts Morgan and Gaines and the Ship Island work. Captain Hoxie, who did not assume charge of the Barrancas fortifications until September 15, failed to forward an estimate. The Department did not take note of this, and there was no maintenance allotment for the Pensacola forts for the year ending June 30, 1885.

2. General Newton Calls for a Report on Putting Major Caliber Gun and Mortar Platforms in Serviceable Condition

In mid-March 1885, Chief Engineer Newton called on Captain Hoxie and his other district engineers to submit, as soon as

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106. Cullum, Biographical Register, Vol. III, p. 107.

practicable, estimates of the costs of putting in serviceable order "existing platforms of 8-inch, 10-inch, and 15-inch guns, of mortars and of rifle guns bearing upon the channel entrance of the various harbors for each work." They would also examine the magazines. Separate figures were to be transmitted for each class of gun and mortar.[107]

Captain Hoxie had the "slows." On April 10, no figures yet received, Chief Engineer Newton reiterated his request.[108]

Captain Hoxie, when he replied, employed a typewriter to draft his letter. On doing so, he noted that the Barrancas fortifications had no platforms for the designated large caliber guns, but there were 5 mortar platforms, mounting three 10-inch siege mortars, model 1861, and two 8-inch siege mortars, model 1861. To repair these platforms, he needed 4,000 feet of oak lumber to cost about $200.

As for the magazines, the two in the counterscarp seeped water after rains. To effect repairs required about $900. Moreover, the bridge connecting the fort and counterscarp should be rebuilt at an estimated expense of $250.[109]

3. Hoxie Makes His First Annual Report

On August 2, Captain Hoxie filed his first annual report for the Barrancas defenses. It was for the fiscal year ending June 30, 1885. Before doing so, he reviewed the one submitted by Major Damrell for Fiscal Year 1884. His report on the condition of Fort Barrancas accordingly was a carbon copy of his predecessor's. He did, however,

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107. Wilson to Hoxie, March 10, 1885, NA, RG 77, Ltrs. Sent, Chief Engineer.

108. Wilson to Hoxie, April 10, 1885, NA, RG 77, Ltrs. Sent, Chief Engineer.

109. Hoxie to Newton, April 18, 1885, NA, RG 77, Ltrs. Recd., Chief Engineer.

add details regarding the Redoubt, i.e., the bridge across the ditch was badly decayed; the wall of the northwest bastion was "badly cracked"; and the parade was "overrun with weeds and undergrowth."

During the next 12 months, he would need considerable sums to get rid of weeds, bushes, and trees that were slowly but surely engulfing Fort Barrancas, the Redoubt, and Water Battery. During the past year, Captain Tiernon, on occasions, had employed his troops to grub weeds and mow grass in and about the defenses.[110]

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110. Annual Report, Fort Barrancas, Fiscal Year 1885, NA, RG 77, Ltrs. Recd., Chief Engineer.

XI. FORT BARRANCAS AND THE LAST YEARS OF THE 19th CENTURY

A. Endicott Board Submits Its Report

1. Technological Revolution Makes the Nation's Seacoast Fortifications Obsolete

In the 1880s, the only monies spent on coastal defenses was for maintenance. "The fortifications fell into disrepair and the defensive strength of the United States" shrank to perhaps its lowest level since 1812. Simultaneously, great advances were being made in the design and manufacture of heavy ordnance.

One important development involved the substitution of steel for iron in the casting of guns. As the technique of forging large masses of steel improved, it enabled the ordnance people to proceed with manufacture of the compound tube. The founding of cannon tubes in accordance with this new concept--increasing the size and strength of the gun by successive shrinking-on of reinforcing hoops--had been practiced, it is true, in the years before 1860. Technology, however, had lagged, and it was not until the Civil War that banded and rifled guns of heavy caliber came into general use. Dr. Raymond Lewis, an authority on the subject, has written:

> Not until the late 1880s did the combined availability of good quality steel in large amounts, industrial facilities for producing heavy forgings, and machining techniques able to meet the required standards of precision make it possible to produce substantial numbers of these lighter, stronger, longer, and hence, more powerful weapons.[1]

Another important advance was in the perfection of breech-loading. The principle had been employed intermittently until 1855 when Lord William Armstrong of Great Britain designed a rifled

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1. Lewis, Seacoast Fortifications of the United States, p. 75.

breech-loading gun that "included so many improvements as to be revolutionary."[2]

During the Civil War, breech-loading artillery was employed on a limited scale by the belligerents. After 1865, breech-loading field guns replaced muzzle-loaders in the European armies, as well as that of the United States. Not so rapid was the replacement of the muzzle-loading heavy ordnance mounted in coastal defenses. The problem of developing a successful breech-loading gun was technological. To be acceptable, a breech mechanism had to withstand the great heat liberated by the detonation of the propellant, be capable of containing the gasses, and be machined to be opened and closed rapidly. It was not until the late 19th century that ordnance technology was sufficiently advanced to produce the well-machined block mechanisms required by the big rifled guns needed for coastal defense.[3]

Three other developments helped speed the emergence of modern coastal artillery: (1) methods of rifling the tubes were improved, which made possible introduction of more efficient and effective projectiles; (b) the development of disappearing carriages that utilized the firing recoil energy to return the gun to its position in battery behind a parapet where it could be reloaded and serviced without unduly exposing its crew; and (c) the introduction of improved propellents, nitrocellulose- and nitroglycerin-based powders, to replace black powder.[4]

The effect on heavy ordnance of this technological revolution cannot be exaggerated because it represented the greatest

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2. Albert Manucy, Artillery Through the Ages: A Short Illustrated History of Cannon, Emphasizing Types Used in America (Washington, 1949), p. 4.

3. Lewis, Seacoast Fortifications of the United States, p. 75.

4. Ibid., p. 76; Manucy, Artillery Through the Ages, p. 28.

advance to be made in artillery from the time of its appearance in the 14th century until development of the atomic cannon of the 1950s. As Dr. Lewis has written:

> Compared to the best of the smoothbore muzzle-loading cannon of the post-Civil War period, the new weapons which began to emerge from the developmental stage around 1890 could fire projectiles that, caliber for caliber, were four times as heavy as to effective ranges two to three times as great; and they could do so with remarkably increased armor penetration ability and accuracy.[5]

During these years, the European naval powers had embarked on ambitious and expensive construction programs--the battleship made her appearance. News of the development of what was considered to be the ultimate weapon afloat caused ranking Army and Navy officers, as well as much of the public residing on the Atlantic and Pacific seacoasts, to become alarmed over the failure of Congress to authorize construction funds for coastal defenses since the mid-1870s. Pressure mounted for Congress to take action to correct this situation which had allowed the Second and Third System forts to deteriorate to a point where the Nation's security was jeopardized.

2. President Cleveland Constitutes the Endicott Board

President Grover Cleveland accordingly in 1885 constituted a board headed by Secretary of War William C. Endicott to review the coastal defense posture of the United States and to submit recommendations for a program to update it to take advantage of the technological revolution in weaponry. This Board was composed of officers of the Army and Navy, as well as civilians. Not since 1816, when the four-man board headed by Brig. Gen. Simon Bernard had made its study leading to the Third System forts, had the subject of fortifications, types of armament, etc., been subjected to such an exhaustive study. The Endicott Board made its report in 1886.[6]

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5. Lewis, Seacoast Fortifications in the United States, p. 76.

6. Ibid., pp. 77-78.

The Board called for fortifications at 26 coastal points, plus three on the Great Lakes, as well as floating batteries, torpedoes, boats, and submarine minefields. Dr. Lewis has observed:

> In terms of the cost estimate alone, the overall proposal was grossly unrealistic. Moreover, the detailed provisions, concerning the types and quantities of weapons, drafted while the new ordnance was still at a fairly early stage of development, were necessarily set forth long before precise information was available regarding the actual performance of the production models.[7]

Nevertheless, on March 29, 1887, the Board of Engineers for Fortifications was directed by Secretary of War Endicott to prepare plans for the defense of the Nation's more important harbors in accordance with recommendations of the Endicott Board. Operating under these guidelines, the Board of Engineers undertook "a thorough revision of plans for defense of our chief ports by submarine mines and a study of the precise location of the new armaments rendered necessary by modern modes of attack."[8]

During the period 1887-1896, detailed plans for defense of 23 key ports and harbor, including Pensacola, were prepared by the Board of Engineers and approved by the Secretary of War.[9]

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7. Ibid., p. 77.

8. Craighill to Lamont, September 29, 1896, found in Report of the Secretary of War; being part of the Message and Documents Communicated to the Two Houses of Congress at the Beginning of the Second Session of the Fifty-Fourth Congress, 3 vols. (Washington, 1896), Vol. 2, p. 7; cited hereinafter as Report Secretary of War--1896. Brig. Gen. W.P. Craighill was Chief Engineer in 1896 while Daniel S. Lamont was Secretary of War.

9. In addition to Pensacola, these harbors were: Portland, Me.; Portsmouth, N.H.: Boston, Mass.; Narragansett Bay, R.I.; eastern entrance to Long Island Sound; New York City, N.Y.; Philadelphia, Pa.; Baltimore, Md.; Washington, D.C.; Hampton Roads, Va.; Wilmington, N.C.; Charleston, S.C.; Savannah, Ga.; Key West, Fla.; Mobile, Ala.; New Orleans, La.; Galveston, Tex.; San Diego and San Francisco, Calif.; mouth of the Columbia River; and Puget Sound, Wash. Ibid.

Besides these major undertakings, partial projects were programmed and approved for defense of the lake ports; Cumberland Sound; Kennebec and Penobscot Rivers, Maine; New Bedford, Massachusetts; and New Haven and New London, Connecticut. Under consideration were projects for defense of Port Royal, South Carolona, and the Dry Tortugas.[10]

B. Captain Hoxie's 53 Months as District Engineer

1. Maintenance and Protection in Fiscal Year 1886

In March 1885, the year President Cleveland constituted the Endicott Board, Chief Engineer Newton alerted his district engineers that lame duck President Arthur had approved an act of the last session of the 48th Congress, appropriating $100,000 for "Preservation" of fortifications in Fiscal Year 1886. They would report before June 1 the sums necessary for "ordinary expenses" in the year ending June 30, 1886. They were to detail the maintenance projects to be executed at each of these works and its estimated cost.[11]

Once again, as he had in the past, Hoxie missed a deadline. On June 5, he was chided by the Department, and asked to submit, "at your earliest convenience," an estimate of funds required for preservation and repair of the defenses in your charge for the next fiscal year.[12]

This time, the Chief Engineer's message registered. Replying, on June 16, Captain Hoxie, keeping in mind the Department's desire that existing platforms of heavy caliber shellguns, rifles, and mortars bearing on the channel entrance, along with their magazines, be placed in serviceable condition, called for:

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10. Ibid.

11. Newton to Hoxie, March 30, 1886, NA, RG 77, Ltrs. Sent, Chief Engineer.

12. Wilson to Hoxie, June 5, 1885, NA, RG 77, Ltrs. Sent, Chief Engineer.

Repair of one single and one double magazine in counterscarp gallery		$ 900
Rebuilding bridge over ditch		$ 250
Replacing five mortar platforms		$ 200
	TOTAL	$1,350[13]

On June 19, after reviewing his nationwide responsibilities, Chief Engineer Newton allotted $1,040 for preservation and repair of the Pensacola Bay defenses during the next 12 months. All of this small sum was earmarked for Fort Pickens.[14]

No repairs were therefore made to the Barrancas fortifications during the fiscal year. When Captain Hoxie submitted his annual report, its description of conditions was a carbon copy of the one prepared and forwarded by Major Damrell for Fiscal Year 1884 and of Hoxie's for Fiscal Year 1885. During these 12 months, Hoxie noted, 2d Artillery fatigue parties organized by Colonel Langdon had "to some extent" removed some of the undergrowth from the parades, glacises, and earthen slopes of Fort Barrancas, the Redoubt, and Water Battery.[15]

2. Maintenance and Protection in Fiscal Year 1887

a. Congress Fails to Pass a Fortifications Bill

Congress, during the 2 years following the 1886 publication of the Endicott Board's report, refused to appropriate money for protection, preservation, and repair of the obsolete fortifications

13. Hoxie to Newton, June 16, 1885, NA, RG 77, Ltrs. Recd., Chief Engineer.

14. Newton to Hoxie, June 29, 1885, NA, RG 77, Ltrs. Sent, Chief Engineer.

15. Annual Report, Fort Barrancas, Fiscal Year 1886, NA, RG 77, Ltrs. Recd., Chief Engineer.

guarding the Nation's ports and harbors. On September 7, 1886, the Department alerted its district engineers that the 49th Congress had failed to make an appropriation for "Preservation" of fortifications in Fiscal Year 1887. Since there would be no allotments, they were to dispense with their monthly reports of operations until such time as there was an appropriation and work was resumed.

At defenses, where fort keepers were employed, they were to be discharged. No expenditures were to be made from "Contingencies," and the district engineers were to report at once any funds on hand, previously allotted from that appropriation.[16]

Captain Hoxie promptly replied that no fort keeper was employed at the Barrancas, because it had always been garrisoned. A number of years having passed since there had been an allotment for the Barrancas, there were no contingency funds in its account.[17]

b. Chief Engineer Duane Calls for Semi-Annual Reports

General Newton, having reached his 64th birthday on August 22, 1886, retired from the Army. His replacement as Chief Engineer was Brig. Gen. James C. Duane. The new chief, in mid-October, to make his presence felt, changed the annual report procedure. Henceforth, district engineers would make semi-annual inspections in January as well as the annual inspection. On submitting the reports, following these inspections, they were to include a "statement of the amount and character of the water supply at each post, and also of the number, character, condition, capacity, and present use of all buildings at each work."[18]

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16. Wilson to Hoxie, August 9, 1886, NA, RG 77, Ltrs. Sent, Chief Engineer.

17. Hoxie to Newton, August 9, 1886, NA, RG 77, Ltrs. Recd., Chief Engineer.

18. Duane to Hoxie, October 16, 1886, NA, RG 77, Ltrs. Sent, Chief Engineer.

Although he made his inspection in January 1887, Captain Hoxie did not file his report until mid-April. On submitting it, he noted that there being no money, no changes had occurred in the condition of the Barrancas fortifications or their armament since his annual report.

There was no source of water at Fort Barrancas, but at the Redoubt, there was a "small running spring," which yielded about three-quarters of a gallon per minute. Rain falling on the roofs of barracks and quarters at the post was conducted into 36 cisterns or tanks. These recepticles held 180,000 gallons.

At nearby Warrington, there was an artesian well.[19]

A table was prepared and mailed, providing the desired data on the reservation structures:

BLDG. NO.	FABRIC	CONDITION	USE	CAPACITY
1	brick	fair	barracks	4 batteries, post library, school, and reading room
2	wood	fair	storeroom and kitchen	-----
3	wood	fair	storeroom and kitchen	-----
4	wood	fair	storeroom and kitchen	-----
5	wood	fair	guardhouse	-----
6	wood	fair	hospital	20 beds

19. Hoxie to Duane, April 11, 1887, NA, RG 77, Ltrs. Recd., Chief Engineer.

BLDG. NO.	FABRIC	CONDITION	USE	CAPACITY
7	wood	good	Comd. officer's quarters	2 stories
8	wood	good	quarters	2 rooms
9	wood	good	quarters	2 rooms
10	wood	good	quarters	2 rooms
15	wood	good	quarters	2 rooms
16	wood	good	quarters	2 rooms
17	wood	good	quarters	2 rooms
11	wood	good	quarters	1 capt.
12	wood	good	quarters	1 capt.
13	wood	good	quarters	1 capt.
14	wood	good	quarters	1 capt.
18	wood	good	CO's office	2 rooms
19	wood	fair	quartermaster & commissary store-house	2 rooms
20	wood	good	quartermaster's office	2 rooms
21	wood	poor	carpenter shop	-----
22	wood	fair	wagon shed	-----
23	wood	fair	stables	10 animals
24	brick	good	blacksmith shop	-----
25	wood	fair	coal shed	-----
26	wood	good	boathouse	-----
27	wood	fair	staff NCO's quarters	-----

BLDG. NO.	FABRIC	CONDITION	USE	CAPACITY
28	brick	good	bakehouse	-----
29	wood	fair	shed for sawing wood	-----

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Captain Hoxie, before preparing his annual report for Fiscal Year 1887, spent several late June days at Pensacola. Upon submitting his report, he noted that, as there were no appropriations, no work had been done by the Corps on the Barrancas fortification during this period.

He also reminded the Department that the plans and estimates prepared by the Board of Engineers, 15 years ago, for the battery on the bluff west of Fort Barrancas were obsolete and must be revised and updated.[21]

C. Captain Price's 63 Months on the Gulf Frontier

1. Captain Hoxie's Final Weeks as District Engineer

a. Congress Resumes its Annual Appropriations

In the autumn of 1888, Congress, for the first time in 2 years, voted funds for "Protection, Preservation, and Repair" of coastal fortifications. On September 26, the Department advised its district engineers that President Cleveland, 4 days before, had approved an act making $100,000 available for these purposes. They would submit as soon as feasible estimates of funds necessary for "ordinary expenses" for the defenses under their charge for Fiscal Year 1889. They would also detail what projects for preservation and repair should be given priority.[22]

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20. Ibid; "Plan of Fort Barrancas, Florida"; "Map of the Military Reservation at Fort Barrancas, Florida." Copies of these plans are on file at the Florida Unit, GUIS.

21. Annual Report, Fort Barrancas, Fiscal Year 1887, NA, RG 77, Ltrs. Recd., Chief Engineer.

22. Sears to Hoxie, September 26, 1888, NA, RG 77, Ltrs. Sent, Chief Engineer.

c. Department Makes its Allotments

On November 8, Brig. Gen. Thomas L. Casey, who had succeeded General Duane as Chief Engineer on his June 30 retirement, made the allotments. Because of his servicewide responsibilities, General Casey only budgeted $450 for the Pensacola forts, $150 of which was designated for replacing the Fort Barrancas bridge.[26]

Captain Hoxie did not inform Colonel Langdon of what transpired. Consequently, Langdon wrote a personal letter to his friend, Chief Engineer Casey, explaining that the wooden bridge crossing the ditch of Fort Barrancas over which people had to pass to enter the fort was "so much decayed as to be dangerous." His troops, he complained, had to cross the bridge twice daily to enter the fort for drill.

If the Engineers would allot the funds, Colonel Langdon would gladly superintend the project.[27]

Chief Engineer Casey advised Colonel Langdon that, on November 8, $150 had been allotted for repair of the bridge. The colonel's letter was referred to Capt. Philip M. Price, who had been ordered to Montgomery as district engineer.[28]

2. Captain Price Replaces Captain Hoxie as District Engineer and Repairs the Bridge

In mid-January 1889, Captain Hoxie had been ordered to Willetts Point, New York, for duty with the Engineer Battalion. It was January 17, 1889, before Captain Price arrived in Montgomery and took

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26. Casey to Hoxie, November 8, 1888, NA, RG 77, Ltrs. Sent, Chief Engineer.

27. Langdon to Casey, December 17, 1888, NA, RG 77, Ltrs. Recd., Chief Engineer.

28. Casey to Langdon, December 23, 1888, NA, RG 77, Ltrs. Sent, Chief Engineer.

charge of the office. Born in Pennsylvania, Price had graduated from the U.S. Military Academy as No. 4 in the Class of 1869. Commissioned a 2d lieutenant in the 2d Artillery, Price was ordered to Fort Riley, Kansas. He served on the western frontier until December 1870, when he returned to West Point as an assistant professor of mathematics. Transferred to the Corps of Engineers, Price spent 2 years, 1872-74, with the Engineer Battalion at Willetts Point.

Price, from June 1874 until March 1875, was in the west as an assistant engineer for "Exploration of the Territory west of the 100th Meridian." His next assignment, which continued until December 1880, was surveying the Northern Lakes and the Mississippi River. Price, from 1881 to November 1883, was an assistant to Maj. George E. Gillespie for the Northern District of New Jersey. The next 3 years found him, now a captain at Willetts Point, commanding an Engineer Company. He returned to West Point in January 1886 as instructor in practical military engineering. Price was there on January 4, 1889, when orders arrived transferring him to Montgomery, Alabama, as Captain Hoxie's replacement.[29]

Among the first details Captain Price undertook was to pacify Colonel Langdon. He found that Assistant Engineer James E. Turtle, who was in charge of the Pensacola harbor improvements, had been directed in November by Captin Hoxie to see to the repair of the bridge. But, before anything could be accomplished, Turtle had been called to Montgomery. Captain Price assured Chief Engineer Casey that Turtle would be returning to Pensacola in a few days and "will have the repairs made immediately."[30]

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29. Cullum, Biographical Register, Vol. III, pp. 128-29.

30. Price to Casey, January 24, 1889, NA, RG 77, Ltrs. Recd., Chief Engineer.

b. Captain Hoxie Submits a Program

Captain Hoxie was absent from his Montgomery office. When 3 weeks passed and there was no answer to the September 26 circular, the Department sent a sharply worded telegram, "The Chief of Engineers directs that you send in immediately the estimates for preservation and repair."[23]

Hoxie, who was in Asheville, North Carolina, wired the Department that no allotment was required for "ordinary expenses." But, for repairs of immediate urgency, he needed $800. A letter of justification would follow.[24]

In his letter, Hoxie explained that Forts Barrancas and Pickens were in charge of Colonel Langdon of the 2d Artillery, while Fort McRee was in ruins. Colonel Langdon, during the 2 years in which the Corps had no maintenance funds for coastal fortifications, had employed the Apache prisoners (see Fort Pickens Historic Structure Report and Resource Study) and the troops for "ordinary care" of the defenses. There had never been a fort keeper at Fort Barrancas, while this position had been abolished at Fort Pickens in 1884. Consequently, he could not justify an allotment for "ordinary expenses."

There were, he continued, several Fort Barrancas projects that required funding. One hundred and fifty dollars were needed to rebuild the bridge across the ditch leading to the drawbridge at Fort Barrancas, and $350 for a study of the masonry's structural failure. To justify the latter expenditure, Captain Hoxie reminded Chief Engineer Duane that there were large cracks in the walls of the scarp and counterscarp exhibiting

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23. Sears to Hoxie, October 19, 1888, NA, RG 77, Ltrs. Sent, Chief Engineer.

24. Hoxie to Chief Engineer, October 22, 1888, NA, RG 77, Ltrs. Recd., Chief Engineer.

> very serious settlement of the masonry. The counterscarp gallery has a nearly continuous open joint at the key of the arch, and considerable portions of the brick work in the soffit of the arch have been spalled off and fallen to the floor.

Although he did not consider the structure endangered, "careful observation" indicated there was progressive degeneration.

Hoxie believed this problem was caused by "defective foundations--either compression of the soil or a shifting of sand from the percolation of water." Colonel Langdon had recently called his attention to the south wall of the 1848 barracks. Two large brick buttresses had been built on the outside of the wall which, instead of supporting the wall, had pulled

> it over outward, opening cracks in the vaulted ceiling of the interior until the wall was relieved from the weight of the buttresses by the opening of a large crack between them which effected a separation.

The interior cracking had then seemingly ceased, and "the buttresses remained a useless pile of brick outside." In Hoxie's opinion, this trouble could have but one cause--the settlement of the buttresses brought about by compression of the soil or movement of the sand.

To test his thesis, Captain Hoxie would employ the requested $350 to underwrite an examination of the structure, with "careful instrumental measurement," and the sinking of test pits at "the foot of the walls to determine the actual construction of the work and the cause of its present condition."[25]

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25. Hoxie to Chief Engineer, October 22, 1888, NA, RG 77, Ltrs. Recd., Chief Engineer.

Proposals for rebuilding the bridge were advertised on February 1. Only one bid was received, and it exceeded the allotment. On being advised of this, the Department authorized Captain Price to have the bridge rebuilt by day-labor, and to purchase the materials on the open market. This was done, and the bridge rebuilt to everyone's satisfaction.[31]

In January 1889, the Department notified Captain Price that with money again being allotted for "Preservation and Repair," the district engineers were to resume submitting monthly operational reports, as well as their annual and semi-annual narratives.[32]

Captain Price, upon filing his annual report for Fiscal Year 1889, listed the condition of the forts and the status of their armament as similar to that described by Captain Hoxie on June 30, 1886, "except there has been a progressive deterioration of the brick work, due to leakage and exposure to weather."[33]

3. Maintenance and Protection in Fiscal Year 1890

a. Appropriations and the Allotment

On March 13, 1889, the Department notified its district engineers that President Cleveland had signed into law, on March 2, an act appropriating $100,000 for "Protection, Preservation, and Repair of Fortifications." In accordance with procedures, they were to submit two sets of figures--one for "ordinary expenses" and the other detailing costs on projects for preservation and repair for Fiscal Year 1890.[34]

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31. Casey to Price, February 27, 1889, & Price to Casey, July 8, 1889, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer.

32. Sears to Price, January 10, 1889, NA, RG 77, Ltrs. Sent, Chief Engineer.

33. Annual Report, Fort Barrancas, Fiscal Year 1889, NA, RG 77, Ltrs. Recd., Chief Engineer.

34. Sears to Price, March 13, 1889, NA, RG 77, Ltrs. Sent, Chief Engineer.

Captain Price, like Captain Hoxie the previous autumn, did not ask for any funds for "ordinary expenses." He, however, called for $350 for a study to ascertain whether Fort Barrancas' structural stability had been compromised by cracks that had opened in the masonry. Chief Engineer Casey approved this allotment.[35]

b. Examining and Strengthening the Scarp at Key Points

On July 10, Captain Price called for proposals to undertake this study. No bids were received, and Price moved to have the work done by hired labor and purchase of materials in the open market. Such action was permitted by Paragraph 620 of Army Regulations for 1889.

The worst cracks in the Fort Barrancas scarp were at the northeast corner. A ditch was dug alongside the wall adjacent to the fractures, which were found to extend through the foundation course. This led Captain Price to conclude that the structural failures were "due both to unequal settlement of the walls, and to an outward movement of the walls caused by the pressure of the earth behind them."

Captain Price and Assistant Engineer Turtle sought to "prevent further damage by enlarging and strengthening the foundation with concrete." To forestall any movement of the scarp while this was being done, heavy props were positioned against both exterior slopes near the angle. Necessary excavations were made, and 14x14-inch lumber "put under the walls at such a distance apart as to leave 4 feet of sand between each timber." The sand was then removed from between the timbers, and the space filled with concrete.

The concrete projected outward 2 feet beyond the line of the old foundation. After the concrete had hardened, the props were

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35. Sears to Price, June 25, 1889, NA, RG 77, Ltrs. Sent, Chief Engineer.

removed. From the summer of 1889 until July 1890, no further movement of the subject salient angle was observed, but, Captain Price cautioned, "this settlement is so gradual that it is very difficult to detect." The funds exhausted, he was unable to apply this treatment to "other weak portions of the walls."

There was considerable settlement and bulging of the scarp walls of the south and west curtains. Because three rifled Rodmans were to be emplaced on the south curtain, Captain Price deemed it prudent to brace the walls of the south and west curtains, opposite the center gun and "just" north of the southwest salient. At each of these places, 6 diagonal heavy timber braces were positioned. They were seated on timber sills in the ditch, and butted against 3 vertical and 2 horizontal timbers placed against the scarp.

While engaged in this work, it was found that the bottom course of the scarp rested on 1-inch boards placed on sand. Some of these boards were sound after 60 years, while others were rotten. Captain Price concluded that the settlement of the walls, in part, could be attributed to decay of the foundation timbers.[36]

c. Emplacements Nos. 10-12 are Modified to Mount Three 8-Inch Converted Rifles

On October 25, 1889, Chief Engineer Casey called on Captain Price to submit estimates, as soon as practicable, for preparing platforms at either Forts Barrancas or Pickens for mounting three 8-inch Rodman rifles on improved front-pintle barbette carriages. His estimates were to be accompanied by sketches showing the locations and numbers of existing platforms to be altered or the sites where they were to be built.

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36. Price to Casey, July 8, 1890, NA, RG 77, Ltrs. Recd., Chief Engineer.

As these guns were for target practice by the garrison, at least one of them must be emplaced at the Barrancas, unless it was too expensive. Before formulating his estimates, Captain Price was to discuss the project with the post commander and ascertain his preference as to sites.[37]

Captain Price was at Fort McRee when the Department's letter arrived. He immediately called on the post commander to ascertain his thinking on the subject. He found that Maj. H.C. Hasbrouck was absent, and the junior officer in charge, Lt. James W. Brooke, would not accept responsibility for locating the platforms. Upon returning to Montgomery, Captain Price left his young assistant, Lt. C.L. Potter, at Pensacola. Potter was to meet with Major Hasbrouck on his arrival, and then prepare and forward the estimates. Lieutenant Potter, however, met with an accident and was unable to attend to these details. They would be handled by Assistant Engineer Turtle, who was also absent. Captain Price, himself, was occupied overseeing construction of the Coosa River locks.

On December 14, the estimates prepared by Turtle reached Montgomery. But, in the meantime, Captain Price had received a letter from Major Hasbrouck that he had changed his "mind as to the desirability of placing wooden platforms outside the fort at Barrancas." Whereupon, Price wrote Turtle to have further consultations with Major Hasbrouck, and "prepare new estimates for placing the platforms on a new site."[38]

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37. Sears to Price, October 25, 1889, NA, RG 77, Ltrs. Sent, Chief Engineer. The subject guns and their carriages had been shipped to Pensacola by the Ordnance Department, in response to a 1887 request by Colonel Langdon. Kelton to Commanding General, Division of the Atlantic, October 5, 1887, NA, RG 77, Ltrs. Recd., Chief Engineer.

38. Price to Casey, December 31, 1889, NA, RG 77, Ltrs. Recd., Chief Engineer.

After meeting with Major Hasbrouck and learning that he wanted the three 8-inch rifled Rodmans emplaced at positions 10, 11, and 12 on the south curtain of Fort Barrancas, Turtle revised his estimates.

The cost of the project was placed at $1,945.23. On being notified of this, Chief Engineer Casey allotted this sum from the "appropriation for Preservation and Repair of Fortifications, Act of March 2, 1889."[39]

On February 10, 1890, Captain Price employed posters to announce that sealed bids were invited for furnishing materials and building three wooden gun platforms at Fort Barrancas. The proposals would be opened at noon, February 21, at the Fort McRee Engineers' office. Prospective contractors were informed that the timber for the platforms was to be first class long-leaf yellow pine, free from shakes, sap, and "injurous knots." The carpentry was to be done in a most substantial and workmanlike manner; and all timbers prepared and framed to exact dimensions. There would be no shimming or blocking up. Ironwork was to be furnished in the quantities, and fitted as shown in the drawings. Pintle pins were to be of the best quality, cold-rolled wrought iron, forged, and turned as represented on blueprints. All wrought iron was to be tough, fibrous, and uniform in texture.

Before they were placed on their foundations, the platforms were to be given two coats of mineral paint. Spaces between the lower course of timbers were to be filled with concrete, made of the best quality Portland cement. Mortar was to be two parts sand and one part cement by volume, and the concrete to be one part mortar to three

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39. Casey to Price, February 1, 1890, NA, RG 77, Ltrs. Sent, Chief Engineer.

parts aggregate. It was to be thoroughly mixed, placed before setting, and well rammed.[40]

No proposals were received by the date stipulated, and, on February 23, Captain Price sought and received authority to take measures to construct the platforms by day labor, and to purchase the materials on open market. At the same time, he mailed to the Department drawings of the platforms and the prerequisite specifications.[41]

Meanwhile, Colonel Hasbrouck had contacted Captain Price and explained that, in the spring, his troops would be having target practice on the nearby small-arms range. The butts were near Fort Barrancas, and it would place the workmen in some danger. He accordingly suggested that the Engineers defer beginning the platforms until after May 10, when the garrison was scheduled to be finished with this phase of its training.

Captain Price, on relaying this information to the Department, observed that the delay had other merits. It would give ample time to complete the platforms during the summer and early autumn, permitting better workmanship because the "timber was now fresh from sawing," and the extra time would permit it to season.[42]

Chief Engineer Casey was agreeable to postponing the project until May 11.[43]

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40. Specifications, Construction of three gun platforms, February 10, 1890, NA, RG 77, Ltrs. Recd., Chief Engineer.

41. Price to Casey, February 25, 1890, & Chief Engineer to Price, April 2, 1890, NA, RG 77, Ltrs. Recd. and Sent, Chief Engineer.

42. Price to Casey, March 29, 1890, NA, RG 77, Ltrs. Recd., Chief Engineer.

43. Casey to Price, March 21, 1890, NA, RG 77, Ltrs. Sent, Chief Engineer.

By then, the iron and timber were on hand and the work was commenced. It was done by men employed on the Fort McRee jetties and the survey of Pensacola Bay, whenever the weather was unfavorable for these projects. By June 30, two of the gun platforms were framed and lowered into place ready for the concrete fill. The third platform was partially framed.[44]

On August 7, Captain Price reported the three platforms had been completed and ready to receive their carriages and 8-inch converted Rodman rifles since July 21. They had been built in accordance with the plans, excepting the upper course of timber. These, as well as those between the lower courses, had been filled with concrete.[45]

d. Investigating the Fort's Drainage

Captain Price, during the autumn of 1889, on reviewing the files, was disturbed to discover that there were no plans depicting the drainage system of the Barrancas forts. This was a problem, because he believed the "leakage, and settling and consequent cracking of the walls" arose principally from a "complete stoppage of the drains in many places." If the Department had drawings of the subject drainage systems, he asked to be provided copies.[46]

Replying, Chief Engineer Casey noted that "very little information is obtainable from the Department's files respecting the drainage." At Fort Barrancas, according to the plans, "the water from

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44. Annual Report, Fort Barrancas, Fiscal Year 1890, NA, RG 77, Ltrs. Recd., Chief Engineer.

45. Price to Casey, August 7, 1890, NA, RG 77, Ltrs. Recd., Chief Engineer.

46. Price to Casey, October 30, 1889, NA, RG 77, Ltrs. Recd., Chief Engineer.

the roof surfaces appears to be discharged directly into the masses of earth forming the rampart and glacis."[47]

e. Captain Price Reports the Barrancas Fortifications Useless for Defense Against Modern Warships

On July 8, 1890, Captain Price filed his Annual Report for Fiscal Year 1890. On doing so, he noted that the condition of Forts Barrancas, Pickens, and McRee had not materially changed from that reported "by my predecessor in his annual report" for Fiscal Year 1886. As to be expected, there had been a "progressive deterioration" of the brickwork because of seepage and exposure to the changes in the weather. This "deterioration," along with the seepage through the casemate arches and walls of Forts Barrancas and Pickens and the Redoubt, had progressed to the point where, in Price's opinion, it was useless to expend any more funds on their preservation and maintenance. To restore them to their "original efficiency," it would be necessary to "practically" tear them down and rebuild. But then, they would be of "no value for the defense of the harbor against modern warships," because of the revolution in weaponry.[48]

4. Department Ceases Allotting Funds for Preservation and Repair

On March 5, 1891, General Casey called on his district engineers to submit programs for which maintenance and repair funds were required during Fiscal Year 1892. Captain Price's opinion was unchanged. He wrote the Department that, the Pensacola forts were "in so advanced a state of deterioration," he did not deem it adviseable to expend any funds on their repair and preservation. Although Forts Barrancas and Pickens, unlike Fort McRee, were extant, the brick and

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47. Casey to Price, November 8, 1889, NA, RG 77, Ltrs. Sent, Chief Engineer.

48. Annual Report, Fort Barrancas, Fiscal Year 1890, NA, RG 77, Ltrs. Recd., Chief Engineer.

mortar of which the casemates were built had "deteriorated." Unequal settlement of the walls had occurred to "such an extent" that there was much leakage, and the walls were "badly cracked in many places."[49]

No money was accordingly allotted for the Barrancas fortifications by Chief Engineer Casey for maintenance and repair in Fiscal Year 1892. When he submitted his annual report for the year ending June 30, 1891, Captain Price announced that, although the garrison had mounted the three 8-inch rifles, they had not been fired.[50]

5. Repair of the Doors to the Water Battery Storerooms

On January 8, 1892, Captain Price had to call for an emergency allotment. During the late autumn, the garrison had fired the three rifled Rodmans, and the muzzle blasts had sprung the doors of the Water Battery storerooms. On examination, the doors and their frames were seen to be rotten. They would have to be repaired, Colonel Hasbrouck told Captain Price, because stowed within were "valuable stores." Captain Price therefore requested and was allotted $75 for their repair.[51]

When he drafted his annual report, on July 1, 1892, Captain Price noted that there had been no substantial change in the physical condition of the Pensacola forts since Captain Hoxie's report for Fiscal Year 1886, excepting the progressive deterioration of the fabric because of seepage and exposure to the elements. The only Corps expenditure on the defenses during the previous 12 months was for

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49. Price to Casey, March 27, 1891, NA, RG 77, Ltrs. Recd., Chief Engineer.

50. Annual Report, Fort Barrancas, Fiscal Year 1891, NA, RG 77, Ltrs. Recd., Chief Engineer.

51. Price to Casey, January 6, 1892 & Knight to Price, January 8, 1892, NA, RG 77, Ltrs. Recd. & Sent, Chief Engineer.

renewal of the frames of the three Water Battery storeroom doors. This work had been done at a cost of $74.10 by a contractor.[52]

6. Fort and Its Armament: April 30, 1892

Several months before, Captain Price had prepared and submitted a plan of Fort Barrancas exhibiting the condition of the armament. There were at that time five guns emplaced in the Water Battery. Mounted on wooden carriages at platforms Nos. 14, 15, and 18 were 8-inch siege howitzers, and at platforms Nos. 16 and 17, 4½-inch siege rifles, likewise on wooden carriages. There were no guns at the battery's other 13 platforms.

Emplaced on iron carriages at Fort Barrancas' platforms Nos. 10, 11, and 12 were three 8-inch converted Rodman rifles. These platforms had 4-inch front pintles with a low traverse circle. Positioned on the fort's parade were two 10-inch and three 8-inch siege mortars. No guns were mounted at platforms Nos. 1-8 and 13-20 in the fort nor on the eight counterscarp platforms.

On hand, but not mounted, were two 200- and two 100-pounder Parrotts and their iron carriages, and one 10-pounder Parrott, one 4½-inch siege rifle, two 10-inch siege mortars, and two 8-inch converted rifles, without carriages.[53]

7. Department Sanctions the Policy of Not Spending Funds for Maintenance and Repair of Obsolete Fortifications

On August 6, 1892, Captain Price notified the Department that he had on deposit with the Assistant Treasurer of the United States

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52. Annual Report, Fort Barrancas, Fiscal Year 1892, NA, RG 77, Ltrs. Recd., Chief Engineer.

53. "Fort Barrancas and Spanish Battery, Pensacola Harbor, April 30, 1892," NA, RG 77.

in New York City a balance of 40 cents from the allotment for "Preservation and Repair of Fortifications" under the act of August 18, 1890. Since no work was contemplated on the Pensacola defenses in Fiscal Year 1893, he had no use for this sum.[54]

Chief Engineer Casey agreed with Captain Price that, because of deterioration of the brick and mortar, it would be a mistake to spend money on the reconstruction of defenses which would be of no service as modern fortifications. Price was to deposit the 40 cents with the Treasurer, notifying the Department of his action.[55] Price deposited the balance as directed on August 19.[56]

8. Construction of the 15-inch Rodman Battery

On November 21, 1892, Maj. Alexander C.M. Pennington, Inspector of Artillery, Department of the East, recommended that measures be taken to position two temporary wooden platforms for 15-inch Rodmans outside the fort at the Barrancas. As soon as guns were mounted on their front-pintle carriages, they could be employed by the garrison for target practice.[57]

When this request reached the Chief Engineer, through channels, he called on District Engineer Price to prepare and submit estimates.[58]

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54. Price to Casey, August 6, 1892, NA, RG 77, Ltrs. Recd., Chief Engineer.

55. Knight to Price, August 11, 1892, NA, RG 77, Ltrs. Sent, Chief Engineer. Capt. John G.D. Knight was assigned to duty in the Chief Engineer's office.

56. Price to Casey, August 19, 1892, NA, RG 77, Ltrs. Recd., Chief Engineer.

57. Pennington to Assistant Adjutant General, Department of the East, November 21, 1892, NA, RG 77, Ltrs. Recd., Chief Engineer.

58. Knight to Price, November 30, 1892, NA, RG 77, Ltrs. Sent, Chief Engineer.

On December 16, Captain Price called for $1,810 to fund the project.[59] After being notified that this sum had been allotted, Price began to doubt his figures, because he had based them on the cost of the three wooden platforms for the 8-inch rifled Rodmans. Now he questioned whether his figures were sufficient for platforms to support the huge 50,000-pound guns and their carriages. Before preparing drawings and specifications, he inquired of the Department, "Have any such platforms been built and tested?"[60]

Chief Engineer Casey turned to Col. D.C. Houston, an authority on this subject. Houston reported that temporary wooden platforms for 15-inch Rodmans had been built in 1890 at Fort Wadsworth. Since then, 124 rounds, employing a 130-pound powder charge, had been fired from one of these monsters without any injury to the platform. To assist Captain Price, Colonel Houston forwarded a drawing of the Wadsworth platform.[61]

Meanwhile, Captain Price had visited the Barrancas and his trip generated additional questions. He wished to know the carriage model for which his platforms were to be built. He had been furnished by the Chief of Ordnance a blueprint for a Model 1891 carriage, but the four on hand at Pensacola were an earlier model. Major Pennington had been contacted as to the desired site. He had suggested that Price consult Capt. James Chester, who was to relieve Capt. Leverette H. Walker as post commander. When he attempted to do so, Price learned

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59. Price to Casey, December 16, 1892, NA, RG 77, Ltrs. Recd., Chief Engineer.

60. Price to Casey, December 26, 1892, NA, RG 77, Ltrs. Recd., Chief Engineer.

61. Houston to Casey, January 9, 1893, NA, RG 77, Ltrs. Recd., Chief Engineer.

that Chester was not expected to arrive and assume command until January 17.[62]

Chief Engineer Casey transmitted the Houston plans to Captain Price. He also fielded the questions raised by his district engineer. Casey's staff had indicated, in red, on one of the sections, a modification that should be made to the concrete work. The platform depicted would receive the Model 1891 carriage.

In siting the platforms, Captain Price was to keep in mind that, in an emergency, they might have to be employed for defense of the harbor.[63]

Upon receipt of the modified Houston plans, Captain Price had Assistant Engineer Turtle revise his estimates, boosting the cost of each platform from $905 to $1,421.94, or a total of $2,843.88. The platforms were to be built outside and to the west of the Water Battery. Consequently, there would be no parapet fronting the guns.[64]

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62. Price to Casey, January 7, 1893, NA, RG 77, Ltrs. Recd., Chief Engineer.

63. Knight to Price, January 11, 1893, NA, RG 77, Ltrs. Sent, Chief Engineer.

64. Price to Casey, January 20, 1893, NA, RG 77, Ltrs. Recd., Chief Engineer. Turtle's estimate broke down:

7,439 feet (BM) lumber for framing	$ 148.78
714 feet (BM) lumber for steps	10.00
Iron	355.16
63 cubic yards concrete	378.00
50 cubic yards excavation	10.00
Hauling	45.00
Labor, besides concreting & excavating	475.00
Total one platform	$1,421.04
Total two platforms	$2,843.88

Chief Engineer Casey allotted the additional $1,033.88 to underwrite the project.[65]

Meanwhile, Chief Engineer Casey had secured authority from Maj. Gen. Oliver O. Howard, commander of the Department of the East, for Captain Price to use lumber belonging to the post quartermaster as skids to facilitate removal of the huge Rodmans from Fort Pickens to the Barrancas.[66]

On February 10, Assistant Engineer Turtle posted announcements in public places in Pensacola and Warrington inviting proposals for furnishing materials and building the platforms. No bids were received, and, on February 27, this news was reported to the Department. On March 6, Chief Engineer Casey authorized Captain Price to have the platforms built by hired labor from materials purchased on the open market. Circular letters were accordingly mailed requesting bids for supplying the lumber and ironwork. Orders were given to the low bidders. But, by June 30, none of the materials had been delivered.

Assistant Engineer Turtle attributed this to the size and quality of the lumber. Teams had to be hired in Pensacola and as the hauling was heavy and the time short, teamsters declined coming out to the Barrancas. Persons owning oxen refused to work them during the summer's heat or so near the bay.

The "odd and heavy sizes of the rails" made it difficult to secure them locally. But, by the end of June, John Cosgrove had completed the ironwork order.[67]

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65. Casey to Price, January 23, 1893, NA, RG 77, Ltrs. Sent, Chief Engineer.

66. Casey to Howard, January 11, 1893, NA, RG 77, Ltrs. Sent, Chief Engineer.

67. Annual Report, Fort Barrancas, Fiscal Year 1893, NA, RG 77, Ltrs. Recd., Chief Engineer.

Meanwhile, Post Commander Captain Chester had called for construction of a tramway and cars for conveying ammunition from the magazines and loading rooms in the counterscarp to the battery below. Also involved would be positioning bulkheads in the two southwest casemates of the counterscarp. Following discussions with Captain Chester, Assistant Engineer Turtle placed the cost of this work at $421.13. On reviewing the proposal and estimates, Chief Engineer Casey, on May 29, allotted the necessary funds.[68]

As soon as the materials were delivered, Turtle put a large crew to work. By September 30, 1893, the platforms and conveyors were completed. A wooden platform was constructed in front of the 15-inch Rodmans in lieu of an earthen embankment. This platform was necessary for loading and cleaning the huge Rodmans.[69]

The conveyors finished, Captain Price asked for and received a $100 allotment for painting the trestles and woodwork.[70]

9. Maintenance of Platforms Nos. 10-12

On October 21, 1893, Captain Price alerted the Department that, for its preservation, exposed woodwork in the three platforms for the converted Rodmans should be thoroughly cleaned and dried. It would then be covered with two coats of hot linseed oil and two coats of mineral paint.

The upper surfaces of the timbers, Price explained, with exception of the pintle blocks, were nearly level with the ground, and

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68. Knight to Price, May 29, 1893, & Casey to Williams, May 29, 1893, NA, RG 77, Ltrs. Sent, Chief Engineer.

69. Annual Report, Fort Barrancas, Fiscal Year 1894, NA, RG 77, Ltrs. Recd.

70. Price to Casey, October 30, 1893, & Knight to Price, January 17, 1894, NA, RG 77, Ltrs. Sent & Recd., Chief Engineer.

whenever there were strong winds, sand accumulated on them. This caused problems during the sickly season when the garrison was evacuated, usually to the Atlanta area, as there were no fatigue details to sweep them down. Because of the sand, the timbers remained damp for weeks on end, and in the hot, humid Florida climate, rot was encouraged.

In addition, an 8'x20' platform of 2-inch plank should be laid behind each gun platform for the gunners who had to stand in the loose sand. This planking would prevent the troops tracking sand upon the gun platforms.

The price of these projects was estimated at $55.[71]

Chief Engineer Casey approved the projects and allotted the necessary funds.[72]

Employing hired labor, Assistant Engineer Turtle saw that the platforms were cleaned, oiled, and painted, and the 2-inch planking laid.[73]

10. Captain Price Justifies the Failure to Call for Maintenance of the Fortifications by Reference to General Order 8

Captain Price, when he submitted his annual reports for 1892 and 93, noted, "no repairs" have been made to the structures of the Barrancas defenses, and no allotments have been recommended for their maintenance and preservation during the ensuing 12 months. This was in

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71. Price to Casey, October 31, 1893, NA, RG 77, Ltrs. Recd., Chief Engineer.

72. Casey to Price, January 17, 1894, NA, RG 77, Ltrs. Sent, Chief Engineer.

73. Annual Report, Fort Barrancas, Fiscal Year 1894, NA, RG 77, Ltrs. Recd., Chief Engineer.

accordance with General Order No. 8, May 27, 1884, Headquarters, U.S. Engineers, which

> prohibited the expenditure of money "upon the repair of slopes or revetment of any portion of the fortifications the dimensions of which may be subjected to extensive modifications corresponding to the penetration of modern artillery."[74]

D. Last 6 Years of the 19th Century

1. Captain Mahan Becomes District Engineer

In March 1894, Captain Price was relieved by Capt. Frederick A. Mahan as district engineer. A son of the distinguished soldier-educator Dennis H. Mahan and a brother of Alfred Thayer Mahan, one of the fathers of American seapower, Frederick had graduated from the U.S. Military Academy as No. 11 in the Class of 1867, and was commissioned a 2d lieutenant in the Corps of Engineers. Mahan's first assignment, after leaving West Point, was with the Engineer Battalion at Willetts Point, New York, where he was posted from September 1867 until July 1869. From October 1869 until August 1872, he was at the Military Academy, first as assistant professor of engineering and then as assistant instructor of practical engineering. He was Assistant Engineer for Improvement of the Ohio River from September to December 1872, and from August to September 1873, he was in charge of surveying the Youghiogheny River.

Mahan was at Fort Pulaski, Georgia, as an assistant engineer from December 1873 to August 1874, when he returned to the Ohio Valley as Assistant Engineer for Improvement of the Ohio River. From October 1883 until June 1884, he was on official duty in Europe. On arrival back in the United States, Mahan, now a captain, returned to Willetts Point as commander of one of the Engineer companies. From August 1884 to May 1885, he was in Washington as assistant to the

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74. Annual Reports, Fort Barrancas, Fiscal Years 1892 & 93, NA, RG 77, Ltrs. Recd., Chief Engineer.

Engineer Commissioner for the District of Columbia. Mahan's next assignment was as assistant to Colonel Gillespie. Captain Mahan was with the Lighthouse Board from 1890 until March 1, 1894, when he was ordered to relieve Captain Price on the Gulf Coast.[75]

2. Construction of a New Fort Barrancas Bridge

During Fiscal Year 1895, Mahan, having been promoted to major, secured a $260 allotment and rebuilt the bridge across the Fort Barrancas ditch. Two plans had been prepared--the first calling for a timber bridge, its flooring supported on I-beams; and the second for a concrete bridge, supported by I-beams and corrugated iron. Because of the heavy initial cost, the Department opted for the former.[76]

3. Emplacements Nos. 10-12 Get Concrete Platforms

In Fiscal Year 1896, Major Mahan had Assistant Engineer Turtle and the carpenter build and hang a door for one of the Fort Barrancas storerooms. This project cost $30.[77]

Workmen, in 1897, the timbers having rotted, tore out the platforms built in 1890 for the three 8-inch converted Rodman rifles at emplacements Nos. 10, 11, and 12. They were replaced by concrete platforms, having low traverse circles and granite pintle-blocks. The 4-inch iron pintles were keyed.[78]

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75. Cullum, Biographical Register, Vol. IV, pp. 167, 186.

76. Annual Report, Fort Barrancas, Fiscal Year 1895; Mahan to Craighill, July 10, 1895, NA, RG 77, Correspondence 1894-1923, Doc. 6919; "Fort Barrancas, Fla., Design for Proposed Bridge over Moat, Timber over I-Beams," Drawer 79, Sheet 75; "Fort Barrancas, Fla., Design for Proposed Bridge over Moat, Concrete over I-Beams and Corrugated Iron," Drawer 79, Sheet 76. Copies of these drawings are on file at the Florida Unit, GUIS.

77. Mahan to Craighill, July 20, 1896, NA, RG 77, Correspondence 1894-1923, Doc. 6919.

78. Executive Documents of the House of Representatives for the 3d Session of the 55th Congress, 1897-98 (Washington, 1897), Serial 3631, p. 721.

4. Disarming the Water Battery and Relocating the Mortars

Meanwhile, the Ordnance Department, assisted by the garrison, had relocated the five siege mortars. They were moved from positions near the parados of the northeast and northwest fronts of Fort Barrancas and grouped near the center of the parade. When he submitted his biannual drawings of the fort on December 31, 1897, Major Mahan noted that the mortar platforms were badly warped.

The five guns (three 8-inch siege howitzers and two 4½-inch rifles) on the Water Battery's platforms Nos. 14-18 had been dismounted. Major Mahan had these comments:

> All that is left of these emplacements is five misshapen mounds of sand, on which stood wooden platforms and wooden carriages all of which have disappeared. The rifles are lying on the ground; the howitzers are standing muzzle-down on pintle stones 8, 9, and 10.

Additional armament on hand but not mounted included: guns--two 100- and two 200-pounder Parrotts, one 10-pounder Parrott, one 4½-inch siege rifle, and one 10-inch siege mortar; and these carriages--two 100- and two 200-pounder Parrott.[79]

The armament out of the way, workmen in Fiscal Year 1898 "thoroughly overhauled and restored the Water Battery."[80]

5. National Defense Funds are Employed For Improvements to the 15-inch Battery

In April 1898, the United States declared war against Spain. Drawing on the National Defense Act of March 9 for funds, the

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79. "Fort Barrancas and Spanish Battery, Pensacola Harbor, Florida," January 19, 1897, & December 31, 1897, Drawer 254, Sheets 27-13 and 27-16.

80. Mahan to Wilson, June 30, 1898, NA, RG 77, Correspondence 1894-1923, Doc. 6919.

Corps of Engineers improved and spruced up the 15-inch battery. The wooden sidewalk from the post's west gate to the entrance of Fort Barrancas was taken up and replaced by a concrete walkway. The loading platforms of the 15-inch Rodmans were renewed, and a flight of wooden steps built from the battery up and into the fort's ditch. Two shot beds, each with a capacity of 60 projectiles, were built.[81]

The previous year, the ammunition conveyors had been repainted.

6. 15-inch Battery is Disarmed and Most of the Obsolete Armament Salvaged

By Fiscal Year 1900, a number of Endicott emplacements had been completed and armed. Orders were now received to salvage all the old armament except the three converted 8-inch rifles mounted in 1890 for target practice. Whereupon, the troops dismounted the two 15-inch Rodmans and their carriages and the five mortars. These weapons and their carriages, along with the other obsolete heavy weaponry stored at the Barrancas, were sold as scrap.[82]

In Fiscal Year 1900, bricklayers rebuilt a section of the Fort Barrancas breast-height wall damaged by muzzle blasts from the 8-inch rifled Rodmans.[83]

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81. Mahan to Wilson, June 30, 1898, NA, RG 77, Correspondence 1894-1923, Doc. 6919; Executive Documents of the House of Representatives for the 2d Session of the 56th Congress, 1897-98 (Washington, 1898), Serial 3746, p. 736.

82. "Fort Barrancas and Spanish Battery, Pensacola Harbor, Fla.," NA, RG 77, Drawer 254, Sheet 27-23.

83. Executive Documents of the House of Representatives for the 2d Session of the 57th Congress, 1900-01 (Washington, 1900), Serial 4089, p. 942.

E. The Garrison During the Final Years of the 19th Century

1. Batteries B and H, 2d U.S. Artillery, Put in 48 Months on the Gulf Frontier

January 1, 1886, found Fort Barrancas garrisoned by Batteries B and H, 2d, U.S. Artillery, and Colonel Langdon in charge of the battalion and post. On July 16, Colonel Langdon was called to St. Francis Barracks, at St. Augustine, to assume command of the regiment, Col. Romeyn B. Ayres having been temporarily detached. Capt. James B. Wilson, the next senior officer, assumed charge of the Barrancas battalion. On July 10, to escape the sickly season, Captain Wilson and his battalion evacuated the barracks and boarded an Atlanta-bound train. Next day, the artillerists detrained in the Georgia capital and occupied nearby Camp Hancock.

On October 24, Captain Wilson and the battalion broke camp and rushed back to the Barrancas. There, they assumed responsibility for guarding the Apache prisoners who had arrived at Fort Pickens on the 25th. Colonel Ayres resumed command of the regiment in mid-December, and Colonel Langdon of the Barrancas battalion, three days before Christmas.

Five months later, on May 17, Colonel Ayres having secured a lengthy leave, Colonel Langdon again assumed command of the regiment. Because of his increased responsibility, resulting from the presence of the Apaches, Langdon remained at the Barrancas instead of traveling to St. Francis Barracks. For the same reason, the troops, for the first time in a number of years, spent the sickly season at Pensacola. On October 22, 1887, Colonel Ayres returned to duty and took charge of his regiment.

Colonel Ayres, whose health had failed, secured another leave to begin April 1, 1888. Once again, Colonel Langdon assumed command of the 2d U.S. Artillery. This time the regimental staff and band were ordered to report to Langdon at the Barrancas. Leaving St. Francis Barracks by train on May 14, they arrived at Pensacola the next day.

On May 12, a detail escorted the Apache prisoners to Mount Vernon Barracks, their new place of imprisonment and exile.

Decoration Day, 1888, was observed at the Barrancas with due respect. All duties, except necessary guard and police, were suspended between reveille and retreat. A national salute of 38 guns was fired at 11:30 A.M. The battalion and the Escambia Guards and Santa Rosa Rifles, in a spirit of reconciliation, were reviewed on the garrison parade ground by Colonel Langdon and others. The troops then marched to the National Cemetery and decorated the graves.

The Apaches gone, there was no need to keep the battalion at the Barrancas during another sickly season. Consequently, on July 6, regimental headquarters, the band, and Batteries B and H traveled to Pensacola, where they boarded the Louisville & Nashville Railroad. The next evening, at 5:00, the artillerists detrained and went into camp at Huntsville, Alabama. On November 13, the band left Camp Monte Lano, as the Huntsville cantonment was called, for Columbus, Georgia, where they participated in the Chattahoochee Valley Exposition. From there, they returned to the Barrancas on December 2. There, they were cheered and jeered by the officers and men of Batteries B and H, who had returned from Huntsville two days before.

Colonel Ayres died at Fort Hamilton, New York, on December 4, 1888, and Loomis Langdon became colonel of the regiment. Early in January 1889, he reestablished regimental headquarters at St. Francis Barracks. The staff and band (2 officers, 5 staff non-commissioned officers, and 11 privates) accompanied him to St. Augustine. Capt. Frank C. Grugan, as ranking officer, now commanded the Barrancas battalion.

On April 2, the post hosted the distinguished soldier and humanitarian, Maj. Gen. Oliver O. Howard, commander of the Department of the Atlantic. While at Pensacola, Howard inspected and reviewed the troops.

In May, 1889, the War Department redeployed the 2d Artillery from the Gulf and South Atlantic posts to New England. Battery B left Pensacola for Fort Warren, Massachusetts, on the 22d, and Battery H, for Fort Adams, Rhode Island, 48 hours later. The battalion had spent four years on Pensacola Bay.[84]

2. Various Units from the 4th U.S. Artillery Garrison the Post

Batteries A and M, 4th U.S. Artillery, were designated to be the new garrison. But, with the sickly season at hand, these units on their arrival at Atlanta from New England, were ordered into camp at Fort McPherson. An advance echelon led by Lt. James W. Brooke was sent ahead to take charge of the post. On October 25, 1889, Batteries A and M finally reached their new home, having departed Atlanta the previous afternoon. As senior officer, Capt. Frederick Fugar commanded the battalion until the arrival of Maj. H.C. Hasbrouck on November 10. Nine days later, the garrison was reinforced by Company C, 19th Infantry, from Mount Vernon Barracks.

On January 12, 1890, Pvt. Joseph F. Devaughan of Battery A was drowned in the bay, and, on the 23d, three front-pintle carriages for the 8-inch converted Rodman rifles were landed at the Fort Barrancas wharf. The carriages and guns were to be mounted on temporary platforms to be built by the Engineers at Fort Barrancas.

The infantry company's stay on Pensacola Bay was abbreviated. On May 3, the footsoldiers started for Fort Mackinac, Michigan. Within 48 hours, their billets in the barracks were occupied by Company D, 15th Infantry, ordered to Pensacola from Fort Randall, South Dakota.

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84. Returns for Regular Army Artillery Regiments, June 1821-January 1901, NA, Microcopy M-727; Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617.

On July 18, at the approach of the sickly season, Major Hasbrouck and his battalion evacuated the Barrancas and proceeded to Fort McPherson, Georgia. A 19-man detachment (1 officer and 18 enlisted men) remained behind to look after the public property. Major Hasbrouck returned to the post on October 18, accompanied by Batteries A and M. The infantry company had been reassigned to Jackson Barracks, Louisiana.

Battery A, on July 11, 1891, left the Barrancas and returned on the 19th. The artillerists had spent 8 days in Mobile participating in the annual encampment of the Alabama Militia.

For the first time since 1887, the troops spent the sickly season of 1891 at Fort Barrancas. On May 24, 1892, Battery D, 4th U.S. Artillery, arrived at the post from Fort McPherson and moved into the barracks. Six days later, on Memorial Day, Batteries A and M were transferred to Fort McPherson. Battery D garrisoned the post for the next 7 months.

In mid-January 1893, it was reinforced by two 3d Artillery batteries. On the 19th, Battery A (3 officers and 55 enlisted men) arrived from Washington Barracks and on the 22d, Battery G (2 officers and 55 enlisted men) from Fort McHenry. Then, on April 7, the garrison briefly became a four-unit post, when Company I, 10th U.S. Infantry, arrived at the Barrancas from Fort Bowie, Arizona Territory. This was an interesting group because the enlisted men were Indians. Battery D, 4th Artillery, did not get to know the redmen very well because on April 17, it left Pensacola for Fort McHenry, the command's new duty station.[85]

3. 3d Artillery Returns to the Barrancas

Col. Larhett L. Livingston of the 3d Artillery knew only too well of the frightful losses suffered by Major Brannan's battalion in

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85. Ibid.; Returns from Regular Army Infantry Regiments, June 1821-December 1916, NA, Microcopy M-665.

the mid-1870s from yellow fever. He would not permit Capt. James Chester's battalion to remain at the Barrancas during the sickly season. On August 12, 1893, the battalion was recalled to Fort McPherson. When they returned to the Gulf Coast on November 17, the artillerists were not accompanied by the Indians. The 10th Infantry company had been sent to Fort Marcy, New Mexico.

In December 1893, fatigue parties took charge of the two 15-inch Rodmans, their carriages, and chassis. After the armament was brought across from Santa Rosa Island, they skidded the guns up over the sand dunes several hundred feet to the platforms the Engineers had built at the foot of the Barrancas. Gins were positioned and the huge 50,000-pound guns mounted.

General Howard was back at the post on March 22, 1894, and inspected and reviewed the battalion. Batteries A and G evacuated the barracks on June 4, 1895, and returned on November 16, having spent the intervening months at Fort McPherson.

The War Department, in the autumn of 1896, undertook another of its periodic redeployment of its artillery units. The 3d Artillery, having spent 45 months in the southern states, was alerted for duty on the Pacific Coast. There, it would replace the 5th U.S. Artillery. On October 16, Batteries A and G departed Pensacola for San Francisco, where the former was assigned to Alcatraz and the latter to the Presidio. The next day, Batteries H, and L, 1st Artillery (4 officers and 93 enlisted men), arrived from New York Harbor and occupied the barracks and quarters.[86]

4. Life at the Post Becomes More Complicated

Thirteen months after the battalion reached Florida, in mid-November 1897, yellow fever again raised its dread spector. There

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86. Ibid.

were five cases and two deaths in the command. To escape the plague, Capt. J.W. McMurray had the officers and men of Batteries H and L evacuate the barracks on November 21 and camp on Bayou Grande, two miles to the northwest. On December 18, the danger having passed, the artillerists returned to the barracks.

The battalion, like most of their fellow Americans, raised the cry, "Remember the Maine!" in mid-February 1898. War fever gripped the area, and, on February 26, Maj. Gen. Wesley G. Merritt, commander of the Department of the East, spent the day in and around Pensacola. He inspected the post, reviewed the troops, and visited Fort Pickens. There, he saw that the huge reinforced concrete Endicott battery had been completed and was being armed with its four 10-inch guns, mounted on disappearing carriages.

On March 1, while the diplomats sought to cool passions, 1st Lt. H.M. Andrews, the battalion commander, dispatched a caretaker detachment (one lieutenant, 2 non-commissioned officers, and 18 privates) across the bay to guard the Fort Pickens defenses and public property. Commander of the Department of the Gulf Brig. Gen. W.M. Graham was at the post on the 30th.

First Lt. J.M. Partello and Company G, 5th U.S. Infantry, reached the Barrancas on April 18 from Fort McPherson. As soon as the footsoldiers were on the reservation, Andrews, now a captain, embarked Batteries H and L and took them across the bay to Santa Rosa Island. The redlegs came ashore at the Engineer's Wharf with three field guns (one 3.2-inch breechloader and two 3-inch muzzle loaders), ammunition, and rations to last 12 days. Seven days later, Congress declared war against Spain. The following day, General Graham made a hurried inspection to insure that the troops were prepared for emergencies.

In June, Fort Pickens was declared a sub-post to Fort Barrancas. On July 3, a United States naval squadron destroyed Admiral Pascual Cervera y Tapete's fleet in a battle off Santiago-de-Cuba, while an American expeditionary force invested the city. On the 19th,

Company L, 3d Texas Volunteer Infantry, arrived at the Barrancas and relieved Company G, 5th Infantry. The next day, Lieutenant Partello and his regulars entrained for the Tampa Port of Embarkation.

Spain asked for peace on August 12, and the "splendid little war" was history in less than four months. On September 1, Batteries H and L, 1st Artillery, broke up their Fort Pickens encampment and returned to the Barrancas. Next day, Capt. G.M. Duncan took his company of Texans into Pensacola. There, they boarded a train for Fort Clark, Texas.

Nothing occurred to interrupt the day-to-day routine of peacetime soldiering for the officers and men of the battalion until June 12, 1899. On that day, 2d Lt. R.H.C. Kelton, accompanied by 5 sergeants, 7 corporals, and 36 privates of Battery H, was sent across to Fort Pickens. They were to mount two guns in the recently completed 12-inch battery and eight 12-inch mortars in the mortar battery. Eight days later, a tremendous explosion destroyed the northwest bastion of Fort Pickens, killing one of Kelton's men and wounding another.

By August, Kelton's people had mounted one of the 12-inch guns and were struggling to emplace four mortars. The squat mortars were positioned in September, while preparations were underway for mounting the second huge rifle. It was emplaced in October. By the end of November, the artillerists had mounted the other four mortars, and Kelton's detachment, now that the hard work was over, was relieved by Lt. W.E. Cole and 60 men of Battery H, 1st Artillery.

On February 27, 1900, the battalion participated in the Pensacola Marde Gras parade. Two weeks later, on March 12, Lieutenant Kelton received from District Engineer Clement A.F. Flager, the recently completed and armed 8-inch Endicott battery on Foster's Bank. To guard the battery, a 14-man detachment was detailed to Fort McRee. On the 28th, Maj. Gen. John R. Brooke, commanding the Department of the East, was in the area, and inspected Forts Barrancas, Pickens, and McRee.

The armoured cruiser New York arrived off the Pensacola navy yard at the beginning of April. On the 2d, Rear Admiral Norman H. Farquhar and his staff visited the post and were received by a 13-gun salute.

On April 3, 1900, Fort Barrancas again became a three-battery post. Battery D, 2d U.S. Artillery, arrived from St. Francis Barracks, and joined Batteries H and L, 1st Artillery.[87]

87. Returns from U.S. Army Posts, 1800-1916, NA, Microcopy M-617.

XII. FORT BARRANCAS IN THE TWENTIETH CENTURY

A. Fort and the Fire Commander's Station

During the first 47 years of the 20th century, obsolete Fort Barrancas and its dependencies continued to be administered by the Army as a unit of the Harbor Defenses of Pensacola. In 1902, the Army determined to employ the commanding position afforded by the Fort Barrancas parade as the site for the Fort Commander's (FC) Station for the harbor defense project. A frame structure, supported on piers, was erected in October. This station, the nerve center for the range-finding system, was successfully tested in April 1903. For details on this system and the test, the reader should consult, Bearss, Historic Structure Report and Resource Study, Pensacola Harbor Defense Project, 1890-1947.[1]

The station was equipped with a Swasey Type A DPF Range-Finder, one U.S. Signal Service portable wall telephone, a plotting board for 8-inch muzzle-loading rifles, a set of charts of Pensacola Bay, a Fort Commander's chart, and a Lewis Type B DPF Range Finder.[2]

B. Fort and the Radio Station

By 1914, the fire control system had become more sophisticated, and Battery Commander's Stations (BCs) had been constructed at each of the seacoast batteries. The Fort Commander's Station was declared surplus to the project's needs and was salvaged in November.

That same month, the post received a radio station. The frame structure housing the station and one of the two steel masts were built on the Fort Barrancas parade. The other "steel" mast was positioned on the

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1. Fort Record Book of Fort Barrancas, NA, RG 392; Bearss, Historic Structure Report and Resource Study, Pensacola Harbor Defense Project, 1890-1947 (Denver, 1982).

2. Fort Record Book of Fort Barrancas, NA, RG 392.

superior slope of the counterscarp, southeast of the bridge spanning the ditch.[3]

In 1930, a brick structure to house the radio transmitter was erected near the steel mast beyond the counterscarp and the frame station on the Fort Barrancas parade razed.[4]

C. 1938 Restoration and Stabilization

1. The Army's Proposal

Few, if any, funds were spent by the Army for maintenance and repair of Fort Barrancas, the Water Battery, and Redoubt during the first 35 years of this century. As the years passed, time, weather, and vandalism took their toll. Finally, in the early summer of 1935, Col. A.L. Fuller, the officer in charge of the Harbor Defenses of Pensacola, had personnel from the Engineer District Office at Mobile travel to Pensacola and inspect these obsolete but historically significant masonry fortifications. Based on what they saw, the Engineers prepared estimates of labor and materials required for their rehabilitation and preservation. They called for:

a. Fort San Carlos (the Water Battery): For repairing lining, cleaning up and repairing brick work, and constructing walkway to the fort.

BILL OF MATERIALS

500 1x6x8 2000 EBM	$56.00	
2 bbl Cement	6.00	
5 bbl coal tar	75.00	
Nails, 8d	1.50	
6 sacks lime	12.00	
		$150.00

LABOR

200 hrs. skilled @ $.70	$140.00	
800 hrs. unskilled @ $.30	240.00	
40 hrs. supervising @ $200.00 per mo.	50.00	
	$430.00	$580.00

3. Ibid.

4. Ibid.

b. Old Fort Barrancas: For walks in galleries, repairing breast-height wall, lighting passages, grouting groined arches, bastions, and counterscarp arches, replacing four doors, and miscellaneous clearing.

BILL OF MATERIALS

720	pcs. 2x10x10	$360.00	
180	pcs. 4x4x12	112.00	
10	bbl. cement	30.00	
1	grouting machine rental	250.00	
10	ceiling fixtures	20.00	
2500	ft. copper wire	25.00	
1	switch	1.00	
4	doz. porcelain knobs	3.00	
1	keg 8d nails	4.00	
			$805.00

LABOR

850	hrs. skilled @ $.70	$595.00	
2060	hrs. unskilled @ $.30	618.00	
80	hrs. supervising @ $200.00 per mo.	100.00	
40	hrs. electrical @ $100.00 per mo.	25.00	
		$1338.00	$2143.00

c. Fort Redoubt: For replacing doors, barring old entrance and flooring counterweight well, constructing interior walks, clearing and miscellaneous, and one mile of road from Fort Barrancas road to Redoubt and thence to Old Fort Barrancas.

BILL OF MATERIALS

50	2x10x8	$ 25.00	
1100	2x10x10	750.00	
30	2x10x12	25.00	
200	4x4x12	125.00	
60	2x4x12	18.00	
8	3x8x12	10.00	
4	locks	9.00	
4	pr. strap hinges	4.00	
4	hasps	2.00	
2	Gal. paint	6.00	
4	gross 3" screws	4.00	
2	kegs 20d nails	10.00	
20	ft. 3/4"x12' rods	4.00	
15	bbl. cement	45.00	
3	bbl. lime	6.00	
1500	bbl. asphaltum	2200.00	
		$3243.00	$3243.00

Rental of machinery:

2 tractors	$600.00	
1 grader	200.00	
1 disk mixer	200.00	
2 tank wagons	600.00	
1 roller	300.00	
4 trucks	900.00	
	$2800.00	$6043.00

LABOR

2924 hrs. skilled @ $.70	$2046.80	
11460 hrs. unskilled @ $.30	3492.00	
360 hrs. supervising @ $200.00 per mo.	450.00	
200 hrs. electrical @ $100.00 per mo.	125.00	
	$6113.80	$12156.80

d. Recapitualation:

OLD FORT	MATERIAL	LABOR	TOTAL
San Carlos	$ 150.50	$ 430.00	$ 580.50
Barrancas	1338.00	1338.00	2143.00
Redoubt	6043.00	6113.80	12156.80
	$6998.50	$7881.80	$14880.30

e. This work could begin after approval and clearance of project:

San Carlos (Water Battery)	10 days
Barrancas	4 days
Redoubt	4 days

	San Carlos (Water Battery)	Barrancas	Redoubt
Skilled labor--$.65-$.75	$140.00	$595.00	$2046.80
Unskilled labor--$.30	240.00	618.00	3492.00
Supervising--$200.00 per mo.	50.00	100.00	450.00
Electrical--$100.00 per mo.	------	25.00	125.00
Material	150.50	805.00	3243.00
	$580.50	$2143.00	$9356.80
Rental of machinery	------	------	2800.00
			$12156.80

Total:	San Carlos	$ 580.50
	Barrancas	2143.00
	Redoubt	12156.80
		$14880.30

Estimates for old forts: District Engineer did not give labor cost; gave man-hours only. Compilation of labor cost calculated from Quarter-master wage rate.

Department to rehabilitate and restore "the two masonry defenses." Continuing, he reported that a "large amount of repair and restoration work had been done on the forts in line with these instructions." Williams was interested in history and had employed "old plans and scale drawings" to insure accuracy. Consequently, he expressed considerable irritation at times over the "clumsy work" of the WPA, especially in repointing, "where their carelessness has resulted in great smears of new concrete over the brick work."[10]

On reconnoitering the Water Battery (Bateria de San Antonio), Appleman was distressed to see that scaffolding covered the exterior face of the Reduit. Here, he saw evidence of "embellishments of Spanish design." A few fragments of the originals were laying about on the ground and inside one" of the casemates. "A new concrete covering had been put on the wall" of the Reduit "for a distance of about four feet from the top; a bead running across the face of the wall had been restored and the process evidently was to be continued the full face of the wall." Just below this bead, Appleman saw ghost lines left by the embellishments. These, he observed, had

> consisted of a series of three large designs across the face of the wall with four circular designs at intervals between and on the outside and slightly above the three larger ones.

He saw nothing to indicate that the original fabric was to be replaced.[11]

This induced Appleman to meet again with Colonel Williams during which he emphasized the desirability of preserving and replacing all the original fabric, of which several "pieces, made of plaster, were nearly intact."

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10. Appleman to Regional Director, May 10, 1938, files Castillo de San Marcos.

11. Ibid.

Colonel Williams was agreeable, and toured the project, accompanied by a Captain MacLamore, the officer in charge of the WPA program, and Appleman. Williams told the WPA foreman that "the plaster pieces were to be replaced after they had served as models in the construction of forms to be used in casting replicas which are needed for replacements, since there are only enough . . . fragments to restore partially one of the figures."

In response to a plea by Appleman, Colonel Williams also "stopped the chipping off of the old concrete or plaster covering the inner face of the brick circular wall." On one-half of the subject wall, the "removal work already had been done and a new concrete facing was being put over the brick work."[12]

After further discussions with Colonel Williams and his staff, Appleman learned that, as of mid-March, these projects had been accomplished by the WPA: (a) replacing with concrete a portion of plaster covering the ramparts of the Water Battery; (b) "laying concrete roof" on Reduit; (c) "Concrete facing over front of structure and restoration of bead across face (the original was made of brick and plaster"); (d) positioning two interpretive markers (one for the fort and the other for the Water Battery, two restroom signs, and one general location marker; (e) construction of two latrines; (f) construction of a 50-car parking area; (g) construction of foot trails from parking area to the defense works; (h) repointing brickwork; (i) clearing out and landscaping Fort Barrancas ditch; (j) grading earthen slopes and glacis of both works; (k) grouting cracks in the Fort Barrancas scarp; (l) demolition of concrete footings of 1902 Fire Commander's Station on the Fort Barrancas parade; (m) relocating and securing displaced granite traverse stones on gun platforms; and (n) a general police of the area.

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12. Ibid.

Colonel Fuller reviewed and approved the estimates, which he forwarded to Fourth Corps Area headquarters on July 6.[5] Before relaying the correspondence to Washington, Corps headquarters recommended that, if Public Works Administration funds became available for "preservation and repair of historical fortifications," the obsolete Barrancas defenses be included in the program.[6]

The Quartermaster General held that the project should not be submitted as a separate entity to the National Emergency Council for consideration, because he believed that the projects included in the War Department's Supplemental Program for Fort Barrancas, already transmitted to the Council included ample provision for the "most urgent of the reconstruction and repairs recommended."[7]

The Chief Engineer concurred with the conclusions of the Quartermaster General. On doing so, he noted that "restoration of historical fortifications is frequently of sufficient interest to civilian communities in their vicinity to cause such communities to raise or procure funds for that purpose."[8]

The estimates and correspondence were accordingly returned by the Adjutant General, through channels, to Colonel Fuller at Fort Barrancas.

The Public Works Administration, beginning in 1936, allotted funds for rehabilitation and improvement of buildings and grounds

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5. Fuller to Commanding General, 4th Corps Area, July 6, 1935, NA, RG 77, Geographic File (1918-45), File 600.3.

6. Levy to Adjutant General, July 15, 1935, NA, RG 77, Geographic File (1918-1945), File 600.3.

7. Guiney to Chief Engineer, July 26, 1935, NA, RG 77, Geographic File (1918-45), File 600.3.

8. Hannum to Adjutant General, August 9, 1935, NA, RG 77, Geographic File (1918-45), File 600.3.

at Forts Barrancas and Pickens. Priority was given in the autumn and winter of 1936-37 to repair of the Fort Barrancas officers' and non-commissioned officers' quarters; rehabilitation of water tanks; rebuilding of barracks porches; repair of railroad tracks on the Barrancas side; and construction of two tennis courts and bowling alleys.

During the spring and summer of 1937, a new post theatre and searchlight garage were built with PWA funds. Works Progress Administration (WPA) workmen, at the same time, continued to renovate quarters and barracks, while painting green and white the exteriors of most of the post buildings. The "ancient brick buttresses" in front of quarters No. 7 were rebuilt. The main gate guardhouse was relocated, and the capacity of the hospital increased by glassing in the porch.[9]

In the winter of 1937-38, WPA workmen began a restoration/ stabilization project involving old Fort Barrancas and its Water Battery. A search of PWA and WPA records on file at National Archives failed to locate any progress or completion reports for this undertaking. The best source of information regarding what was accomplished is the trip report submitted by an alert National Park Service historian.

2. Historian Appleman's Visit and Report

In mid-March 1938, Staff Historian Roy E. Appleman of the National Park Service's Region 1 Office spent several days in and around Pensacola. On Saturday, the 19th, and Monday, the 21st, he visited Fort Barrancas and its Water Battery. He saw that both works were "pretty well preserved," and found that a WPA project, employing about 400 men, was underway on the reservation. Post Commander Col. H.B. Williams told Appleman that he had recently received instructions to add another 500 men to the WPA rolls. He had also been directed by the War

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9. The Coast Artillery Journal, Vol. 79, No. 6, p. 463; Vol. 80, No. 1, p. 73; No. 3, p. 264; No. 4, p. 344.

Projects to be completed or accomplished by the WPA included: (a) restoration/reconstruction of the plaster embellishments on the exterior of the Reduit; (b) repair of several bad cracks in the Fort Barrancas scarp, especially the one at the southeast salient; and (c) erection of a large narrative marker "outlining the history of military fortifications" at the site.[13]

D. Barrancas Fortifications Become Part of the Naval Air Station

On April 15, 1947, Fort Barrancas, as part of the Army's retrenchment program following World War II, was ordered deactivated. The post was phased out by June 30, and the Fort Barrancas reservation transferred to the Navy, as part of the Pensacola Naval Air Station.

E. Congress Authorizes a Pensacola National Monument

Meanwhile, local Congressman Robert L.F. Sikes had introduced legislation to establish the Pensacola National Monument and to transfer to Escambia County 1,500 acres of the Fort Pickens Reservation. The National Monument was to include Fort Barrancas, the Water Battery, the Redoubt, and Fort Pickens.

The 2d Session of the 80th Congress enacted and President Harry S Truman signed into law on July 2, 1948, a revised version of the Sikes' bill providing for establishment of the Pensacola National Monument. This act authorized the Secretary of the Interior to receive, on behalf of the United States, certain tracts of land, along with the improvements thereon, in the Harbor Defenses of Pensacola owned by the Navy. The parcels involved were: (a) "Old Fort San Carlos and Old Fort Barrancas (approximate area, four acres"; (b) "Old Fort Redoubt (approximate area, four acres)"; and (c) "Old Fort Pickens (approximate area, five acres)."

Section 2 of the Act provided that the land so acquired was to be held by the Secretary pending determination by him as to its "national

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13. Ibid.

significance for national monument purposes." If the Secretary so determined, the area, upon publication of a Secretarial Order in the Federal Register, was to "constitute the Pensacola National Monument."

Section 4 provided that, in event the Secretary of the Interior determined that, "the area would be more suitably administered as a State historical park," he was empowered "to transfer title to the land, and jurisdiction of the area to the State of Florida: Provided, that the State shall perpetually maintain the area for State historical park use." Should the State ever abolish the historical park, or attempt to alienate the lands, title was to revert to the United States.[14]

The National Park Service, on reviewing the legislation and evaluating the resources, concluded that the Pensacola forts were "best adapted to establishment as a state historical area and that the lands should be turned over to the State of Florida as a State Historical Park."

In relaying this information to the Secretary of the Interior's Advisory Board on National Parks, Historical Sites, Buildings, and Monuments, Director of the National Park Service Newton B. Drury noted that, at its March 1940 meeting, the Board had indicated that the Pensacola forts "were of sufficient national importance to be eligible for some kind of National Park Service effort for their proper preservation." In view of Congress' mandate, it would be desirable for the Board to review this question. To facilitate the members' deliberations, the National Park Service suggested that the Board consider these alternatives:

(a) That the Pensacola forts are of "sufficient national importance to be administered for national monument purposes as part of the National Park System.

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14. Public Law 878, 80th Congress, July 2, 1948.

(b) That these areas be "transferred to the State of Florida for administration as a State Historical Park." In addition, it was recommended that, in view of the antiquity of Bateria de San Antonio and its "significance in the history of early Spanish colonization in Florida," the National Park Service cooperate with the State in preserving and developing "the areas for public use through advisory assistance in planning, within the limits of available funds."[15]

The Advisory Board, as the Service anticipated, adopted the second alternative.

When pressed by members of the Florida congressional delegation, including the influential Senator Claude Pepper, to "take over the old fort at Pensacola as a national monument," as authorized by Congress, the Department of the Interior fell back on the position taken by the Board.[16]

During the ensuing years, the Fort Pickens area became a state park, while Fort Barrancas, its Water Battery, and the Redoubt remained a part of the Naval Air Station.

F. Navy Provides Minimum Maintenance

In 1948, after assuming responsibility for the Barrancas fortifications, the Navy "cleaned up the confusion of shrubbery and weeds in Forts San Carlos and Barrancas."[17]

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15. Drury to Advisory Board, October 28, 1948, NA, RG 79, Proposed National Monuments.

16. Pepper to Krug, February 14, 1949, & Krug to Pepper, February 15, 1949, NA, RG 79, Proposed National Monuments.

17. Long to Drury, July 12, 1948, NA, RG 79, Proposed National Monuments.

Then, on November 26, 1950, the facing on the bombproof (Reduit) of the Water Battery gave way, during a change in the weather which caused the mercury to plunge below freezing. Water which had seeped into cracks in the rampart froze and the expansion sent the plaster and masonry tumbling onto the parade. This caused a correspondent for the News Journal to lament, "one of the finest remaining examples of early Spanish fortifications in the United States" was destroyed overnight.

As a safety measure, Naval authorities blocked off the gallery providing access to the Water Battery from Fort Barrancas.[18]

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18. Pensacola News Journal, February 4, 1951.

APPENDIX A
GLOSSARY

applicateur. Workman engaged in applying asphaltum to roof surfaces of arches.

architrave. Beam or lowest division of entablature, which extends from column to column. The term is also applied to the moulded frame around door or window.

archivolt. Mouldings on face of arch, following its contour.

arrondisment. (French: arrondssement) Rounding (noun).

askew arch. Segment arch which springs from oblique piers, and twists gracefully in its length to seat its weight fully upon the skewbacks.

ballister. Small pillar or column supporting handrail or coping. Series of such is called a balustrade.

baluster. See ballister.

banquette. Raised way, or foot bank, running along inside of parapet, on which riflemen stand to fire on enemy.

barbette. Platform in fortification on which guns are mounted to fire over parapet.

barrack. Large building for lodging of soldiers; barracks (plural): building or buildings for that purpose.

barrel vault. Brick semicircular arched covering of greater length than breadth.

bastion. Work projecting outward from main enclosure of fort, consisting of two faces and two flanks, and so constructed that it is able to defend by flanking fire the adjacent curtain or wall which extends from one bastion to another.

bastion towers. Section of the bastion enclosing the spiral stairway.

batten. Narrow strip of wood or scantling used in various ways: to rest upon piazza joists and provide additional support for flooring.

batter. Backward slope of retaining wall.

battery. Any place where cannon or mortar are mounted for attack or defense.

bead. Narrow rounded moulding or protecting band at masonry corners.

belt. Strip or band.

breakwater. Counterscarp (moat) wall, seawall built to exhaust force of waves.

breast-height wall. Interior slope of parapet, against which the garrison lean in firing.

breastwork. A defense work of moderate height, hastily thrown up, of earth or other materials.

brick facing. The outer or exposed portion of brick wall.

caballero. (Spanish) Sort of fortification, or part of fortification.

carriage. Wheeled stand or movable support of gun.

casemate. Bombproof chamber, in which cannon may be placed to be fired through embrasures in its front.

cistern. Receptacle for storing water; reservoir.

coal rig. Coal storehouse and apparatus for depositing coal in bunkers of vessel.

cofferdam. Water tight structure of pilings, used in engineering for excluding water from area excavated, so that foundations may be built dry.

communication arch. Arched opening that pierces casmate pier and gives access to adjoining casemate. These openings are near the rear of gun room or casemate, away from the arc described by traverse of gun carriage, which impeded progress through main and larger connecting casemate arches.

contrabands. Escaped black slaves, termed "contraband of war."

coping. Highest or covering course of masonry in wall, often with sloping edges to carry off water.

cobel. Projecting brick, generally used for support of element above, although occasionally for ornamentation.

cordon. Coping of scarp wall, which projects a few inches beyond face of wall.

cornice. Horizontal projection which crowns or finishes the work to which it is affixed.

counterscarp. Exterior slope of ditch or moat opposite the scarp; moat wall: see scarp.

curtain. That part of rampart and parapet which extends between two bastions or gates.

dentil. Tooth-like cube in cornice.

elliptical. Arch, the rise of which follows oval curve above the long horizontal axis of an ellipse.

embrasure. Opening in a fort wall from which to fire guns.

embrasure cheek. Vertical side or jam of an embrasure.

embrasure iron. Iron protecting frame about outer opening of embrasure.

embrasure shutters. Iron shutters to close embrasure.

emplacement. Position of guns within fortification.

enrockment. Protective layer of loose stone to prevent undermining of counterscarp foundation.

entablature. Upper part of the architecture, comprising architrave, frieze, and cornice.

facade. Face or elevation of building.

fascine. Bundle of sticks or fagots bound together and used for fortifying ditches, building earthworks, etc.

filter closets. Opening in casemate pier where was placed apparatus to filter water conducted from terreplein to casemate cisterns.

flagging. Pavement of flagstones; sometimes used to denote a single flagstone.

flagstone. Large flat paving stone.

front. Designation of a side of the polygonal figure; curtain. The sides of the polygon are numbered, the angles (or bastions) lettered.

gabion. Large cylindrical bottomless basket filled with earth and used in building earthworks.

girder. Main beam in a floor.

gorge. Entrance into a bastion; usually synonymous with rear.

grillage. Arrangement of sleepers and crossbeams forming a foundation in loose or marshy soil.

groin. Curved arris (sharp edge) formed by the insection of vaulting surfaces.

grudgeon. Pin, wedge or pivot placed at the end of a shaft to prevent pulley from slipping.

gun circles. See traverse arc.

hot shot furnace. Furnace in which round shot was heated. Apparatus within the oven delivered the red hot balls to artillerists who by means of tongs conveyed them to muzzle loading cannon. These missiles could set a wooden vessel on fire, or wreak havoc in a magazine. They were capable of skipping upon water several times and still retaining enough heat to start a blaze.

howitzer. Short, light, large bore cannon, in which the hollow projectile could be placed by hand.

jamb. Upright side of a doorway, window, or fireplace.

joist. Horizontal timber to which boards of floor or laths of ceiling are fastened.

linstock. Pointed, forked staff, shod with iron at the foot, to hold lighted match for firing cannon.

lintel (lintle). Horizontal member spanning an opening and carrying superincumbent weight by means of its strength in resisting crosswise fracture.

loopholes. Narrow aperture for observation or defense.

lunette. Detached bastion.

magazine. Building or room in which powder and explosives are kept in a fortification or ship.

magistral. Line from which the positions of various units of the fortification are determined.

mitred. Joined on a slanting line at the corners.

moat. Deep ditch around a fort, frequently containing water.

mortised. Joined (as timbers) by putting a projecting part into a hole made to fit.

pan-coupe. Cant-wise slope of wall or skirt on parapet below mouth of gun to deflect shell fire.

parade. Courtyard or enclosure in fortification where troops are drilled.

parapet. Wall crowning curtain to protect soldiers from enemy fire.

pediment. Triangular piece over the entablature, which fills in and supports the sloping roof.

permanent buildings. Those buildings on Santa Rosa Island designed as integral units of the fortification or for the use of its garrison.

piazza. Veranda.

pier. Mass of detached masonry, distinct from a column, from which an arch springs.

pilaster. Rectangular column or pillar, inserted partly in or attached to a wall.

pintle. Pivot about which the chassis of the gun carriage swings.

pintle stone. Stone in which pintle is set.

plinth. Lowest square member at the base of a column; projecting face at the base of a wall.

postern. Entrance (usually subterranean) beneath the parapet and through the rampart of a fortification. Term that engineers sometimes used as synonymous with sally port or entrance.

primage. Small sum of money paid to a shipowner in addition to payment for carrying goods, as for the care of the goods.

purlin. Horizontal beam in a roof resting on the principal rafters and supporting the common rafters and roof covering.

quarters. Lodging.

quoin. Term applied to corner stone at angle of building; hence, the angle itself. Also: support at breech of cannon.

rampart. Broad embankment round a place, upon which the parapet is raised.

ravelin. Detached work with two embankments which made a salient angle. It is raised before the curtain on the counterscarp of the fortification.

recess. Niche or hollow in the wall.

reference. Established level or elevation; engineers used the mean low water level as elevation (or reference) zero, and made their computations of height upon that basis. A point five feet below low water level was at reference minus five feet; ten feet above low water was similarly designated as a reference ten feet.

revetment. Facing of wood, stone, or any other material, to sustain an embankment when it receives a slope steeper than the natural slope; also a retaining wall.

riser. Upright part of a step.

rusticated. With reference to stonework, made with grooved joints or roughened surface.

salient. Projection.

sally port. Gate in fortification, through which besieged troops might rush forth. See postern.

scarp. Slope of the protecting ditch or moat which touches the wall or parapet; inner slope of the protecting ditch at the foot of the parapet, nearly perpendicular.

segmental arch. Arch, the curve of which forms less than half a circle. This type of low arch the engineers usually referred to as "flat"; technically speaking, the soffit of a flat or straight arch is on the same level with its skewbacks--it is horizontal.

semi-circular arch. Arch, the curve of which forms a half circle. Sometimes called round arch.

shoal. Shallows about Santa Rosa Island.

skewback. In masonry, a stone block, steel plate, or the like having a sloping face against which an end of the arch rests.

soffit. Ceiling or under surface.

subsidence. Sinking or settling.

surbase. Moulding around the top of a pedestal or where the wall of a masonry building rests on its foundation; interior; moulding or chair rail along the top of a wainscot or baseboard.

temporary buildings. Structures on Santa Rosa Island erected for use of the workmen, and to be demolished as the permanent units replaced their utility.

terreplein. Main upper level of a rampart, where guns, shielded by a parapet, are mounted; roof of the fort.

tiebeam. Beam which acts as a tie in connecting the lower ends of rafters.

transom. Piece of wood or iron connecting the checks of some gun carriages.

traverse arc. Arc of part of a circle described by movement of gun carriage about the pintle or center point; the stone support and iron track upon which the gun carriage rolls to turn the gun right or left. By traversing the arc, the gun thus commands a horizontal range of about ninety degrees. Traverse arcs were laid in casemates and terreplein fronts.

traverse circles. The complete circle described by movement of gun carriage about the pintle or center point; the stone support and iron track upon which the gun carriage rolls to turn the gun right or left. By traversing the circle, the gun thus commands a horizontal range of three hundred sixty degrees. Traverse circles were laid on the bastion terreplein, Cf. traverse arc.

traverse iron. Iron track embedded in the traverse stone, and forming an arc upon which the wheels of the gun carriage roll.

traverse magazine. Magazine built athwart the terreplein.

tremie. Caisson-like device for laying concrete under water.

traverse stone. Granite stone cut in the form of a small segment of a circle, so that with its mates it comprised the traverse arch.

triangular arch. So-called arch, the sides of which are straight and meet in a peak.

Venetian blind. Window shade or blind made of horizontal slats of wood or cords, turnable so as to admit or exclude light and air.

vault. Arched roof.

voussoirs. Truncated, wedge-shaped blocks forming an arch.

wainscot. Paneled wooden lining on walls.

water table. Projecting course of masonry or moulding to throw water away from a wall.

zero level. Mean low water level; see reference.

BIBLIOGRAPHY

Primary Sources

1. Manuscript Materials Found at the National Archives and Suitland Records Center

Record Group 77

Records of the Office of the Chief of Engineers. Engineer Orders and Circulars. 1811-68.

Office of Chief of Engineers, Letters Sent to Engineer Officers. 1812-69.

Records of Engineer Boards and Commissions. Board of Engineers for Fortifications. Letters Received. 1825-30.

Office Chief of Engineers. Register of Letters Received. 1827-70.

Office Chief of Engineers. Letters Received. 1826-66.

Bernard, Simon. "Memoir on the Defence of Pensacola Bay, January 1830." Letters Received. 1826-66.

Chase, William H. "National Defenses," May 7, 1851, found with Chase's letter to Joseph Totten, June 26, 1852. Letters Received. 1826-66.

Military Service Registers of Officers of the Engineer Corps, 1857-1894.

Records of the Office of the Chief of Engineers. Correspondence Relating to Fortifications. Letters Sent. 1866-70.

Records of the Office of the Chief of Engineers. Correspondence Relating to Fortifications. Register of Letters Received. 1866-67.

Records of the Office of the Chief of Engineers. Correspondence Relating to Fortifications. Letters Received. 1866-67.

Records of the Office of the Chief of Engineers. Correspondence Relating to Fortifications. Register of Letters Received. Nov. 1867-Dec. 1870.

Records of the Office of the Chief of Engineers. Correspondence Relating to Fortifications. Letters Received. Nov. 1867-Nov. 1870.

Correspondence of the Fortifications Division, 1871-86. Letters Sent.

Correspondence of the Fortifications Division, 1871-86. Register of Letters Received.

Correspondence of the Fortifications Division, 1871-86. Letters Received.

Correspondence. 1886-89. Letters Sent.

Correspondence. 1886-89. Registers of Letters Received Relating to Fortifications, Administration, and Exploration and Surveys.

Correspondence. 1886-89. Letters Received Relating to Fortifications, Administration, and Exploration and Surveys.

Correspondence. 1886-89. Registers of Letters Received Relating to Fortifications.

Correspondence. 1886-89. Letters Received Relating to Fortifications.

Records of the Office of the Chief of Engineers. General Correspondence. 1890-92.

Records of the Office of the Chief of Engineers. General Correspondence and Record Cards. 1893-94.

Records of the Office of the Chief of Engineers. Name and Subject Index to Series 96.

Records of the Office of the Chief of Engineers. Name and Subject Index to Series 98.

Records of the Office of the Chief of Engineers. Name and Subject Index to Series 103.

Records of the Office of the Chief of Engineers. General Correspondence. 1894-1923.

Records of the Office of the Chief of Engineers. Geographic File. 1918-45.

Record Group 79

Pensacola National Monument. Proposed National Monuments.

Record Group 92

Office of the Quartermaster General, Consolidated Correspondence File. 1794-1890.

Wilcox, Richard. "How Fort Pickens, Florida, Was Saved from the Rebels, April 11,1861." Incidents of the War.

Record Group 109

General and Special Orders Issued March 11, 1861-Jan. 27, 1862, Army of Pensacola.

Record Group 127

Office of the Marine Corps Commandant. Letters Sent. March 1804-Feb. 1884.

Office of the Marine Corps Commandant. Letters Received. 1819-1903.

Marine Corps Historical Division. Letters Received. 1818-1915.

Record Group 156

Records of the Office of the Chief of Ordnance. Letters, Endorsements, and Circulars Sent ("Miscellaneous Letters"). 1812-89.

Records of the Office of the Chief of Ordnance. Register of Letters Received. 1827-89.

Records of the Office of the Chief of Ordnance. Letters Received. 1812-94.

Record Group 392

Fort Record Book of Fort Barrancas.

2. Manuscript Materials Found at Castillo de San Marcos National Monumet

Appleman, Roy E. to Regional Director. May 10, 1938.

3. Manuscript Materials Found at University of North Carolina Library. Chapel Hill, North Carolina

Samuel Henry Lockett Papers. Southern Historical Collections.

4. National Archives Microfilm

Letters Received by the Adjutant-General of the United States, 1822-60. Microcopy M-567.

Returns from U.S. Military Posts, 1800-1916. Microcopy M-619.

Returns for Regular Army Infantry Regiments, June 1821-December 1916. Microcopy M-665.

Letters Sent by the Quartermaster General. Microcopy M-745.

Returns from Regular Army Artillery Regiments, June 1821-January 1901. Microcopy M-727.

5. Maps, Plans, and Drawings

National Archives

"Details of Draw-Bridge of Fort Barrancas as Projected by the Board of Engineers."

"Map showing the situation of the Fort San Carlos de Barrancas with about one mile of its surrounding country at Pensacola Harbor, scale 400 feet to 1 inch."

"Plan and Section of a Relieving Arch, showing the curved wall, between piers constructed in place of timber supports, and of a detail showing the bonding into the pier of said wall."

"Plan No. 1, Fort Barrancas, Aug. 16, 1821."

"Plan of Fort San Carlos de Barrancas, Scale 25 feet to 1 inch."

"Plans, Sections and Elevations of Fort Barrancas as projected by the Board of Engrs. in 1841."

William L. Clements Library, Public Records Office, and Pensacola Historical Society.

"Plan and Section of the Upper and Lower Batteries laid out and begun building 5 March 1771; for Protecting the Harbor of Pensacola." Public Records Office, London, England. M.P.G. 11.

"Plan of the Siege of Fort George and Work adjacent at Pensacola in West Florida, 1781." Henry Clinton Papers. William L. Clements Library. University of Michigan.

"Plano de la Bateria de San Antonion y Fuente Provicional de San Carlos en la entrada el puerto la Panzacola." Files Pensacola Historical Society.

6. Governmental Publications

Public Documents, Printed by Order of the Senate of the United States, During the 2d Session of the 26th Congress. Washington, 1840. Serial 375.

Public Documents, Printed by Order of the Senate of the United States, 2d Session of the 27th Congress. Washington. 1842. Serial 395.

Public Documents, Printed by Order of the Senate of the United States, 3d Session, 27th Congress. Washington. 1843. Serial 413.

Public Documents, Printed by Order of the Senate of the United States, 1st Session, 28th Congress. Washington. 1844. Serial 431.

Public Documents, Printed by Order of the Senate of the United States, 2d Session of the 28th Congress. Washington. 1845. Serial 449.

Public Documents, Printed by Order of the Senate of the United States, 1st Session of the 29th Congress. Washington. 1846. Serial 470.

Public Documents, Printed by Order of the Senate of the United States, During the 2d Session of the 29th Congress. Washington. 1847. Serial 493.

Public Documents, Printed by Order of the Senate of the United States, During the 2d Session of the 30th Congress. Washington. 1849. Serial 537.

Executive Documents, Printed by Order of the Senate of the United States, 1st and 2d Sessions, 34th Congress. Washington. 1856. Serial 811.

Executive Documents, Printed by Order of the Senate of the United States, 3d Session, 34th Congress. Washington. 1857. Serial 876.

Executive Documents, Printed by Order of the Senate of the United States, 2d Session of the 36th Congress. Washignton. 1861. Serial 1079.

Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 39th Congress. Washington. 1867. Serial 1285.

Executive Documents, Printed by Order of the House of Representatives, During the 3d Session of the 40th Congress. Washington. 1869. Serial 1368.

Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 41st Congress. Washington. 1870. Serial 1413.

Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 42d Congress. Washington. 1872. Serial 1504.

Executive Documents, Printed by Order of the House of Representatives, During the 3d Session of the 42d Congress. Washington. 1873. Serial 1559.

Executive Documents, Printed by Order of the House of Representatives, During the 1st Session of the 43d Congress. Washington. 1874. Serial 1598.

Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 43d Congress. Washington. 1875. Serial 1636.

Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 44th Congress. Washington. 1877. Serial 1743.

Executive Documents, Printed by Order of the House of Representatives, During the 2d Session of the 45th Congress. Washington. 1878. Serial 1795.

Executive Documents, Printed by Order of the House of Representatives, During the 3d Session of the 45th Congress. Washington. 1879. Serial 1844.

Report of the Secretary of War; being part of the Message and Documents Communicated to the Two Houses of Congress at the Beginning of the Second Session of the Fifty-Fourth Congress. 3 vols. Washington, 1896.

Executive Documents of the House of Representatives for the 3d Session of the 55th Congress, 1897-98. Washington. 1897. Serial 3631.

Executive Documents of the House of Representatives for the 2d Session of the 56th Congress, 1897-98. Washington. 1898. Serial 3746.

Executive Documents of the House of Representatives for the 2d Session of the 57th Congress, 1900-01. Washington. 1900. Serial 4089.

American State Papers, Military Affairs, Documents, Legislative and Executive of the Congress of the United States. vol. III. Washington. 1860.

American State Papers, Documents, Legislative and Executive of the Congress of the United States, Naval Affairs. vol. II. Washington. 1862.

Carter, Clarence (editor). Territorial Papers of the United States, the Territory of Florida, 1821-24. Washington. 1956.

Minot, George (editor). Statutes at Large and Treaties of the United States of America from December 1, 1851, to March 3, 1855 . . . . Boston. 1855.

Official Records of the Union and Confederate Navies in the War of the Rebellion. 31 vols. Washington. 1895-1929.

The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. 73 vols. and 128 parts. Washington. 1880-1901.

Public Law 878. 80th Congress. July 2, 1948.

Soldiers of Florida in the Seminole Indian-Civil and Spanish American Wars. Compiled by the Board of State Instruction. Live Oak, Florida. 1903.

The Official and Statistical Register of the State of Mississippi, 1908. Edited and compiled by Dunbar Rowland. Nashville. 1908.

7. Published

Cronin, Cornelius. Recollections of Service in the United States Navy While Serving Aboard the U.S. Ships "Sabine," "Brooklyn," and "Richmond." n.p. n.d.

Bassett, John S. (ed.) Correspondence of Andrew Jackson. 4 vols. Washington. 1926-33.

Bernhard, Kurt, Duke of Saxe-Weimar Eisenach. Travels Through North America, During the Years 1825 and 1826. 2 vols. Philadelphia. 1828.

Gadsden, James, to Andrew Jackson. Aug. 1, 1818, found in Florida Historical Quarterly. Vol. XV. April 1937. No. 4.

Gilman, Jeremiah M. "With Slemmer in Pensacola Harbor." Battles and Leaders of the Civil War. Robert V. Johnson & C.C. Buel. 4 vols. New York. 1884-1887.

Hutchins, Thomas. An Historical Narrative and Topographical Description of Louisiana and West Florida. Philadelphia. 1784.

Latour, A. LaCarriere. Historical Memoir of the War in West Florida and Louisiana in 1814-15. Philadelphia. 1816.

McCall, George A. Letters from the Frontiers. Philadelphia. 1868.

McFarland, Baxter. "A Forgotten Expedition to Pensacola." Publications of the Mississippi Historical Society. Vol. IX. Oxford, Mississippi. 1905.

Starx, Henry E. and Brooks Thompson (editors). "Letters of a Teenage Confederate." Florida Historical Quarterly. Vol. 38. No. 4.

Stoddard, Amos. Sketches, Historical and Descriptive, of Louisiana. Philadelphia. 1812.

Walke, Henry. Naval Scenes and Reminiscences of the Civil War in the United States on the Southern and Western Waters. . . . New York. 1877.

Secondary Sources

1. Biographies

Andrist, Ralph K. Andrew Jackson: Soldier and Statesman. New York. 1963.

Bassett, John S. The Life of Andrew Jackson. New York. 1931.

James, Marquis. The Life of Andrew Jackson. Indianapolis. 1938.

Parton, James. Life of Andrew Jackson. 3 vols. Boston. 1870.

West, Richard S. The Second Admiral. New York. 1937.

Williams, T. Harry. P.G.T. Beuregard: Napoleon in Gray. Baton Rouge. 1955.

2. Regimental Histories

Haskin, William L. The Story of the First Regiment of Artillery from its Organization in 1821, to January 1st, 1876. Portland, Maine. 1879.

McMorries, Edward Y. History of the First Alabama Volunteer Infantry, C.S.A. Montgomery. 1904.

Morris, Gouverneur. The History of a Volunteer Regiment, Being a Succinct Account of the Organization, Services and Adventures of the Sixth Regiment, New York Volunteers. . . . New York. 1891.

Shorey, Henry A. The Story of the Maine Fifteenth: Being a Brief Narrative of the More Important Events in the History of the Fifteenth Maine Regiment. . . . Bridgton, Me. 1890.

3. Monographs

Bearss, Edwin C. Historic Structure Report, Fort Pickens, Historical Data Section, 1821-1895. Denver, 1983.

Bearss, Edwin C. Historic Structure Report: Fort Point: Historical Data Section. Denver. 1973.

Bearss, Edwin C. Historic Structure Report, Historical Data Section, Harbor Defense Project, Pensacola Bay, 1893-1947. Denver. 1982.

Dickson, J.J. Confederate Military History of Florida. 12 vols. Atlanta. 1898.

Donnelly, Ralph W. The History of the Confederate States Marine Corps. Washington. 1976.

Haynes, Robert V. "The Road to Statehood," found in A History of Mississippi. Edited by Richard A. McLamore. 2 vols. Hattiesburg. 1973.

Lewis, E. Raymond. Seacoast Fortifications of the United States: An Introductory History. Washington. 1970.

Mahan, Alfred T. Gulf and Inland Waters. New York. 1883.

Manucy, Albert. Artillery Through the Ages: A Short Illustrated History of Cannon Emphasizing Types Used in America. Washington. 1949.

Moore, Albert B. Conscription and Conflict in the Confederacy. New York. 1924.

Nicolay, John G. The Outbreak of Rebellion. New York. 1881.

Randall, John G. The Civil War and Reconstruction. New York. 1953.

Scharf, J. Thomas. History of the Confederate Navy, from its Organizations to the Surrender of its Last Vessel. New York. 1887.

Tucker, Glenn. Poltroons and Patriots: A Popular Account of the War of 1812. 2 vols. Indianapolis. 1954.

Wallace, Edward S. Destiny and Glory. New York. 1957.

4. Compendiums

Cullum, George W. Biographical Register of the Officers and Graduates of the U.S. Mlitary Academy from 1802 to 1920. 9 vols. New York. 1879-1920.

Miller, Francis T. (editor). The Photographic History of the Civil War. 10 vols. New York. 1911.

Warner, Ezra. Generals in Blue: Lives of the Union Commanders. Baton Rouge. 1964.

Warner, Ezra. Generals in Gray: Lives of the Confederate Commanders. Baton Rouge. 1959.

5. Articles in Historical Journals

Bearss, Edwin C. "Asboth's Expedition Up the Alabama and Florida Railroad." Florida Historical Quarterly. Vol. XXXIX. No. 2.

Bearss, Edwin C. "Civil War Operations In and Around Pensacola." Florida Historical Quarterly. Vol. XXXVI. No. 2.

Bearss, Edwin C. "Civil War Operations In and Around Pensacola." Florida Historical Quarterly. Vol. XXXIX. No. 3.

Bearss, Edwin C. "Rousseu's Raid on the Montgomery and West Point Railroad." The Alabama Historical Quarterly. Vol. 25. Nos. 1 & 2.

Faye, Stanley. "British and Spanish Fortifications of Pensacola, 1781-1821." Florida Historical Quarterly. Vol. XX. No. 3.

Faye, Stanley. "Privateersmen of the Gulf and Their Prizes." The Louisiana Historical Quarterly. Vol. 22. No. 2.

Jones, John F. (editor). "Lincoln's Courier: John L. Warden's Mission to Fort Pickens." Florida Historical Quarterly. Vol. XLI. No. 2.

Larkin, J.L. "Battle of Santa Rosa Island." Florida Historical Quarterly. Vol. XXXVII. Nos. 3 & 4.

Mahon, John K. "British Strategy and Southern Indians: The War of 1812." Florida Historical Quarterly. Vol. XLV. No. 4.

6. Newspapers

Montgomery Weekly Mail

New York Herald

Niles' Weekly Register

Pensacola News Journal

Pensacola Gazette

Pensacola Observer

The Floridian (Pensacola)

Tuscaloosa Monitor

ILLUSTRATIONS

Plate I

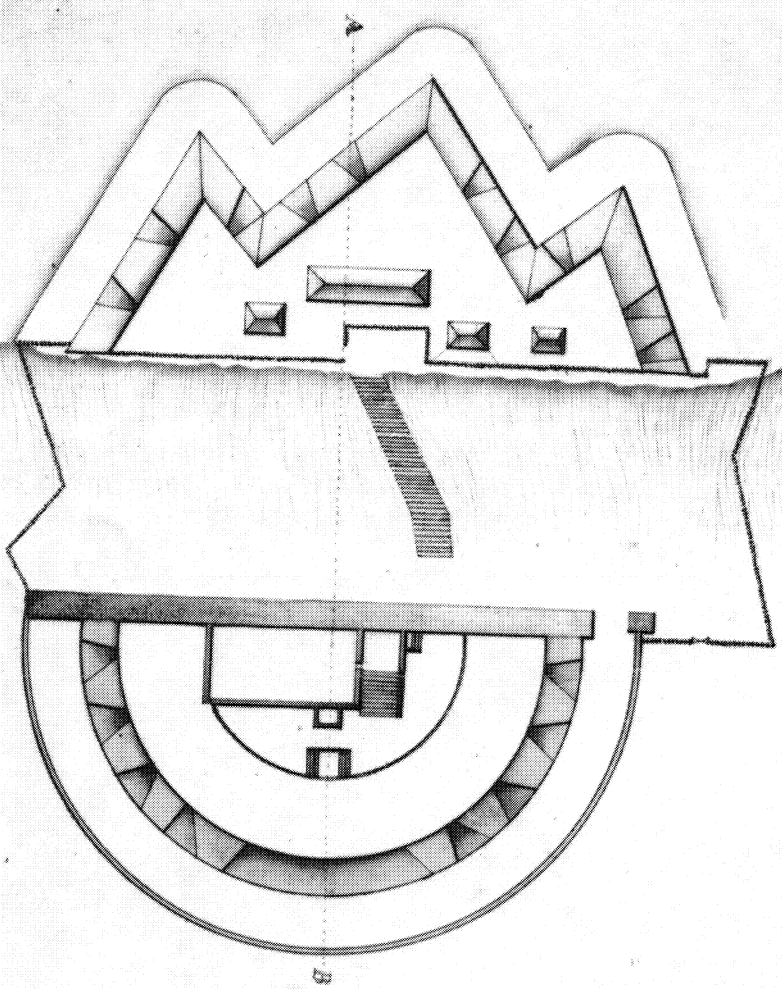
Plan of Bateria de San Antonio and Fort San Carlos de Barrancas by unidentified Army Engineer, August 1821, RG 77, Drawer 79, Sheet 1. Courtesy National Archives.

ENGINEER DEPARTMENT

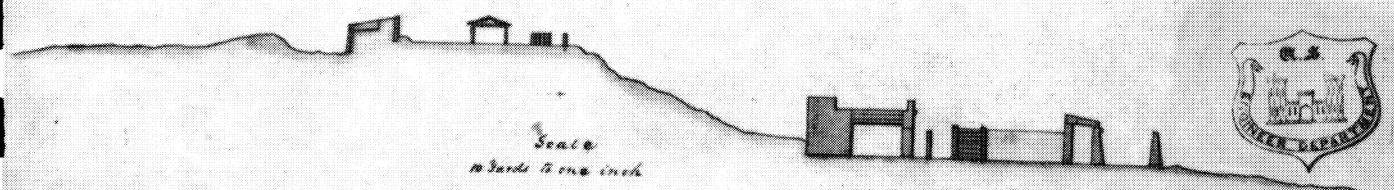
Drawer 79.
Sheet 1.

Plan N° 1

ENGrDEPT
U. STATES
TOPL BUREAU



Section on the line AB



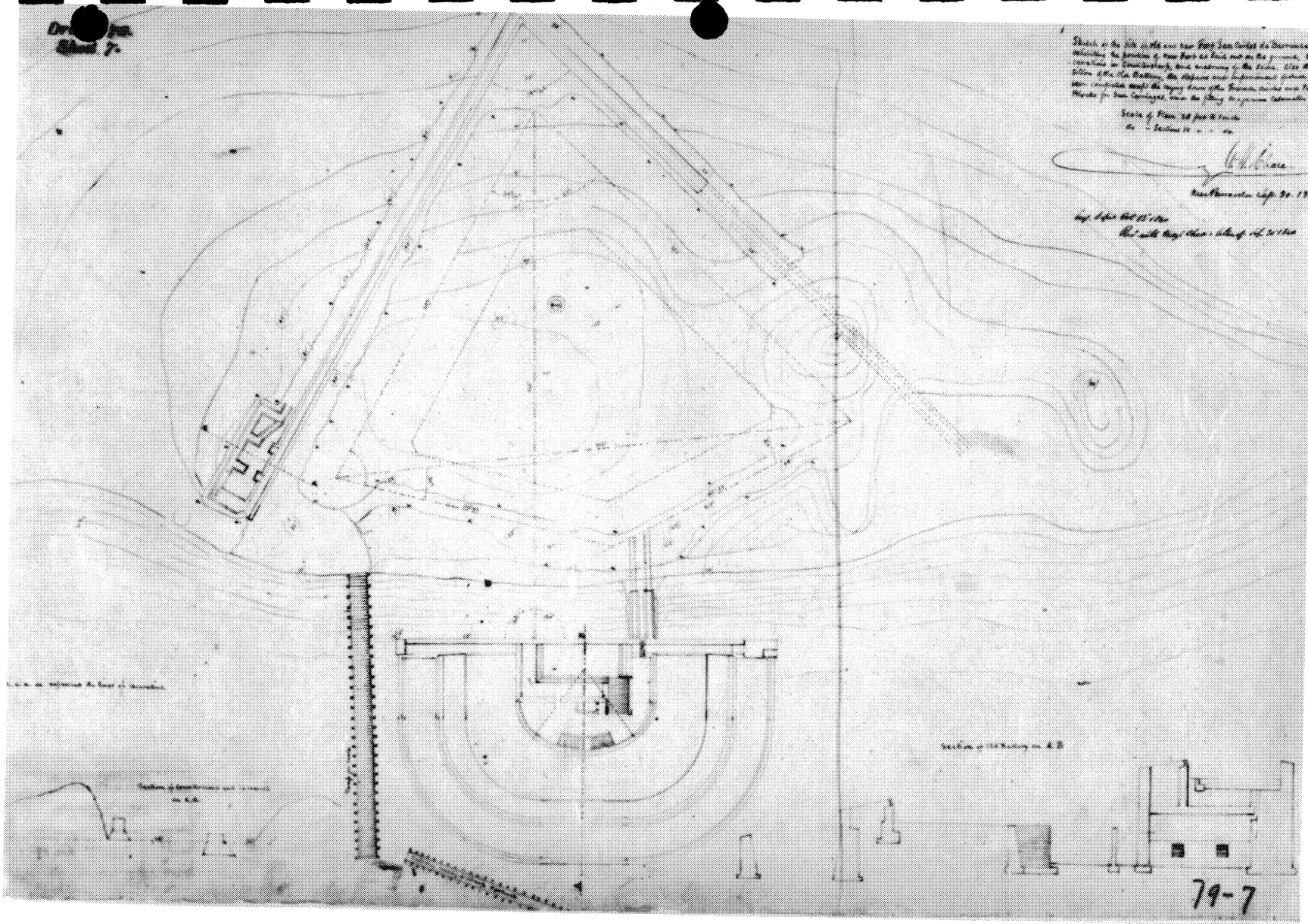
Scale
200 Yards to one inch

U.S. ENGINEER DEPARTMENT

79-1

Plate II

"Plan of Fort San Carlos de Barrancas [and Bateria de San Antonio], scale 25 feet to 1 inch, from Measurements by J.G. Barnard, Capt. Eng." December 1838. RG 77, Drawer 79, Sheet 4. Courtesy National Archives.

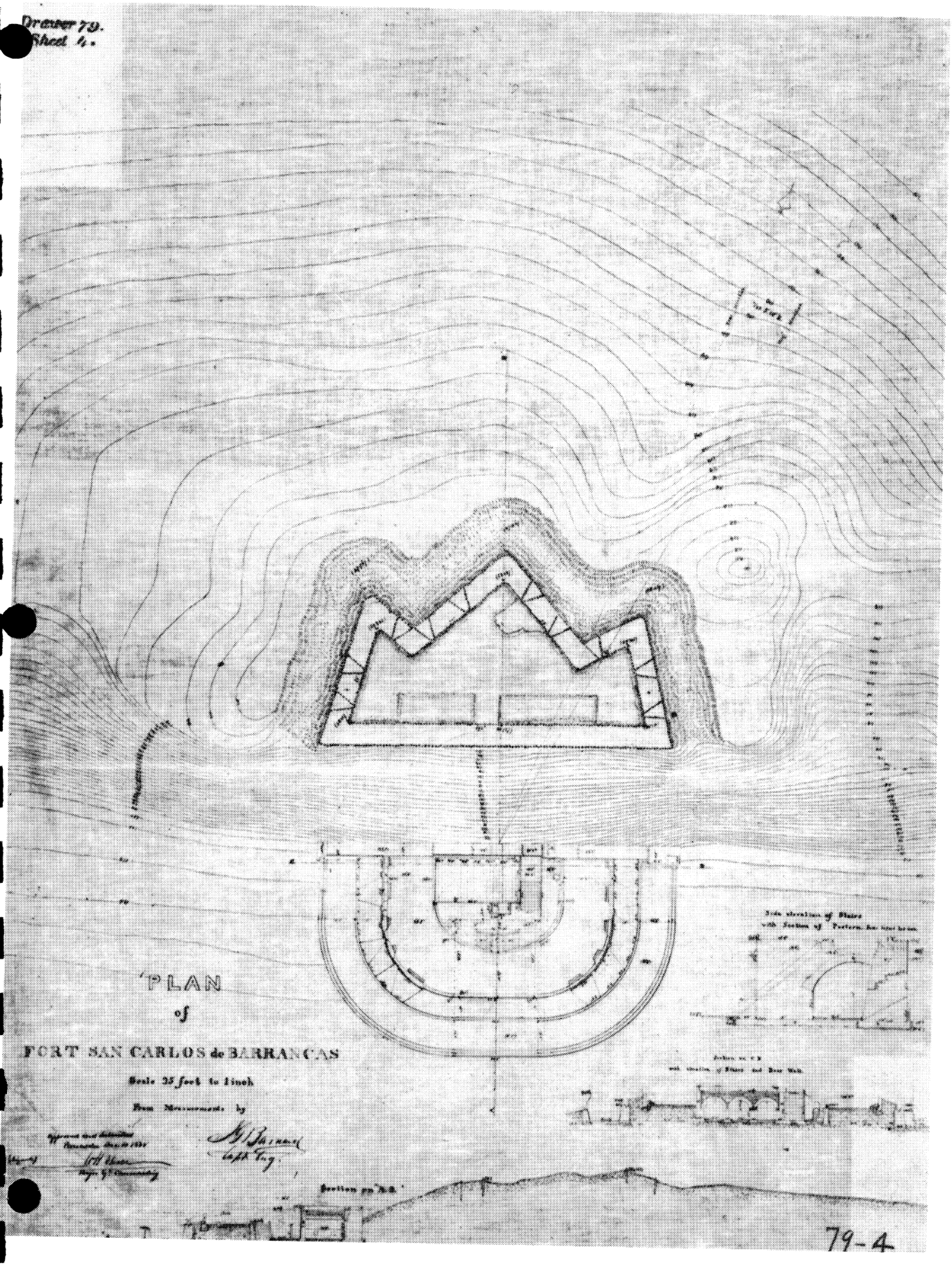


79-7

Plate IV

"Fort San Carlos de Barrancas, Harbor of Pensacola, showing the condition of the work on the 30th Sept. 1841." RG 77, Drawer 79, Sheet 16. Courtesy National Archives.

Drawer 79.
Sheet 4.



79-4

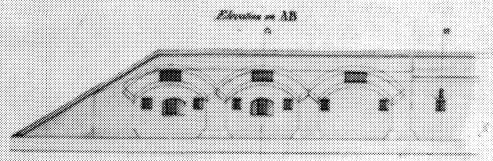
Plate III

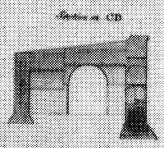
"Sketch of the site of old and new Fort San Carlos de Barrancas, exhibiting the position of the new Fort as laid out on the ground. The excavations for counterscarp and masonry for same. Also the position of the Old Battery, the repairs and improvements exhibited have been completed except the laying down of the traverse circles and pintle blocks for the gun carriages, and the fitting [of] magazine casemates," September 30, 1840. RG 77, Drawer 79, Sheet 7. Courtesy National Archives.

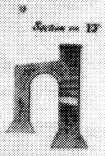
Drawer 79.
Sheet 10.

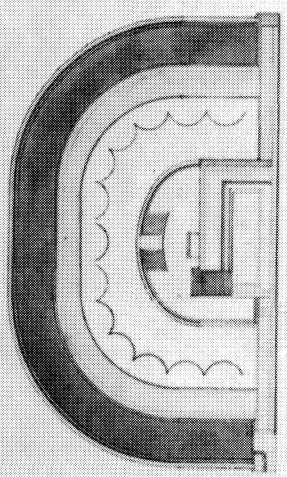
FORT SAN CARLOS DE BARRANCAS *Harbor of* PENSACOLA.

showing *the* condition *of the* work *on the* 30th Sept. 1841.





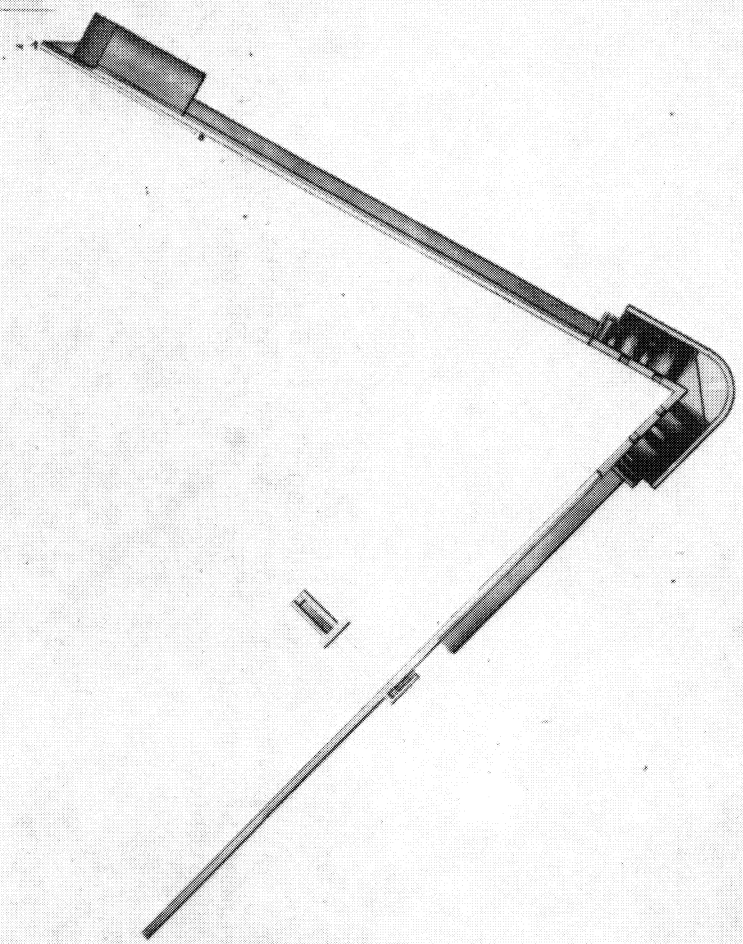






Vertical Scale, 1 inch to 10 feet.

Scale of Plan, 1 inch to 24 feet.



Nota. The Elevation & Section AB show the only deparation from the plan now submitted to the Engineer Department

Barracks Commenced 18th 1841
Plan Sanctioned by Genl Macomb
on the 2nd Septr 1841

Drawn by Lt Hagner U.S.A.

79-10

Plate V

"Sketch of the Ground Between Fort Barrancas and Bayou Grande, showing the position for the Advanced Redoubt of the Fort. Engineer Department September 5, 1850." RG 77, Drawer 79, Sheet 22. Courtesy National Archives.

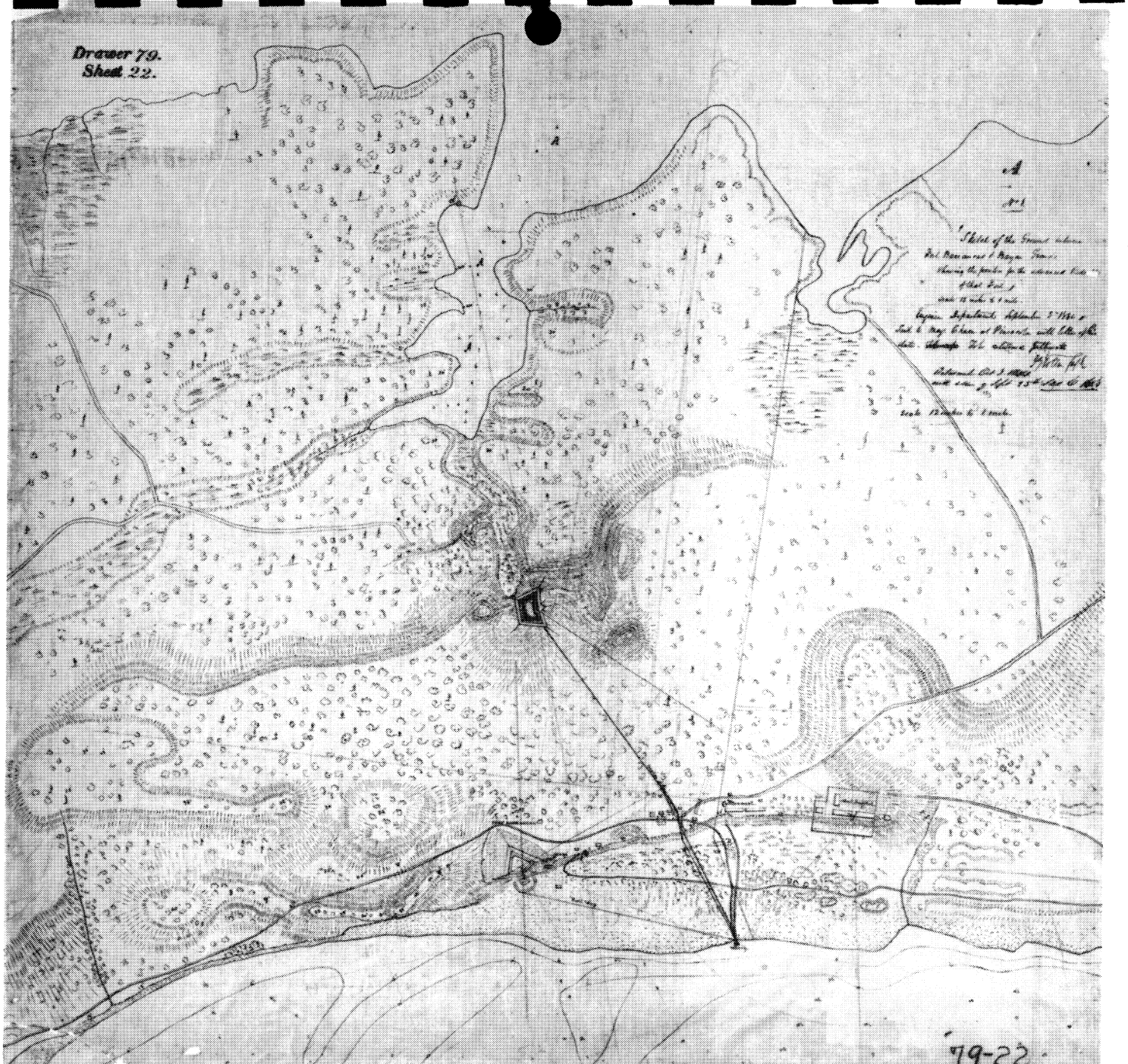

Drawer 79.
Sheet 22.
79-22

Plate VI

"Fort San Carlos de Barrancas, Florida. Horizontal Section through Loop Holes. Surveyed under direction of Bvt. Col. F.E. Prime, U.S.A., Major Corps of Engineers 1869." Drawer 79, Sheet 63. Courtesy National Archives.

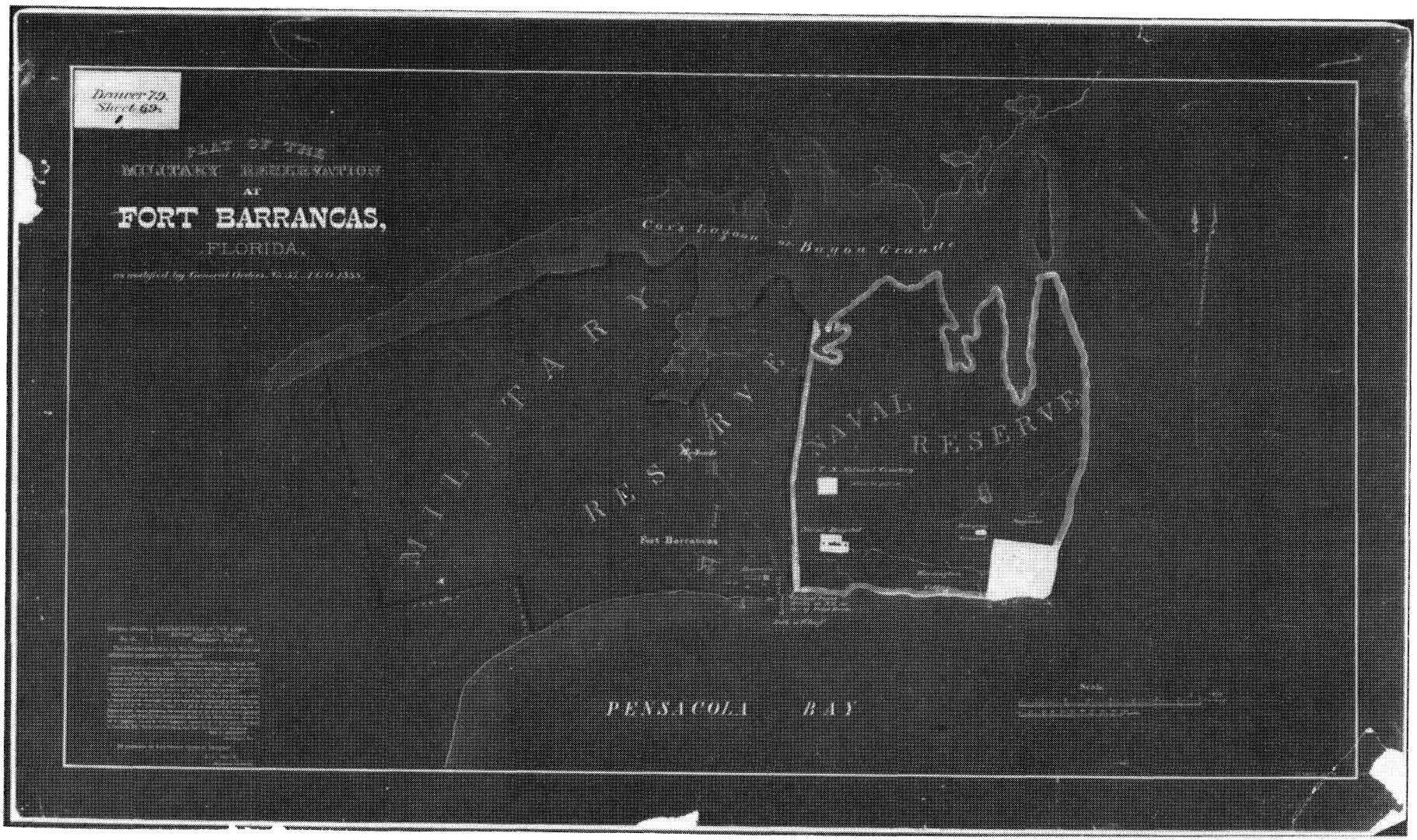
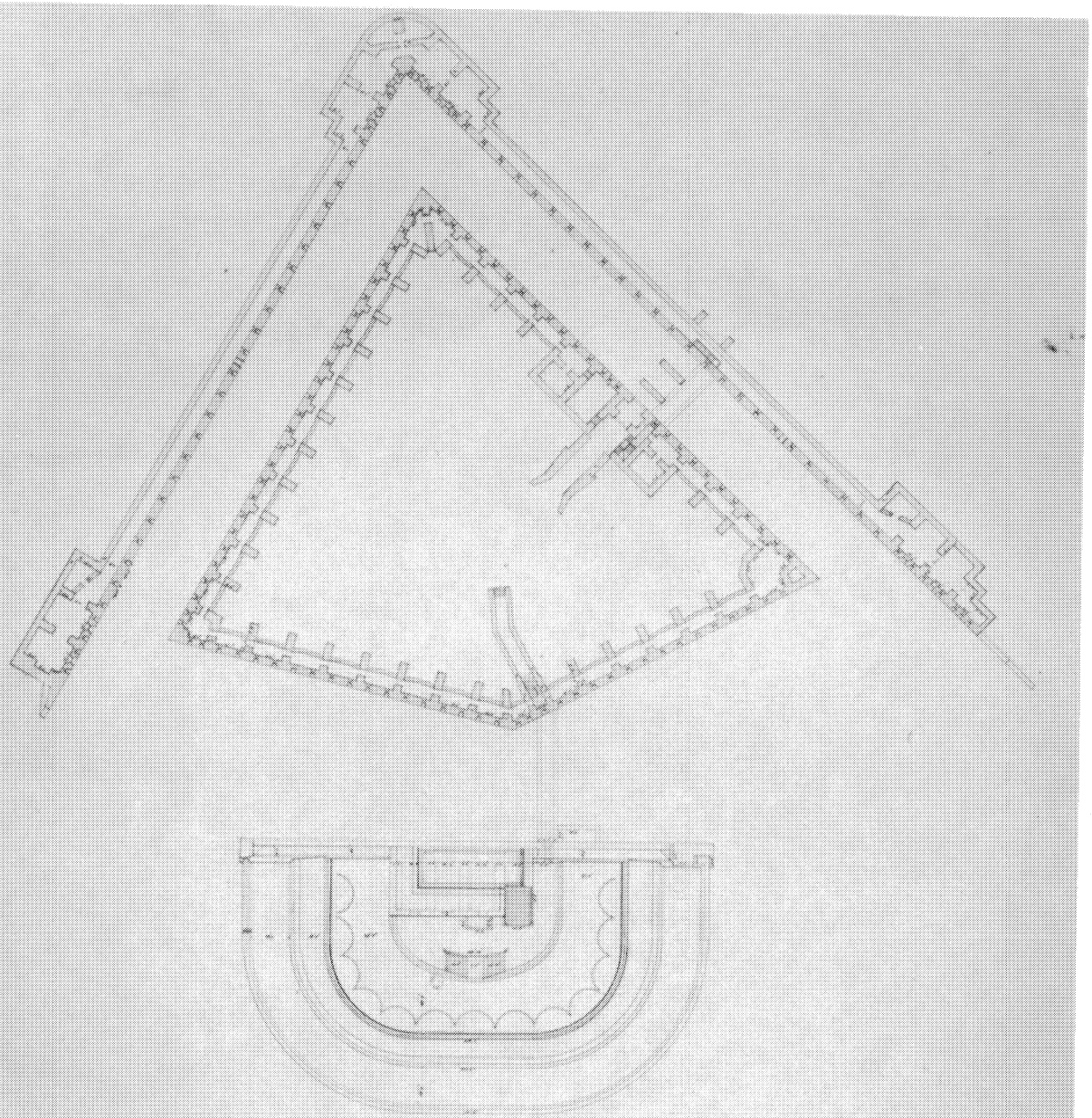

Drawer 79.
Sheet 69.
PLAT OF THE
MILITARY RESERVATION
AT
FORT BARRANCAS,
FLORIDA.
MILITARY RESERVATION
NAVAL RESERVE
Fort Barrancas
PENSACOLA BAY

Plate VIII

Fort Barrancas and the Old Spanish Battery, from near the beach, circa 1910. Note the Fire Commander's (FC) Station, a Battery Commander's (BC) Station built in 1902 and removed in 1914. Courtesy GUIS.

Fort Barrancas, the Old Spanish Battery, and Counterscarp, circa 1950. Photograph taken from the air. Courtesy GUIS.



FORT SAN CARLOS DE BARRANCAS,

FLORIDA.

HORIZONTAL SECTION THROUGH LOOP HOLES.

Surveyed under direction of Bvt. Lt. Col. J. L. Tenn U.S.A. Major Corps of Engineers.

Scale 1 Inch = 25 Feet.

1849

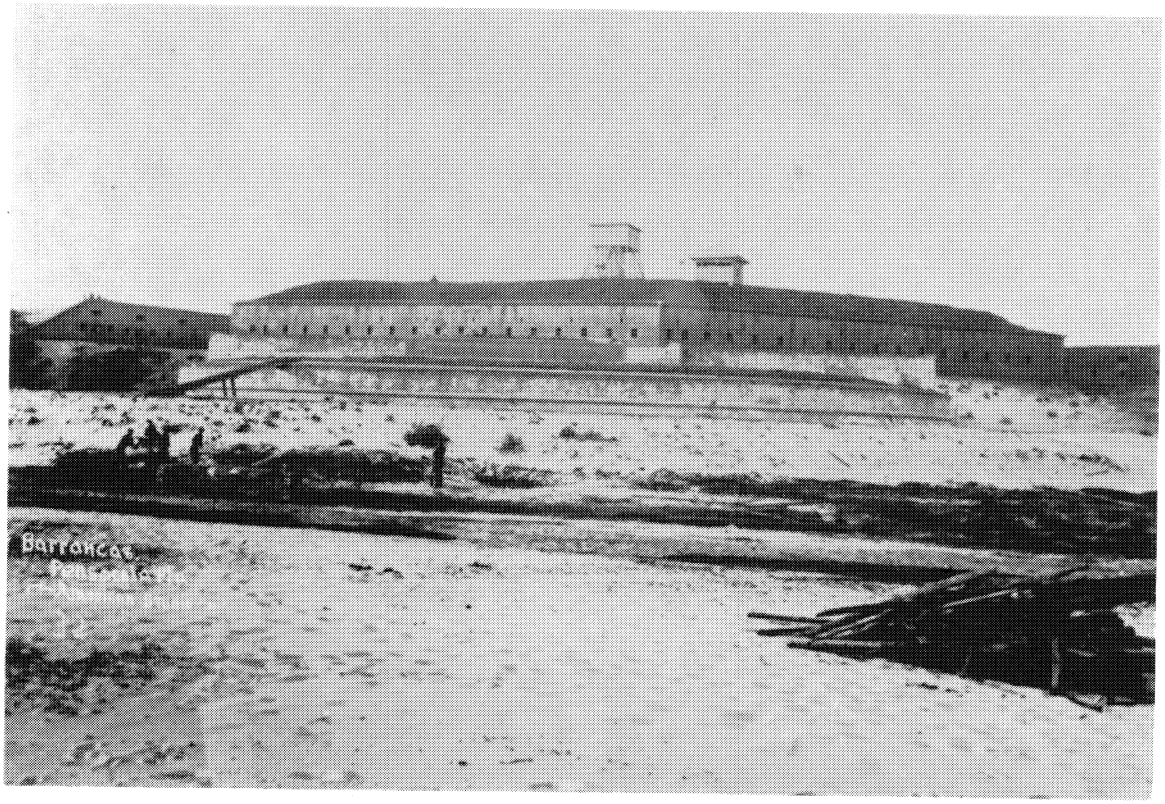
Drawing sent to Off. Ch. Engrs. Washington D.C. with letter of transmittal dated 10th February 1849

C.A. Lanyon Civil Engineer

79-65

Plate VII

"Plat of the Military Reservation at Fort Barrancas, Florida, as modified by General Orders No. 35, A.G.O. 1888." RG 77, Drawer 79, Sheet 69. Courtesy National Archives.


Barracks

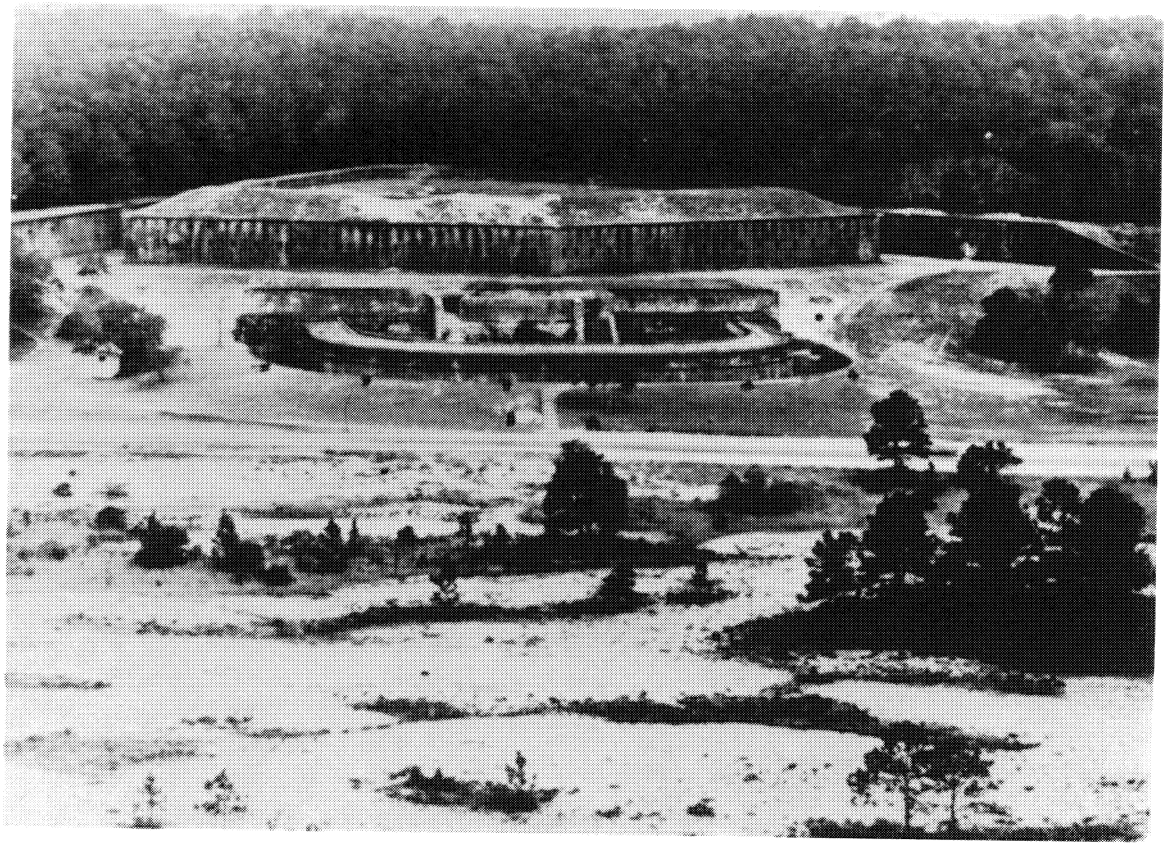


Plate IX

The Fort Barrancas Salient Angle and Two Channel Fronts from the Gorge of the Old Spansh Battery, circa 1910. Note Fire Commander's (FC) Station and Battery Commander's (BC) Station on the fort's parapet. Courtesy GUIS.

The West Angle of Fort Barrancas from the Counterscarp, circa 1910. Note Fire Commander's (FC) Station, and Battery Commander's (BC) Station, tube of 8-inch muzzle-loading rifled Rodman, and bracing to shore up angle of the scarp. Courtesy GUIS.

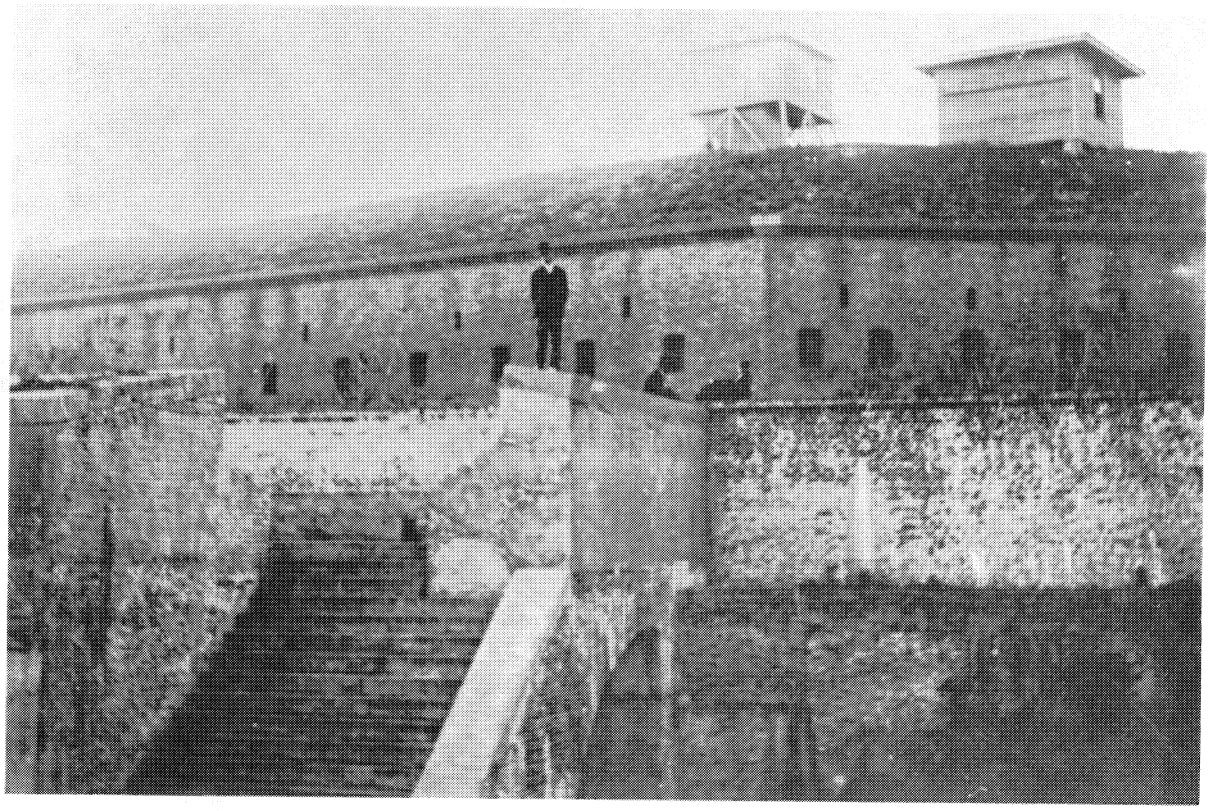
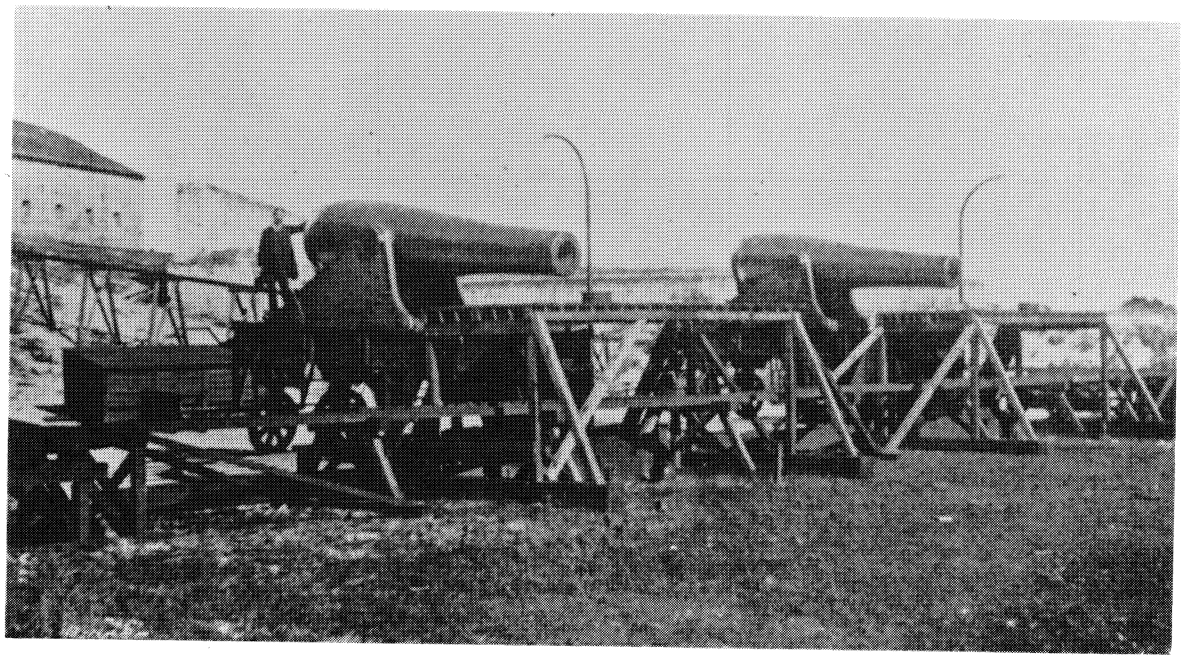




Plate X

Two 15-inch Rodman Guns Emplaced at Fort Barrancas in 1893 for Target Practice by the Garrison. This battery was salvaged in 1900. Courtesy GUIS.

The Old Spanish Battery (Fort Barrancas Water Battery) from the Fort Barrancas Glacis circa 1895. Note the ammunition conveyors for the 15-inch Rodman Battery in the foreground. Courtesy GUIS.



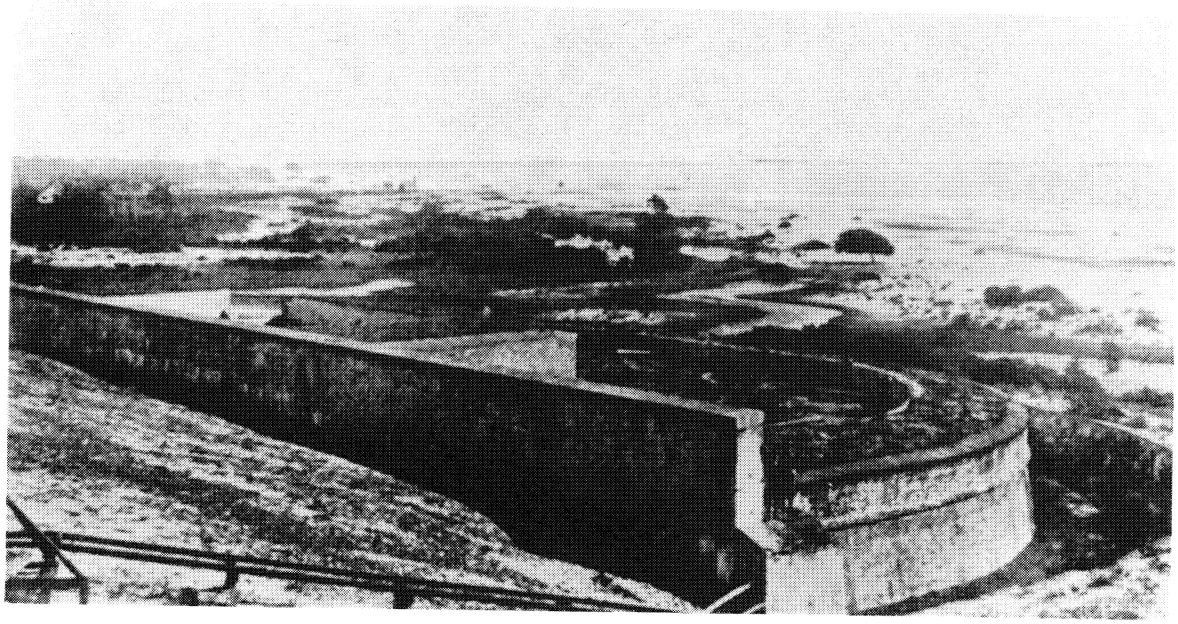
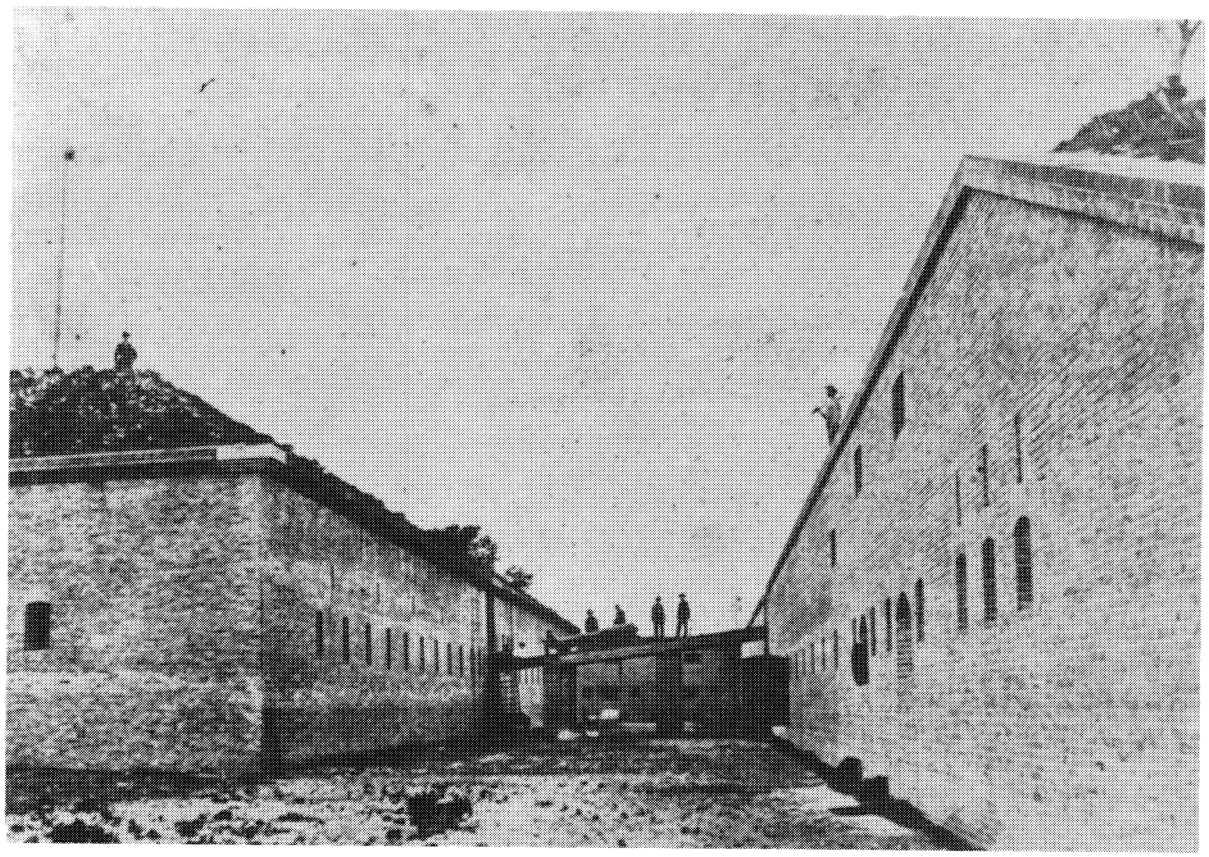


Plate XI

The Fort Barrancas Dry Moat and Bridge Connecting the Counterscarp and the Fort's Sally Port, circa 1861. View taken from southeast, looking northwest, the fort on the left and the counterscarp on the right. Note dismounted gun being either taken into or removed from the fort. Courtesy GUIS.

The Fort Barrancas Dry Moat, circa 1900. View taken from southwest, looking northeast, counterscarp to the left and the fort's scarp to the right. Courtesy GUIS.



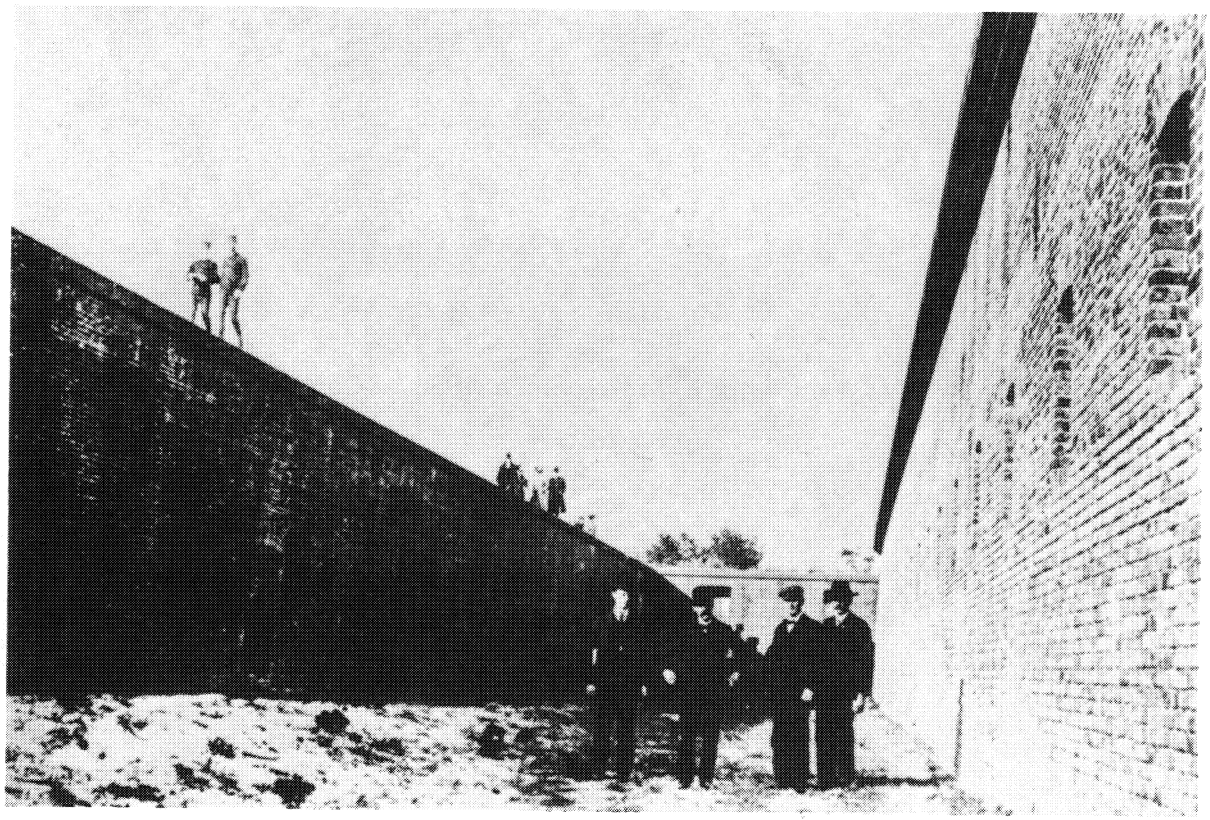
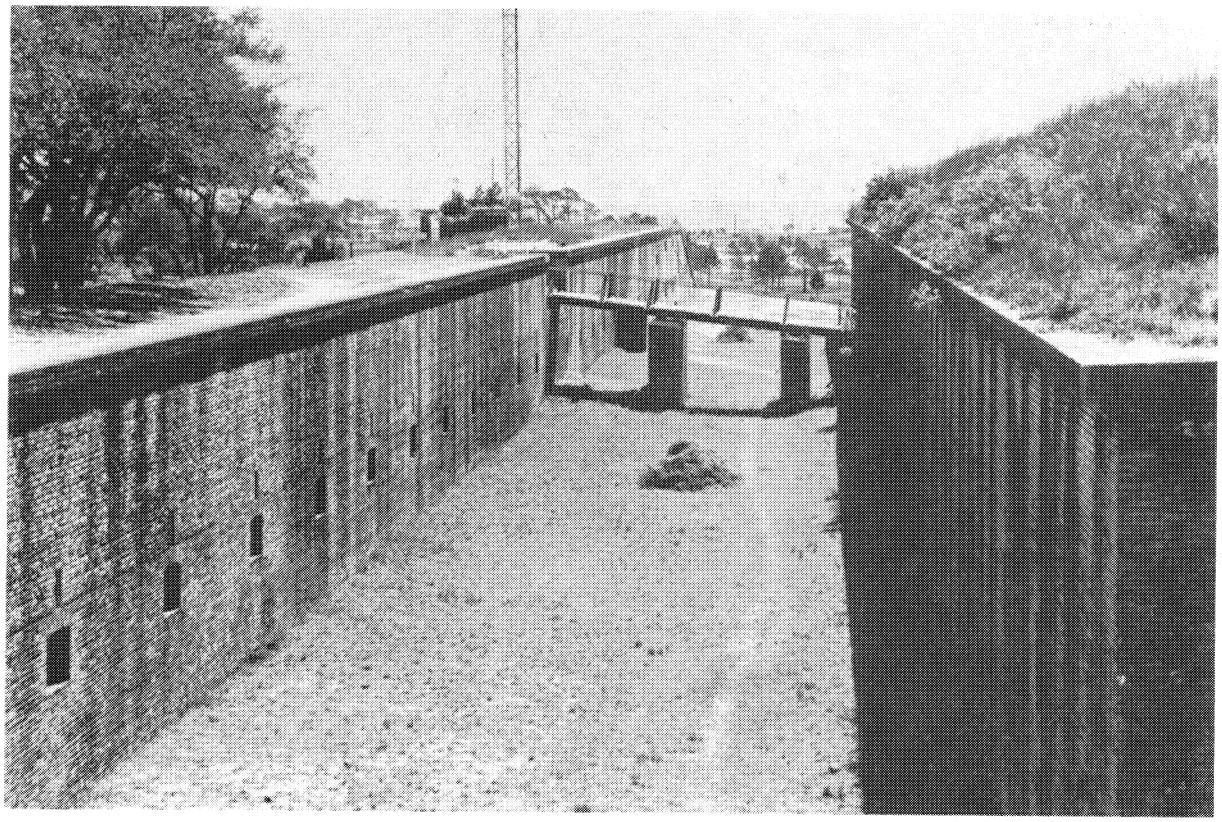


Plate XII

The Fort Barrancas Dry Moat, circa 1935. View taken from near the fort's north salient angle. Note steel radio mast erected in 1914 and brick transmitter shack built in 1930. Courtesy GUIS.

Fort Barrancas Sally Port and Bridge, circa 1950. Courtesy GUIS.



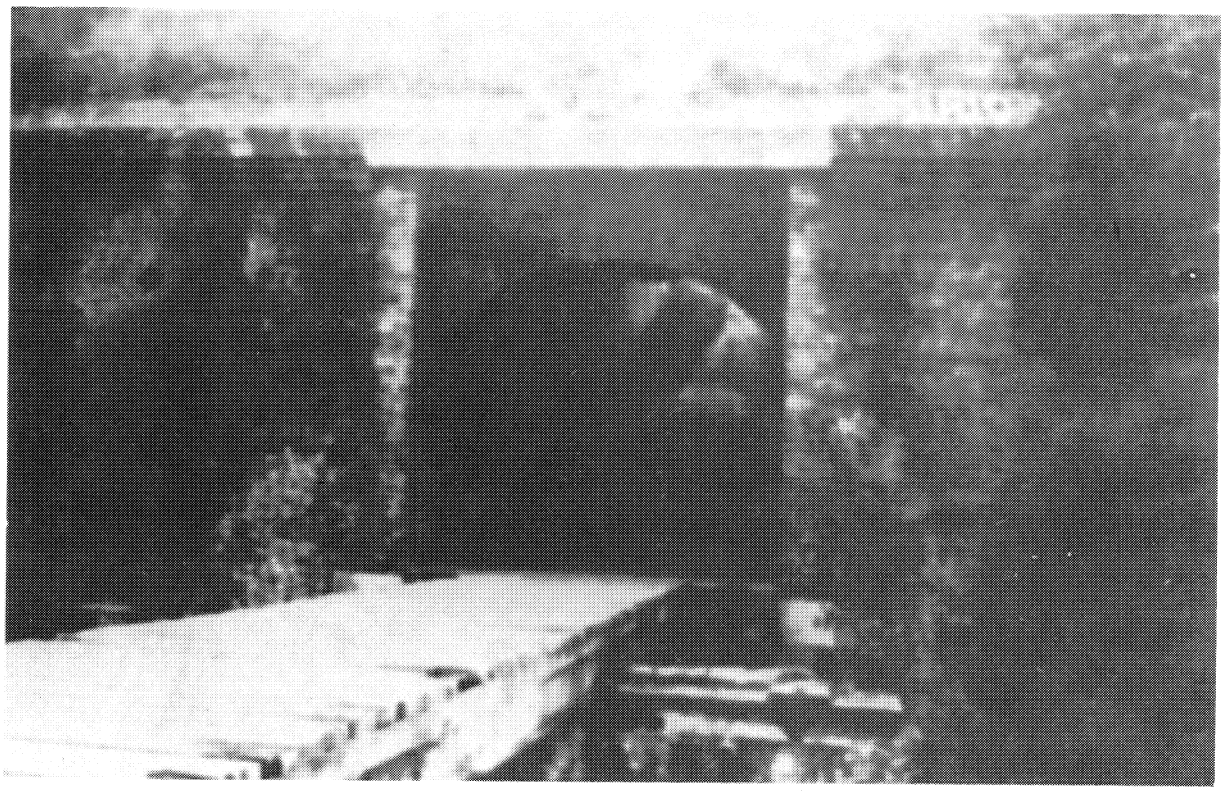
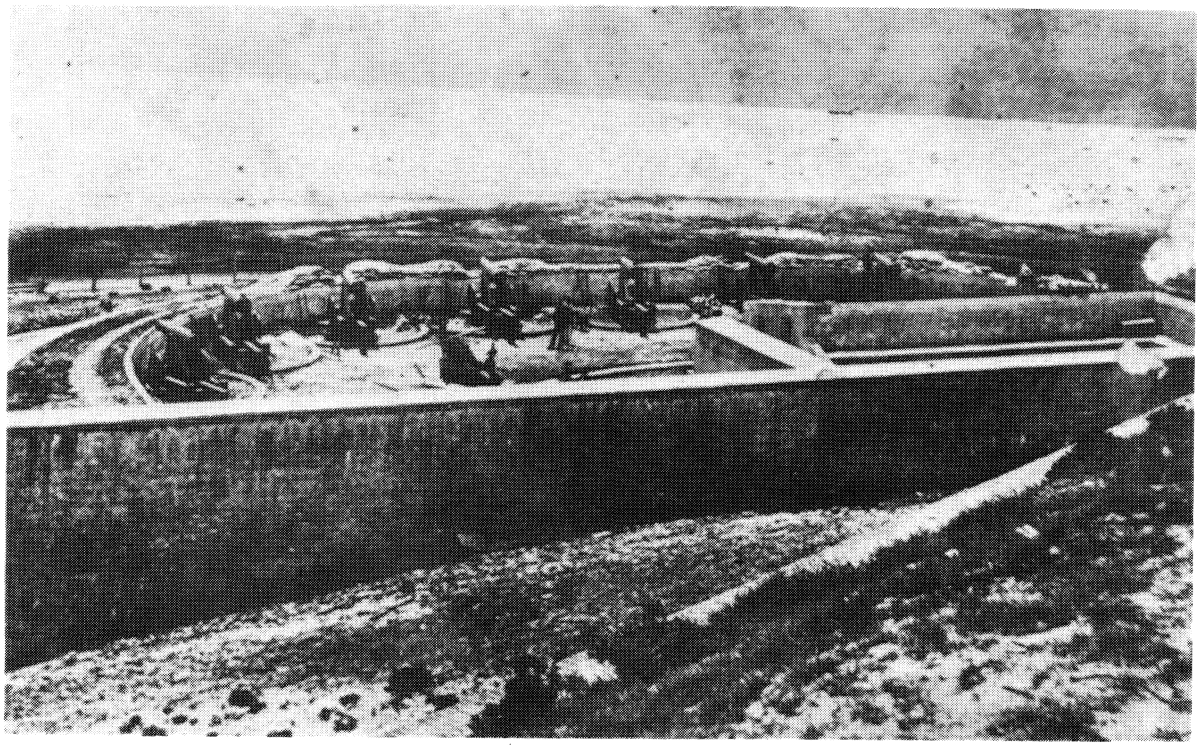


Plate XIII

The Old Spanish Battery (the Fort Barrancas Water Battery), circa 1861. The battery at this emplaced eight guns and several seacoast mortars. Courtesy GUIS.

The Old Spanish Battery (the Fort Barrancas Water Battery) in the late 1930s, following its restoration by the Army, employing PWA and WPA funds. The workmanship on the Reduit involved restoration of the Spanish emblishments and plastering the exterior facades with concrete. Courtesy GUIS.



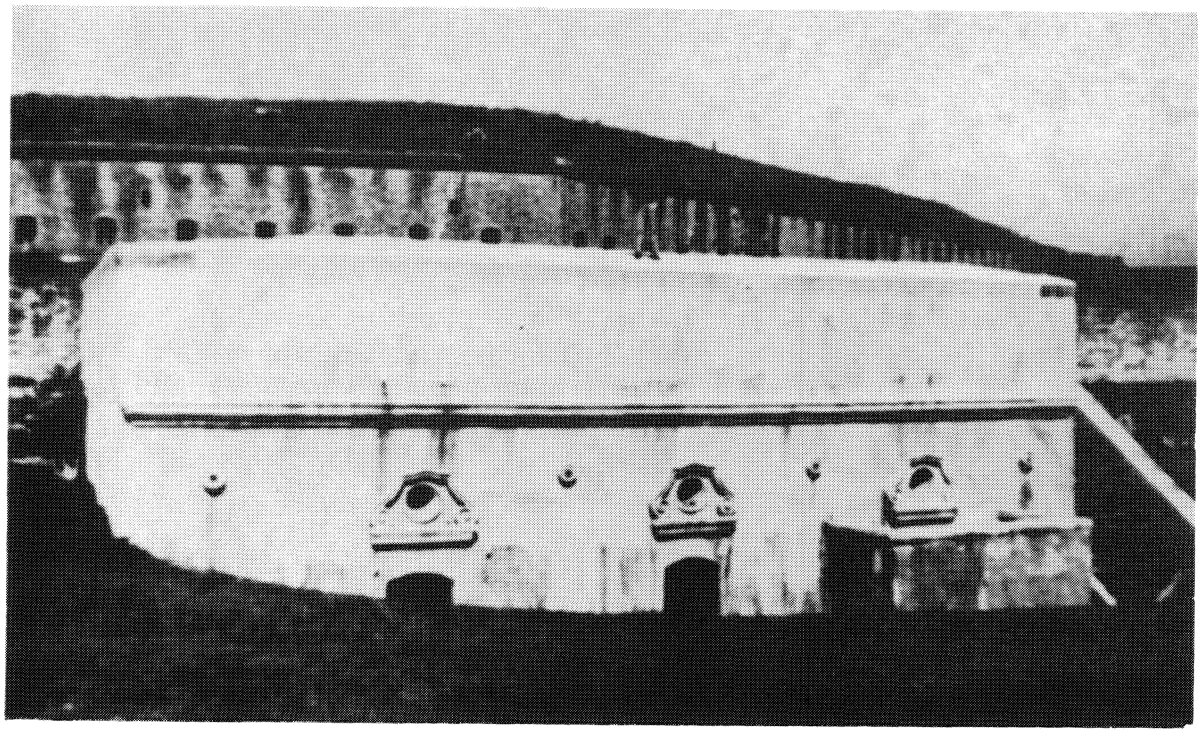
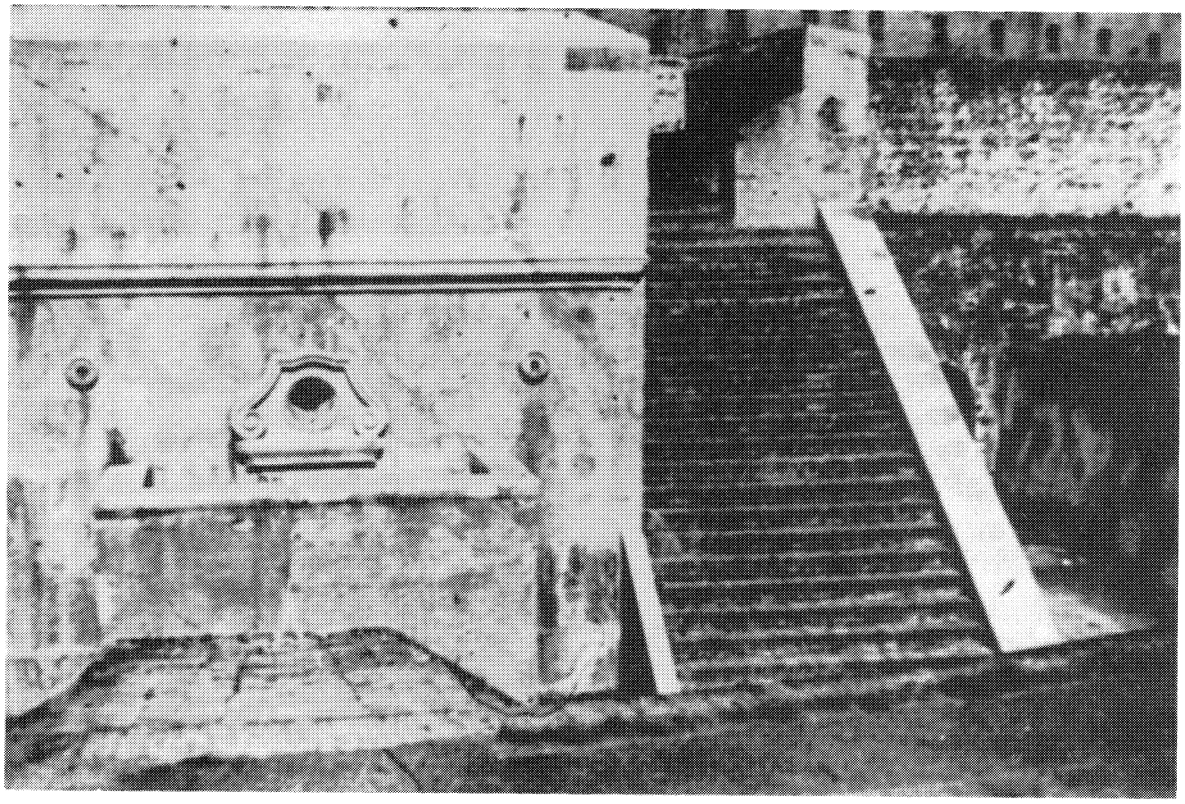


Plate XIV

The Old Spanish Battery (Water Battery), circa 1940. The southeast corner of the Reduit and traverse protecting entrance to magazine. Note the restored "emblishment" and concrete plastering positioned during the 1938 restoration. Courtesy GUIS.

The Old Spanish Battery (the Fort Barrancas Water Battery), circa 1935. The Reduit, magazine traverse, breast-height wall, and terreplein before the 1938 restoration. Courtesy GUIS.



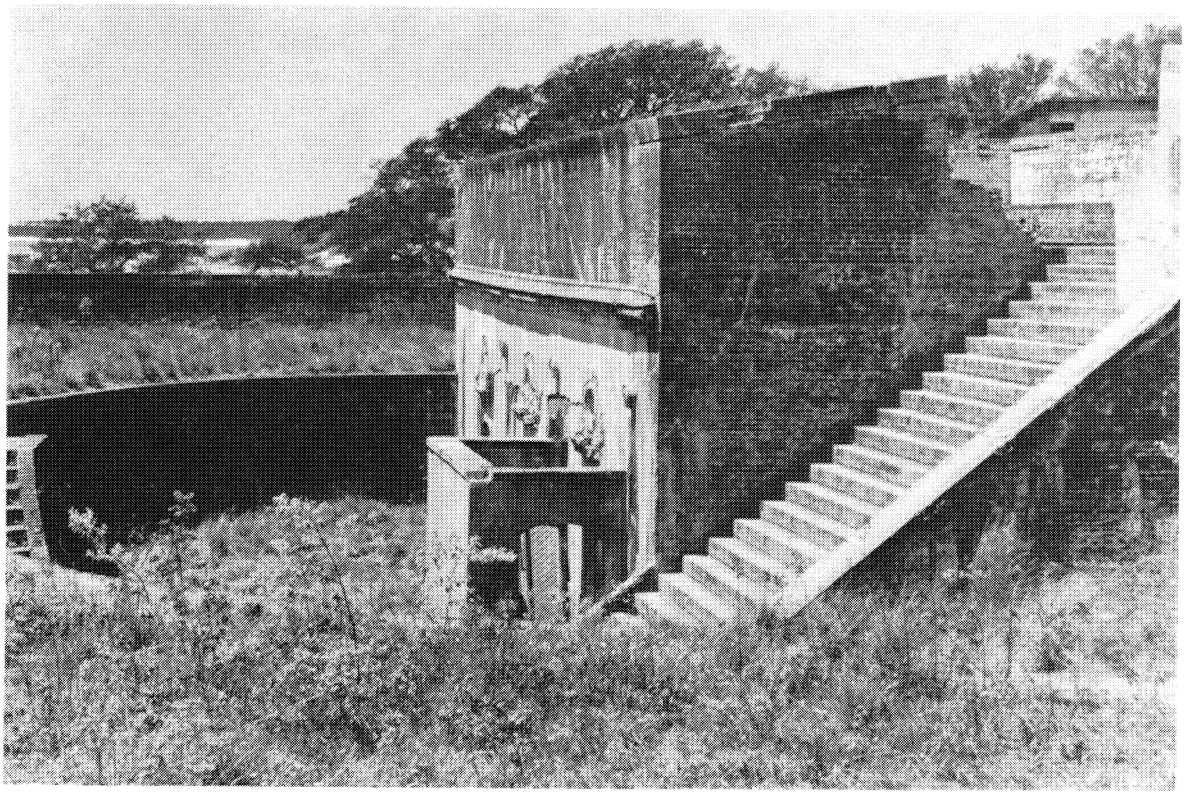


Plate XV

The Old Spanish Battery (the Fort Barrancas Water Battery), circa 1905. Note the battery has been disarmed and the earthen fill constituting the parapet's superior slope has eroded, and the absence of trees between the fort and bay. Courtesy GUIS.

Early 1900s visitor to the Old Spanish Battery. He is seated on the brick coping of the parapet's superior slope. Note that much of the earthen parapet has been displaced. Courtesy GUIS.

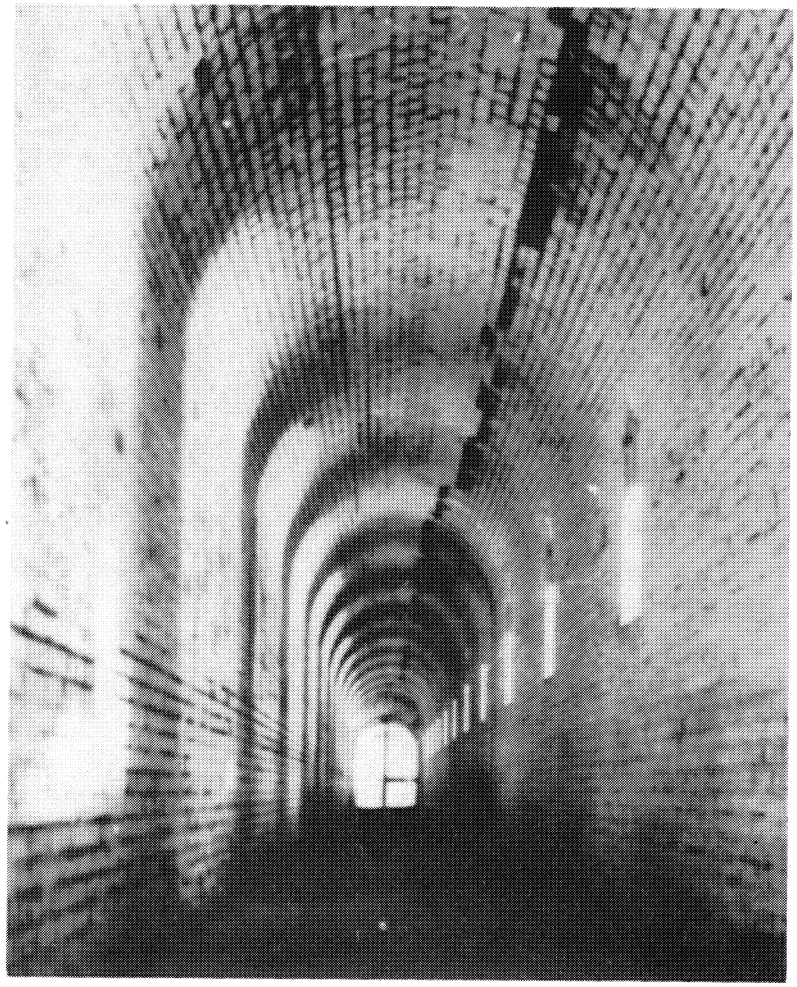




Plate XVI

Fort Barrancas Interior of Counterscarp Gallery, circa 1930s. The northwest gallery, with loopholes to the right. Courtesy GUIS.

Fort Barrancas Counterscarp, Flanking Howitzer Casemate, circa 1930. Courtesy GUIS.



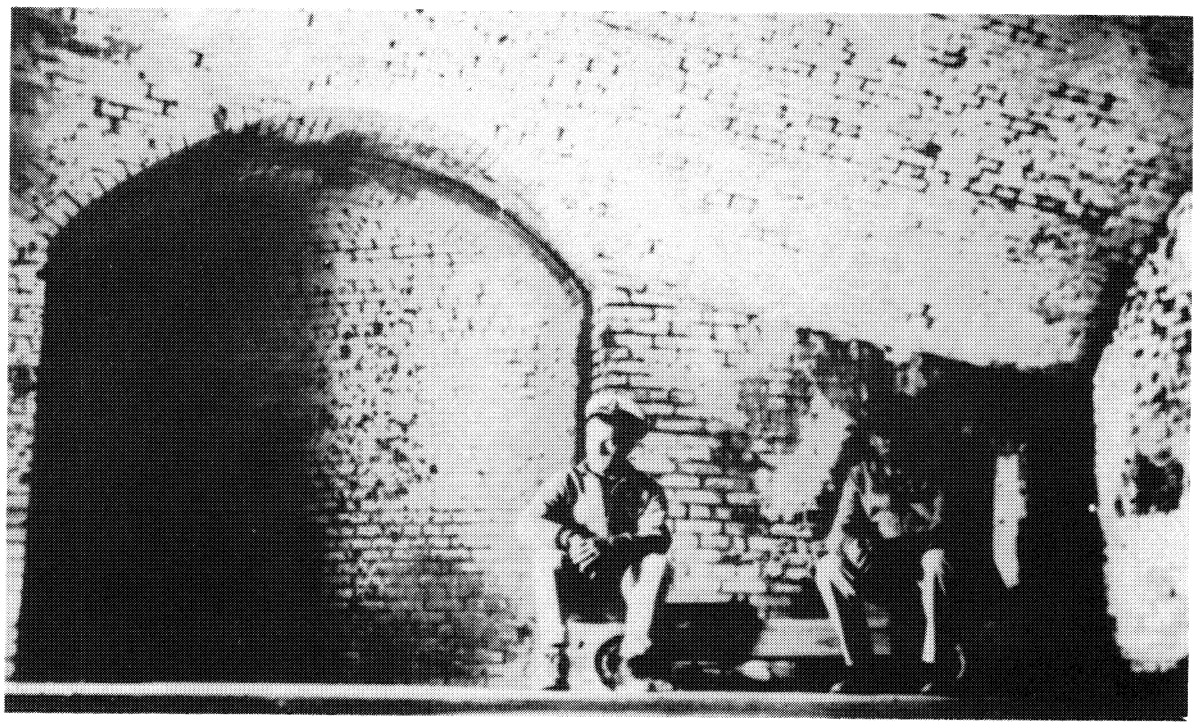
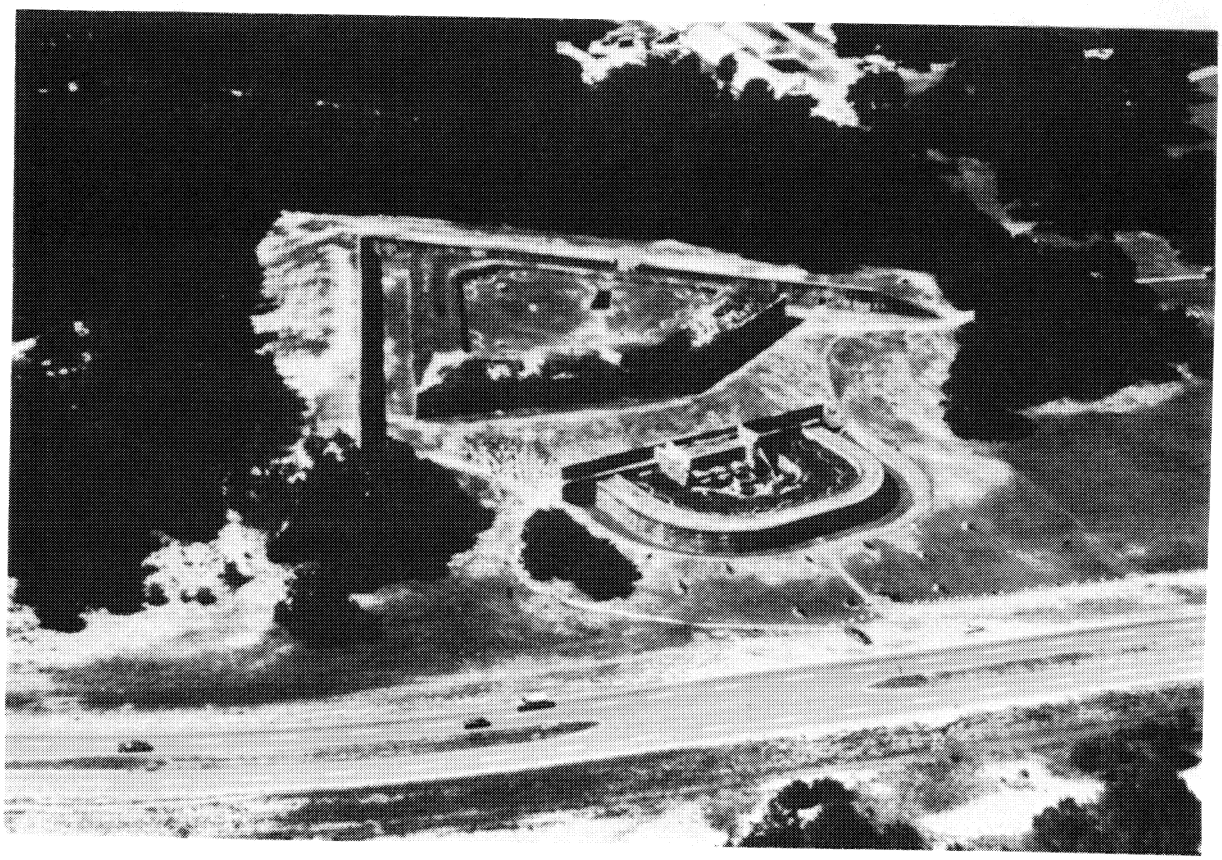


Plate XVII

Fort Barrancas, Aerial View, circa 1971. This photograph taken before the 1978-1980 restoration. Courtesy GUIS.

Fort Barrancas Aerial View from the Southwest, circa 1981. This photograph documents the 1978-1980 restoration. Courtesy GUIS.



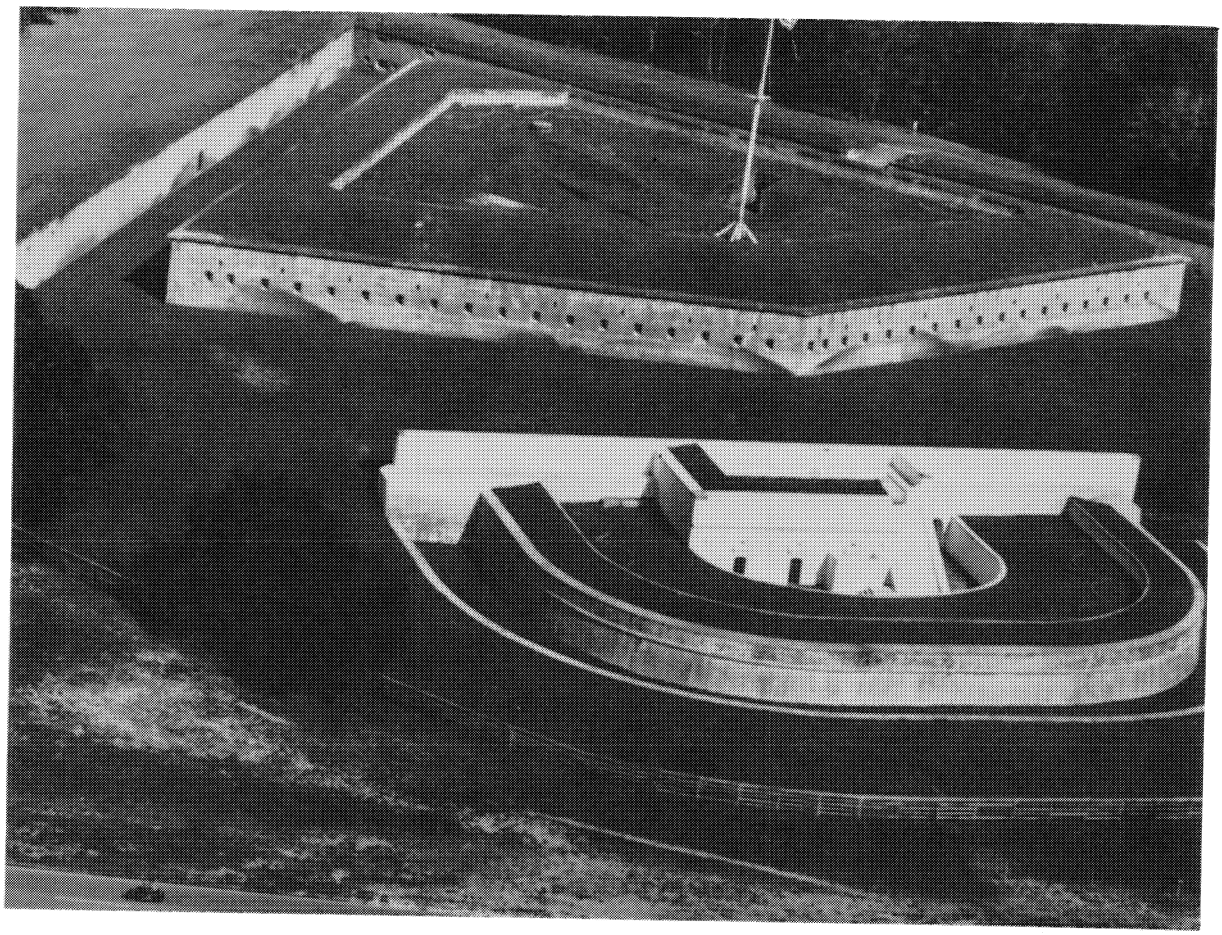
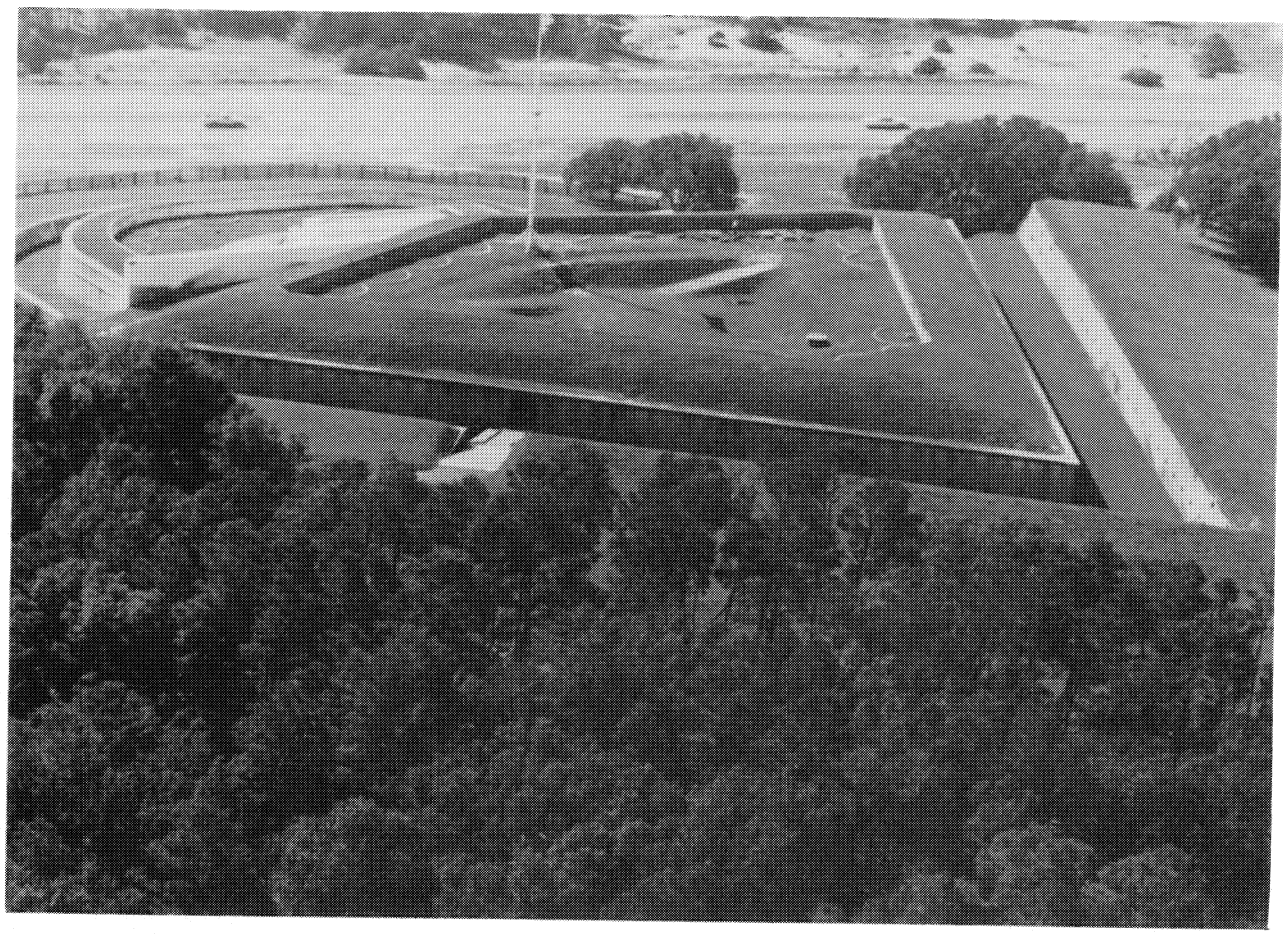


Plate XVIII

Fort Barrancas, Aerial View from the Northeast, looking Toward the Bay, circa 1981. This photograph documents the 1978-1980 restoration. Courtesy GUIS.



As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The Department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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