Kimberly Lane Eslinger. "...AND ALL THE MEN KNEW THE COLORS OF THE SEA...." HISTORICAL AND ARCHAEOLOGICAL INVESTIGATION OF THE SS *COMMODORE*, PONCE INLET, FLORIDA. (Under the direction of Dr. Timothy Runyan) Department of History, August 2005.

This study focuses on a single question: Are the wreck site remains held under joint title by the Ponce Inlet Lighthouse Association and Norman Serbousek those of the SS *Commodore*, sunk on January 1, 1897? The answer to this question lies in the documentation, survey, and historical study of a shipwreck lying twelve miles off Daytona Beach, Florida, in seventy feet of seawater. The remains at the site represent a significant late nineteenth century wooden-hulled steam vessel located in a dynamic marine environment off Ponce Inlet, Florida. The research presented here stems from the hypothesis that the vessel's identity can be determined by an examination of the historical and archaeological records.

Discovered in 1985 by Norman (Don) Serbousek, the vessel remains are primarily sitting on a sand and shell hash bottom. The engine, shaft, propeller, donkey boiler, small anchor, and windlass are the dominant site features. Buried under a thin layer of sediment are at least two cases of bullets, large pieces of boilerplate, and some hull structure. Serbousek and the Anchor Chasers Dive Club recovered over 180 artifacts in the 1980s and early 1990s. The collection contains rifles, bullets, coal, ceramics, and steam machinery. It is housed at Ponce Inlet Lighthouse, where it awaits conservation.

Research was facilitated by the existence of extensive archival materials, a relatively "untouched" archaeological wreck site, and the ability to examine previously recovered artifacts. Each of the sources above were examined to test Ponce Inlet

Lighthouse Association's (PILHA) and Serbousek's assertions that the wreckage is that of the SS *Commodore*.

Underwater investigations of the site were made using standard archaeological practices. The site was mapped to scale, and a video documentary record made of the site. All previously recovered artifacts were examined, identified, drawn, photographed, tagged, and assessed for future conservation. Documents from a variety of sources were studied and used in testing the site's identity. The incorporation of data from all three sources, the site, the artifacts, and the documents lead the author to conclude that the wreck lying twelve miles from Daytona Beach, Florida, represents the remains of SS *Commodore*.

"...AND ALL THE MEN KNEW THE COLORS OF THE SEA...."

HISTORICAL AND ARCHAEOLOGICAL INVESTIGATION

OF THE SS *COMMODORE*, PONCE INLET, FLORIDA

A Thesis

Presented to

the Faculty of the Department of History

East Carolina University

In Partial Fulfillment

Of the Requirements for the Degree

Master of the Arts in History

By

Kimberly Lane Eslinger

August 2005

ACKNOWLEDGMENTS

As with any study it is impossible to claim sole credit for the work accomplished within these pages. This manuscript would have been impossible to complete without the assistance of numerous individuals over the last several years. I am indebted to Ann Caneer, Ed Gunn, John Lane, Jan Neal, Denise Morrisette, and Don Serbousek who have given their time, understanding and assistance to studying the site believed to be the *Commodore*. My work at the site would be incomplete and unfinished without the photographic and videographic documentation and expertise of my dive buddies and friends Cindy Burnham and Rick Allen at Nautilus Productions. I owe a debt of gratitude to Matthew Muldorf for his hours of unceasing assistance in cataloguing, drawing, measuring and assessing artifacts. To the field and documentation crew involved with the *Commodore* Project past and present I would like to say thank you for your time, assistance, knowledge and never failing support: Terrence N. Tysall, Jan Neal, Denise Morrisette, Don Serbousek, John Lane, Don Hampton, Ann Caneer, Frank Singley, Tom "Tatonka" Killinger, Conrad Pfiefer, Pete Groutmann, Bill Ward, Kate Schmidle, Robert "Coach" Ogoreuc, Jim Golub, Rick Allen, Cindy Burnham, Matthew Muldorf, John W. Morris III, and Robin Moore.

The *Commodore* Project has been a labor of love and a joy to participate in thanks to the remarkable people at Ponce Inlet Lighthouse who never failed to assist me any way they could. I thank every board and staff member who aided me, but particularly every member of the maintenance staff who made sure I had the tools I needed to complete my job, be it duct tape, mylar, or manpower. Thank you. To the Volusia County Reef Team

job, be it duct tape, mylar, or manpower. Thank you. To the Volusia County Reef Team who has so graciously volunteered time, boats, money, and site knowledge I owe a round of applause and a thank you. Without you the site would have been looted long ago. Don Serbousek's unfailing enthusiasm and knowledge deserves recognition here because without his knowledge of the site and past recovery procedures there would be little upon which to base my work. Don, thank you for your time, your help, and all of our talks over the last few years; it has truly been a pleasure. The opportunity to work with, train, and dive with the Cambrian dive team in 2002 made the field work a pleasure and a worthwhile experience – thank you.

For the hours of thankless assistance, editorial comments, and helpful suggestions I owe a thank you to John W. Morris III and Robin Moore formerly of the Lighthouse Archaeological Maritime Program. It has been a pleasure to work with you, and I know that the smartest thing I did in this research was to ask for your help. Thank you.

To my committee, Professor Frank Cantelas, Dr. Timothy Runyan, Dr. Carl Swanson, and Dr. Roger Smith – thank you. Thank you for your time, unflagging support, and concise criticisms. Without your help and guidance this thesis could not have been finished so quickly or well. Thank you.

A master's thesis is the culmination of years of research, hard work, and constant learning; I am indebted to those who prepared me for this task. To my former department, mentors, and instructors at Roanoke College, Dr. Mark Miller, Dr. John Selby, Dr. Michael Hakkenberg, and Dr. Susan Millenger thank you for helping me build the foundation and inspiring me to continue on in our chosen field. To those who

constantly raised the bar, Dr. Bobby Au and Dr. Carl Swanson, thank you for making me work harder, and continually challenging me to be better (not to mention eliminating comma splices). Dr. Timothy Runyan, thank you for always providing me an opportunity to succeed and believing that I could finish what I set out to do.

To my parents, Karen and Stephen Eslinger, thank you for your love, constant support, laughter, and belief that I could accomplish whatever I put my mind to. This list would be incomplete if I failed to thank my youngest brother, Matthew, for his constant support, editorial comments, and countless hot dinners when I was too busy to stop work. To my colleagues and friends who have assisted with comments, constructive criticism, and reminders that a world exists outside of my computer I owe you a thank you in print: Rick Allen, Cindy Burnham, Karen Eslinger, Ed Gunn, Andy Henderson, Kar Howe, Bob & Pat MacLean, Kathleen McCormick, Denise Morrisette, the Mortensen clan, Matthew Muldorf, Jan Neal, Mark Padover, Ben Pierls, Matthew "FMR" Russell, Mike St. Germaine, Jay "JIR" Styron, Glenn Taylor, and Dan Warren. For the hours spent at my side while I proofread, edited, and printed this thesis I owe a thank you to Baxter. Last, but most importantly, I owe a thank you to the one person who always believed I could complete the work I set out to accomplish; Seth DeGraff, this is for you.

While much within the following pages is owed to the people above, I alone can claim responsibility for the mistakes and conclusions that follow.

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CHAPTER I:
INTRODUCTION

> None of them knew the color of the sky. Their eyes glanced level, and were fastened upon the waves that swept toward them. These waves were of the hue of slate, save for the tops, which were of foaming white, and all of the men knew the colors of the sea.
>
> (Stephen Crane "The Open Boat" reprint 2000:70)

Thus begins Stephen Crane's short story "The Open Boat," and so ends SS *Commodore*'s career. In January 1897, the filibusterer or illegal gunrunner SS *Commodore* sank just miles from the safety of Mosquito Inlet (renamed Ponce de Leon Inlet), near Daytona Beach on Florida's Atlantic coast (see Figure 1). Crane's short story immortalized the event and became one of American literature's most celebrated short stories. One hundred five years passed before the Ponce Inlet Lighthouse Association (PILHA) studied the site, they believed to be the resting place of *Commodore* and several of her crew.

Daytona Beach and Ponce Inlet's local sport diving and fishing communities have known the alleged SS *Commodore*'s wreck site for more than four decades. The site's identity has puzzled locals and eventually resulted in a professional archaeological and historical site investigation. Fortunately, for the site and researchers, few divers and fishermen previously understood the wreck's historical or archaeological value.

SS *Commodore* was running arms, munitions, and medicine to Cuban insurgents when a fierce nor'easter sent the ship to the bottom in 1897. Yellow journalism led many to conclude the ship was a victim of sabotage. The search for the harbor-tug turned filibusterer began in the 1980s when Elizabeth Friedman, a Jacksonville literature teacher

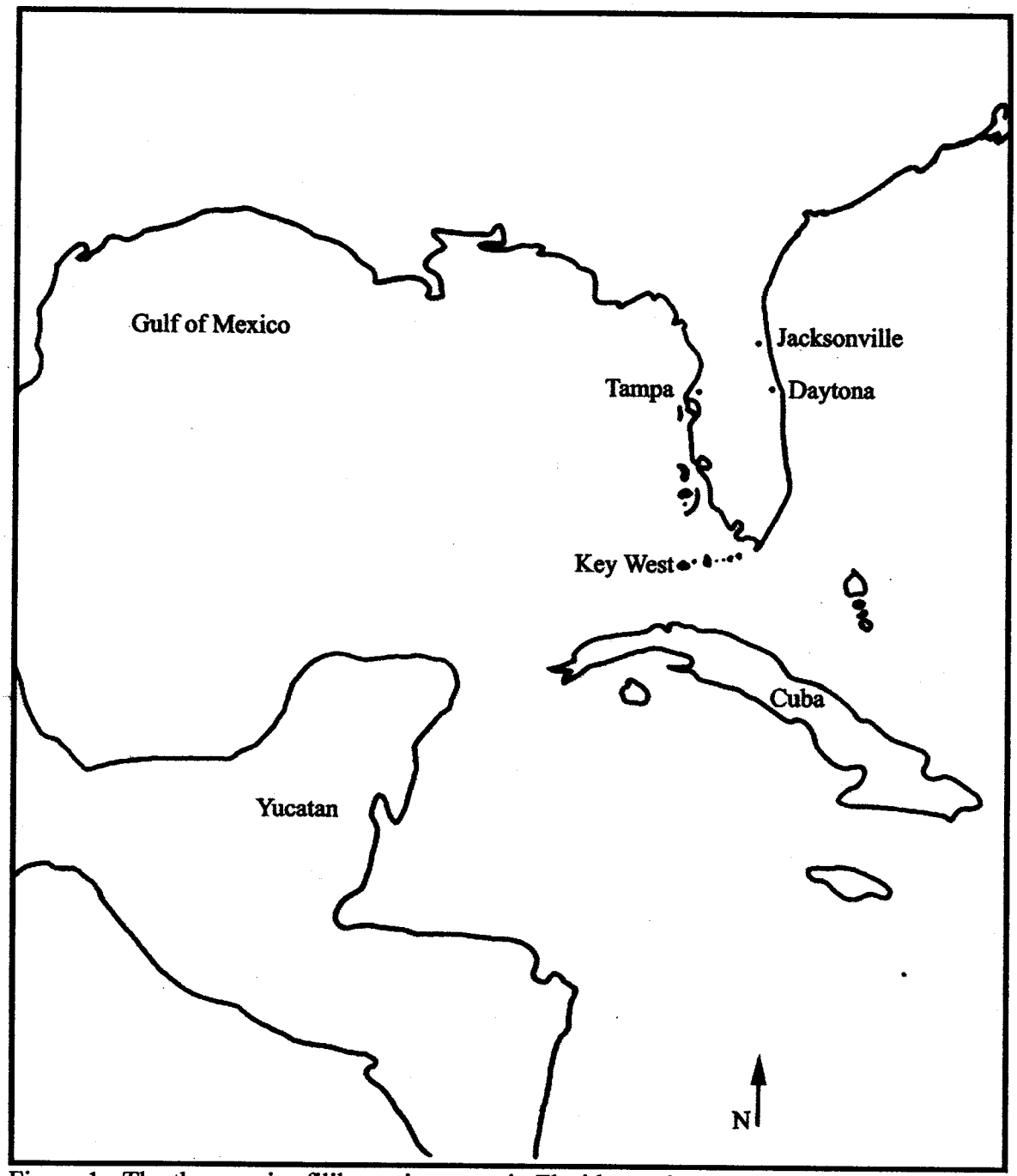

Figure 1: The three major filibustering ports in Florida can be seen here: Jacksonville, Tampa, and Key West. The close proximity of Cuba to Key West, Florida, a mere ninety-miles has had tremendous impact on both Cuba and Florida.

approached Norman (Don) Serbousek, a Daytona diver, about seeking the ship that inspired Crane's "The Open Boat." Friedman wanted to locate the *Commodore* and try to solve the mystery of the ship's whereabouts. The weapons and munitions allegedly loaded before *Commodore*'s sinking appeared to match the material cultural remains found by Serbousek and others. Serbousek felt certain he had found the *Commodore*'s wreckage.

The site's arrest by Serbousek, a local avocational underwater archaeologist, and the nonprofit Ponce Inlet Lighthouse Association in 1999 prevented salvage and sport diving on a large scale. Serbousek and PILHA jointly control the site (see Appendix C). Monitoring the wreck site's stability is the Volusia County Reef Team's responsibility whose members have actively dived, observed, and protected the site's location for many years. The efforts of Serbousek, PILHA, and the Reef Team have focused on a single question: Are these the remains of the S.S *Commodore*?

Initially, Serbousek spent several years and a large sum of money attempting to identify the site. The United States Middle District of Florida Court awarded title of the wreck to PILHA and Serbousek based on arguments proclaiming the site's remains represent the lost *Commodore*. The archaeological and historical evidence did not confirm that the site lying twelve miles from Daytona Beach, Florida, was the lost steamship. This thesis documents the efforts to identify the vessel remains through historical and archaeological means.

PILHA sought a partner to resolve the mystery of the vessel's identity. Serbousek's work, while notable, did not meet professional, or archaeological standards.

PILHA wanted an archaeological investigation conducted to generate a detailed site plan buttressed by documentary evidence. To achieve a portion of their goal, PILHA forged a partnership with the not-for-profit Cambrian Foundation establishing that PILHA provide logistical support for the field operations and Cambrian supply a dive team and a supervising archaeologist (See Figure 2).[2] The first archaeological field season at the site was conducted in 2002 with PILHA and Cambrian support under the author's direction.

Three field seasons, several site visits, artifact analysis and recording, and historical research have yielded new clues to the site's identity. The first field season held under PILHA auspices in 2002 yielded a site plan, two weeks of intensive mapping, and some minimal artifact conservation processes. In December 2002, PILHA received a site report and management plan based on the previous field season's recovered data (*Draft Site Report and Management Recommendations for the site believed to be the SS* Commodore, Kimberly Eslinger 2002). Continued work at the site by PILHA in 2003 included site reconnaissance dives, mapping, artifact mediation, artifact recording, and the creation of conservation recommendations. The 2004 investigations utilized mapping, monitoring, and artifact condition assessments.

The limited number of divers aware of the site protected it from widespread looting prior to 2003. After 2003, site looting increased. This prompted a need to positively identify the wreck site before further damage and artifact loss could occur. PILHA's conservation obligations imposed by the Middle District Court as part of the

[2] The Cambrian Foundation is a nonprofit organization dedicated to protecting the oceanic realm and educating the public about their impact on our marine resources. The Foundation has been instrumental over the years in assisting NOAA archaeologists at the USS *Monitor* National Marine Sanctuary, and has worked extensively in the Yucatan helping hydrologists map groundwater resources.

Figure 2: The Cambrian Foundation and PILHA dive teams gearing up for the second week's dives. Members were tasked with mapping unfinished grids and video-mosaicing the site. From left to right: first mate Red, Terrence Tysall (Cambrian Foundation Director), Kate Schmidle (Project Director), Captain JB, Bill Ward (research diver), Rick Allen (videographer). (Image courtesy PILHA 2002)

title agreement have also resulted in a greater need to identify the wreckage in order to raise funds for the work. The following chapters will seek to answer the question of whether or not the wreckage is that of the lost SS *Commodore* by examining the historical and archaeological evidence.

Chapter II focuses upon the historical context of SS *Commodore*. This was an age of American expansion, the Cuban fight for independence, and the Spanish-American War. This chapter provides historical context for the lost vessel and her cargo.

Chapter III focuses on the evolution of specialized vessel construction and steam propulsion. *Commodore*'s wooden hull was fitted with steam machinery at a time when steamships were constructed of steel. *Commodore* was built as a New York Harbor Tug in the 1880s. She ended her career as a filibusterer for the Jacksonville *junta*. This chapter provides a perspective on how technology impacted the ship's usage, cargo, and loss.

Chapter IV focuses on *Commodore's* early career, eyewitness accounts of the vessel's loss, yellow journalism, and the expeditions to Cuba. The information presented in Chapter IV was used to assist in site identification discussed in Chapter VI.

Chapter V addresses the site of *Commodore*'s remains. The chapter focuses on a brief history of the previous salvage investigations, the site's orientation and location, site formation processes, and the surveys prior to 2002.

The *Commodore* archaeological site is the subject of Chapter VI. This includes a discussion of the archaeological survey, video mosaic, photo documentation, and fieldwork at the site. The material culture records from the site are discussed in this

chapter. The site's remains, artifact assemblage, and orientation are compared to ship schematics and eyewitness accounts of the sinking. The artifacts previously recovered from the site are compared to the cargo known to have been aboard the vessel and bound for Cuba.

Chapter VII focuses on the site's identity, its history as a closed site, and the threats to the site. The identification of the shipwreck believed to be SS *Commodore* sheds light on a mystery over a century old. The conservation of materials from the site by the Ponce Inlet Lighthouse Association's Museum will permit continued research, interpretation, and educational exhibits. The loss of SS *Commodore* on the night of January 1, 1897, impacted not only the crew and officers of *Commodore*, but also the lives of the keepers at Ponce Inlet Lighthouse, the Jacksonville *junta*, and the Cuban insurgents awaiting their supplies. The story of *Commodore* brings to life the story of Ponce Inlet Lighthouse and its role in keeping mariners safe. It links archaeology, history, and American literature. The events that led to *Commodore*'s role in the Cuban Revolution also led to her loss in the waters of Florida's east coast.

CHAPTER II:
"THE COLOR OF THE SKY:"
THE CUBAN AND AMERICAN 1890's CONTEXT

The sinking of SS *Commodore* in 1897 is closely linked both to the United States' struggle to expand after the frontier's closing in 1891, and the economic uncertainty of the 1890s. The 1823 Monroe Doctrine pronounced the United States' authority and power in the western hemisphere. The Doctrine justified the assistance of Cuban revolutionaries by the United States at the century's close. Technology and big business demanded new markets for finished goods at the same time the United States suffered a series of depressions. A burgeoning population and labor movements combined to create a closed and racist American society at a time when revolutions in the western hemisphere made expansion possible. To understand the importance of *Commodore*'s role in the Cuban Revolution, one must consider the factors that shaped the era's political and technological context.

Technological advances in steam machinery, steel construction, and maritime technologies allowed nineteenth century American settlers to expand westward at an unprecedented rate. The exploration of the Louisiana Purchase by Lewis and Clark, the settlement of westward territories, the Mexican War, the California Gold Rush, Native American resettlement policies, and the purchase of Alaska in 1867 furthered American expansion. The American people and government moved into lands previously unexplored and unpopulated by white settlers. Immigration between 1870 and 1900 almost doubled the population of the United States at a time when the frontier was closing, and economic collapse seemed inevitable (*The Gilded Age: Essays on the*

closing, and economic collapse seemed inevitable (*The Gilded Age: Essays on the Origins of Modern America*, Charles Calhoun 1996:xi). The California Gold Rush inspired technological advances in shipping both by water and by rail. Completion of the transcontinental railroad in 1869, combined with canal construction through the Great Lakes and Northeast, linked the East and West coasts as never before (*The Cambridge History of American Foreign Relations, Volume II, The American Search for Opportunity, 1865-1913*, Walter LaFeber 1993:5). Goods and people could travel from one sea to the other with the assistance of improved transportation technologies. By 1860, the United States operated or owned over fifty percent of the railroad track in the world ("Industrialization and the Rise of Big Business," in *The Gilded Age: Essays on the Origins of Modern America*, Glenn Porter 1996:4).

Better distribution of goods paired with new industrial technology created a second industrial revolution following the American Civil War. Historian Walter LaFeber described the impact of the Civil War on American Industry this way:

> As a result of the vast wartime market and new laws that gave incredible gifts of land and money to railroad builders and steel manufacturers, North Americans emerged in 1865 with a nascent industrial complex which in a mere thirty-five years would make them the world's leading industrial power and, shortly thereafter, make their country the globe's financial center. (*Inevitable Revolutions: The United States in Central America*, Walter LaFeber 1983:31).

Companies such as Westinghouse, General Electric, Singer Sewing Machines, Sears, Roebuck & Company, and Standard Oil created technological change while driving the economy (Porter 1996:14). Despite the economic potential of the new industrial complex in the United States, larger markets were needed to keep the factories running. Thus, the

same technologies that made North American expansion possible created a financial and industrial need for the United States to become a world power.

President James Monroe's 1823 congressional address set the tone for nineteenth century American expansion. Monroe's speech, now known as the Monroe Doctrine, clearly stated the United States' position as the sole western hemisphere power. The Doctrine, issued in response to continuing European expansion in the western hemisphere, stated the United States would not interfere with European colonies or revolutions provided European countries did not continue expansion into the hemisphere. According to Monroe, any attempt by European powers to expand or forcefully put down rebellions in the Caribbean, Central and South Americas would be seen as hostile acts towards the United States. Although issued in 1823, the Monroe Doctrine was the foundation for the United States' reaction to the Cuban bid for independence from Spain in 1895. The Monroe Doctrine was cited by Presidents Grover Cleveland, Benjamin Harrison, and William McKinley in support of munitions trafficking to Cuba by Americans in the 1890s:

> With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the Governments who have declared their independence and maintained it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them, or controlling in any other manner their destiny, by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States. In the war between those new Governments and Spain we declared our neutrality at the time of their recognition, and to this we have adhered, and shall continue to adhere, provided no change shall occur which, in the judgment of the competent authorities of this Government, shall make a corresponding change on the part of the United Stares indispensable to their security (*Our Nation's*

Archive: The History of the United States in Documents, Monroe 1999:223).

The American pledge of neutrality during a war in the western hemisphere between a colonial power and a colony *unless* the United States felt at risk is one of the keys to understanding the Spanish-American War. The Monroe Doctrine protected American gun running to Cuban rebels because the United States was not actively participating in the rebellion, nor were the Cubans an acknowledged government. This policy allowed SS *Commodore* to steam from Jacksonville, Florida, for Cuba carrying weapons, munitions, medications, and Cuban freedom fighters in 1896 and 1897.

The Monroe Doctrine only provided a foundation for American protection of self-interest during the Gilded Age – it did not provide the impetus for American imperialistic actions during the nineteenth century. Several factors influenced the expansionist practices followed by the American government in the final decades of the century. A need for new markets, new frontiers, and a way to fuel the economy reflected the needs of American big business during the Gilded Age.

When University of Wisconsin professor Frederick Jackson Turner, addressed fellow historians at the Chicago World's Fair in 1893 he focused on "The Significance of the American Frontier (LaFeber 1993:43)." Turner used the 1890 U.S. Census Bureau's announcement that the frontier was closed to propose a new foreign policy (*Empire by Default: The Spanish-American War and the Dawn of the American Century*, Ivan Musicant 1998:4). The Turner thesis stated the frontier had driven the United States economy for over a century, and he posited that a new frontier was needed to fuel domestic economic growth (Musicant 1998:4). Turner's comments found a fellow voice

in Admiral Alfred Thayer Mahan who not only agreed with Turner, but took the concept one step further by proposing the world's oceans as the next American frontier (Musicant 1998:9). Mahan's revolutionary monograph *The Influence of Sea Power Upon History 1660-1783* viewed the world's oceans as an opportunity for the United States. He suggested that the "most obvious light in which the sea presents itself from the political and social point of view is that of a great highway...over which men may pass in all directions....These lines of travel are called trade routes.... (*The Influence of Sea Power Upon History 1660-1783*, Alfred Thayer Mahan 1987:25)." Mahan's view of the world's oceans as an opportunity for commerce dovetailed nicely with the need for larger markets, an isthmian canal, naval coaling stations, and control of the western hemisphere.

If the Monroe Doctrine prevented European interference in the western hemisphere while creating American dominance, why did the United States not take a larger role in the hemisphere before 1898? The American foreign policy towards Latin America and the Caribbean clearly changed throughout the nineteenth century as the United States came through the Civil War and into Reconstruction. One important aspect of American interest did not change, however, an interest in gaining Cuba as an American holding.

From the start of the early Republic, the United States coveted Spanish holdings in the New World and believed that in time those holdings would join the United States. According to LaFeber, "from the beginning, North American leaders believed their new republic was fated to be dominant in Spanish-held Mexico, Central America, and, indeed, the regions beyond" (LaFeber 1983:19). As early as 1823, John Quincy Adams believed

Cuba should be gained for the United States (Herring 1968:396). By 1852, American interest in the Ever Faithful Isle had become so pronounced that Great Britain and France requested the United States disavow any desire for Cuba. Claiming the right to mediate disputes and colonial ownership in the western hemisphere, President Franklin Pierce instead invoked the Monroe Doctrine and then offered Madrid $130 million for Cuba in 1853. When Spain refused, the American ambassadors in Great Britain, Spain, and France issued the Ostend Manifesto declaring the United States' willingness to have Cuba as a possession through purchase or other means (Herring 1968:396). Although Washington decried the Ostend Manifesto, southern interests saw Cuba as a new southern slave state. An option President Pierce's administration did not want to encourage (Herring 1968:396). Incidentally, until 1865, the Cuban independence movement sought admittance to the United States. Cuban proponents of freedom believed they could protect the institution of slavery on the island if admitted as a slave-holding state. A hope clearly dashed at the close of the American Civil War (LaFeber 1993:63-4). The Civil War and Reconstruction altered the predominantly isolationist American foreign policy:

> Americans, often viewed as ardently anti-revolutionary, acted as catalysts for revolution as they searched for economic and missionary opportunities around the world; then as they willingly sacrificed order for the sake of opportunity, they supported a new presidency that emerged with this imperialism. (LaFeber 1993:xiii)

United States foreign policy began to focus on Latin America and China by the late 1860s. In 1869, Secretary of State William Henry Seward negotiated and signed a treaty with Colombia giving the United States complete control of a twenty-mile wide canal through the Panamanian province (LaFeber 1993:16). The Colombia-United States

treaty directly conflicted with the restrictive Clayton-Bulwer Treaty of 1850, which gave joint control of an isthmian canal through Nicaragua to the United States and Great Britain. Despite the Senate's refusal to ratify the 1869 treaty, American expansion in the Caribbean would continue well into the twentieth century (LaFeber 1993:16). Seward turned American foreign policy towards developing American footholds in Caribbean islands to provide protection for a future isthmian canal (*The New Empire: An Interpretation of American Expansion, 1860-1898*, Walter LaFeber 1963:28). American ownership of Caribbean islands and an isthmian canal would open the door to Hawaii and Asian markets, Seward's true goal (LaFeber 1963:29). An isthmian canal would enable American merchants to travel a shorter distance to newly opened Asian markets using California and Hawaii as convenient coaling stations (LaFeber 1963:29). While Americans began to look beyond U.S. shores for new markets, both the U.S. merchant marine and navy were collapsing (LaFeber 1963:19). Of 1,942 vessels in the United States Navy in 1880, only 48 could fire a shot if called upon (LaFeber 1963:58). Clearly, American interests in foreign markets had more to do with selling goods than carrying them in American hulls.

The decline of American naval power coincided with American expansion into Latin America during the 1880s. When Cuban revolutionaries first declared independence in 1868, Congress quickly reacted. By 1869, Congress urged President Ulysses S. Grant to take immediate action and either recognize the belligerents, or annex Cuba. Secretary of State Hamilton Fish fought the Congressional recommendation for Cuban annexation on racial grounds and eventually persuaded Grant to avoid annexation

(LaFeber 1993:64). Several key members of Congress sided with Fish in the annexation dispute citing the concern that once annexed, Cuban sugar production would compete too heavily with American sugar beet production (LaFeber 1993:65). The Cuban Ten Years War (1868-1878) left Cuban plantations ravaged and economically unviable. Americans quickly bought Cuban sugar plantations for a fraction of their real price (LaFeber 1993:65). Partly because of protective tariffs and partly because of American owned plantations, ninety-four percent of Cuban sugar was exported to the United States ("Phases of Empire: Late Nineteenth Century U.S. Foreign Relations," in *The Gilded Age: Essays on the Origins of Modern America*, Joseph A. Fry 1996:279). American expansion into Cuba also provided opportunities in industrial and infrastructure venues. Americans built and controlled Cuba's railways, gas lighting, elevators, and even telegraph communications. Notably, Cuba maintained direct telegraph links with both New Orleans and New York City, but not Madrid in the 1880s (Fry 1996:279).

Central America's agrarian economy and unstable politics made the area a profitable arena for American business at the end of the nineteenth century. American merchants sought not "farming, mineral, or grazing lands, Americans sought foreign markets for agricultural staples or industrial goods," and Central America was pivotal to this expansion (LaFeber 1963:1). American entrepreneur Minor Keith had already established United Fruit in Costa Rica by 1883. Keith had left the U.S. in 1871 to lay railway track through Costa Rica to the Atlantic Ocean. Twelve years later, Keith controlled seven percent of Cost Rica's territory in the form of mines, banana plantations, ranches, and railroads. At pivotal moments of unrest, Keith exerted control over the

would link North and South America (LaFeber 1993:75). The creation of a Pan-American organization gave the United States a new foothold in the western hemisphere and the opportunity to aggressively seek new markets while keeping Europeans out (LaFeber 1993:60). Newly recognized U.S. strength in the western hemisphere in 1890 triggered American investment in Central America, South America, Asia, and Europe. Americans purchased foreign stocks and bonds while building industrial and transportation systems to protect their investments (LaFeber 1963:9).

Reciprocity treaties promoted American trade in foreign markets while protecting the United States as the 1890s dawned. Congressman William McKinley's 1890 tariff gave President Harrison the ability to "reduce tariffs on foreign goods (especially raw materials) when other nations reduced their tariffs for U.S. products (especially industrial and staple agricultural goods)" (LaFeber 1993:77). The McKinley tariff focused on five key goods: sugar, molasses, coffee, tea, and hides (LaFeber 1993:77). Recognizing the new tariff and Pan-American agreements would require protecting American interest abroad, Congress authorized the construction of three modern battleships in 1890, and the subsidizing of American steamship companies that delivered mail in 1891 (LaFeber 1993:80; *Benjamin Harrison*, Charles Calhoun 2005:117). Seward had proposed in the 1870s that American power in Asian markets would rely on two things: force and the cooperation of the powers involved to guarantee power for all in Asia (LaFeber 1993:95). Following Seward's path, the construction of three modern battleships provided the United States the necessary force to enforce its treaties in Asia.

The start of the 1890s proved Seward correct and validated the congressional naval appropriation. Captain Mahan convincingly argued competition for world markets would result in instability in the balance of power, instability that would result in war. He concluded that the only way to protect American foreign markets and interests was to build a strong navy (LaFeber 1993:117). The Valparaiso Incident of 1891 and the Hawaiian revolt in 1893 proved Seward and Mahan correct. The beating of American sailors from the USS *Baltimore* in Valparaiso, Chile, by police forces in 1891 almost sent the United States to war with Chile. When the Chilean government failed to apologize appropriately (in the eyes of President Harrison), the president asked Congress to give him power to force an apology. Although a minor incident by modern standards, President Harrison's threat of war with Chile proved the power the United States felt it held in the western hemisphere. Without a modern navy, however, the United States would more than likely have lost the war (Calhoun 2005:127). In Hawaii, the situation was quite different, because American firepower could not be challenged by native Hawaiians. White Hawaiian planters controlled more than two-thirds of the islands and their sugar production (LaFeber 1993:91). When the 1890 McKinley treaty removed favored status for Hawaiian sugar, it forced an economic recession for white planters. The economic downturn created a struggle between the white planters and Queen Liliuokalani. The political battle ended in 1893 when American sailors and white planters forced annexation on Hawaii proving the navy a powerful diplomatic tool (LaFeber 1993:94).

The 1893 Panic and resultant depression created a need for American big business to further expand the American economic empire. American business clamored for more favorable trade agreements and better protection from foreign products (LaFeber 1963:192). The protectionist economic thread once more altered American foreign policy when Cuba declared independence in 1895. To protect American interests the Wilson-Gorman tariff "removed Cuba's favored position in the American sugar market" thereby offsetting the economic uncertainty of the Cuban sugar market during a revolution (LaFeber 1963:286).

American foreign policy after 1895 focused on three things: Cuba Libre, the Japanese and Russian threat to American interests in the Orient, and the rapprochement of British and American foreign policy (LaFeber 1963:285). The new status of American and British relations is most clearly evidenced in the appeasement of American demands regarding British policies in Brazil, Nicaragua, and Venezuela. The capitulation by London to the demands of Washington made the United States the sole power in the western hemisphere (LaFeber 1993:126). Adding to the United State's newfound power in the hemisphere was the request by the Cuban insurgents for official recognition. President Cleveland refused to recognize the belligerents lest official recognition free Spain of its responsibility of protecting American property in Cuba (LaFeber 1963:287). Cleveland wanted Spain to give Cuba autonomy, which would provide the United States with fresh markets and no political responsibilities (LaFeber 1993:131).

American opinion over the 1895 Revolution was sharply divided. A clear rift between war hawks (generally Democrats and Populists) and expansionists (primarily Republicans) appeared in the upper levels of American government as the war with Spain drew closer. Westerners, Populists, and Democrats generally supported Cuban independence because they believed it would force the government to reissue silver coinage thereby re-floating the economy (LaFeber 1993:141). The Republicans meanwhile wanted Hawaii annexed, a Nicaraguan canal, a naval base in the Danish West Indies, an empire, and Spain's withdrawal from Cuba and the western hemisphere (LaFeber 1993:127). From 1895-1897, Republicans in Congress led the Cuba Libre cry and supported the Cuban *juntas* in the United States (LaFeber 1963:333).

Not to be left out, labor unions and big business voiced their opinion of the Cuban Revolution and the possibility of American involvement. The American Federation of Labor under the control of Samuel Gompers pledged its support for a free Cuba. This stance was not overly surprising since many of the AFL's members were Cuban cigar rollers living in New York, Florida, and Louisiana (LaFeber 1993:131). Interests in the Northeast worried war would undermine the economy further and undercut profits (LaFeber 1993:141). Big business, on the other hand, believed war with Spain over Cuba could open new markets and accelerate economic recovery while protecting market shares (LaFeber 1963:291).

Secretary of State Richard Olney supported American involvement in the Cuban Revolution in 1895. He advocated war for four reasons: the United States should always support independence, the Cuban war was cruel and inhumane, to protect trade agreements, and to protect American property in Cuba (LaFeber 1963:292). Olney stated that if the rebels held "a substantial portion of the community" the United States should "put ourselves in a position to intelligently consider and pass upon the questions of according to the insurgents belligerent rights, or of recognizing their independence (LaFeber 1963:289)."

Secretary of the Navy Theodore Roosevelt, like Secretary of State Olney, saw the Cuban bid for independence as an opportunity. In a May 3, 1897, letter to Captain Alfred Thayer Mahan, Roosevelt told Mahan "...there are big problems in the West Indies also. Unless we definitely turn Spain out of those islands (and if I had my way that would be done tomorrow), we will always be menaced by trouble there (*The Annals of America*, Volume 12 1968:151)." Six months later, on December 6, 1897, President William McKinley in his first address to Congress stated:

> The story of Cuba has been one of unrest; growing discontent; an effort toward a larger enjoyment of liberty and self-control; of organized resistance to the mother country; of depression after distress and warfare and of ineffectual settlement to be followed by renewed revolt....The revolution which began in 1868 lasted for ten years, despite the strenuous efforts by the successive peninsular governments to suppress it. Then as now, the government of the United States testified its grave concern and offered its aid to put an end to bloodshed in Cuba....There is no desire on the part of our people to profit by the misfortunes of Spain. We have only the desire to see the Cubans prosperous and contented, enjoying that measure of self-control which is the inalienable right of man...." (McKinley 1968:161-2)

McKinley continued his address, informing Congress he had already informed Spain that the United States could only "be required to wait a reasonable time" for Spain to end the revolt (McKinley 1968:161-2). Spain's response to McKinley's demand was to remind the United States that it was bound by its declaration of neutrality, and that the United States needed to prevent filibusterers from leaving US waters (McKinley 1968:163).

McKinley claimed the United States had prevented the voyage of even a single armed vessel for Cuba (McKinley 1968:163). This is an interesting statement from McKinley when one considers that between 1895 and 1898 seventy-one filibustering trips left for Cuba from the United States. Of those trips, twenty-seven were successful. Twenty-three voyages were made from Jacksonville, Florida, and of the successful twenty-seven trips, twelve of the voyages were made by *Commodore*, *Dauntless*, or *Three Friends*. Of the unsuccessful forty-four filibustering trips, the United States caught thirty-three, the Spanish blocked five, the British captured two, and storms stopped four (*Jacksonville: Riverport-Seaport*, George E. Buker 1992:116). It appears the United States, Spain, Great Britain, and even Mother Nature were doing their best to stop filibustering. Clearly, however, the port of Jacksonville, Florida, was not helping matters by being so successful at slipping vessels into and out of port.

Recognizing perhaps that Congress disagreed with his position on Cuba, McKinley addressed Congress's spring 1896 vote that recommended to the president that Cuban insurgents be recognized as belligerents (McKinley 1968:164). Although a seemingly minor distinction, McKinley reminded Congress that the difference between insurgent and belligerent for international relations is vast. An insurgent cannot be

recognized or supported by a separate government, but a belligerent can be recognized, thereby removing the United States' neutrality and obligations to Spain. The Congressional recommendation made it clear whom they believed the United States should support. McKinley argued that recognizing the Cubans as belligerents would gain them nothing, but would bind the United States in policy and support to the Cubans. If the United States diplomatically recognized the Cuban insurgents, it would give Spain reason to close Cuban ports to American vessels (McKinley 1968:164). Despite McKinley's clear decision to avoid involving the United States in the Cuban revolt, he did not fail to answer those concerned with holdings in Cuba or those who believed his stance too soft:

> Sure of the right, keeping free from all offense ourselves, actuated only by upright and patriotic considerations, moved neither by passion nor selfishness, the government will continue its watchful care over the rights and property of American citizens and will abate none of its efforts to bring about by peaceful agencies a peace which shall be honorable and enduring....If it shall hereafter appear to be a duty imposed by our obligations to ourselves, to civilization and humanity, to intervene with force, it shall be without fault on our part and only because the necessity for such action will be so clear as to command the support and approval of the civilized world. (McKinley 1968:164)

Despite continued American interest in joining Cuba and the United States, McKinley refused diplomatically recognizing the Cuban revolutionaries for several reasons. McKinley wanted to avoid either annexation or American responsibility for Cuba. The President's disinterest in the Cuban revolution was a disinterest in a country populated by free slaves and Creoles, a racist sentiment shared by many Americans in the 1890s (Fry 1996:280). Despite McKinley's refusal to be drawn into a war that would negate Spain's responsibilities to American interests, he recognized the threat Cuban

insurrectionists posed to an American isthmian canal and the American-China trade. The Cuban revolution destabilized the Caribbean and the United States' ability to focus on opening up new markets in Latin America (Fry 1996:276). The departure of USS *Maine* for Havana Harbor in January 1898 was meant to send a clear message to Spain. First, the United States was watching Spanish actions. Second, the United States would protect its economic investments in Cuba (Brands 1994:1). The subsequent loss of USS *Maine* and the United States' declaration of war on April 25, 1898, began the Spanish-American War. Despite the sinking of USS *Maine*, the United States had four reasons for going to war against Spain in April 1898. First, the yellow press had pleaded for war since the insurrection began in 1895. Second, the United States claimed humanitarian intervention was necessary to protect the Cubans from the *reconcentrado* policies of the Spanish army. Third, and perhaps most importantly, the United States did not want Spain controlling the largest island in the Caribbean and a potential vulnerability for a new isthmian canal's defense. Finally, McKinley wanted satisfaction for the insult he received from the Spanish Ambassador to the United States (Herring 1968:398). Despite less than perfectly noble reasons for going to war, at the war's end in December 1898, the United States held the Philippines, Puerto Rico, and Guam. Hawaii had been annexed, and Cuba gained independence, albeit as a protectorate of the United States.

American foreign policy towards Cuba after the Spanish-American war bore little resemblance to the noble goals the United States claimed to desire at the start of the war. In April 1898, the United States pledged in the Teller Amendment that the United States had no "intention to exercise sovereignty, jurisdiction, or control over said Island [Cuba]

except for the pacification thereof, and asserts its determination, when that is accomplished, to leave the government and control of the Island to its people (Herring 1968:398)." At the close of the war, however, President McKinley's refusal to recognize the Cuban insurrectionists at the start of the Cuban Revolution carried over into the Spanish-American War peace talks. When the terms were settled, the colonies dispersed, reparations set, and the treaty signed, only American and Spanish interests had been served. The Cuban freedom fighters, who fought for independence from 1868-1898, were neither present at the peace talks nor given a voice in the final settlements. American racism at the close of the nineteenth century made Americans believe they knew what would be best for their Cuban protectorate (Fry 1996:280). Historian William Brands summed up the Spanish-American War's importance in American history thus:

> The significance of the Spanish-American War lay in the fact that it represented a willingness on the part of the American government and the American people to use American power for purposes not immediately related to American security and to do so at a great distance from home (*The United States in the World, Volume II*, H. William Brands 1994:1).

Americans used the Monroe Doctrine, Manifest Destiny, racism, social Darwinism, and a second industrial revolution to expand American influence in Hawaii, the Philippines, and the Caribbean during the Gilded Age (LaFeber 1993:50). Big business needed new markets to conquer and raw materials to supply its factories. The Cuban Revolution of 1895-1898 provided an opportunity for the United States to become a world power while invoking the Monroe Doctrine; however Spain's involvement in the New World was neither new, nor disputed in 1895. Despite Latin American revolutions at the beginning of the eighteenth century, Cuba remained the Faithful Isle. What factors

contributed to Cuba's late bid for independence? How did the Cuban revolutionaries gain the popular imagination of Americans at the close of the nineteenth century, and how did they use the press to promote their interests?

The Cuban Revolution

Spanish endeavors in the Western Hemisphere began with Columbus's voyages in the fifteenth century and continued well into the nineteenth century. The early nineteenth century witnessed repeated colonial revolutions in South and Central America (Brands 1994:4; *A History of Latin America*, Hubert Herring 1968:393-4). Many of these revolts centered around the emancipation of Spanish-held slaves who in turn assisted in overthrowing the colonial regimes. By the mid-nineteenth century, many former Spanish colonies were independent and formally recognized by the United States as sovereign states. Cuba, however, remained an important Spanish colony.

The Cuban situation was different from Spain's other New World colonies. Largest of the Caribbean islands, Cuba is 760 miles east to west, but less than 100 miles across at its widest point. Cuba's proximity to the United States, a mere ninety miles from Key West, influenced the Cuban socioeconomic dynamic (Herring 1968:393).

Cuba's stable economy and society resulted from its sugar trade. Sugar and tobacco were the staples of Cuba's economy; sugar accounted for nearly 75 percent of its total exports (Herring 1968:394). The importance of sugar and stability for the Creole elite made them loyal to Spain and "countenanced Spain's restrictive press policies; they sacrificed expressive freedom at the altar of sugar profits and social stability (*Children of*

Colonial Despotism: Press, Politics, and Culture in Cuba, 1790-1840, Larry R. Jensen 1988:ix)." Cuba's stability and vibrant economy owed much to two key events in 1789, the opening of slave importation into Havana, which allowed Cubans to import 20,000 slaves in four years, and the Saint-Domingue slave revolt that destroyed sugar production on the island and pushed the price of Cuban sugar higher on the world market (Jensen 1988:7). Cuba's position in Caribbean sugar production rose following the loss of Haitian sugar production in 1803. After Napoleon sold Louisiana to the United States, a revolt in Haiti destroyed most of the island's plantations (Brands 1994:4). Cuban sugar production and profit in the early and mid nineteenth century depended upon a landed plantation class that remained loyal to Spain because it feared profit losses if its slaves were freed through revolution (Brands 1994:4). This plantation class would remain loyal to Spain throughout the Ten Years War (1868-1878), despite economic incentive to join the rebellion.

Cuba's colonial government received its instructions from Madrid, but the minor slaveholders of the Creole ruling classes resented Spanish meddling in Cuban affairs. Theoretically, Cuba held state status in the Spanish nation, and even elected representation to Spain's parliament, the Cortes (Musicant 1998: 38). Cuban representation in peninsular politics, however, could not balance the 1860s economic downturns that pushed the Creole elite to its limits. By 1868, the Creole Cuban government declared independence from Spain with the *El Grito de Yara*, thereby sparking ten years of armed conflict that resulted in stalemate (Herring 1968:396). The final peace agreement removed the last obstacle for Cuban plantation owners to support

an independent Cuba – Spain freed all Cuban-owned slaves (Brands 1994:6). The close of the Ten Years War left Cuba with greater autonomy, no slaves, and a promise to remain loyal to Spain.

The Cuban slave emancipation left the plantation class little reason to fear independence any longer. Without a slave population to plant and harvest sugar, the economic incentives that kept the Creole elite loyal to Spain prior to 1878 were removed, and the plantation class had no reason to oppose a sovereign Cuba. The war left 200,000 dead and the economy in shambles (Herring 1968:397). American money poured into Cuba after the war, and by the mid 1890s, American sugar producers had invested almost $50 million in the Cuban economy. America's stake in Cuban sugar production is evident from then congressman McKinley's 1890 tariff, which eliminated Cuban sugar duties while raising Hawaiian sugar import tariffs. Despite the loss of slaves for the sugar plantations, Cuba was the third largest exporter of goods to the United States. In 1894, Madrid cancelled its favorable trade agreements with the United States cutting Cuban trade profits from $89 million in 1889 to $56 million by 1897 (Herring 1968:397). The drastic drop in revenue and the close economic tie to the United States left Cuba in a perfect position to gain a local and friendly audience for its independence movements.

The Florida-Cuban bond influenced American opinion of the Cuban Revolution, and gave Cuban Revolutionaries an unparalleled opportunity in Florida. As early as 1565, the Spanish held an outpost at St. Augustine, Florida. The close of the Seven Years War forced the Spanish to evacuate East Florida for Havana in 1763 when the Treaty of Paris gave Florida to the British. When Spain returned to Florida following the close of

the American Revolution, the Second Spanish period tightened ties between Cuba and Florida. Historian Louis Peréz, Jr., describes Spanish Cuba's influence on Florida this way; "Florida was once a dependency of Cuba, populated and subsidized from the island ("Between Encounter and Experience: Florida in the Cuban Imagination" in *Florida Historical Quarterly*, Volume 82, No. 2, 2003:170)." The return of Spanish control to Florida in 1783 meant Florida retained its Spanish Cuban flavor well into the nineteenth century, despite becoming an American Territory in 1823. The nineteenth century Cuban population in Florida was a separate and immediately identifiable community (Peréz 2003:171).

Cities like Tampa and Ybor City had long lasting ties to the Cuban independence movement. In 1873, Captain Joseph Fry, an ex-Confederate naval officer left Tampa Bay with a load of men and munitions aboard the filibustering vessel *Virginius* (*The Spanish-American War in Tampa Bay*, Alejandro M. de Quesada 1998:7). The Spanish Navy captured *Virginius* and held the crew prisoners. The American Navy gathered in Key West, Florida, and prepared to protest the taking of an American vessel, but the American fleet was heavily outgunned and never left the harbor. Fifty-two Americans and passengers were shot before the United States could issue a diplomatic protest. The remaining 155 passengers would have died if Great Britain had not intervened (Musicant 1998:13). The inability of the United States Navy to protect American lives became a factor in the decision to commission three modern battleships in 1890 (LaFeber 1993:80). Nonetheless, the Cuban influence on Florida towns gave the Cubans a place from which to fight for independence.

Cubans living in Florida during the nineteenth century brought their economic and industrial base with them. The Cuban migration to Key West, Tampa, and Jacksonville altered the cities economically and technologically, events that foreshadowed Miami's transformation a century later (Peréz 2003:174). The growth of cigar factories in otherwise small coastal Florida towns created a vital economy and community (Peréz 2003:174). The fight for Cuban independence was fought from small coastal towns such as Key West, Ybor City, Tampa, and Jacksonville where "filibustering expeditions destined for the fields of insurgent Cuba routinely departed (Peréz 2003:171, 172)."

According to Pérez, "The presence of José Martí in the Cuban communities of Florida and the pursuit of *Cuba Libre* by those communities had far-reaching and long-lasting implications in the historical development of Florida (Pérez 1995:7)." Unlike previous immigrant populations, Florida's Cuban population was comprised of whites, blacks, and Creoles all of whom were united by their common Cuban identity. This common culture enabled José Martí to create the *El Partido Revolucionario Cubano*, or the PRC in New York City on January 5, 1892, thereby tying together Cuban populations throughout the United States (Peréz 2003:175, Musicant 1998:45). In Florida, where the Cuban connection was strongest, the cities of Key West, Ybor City, Tampa, and Jacksonville emerged as the political centers of the Cuban Independence Movement after 1892 (*José Martí in the United States: The Florida Experience*, Louis A. Pérez, Junior 1995:7).

The PRC's focus was to raise funds, munitions, and fighters for the Cuban Revolution Martí and others were planning. *El Partido Revolucionario Cubano* focused on centralized Cuban populations, especially those found in Florida, a scant ninety miles from Havana (Musicant 1998:45). Martí used the PRC to create the *juntas* that later moved key personnel and arms into Cuba. The PRC's first attempt to send men, money, and munitions to Cuba started from Fernandina Beach, Florida, an obscure coastal town in December 1894; this attempt will be discussed later in this chapter (Musicant 1998:47).

The declaration of Cuban Independence in 1895 by revolutionaries brought unexpected allies into the fold. Cuban bandits joined the revolution on both sides. Many joined the revolution after Martí landed in 1895, but many fought for the side they thought would win (*Lawless Liberators: Political Banditry and Cuban Independence*, Rosalie Schwartz 1989:13). One notorious and patriotic bandit, Manuel García, used his band to help overthrow Spanish rule in Cuba (Schwartz 1989:18). Martí recognized the value of Cuban outlaws and used García's expertise to further the revolution. In 1893, Martí appointed García a general of the revolution (Schwartz 1989:158). García's gang collected ransom and protection monies from rich and poor alike. These funds protected the payees from being kidnapped or from having their fields burned (Schwartz 1989:19). Funds generated from ransoms and protection fees by Cuban bandits began arriving in PRC coffers stateside by 1896 (Schwartz 1989:117). Popular support for the bandits and the revolutionaries in Cuba matched the public outcry at Spanish policies in the United States.

By 1895, Cuban independence advocates won support both at home and abroad. The best-known advocate to Americans for Cuban independence was José Martí, who spent almost ten years in New York City before leaving to fight on Cuban soil in 1895 (Herring 1968:397). At the same time that revolutionaries in eastern Cuba declared independence, Martí and his followers delivered weapons to them from the New York *junta* (Herring 1968:397). Shortly after Martí's return to Cuba, he was killed in a battle with Spanish forces (Herring 1968:397). The contacts and allies Martí made in the United States served his successors well after his death. These same allies helped lobby Congress and printed news stories to fuel American interest and support for the Cuban uprising. American interest in the Cuban insurrection played an important role for the filibusters and the steamship *Commodore*.

Initial American disinterest in the 1895 Cuban revolution might have held steady had the Spanish not begun a policy of *reconcentrado* (Brand 1994:9-10). To fight an increasingly hostile Cuban citizenship engaged in guerrilla warfare, the Spanish rounded up the Cubans and removed them from their homes (Herring 1968:397). These citizens were resettled in mountain towns and put under guard. Any person found outside the mountain camps after curfew was an enemy and shot immediately. The brutal tactics infuriated American newspaper readers who protested loudly to the American government. In the Havana province, General Valeriano Weyler's *reconcentrado* policy resulted in the deaths of 50,000 people. Weyler's policies earned him the title *Carnicero* or Butcher (Herring 1968:397). Adding to Spain's image problem in American newspapers was the fact that Cuban revolutionaries made excellent use of American

yellow journalism by sending reports to the papers from American field correspondents. Spain's inability to protect American business interests and property in Cuba incited Americans and fueled sympathetic feeling for the Cuban insurgents. In the end, the Cuban revolutionaries succeeded in making the Spanish look brutish and harsh to a sympathetic American populace who demanded intervention.

Cuban revolutionaries gained popularity the longer they held out against Spain. By 1896, guns were shipped to Cuba in American hulls from several ports in Florida, including Jacksonville, Key West, and Tampa (*New York Times* January 6, 1898:1). Unfortunately, for Cuban interests, Spain felt the shipment of munitions from the United States aboard American vessels warranted censure. In successive correspondence with the United States, Spain decried a policy of American gunrunning by private interests as a ploy to assist Cuban freedom fighters. To avoid international repercussions the American government prohibited the running of munitions from American ports aboard United States vessels to Cuban ports. Several American filibusters were seized before the legality of American actions could be tested (*New York Times* January 6, 1898:1).

Filibusters[2]

Filibustering has an American legacy that stretches to the early nineteenth century. Filibustering prior to 1850 focused on Mexico, but voyages following 1850 looked to Central America and Cuba to increase American power (*Manifest Destiny's*

[2] *Merriam Webster's Collegiate Dictionary Eleventh edition* defines the word filibuster as "an irregular military adventurer; specifically: an American engaged in fomenting insurrections in Latin America in the mid-nineteenth century....(2003:468)." Meanwhile the *American Heritage Dictionary Third Edition* defines filibuster as "an adventurer engaged in private warfare abroad (1994:314)."

Underworld: Filibustering in Antebellum America, Robert E. May 2002:45). The term filibuster, however, did not come into common usage until after Narcíso López's attempts to invade Cuba using American volunteers in 1850 (May 2002:1). Antebellum Americans supported these "heroes" and thronged docks to cheer filibusters on their way. Filibusterers themselves, caught up in the glory, often signed up for successive voyages regardless of the expedition's outcome (May 2002:76, 107). Attempts by the United States to halt filibustering trips started in the eighteenth century and continued into the 1890s.

Despite a 1794 Neutrality Act which made it illegal to outfit armed expeditions on American soil, the first documented filibustering expeditions occurred in 1806 (*Agents of Manifest Destiny: The Lives and Times of the Filibusters*, Charles H. Brown 1980:6,3). Aaron Burr led an expedition to Mexico, while Francisco de Miranda led an expedition to Venezuela. Both expeditions aimed to overthrow Spanish colonial power and bring both Mexico and Venezuela into an American empire (Brown 1980:3). Between 1810 and 1824, rebellions occurred everywhere in the Caribbean, Central America, and South America except in Puerto Rico and Cuba (May 2002:5).

American opportunists used expeditions to unstable countries for personal gain, but undermined American foreign relations at the same time. The United States strengthened and passed a series of neutrality laws beginning in 1818. Article Six of the 1818 Neutrality Law mandated a three-year prison sentence and $3,000 fine for those who assisted or started a military expedition against an area with which the United States

was at peace (May 2002:7). When the 1818 law failed to stop American expeditions, the United States warned targeted governments of planned invasions (May 2002:8).

Supplying weapons, ammunition, medicines, and men to Cuban revolutionaries required organization. Luckily, for Cuban freedom fighters, Americans happily assisted the Cuban cause. The failure and execution of Narcíso López in 1851 led interested Americans in Lafayette, Louisiana, to create the Order of the Lone Star. Founder Dr. John V. Wren stated the Order was made up of those who were "sympathetically favorable" to López's expedition and goals. The Order flourished in the Gulf States but also established groups as far flung as New York City. By 1852, the Order of the Lone Star planned a new filibustering trip to promote Cuban independence (May 2002:33). Unlike later Cuban-American *juntas*, the Order of the Lone Star failed to successfully launch an expedition. Like later *juntas,* the Order relied upon members in key positions to move funds and arms surreptitiously (May 2002:35, 129).

Americans have often found ways to profit from a war without participating directly, and the Floridian filibusters were no exception. Men like Alexander Merrill, one of the wealthiest and most powerful men in Jacksonville, worked with the filibusters by storing weapons on his estate and then lightering the goods to the departing vessels anchored in the St. Johns River (Buker 1992:103). Historian Charles Brown argued the 1895-1898 filibustering voyages differed greatly from those made in the 1850s. Brown suggested the filibustering fleet focused on gunrunning and profit while the 1850s voyages were bent on invasion:

> The junta maintained a fleet of what were called filibuster boats, small sea-going tugs well known in the newspaper headlines – the *Three*

necessary railroad hubs nearby. As early as August 1851, filibusters cached weapons in Jacksonville and along the St. Johns River for proposed expeditions (May 2002:31, 77). Following a path trod by *juntas* for forty-five years, José Martí planned a filibustering voyage departing from the St. Johns River in 1895. Martí chartered three vessels from New York and Boston in secrecy. Munitions were sent by rail to Fernandina Beach, Florida, where they were stored in a warehouse and labeled as foodstuffs. The Cuban revolutionaries planned to board in Key West, the Dominican Republic, and Costa Rica after the weapons were loaded aboard the three vessels in Fernandina Beach. Unfortunately for Martí, the Jacksonville collector of customs sniffed out the expedition, and the voyage was cancelled ("Fernandina Filibuster Fiasco: Birth of the 1895 Cuban War of Independence," in *Florida Historical Quarterly*, Volume 82, No. 1, Antonio Rafael de la Corva 2003:16). The voyage's failure can be partly blamed on the bragging of Cuban participants to the press. The yellow press then printed sensationalized accounts of Martí's plan that tipped off both the Spanish and American officers tasked with preventing filibustering voyages (de la Corva 2003:42). Despite the voyage's failure, Fernandina continued to be used by the filibusters, and both *Dauntless* and *Commodore* operated out of Fernandina in October 1896 (de la Corva 2003:41).

Despite Fernandina Beach's use by filibusters, Jacksonville, Florida, was the nation's major filibustering port by 1895 (*Badge of Courage: The Life of Stephen Crane*, Linda H. Davis 1998:172). Jacksonville's ties to Cuba can be traced to the cigar distributor José Alejandro Huau. Seňor Huau established the Jacksonville *junta* in 1896 as a means to arrange cargoes, fighters and ships for transport to Cuba (*St. Johns River*

Steamboats, Edward A. Mueller 1986:122). Huau, like many Cuban-Floridians, had a foot in Cuba and the United States through his Cuban mother who was expelled from Cuba in 1869, and his American father (Buker 1992:99). Those involved in the *junta*, those wishing to join a filibustering voyage like correspondents, and freedom fighters used Huau's cigar shop as a meeting place (Davis 1998:173). Martí's PRC relied on cigar manufacturers like Huau. Members of the *juntas*, primarily cigar makers, contributed ten percent of their wages each month to the *junta* (*A Captain Unafraid: The Strange Adventures of Dynamite Johnny O'Brien*, Horace Smith 1912:71). Huau arranged voyages, bought and moved arms, and even arranged transport from his cigar shop in Jacksonville. Like previous filibustering *juntas*, Huau had friends in key places. Alfonso Fritot, a local railroad switchman and *junta* member, rotated railroad cars in and out of the trains according to Huau's direction. The ability to move weapons and men under the watchful eyes of Spanish spies and American authorities made Huau an important member of the PRC (Buker 1992:100). Huau also played an important role in getting American reporters aboard filibustering vessels so Cubans could win the propaganda war.

The yellow press played an important role for both the filibusters and the Cuban revolutionaries. At the time of the Cuban Revolution, American newspapers were warring for readership. More sensational headlines splashed across the papers each day, as reporters sought bigger and more exciting stories. The Cuban Revolution and the illegal filibustering expeditions offered an opportunity that few reporters or papers could resist. Many up and coming correspondents of the day traveled to Jacksonville, Florida,

where they could secretly sign onto a filibustering crew and then send their stories home (Buker 1992:102). As reporter Ralph Paine described it: "the thing was to get afloat in one of those notorious steamers whose voyages had an air of mystery, whose departures and escapades were clouded in a baffling secrecy, and whose sailormen had the temper of the buccaneers who had cruised in those same seas long, long ago (*Roads of Adventure*, 1922:60)." Stephen Crane even felt the pull and excitement of the filibustering voyages and said filibustering "catches the heart of the lad (Davis 1998:172)." It was difficult for journalists to gain access to a filibustering voyage because of the neutrality laws and the U.S. policy of trying correspondents under the same laws as the filibusters themselves (Davis 1992:173). The reporters faced the same perils as the filibusters: jail, death, or sinking (*The Correspondents' War: Journalists in the Spanish-American War*, Charles Brown 1967:65).

Filibuster historian Charles Brown said, "it requires a valor not common for a handful of men to embark on the seas in leaky sailing vessels with the intention of conquering a country;" imagine then the courage it must have taken to join the voyage simply for a story (Brown 1980:45). Unmindful of the risk, the correspondents knew their job was to secretly join the filibusters and then bring the story home where they could influence American popular opinion. Stephen Crane claimed to be an able bodied seaman so he could join *Commodore*'s crew and tell its tale. Little did he know it would become his most acclaimed short story.

The United States government tried to stop filibustering trips between American shores and Cuba during the 1890s and to prevent reporters' stories from making the

papers. The Navy patrolled the East Coast from Sandy Hook, New Jersey to Key West, Florida, arresting suspected filibusters (Paine 1922:59). The navy succeeded several times, "but the famous *Three Friends*, the *Dauntless*, and the *Commodore* were stealing out of the Florida harbors and inlets with their lawless freightage and picaresque crews, so cleverly handled that they defied capture and left not enough evidence to trap them (Paine 1922:64)." Nonetheless, the successful impounding of ships, crews, and goods by the U.S. Customs Office resulted in discord amongst Florida captains and ship owners. In response to continued criticism, U.S. Attorney General Judson Harmon issued a statement in December 1896 declaring the shipment of arms to Cuba by Americans to be legal (*Daily Florida Citizen* December 13, 1896:1).

Arms running to Cuba continued unabated once Attorney General Harmon's statements reached the press. Despite Spanish indemnity threats against the United States for damages caused by American shipped weapons, Harmon maintained American citizens were legally protected when shipping weapons to Cuba through American ports. Spain also accused the United States of violating international treaties by allowing continued gun running. Harmon, however, found that international law took "no account of a mere insurrection, confined within the limits of a country, which has not been protracted or successful enough to accrue for those engaged in it recognition as belligerents by their own Government or by foreign Governments (*Daily Florida Citizen* December 13, 1896:1)." Therefore, the international law that applied to neutrality or the recognition of belligerent parties did not apply to Cuba, and the United States did not violate international treaties by trading with revolutionaries.

Harmon's decision quickly reached Jacksonville, Florida, and its Cuban *junta*. The attorney general's statements regarding the legality of American filibustering to Cuba reinforced the city's strong pro-filibustering opinion. According to the *Daily Florida Citizen,* "the reading of the opinion seems to establish the right of persons to ship arms direct from any port within the United States to a Cuban port and to demand the protection of the Government making such shipments (December 13, 1896:5)." For the filibusters to know whether or not the customs office would acknowledge the attorney general's ruling, a Jacksonville vessel had to try to clear port for Cuba. The newspaper reported a ship would be loaded with a cargo of war material and weapons, papers would be demanded from the customs office, and the vessel clear for Cuba. The newspaper reiterated Harmon's statement that "The shipment or carriage of such articles to Cuba does not become a violation of international law, merely because they are not destined to [*illegible*] thereof which is recognized by the Spanish Government as open to commerce nor because they are to be traded by stealth (*Daily Florida Citizen*, December 13, 1896:5)." The first filibuster to comment on Harmon's ruling was J.M. Barr, part owner of *Three Friends,* one of the other two filibusters active in Jacksonville, (another partner in the venture was eventually elected governor).[4] Barr told the paper he simply wanted to land arms in the revolutionary Cuban held two-thirds of Cuba and carry enough "porters" to land said cargo (*Daily Florida Citizen*, December 13, 1896:5). Based on the remarks

[4] Napoleon Bonaparte Broward, one of three owners in the *Three Friends*, used his connection to the filibustering vessel as part of his stump speeches as a Florida gubernatorial candidate in 1894. When asked about the vessel and current court case he responded he was "charged with filibustering from Florida to Cuba, and as we are not yet out of the woods...I can, without violating any of the neutrality laws, say that the THREE FRIENDS is one of the trimmest little crafts that ever showed her heels to another...." (Broward 1894:17)

of Barr and other ship owners the Cuban *junta* in Jacksonville had friends amongst the filibusters willing to risk their ships and crews despite international laws.

Despite Barr's eagerness to prove the attorney general's ruling valid, *Commodore*'s owners moved first. On December 14, 1896, a *Daily Florida Citizen* headline read "Big Cuban Expedition. The *Commodore* and *Three Friends* Figuring In It. Test of Mr. Harmon's Decision. *Commodore* to Load with Arms Openly, and to Take Twenty-Five "Porters" – Party of Cubans Arrives From Tampa (1896:1)." The paper reported its correspondents in Tampa had telegraphed the night before that a crew of sixty-seven men left Tampa for Jacksonville aboard the Florida Central and Peninsular Train (*Daily Florida Citizen*, December 14, 1896:1). The men claimed they would depart Jacksonville immediately for Cuba aboard one of the filibustering vessels. These Cuban revolutionaries composed one of three expeditions enroute to Cuba under prominent Cuban General Carlos Roloff's command. According to the Tampa correspondent:

> General Carlos Roloff has sailed from some Northern port in the *Bermuda*. It is said that he is to be met by two expeditions as he comes south. Rumor has it one is to be made up from the Atlanta Cuban colony and to go to the nearest port where they will embark. The second party left here this morning, as stated, among them being Americans. It is thought that they will go to Trout Creek, where there after dark [sic], and embark at once on the *Three Friends* (*Daily Florida Citizen*, December 14, 1896:1).

Tampa's unnamed journalist reported the Cuban revolutionaries were under Perez Gonzales and Augusto Arnao's leadership. The revolutionaries carried bundles to the Tampa train station in small, staggered "squads" to avoid suspicion (*Daily Florida Citizen*, December 14, 1896:1). According to the paper, *Bermuda* carried 6,000 rifles, 4 million cartridges, 4 Hotchkiss guns, 2 dynamite guns, 600 hand bombs, ammunition for

the cannon, and medicine. In all, around 300 men were involved in the expedition under Roloff's command. This test of the attorney general's ruling the previous day was met with "great excitement" among the Cubans in Jacksonville (*Daily Florida Citizen*, December 13, 1896:2).

The success of *Bermuda*, *Three Friends*, and *Commodore* in clearing Jacksonville for Cuba in December 1896 gave the filibusters the legal footing they needed. *Commodore*'s loss only two weeks later did not impinge upon subsequent shipments of arms and men to Cuba. As late as January 1898, the Treasury Department was still studying the influence of filibustering in Florida on the nation's economy. Assistant Secretary of the Treasury Scott Wike spent two weeks in Florida investigating the methods used by the Cuban filibusters. Wike visited the major ports in Jacksonville, Key West, and Tampa to ascertain public sentiment. He found that "the sentiment throughout Florida, both American and native Cuban, was almost entirely with the [Cuban] insurgents" (*New York Times*, January 6, 1898:1). He finished his report by stating that the popular feeling in Florida made it difficult for the government to stop the filibustering expeditions (*New York Times*, January 6, 1898:1).

Filibustering expeditions to Cuba continued until 1898 when the United States sent naval vessels into Cuban waters. More than three years of Floridian-Cuban gunrunning indelibly marked Florida's maritime history. *Commodore*'s loss during a fierce storm in 1897, while a small footnote in the history of the larger event, is still notable. *Commodore* was not only a filibusterer, but also an ocean tug like the other vessels in what became known as the Filibustering Fleet (See Figure 3).

The legal and political ramifications of filibustering from Florida to Cuba by resourceful businessmen both hindered and assisted the federal government's stated neutral position. At the close of the Spanish-American War, the federal government had spent six million dollars. Four million dollars of the total expenditure for the war was spent in Florida (de Quesada 1998:8). The link between Cuba and Florida not only brought the United States into the Spanish-American War, but also profited Floridians smart enough to recognize an economic opportunity when they saw one.

The Jacksonville *junta*'s power and wealth allowed it to contract three vessels for its filibustering trips: *Three Friends*, *Dauntless*, and *Commodore*. All three vessels were tugs, but only *Commodore* was not specifically built for filibustering. *Commodore* was initially built as an ocean steam tug for harbor use in New York City, but became useful for the Florida-Cuba run. The use of harbor tugs by the Jacksonville *junta* in its filibustering trips is particular to Jacksonville. The tug's importance in Jacksonville and type must be addressed if the vessel remains are to be matched to *Commodore*'s specifications. The evolution of tugboats, the success of the vessel type as filibusters in Jacksonville, and the *junta*'s deliberate use of tug boats for gunrunning are addressed in the next chapter.

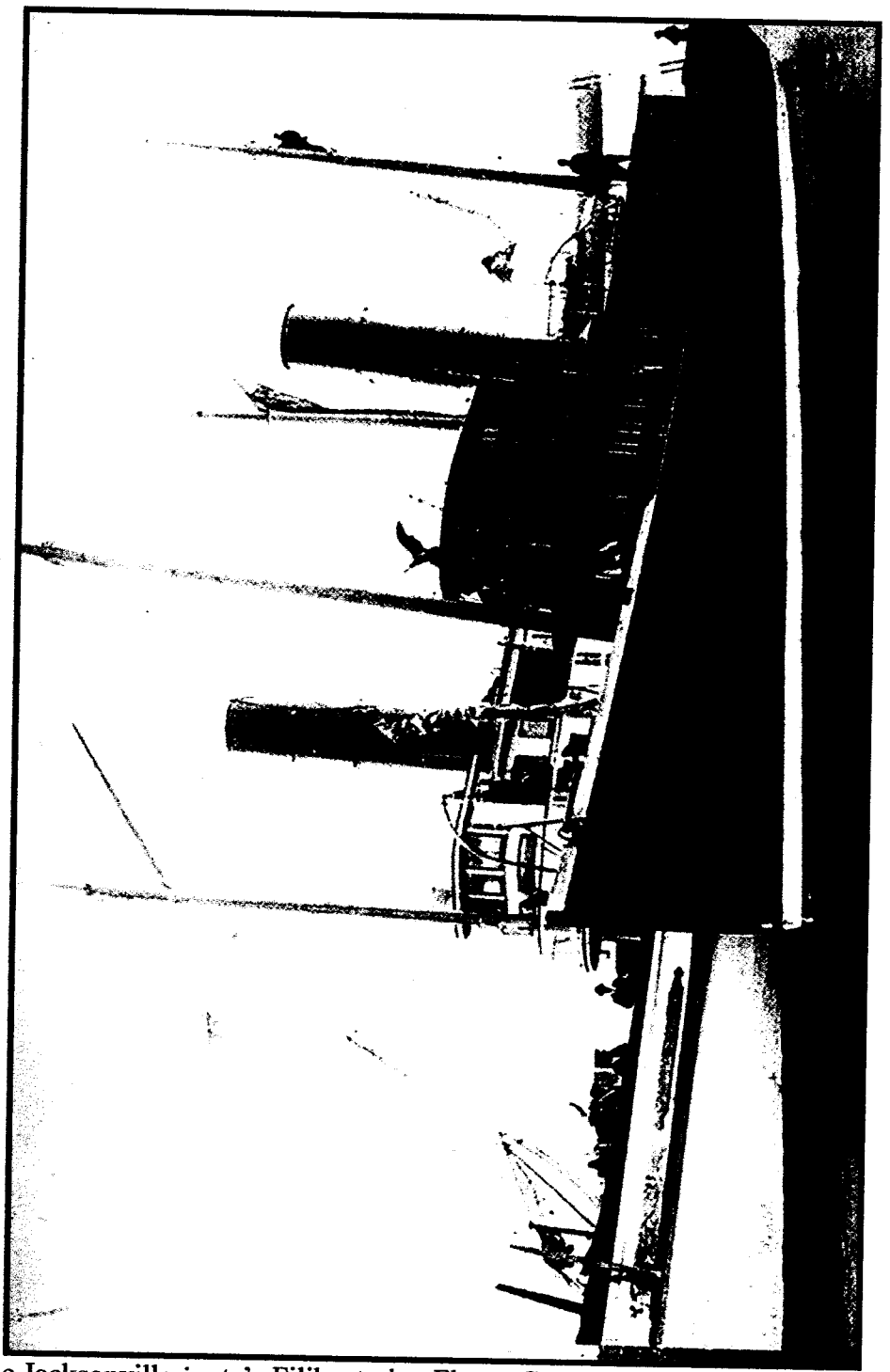

Figure 3: The Jacksonville *junta*'s Filibustering Fleet: *Commodore* resembled *Dauntless* and *Three Friends*, pictured above, while tied up in Jacksonville. Unlike *Dauntless* and *Three Friends*, *Commodore* was not purpose-built for filibustering voyages. (*Roads of Adventure*, Ralph D. Paine 1922:118)

CHAPTER III:
"THEIR EYES...WERE FASTENED UPON THE WAVES:" THE *COMMODORE*'S VESSEL TYPE

The evolution of vessel type based upon environmental, military, or economic factors dates to the start of seafaring. The building of specific vessel types for distinct purposes continues today, but is of interest here because all of the vessels in Jacksonville's filibustering fleet, including SS *Commodore*, were steam tugs. The *Commodore* was built at a time when wooden vessels competed directly with iron-hulled vessels for the same jobs. A tugboat requires several things to be successful including the horsepower to haul or tow larger vessels and fight strong currents, and the ability to maneuver around tows, snags, and other shipping. This chapter addresses the *Commodore* as a tugboat and the filibustering fleet's use of these specialized vessels unique ability to leave port at any time. The tugboat's specific design and construction features will later be used to identify *Commodore*'s wreckage.

The first documented steam-driven purpose-built tugboat was the *Charlotte Dundas*, built to tow coal barges on the Forth and Clyde Canal in 1802 ("Fair Wind Ahead: The Developing World of the British Tugboat" in *Maritime Life and Traditions,* Tom Cunliffe 2001:57). Despite the fifty-seven foot tugboat's success, the vessel was shelved when it appeared that it was adding to erosion problems on the Forth and Clyde Canal's banks (Cunliffe 2001:57). Tugboats quickly gained respect elsewhere, however, and by the first quarter of the nineteenth century, the Black Ball Line used New York Harbor's tugboats to remain on schedule when entering and leaving port (Cunliffe 2001:58). The first purpose built tugboat in the United States was *Rufus King*, built by

Harbor's tugboats to remain on schedule when entering and leaving port (Cunliffe 2001:58). The first purpose built tugboat in the United States was *Rufus King*, built by Smith & Dimon for the New York Dry Dock Company (*History of American Steam Navigation*, John H. Morrison 1903:539). *Rufus King* was built in 1825 to haul vessels to and from the New York Dry Dock Company's railways thus allowing the company to maximize profits (Morrison 1903:539).

Over time three types of tows evolved. The first, the horse-drawn tow, was used primarily on inland canals where the size of the canal necessitated the use of horses along the banks to guide canal barges through the locks. The best example of a horse-drawn tow is its application in the Erie Canal after 1825 (*Principles of Water Transportation*, Leslie A. Bryan 1939:171). The second type of tow was the mechanical tow. A mechanical tow was used when the size of the tow was too large to be handled by a horse, but the waterway is too narrow to allow for another vessel. An example of this tow was the use of electric locomotives to pull vessels through the Panama Canal (Bryan 1939:171). The last type of tow used by vessels utilizes another ship to help maneuver and dock. Tugboats are the tools used to move larger vessels in riverrine, harbor, or open ocean environments (Bryan 1939:171).

Prior to construction of purpose built tugboats such as *Rufus King*, vessels entering and leaving New York harbor had few options. Oceangoing sailing vessels relied upon good weather or small passenger steamers to guide them in and out of New York (Morrison 1903:539). From 1816 to 1840, the size of ocean going vessels continued to grow, which required ever-larger steam driven vessels to guide the sailing

ships to dock (Morrison 1903:540). Compounding the need for tugboats at the turn of the nineteenth century was the opening of the Erie Canal in 1825; the canal increased the number of vessels and amount of goods traveling from New York to the Midwest (Morrison 1903:539). By 1830, three separate companies controlled tows on the Hudson River, and in 1832, the *Hercules* became the first tugboat in New York to work in "general service" (Morrison 1903:540). Harbors reliant upon waterborne trade such as Philadelphia quickly began utilizing tugboats to increase trade. In 1836, Philadelphia began offering steam tug service to entering vessels (Morrison 1903:540).

Like other steamboats, early tugboats relied upon paddlewheels for propulsion, and like other steamers, tugboats were incredibly inefficient in coal use (Cunliffe 2001:58). The evolution of propulsion in steam tugboats from paddlewheels to propellers is an important development when examining wooden hulled steam engine tugs. The necessity for tugboats to remain stable and maneuver easily made side paddlewheel tugboats with dual engines ideal. A dual-engine side paddle wheeler's ability to pivot and maneuver is comparable to modern day dual and triple drive system tugs. A well-driven paddlewheel tugboat could shift, change loads, and maneuver around tows easily (Cunliffe 2001:61). The two engine, dual side-wheel steam tug's maneuverability, postponed the transition to screw propellers in tugboats (Cunliffe 2001:63).

The transition to propeller propulsion signaled an important development in tugboat usage: the ability to place the towrope over the tugboat's "center of longitudinal pivot" (Cunliffe 2001:63). The use of propeller-driven tugboats resulted in faster tugboats allowing for faster service in harbor and long-haul applications (Cunliffe

Commodore and other tugs were vital to New York's commerce because they guided much larger vessels to their wharves for unloading and loading. The use of steam tugs to position larger vessels in the harbor meant that ever larger ocean-going vessels could be built. Tugboats allowed shipping lines to build larger vessels to maximize profit. The Neafie and Levy yard constructed SS *Commodore* in 1882 to serve as a harbor tug for one of the world's largest and most active ports. With a four-bladed propeller and relatively short length, *Commodore* was designed to be maneuverable and powerful.

A tugboat requires tremendous horsepower housed in a maneuverable hull generally necessitating small vessel size with a powerful engine. The direct acting, single expansion steam engine of *Commodore* minimized size while maximizing horsepower. Although the wooden hull worked as the propeller rotated, *Commodore*'s builder equipped the vessel with a Philadelphia Flywheel, or Loper Wheel – a four-bladed propeller specifically designed to minimize vibration. A ship's hull resembles a violin; the hollow wooden hull has a specific harmonic, or a point at which the hull will perfectly vibrate. In musical terms a perfect vibration or harmonic is heard when the note is pure and a sympathetic note one octave higher is heard. In a ship's hull, this sympathetic vibration is catastrophic. Placing a rotating propeller and a vibrating engine into the wooden hull can create a vibration that will destroy the ship. The evolution of the four-bladed propeller is linked with designing an engine that rotated at a period that neither matched the hull's harmonic nor was a multiple of the hull's vibration period (Desmond 1998:35). In other words, if either the engine or the propeller's harmonic

matched the hull's harmonic, the hull broke apart. It was necessary to cancel out the hull's vibration with the vibrations produced by both the propeller and the engine. For this reason a balanced four-bladed propeller was paired with an engine that vibrated at a different rate than *Commodore*'s wooden hull.

A critical component of a tugboat's machinery is the winch that held the towrope or cable. Although tugboats initially used standard heavy gauge line to hold the tow, by 1870 wire cable was in use for sea tows (Cunliffe 2001:66). The use of steam-powered winches to haul in or release cable made it easier for tugboat men to haul heavier loads and control a tow (Cunliffe 2001:66). Like other tugs of the late nineteenth century, *Commodore* could have had a steam-powered winch on the aft deck powered by a donkey boiler.

Commodore's forward pilothouse allowed the captain an unobstructed field of view when under a load (See Figure 4). The critical center point for the *Commodore*'s longitudinal pivot as on other tugboats was aft of the pilothouse allowing the ship to maneuver under heavy strain without capsizing. Much like the derelict tugboat at Hutchinson Island in Savannah, Georgia, the *Commodore* operated under heavy loads with a massive single expansion engine. To accommodate the added strain, both vessels were reinforced near the engine footings, and utilized oak frames (Watts 1992:35-36).

Tugboats served an important function in the nineteenth century, just as they do today. The need for vessels that could tow, push, and maneuver larger vessels in and out of tight harbors, rivers, canals, and to and from berthing docks made tugboats necessary. The nature of the types of tows a tugboat could be called upon to perform required

flexibility both in the vessel's maneuverability, but also in the captain's ability to contract jobs. Tugboats could be called upon at any time to undertake a salvage or vessel rescue. This meant the tugs could leave port without clearance papers for a specific destination (Paine 1992:69). This loophole in port papers made oceangoing tugs the perfect choice for filibustering voyages. The owners, captains, and crews could avoid filing illegal papers by simply sailing under the pretense of a salvage job. Often the illegal munitions and medicines carried aboard the vessels to Cuba were mislabeled as "fish, bacon, lard" to prevent customs agents from investigating the tugboats (Mueller 1986:127). If the Jacksonville filibustering fleet relied primarily on powered vessels that could leave port on a moment's notice, it explains the need for sea-going tugboats in the filibustering trade. The success of *Dauntless*, *Three Friends* and *Commodore* as filibusters is directly linked to their ship type. The answer to what role SS *Commodore* played in the filibustering trade and events leading to her sinking are discussed in the next chapter.

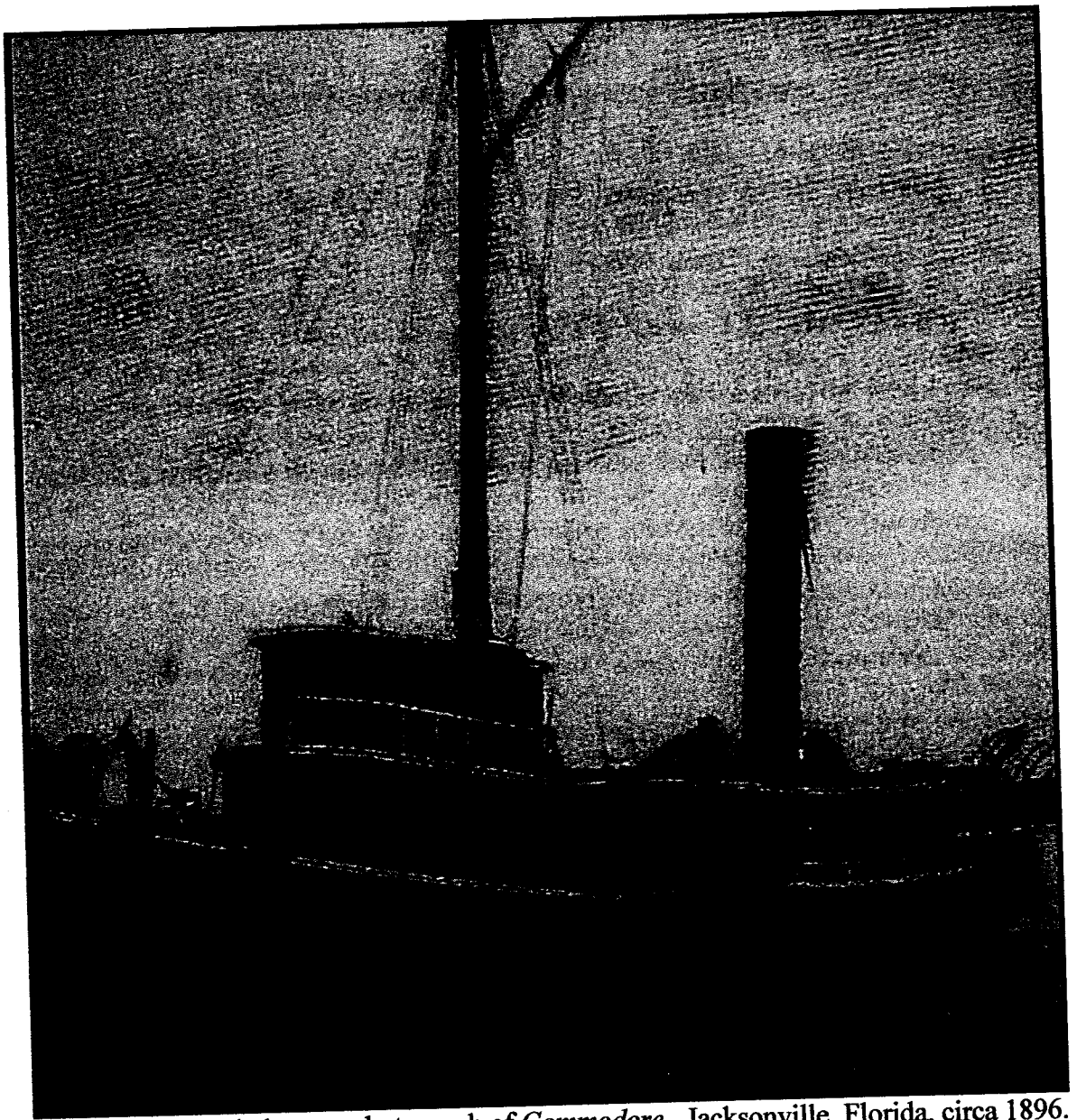

Figure 4: The only known photograph of *Commodore*. Jacksonville, Florida, circa 1896. (Image courtesy Ponce Inlet Lighthouse Association 2002)

CHAPTER IV:
"THE WAVES WERE OF THE HUE OF SLATE:"
SS *COMMODORE*'S WORKING HISTORY

Primary historical source research on SS *Commodore* yielded interesting information about the vessel's history. Unfortunately, much of the information reflects eyewitness stories that disagree about the events of January 1-2, 1897. Yellow journalistic practices of the era define much of what is known about the vessel's loss, and Stephen Crane's own account of the voyage provides few clues. Several questions require attention here. First, what do historical sources tell us about *Commodore*'s construction, refits, and adaptations for filibustering? How did Captain Murphy and the Cuban *junta* use *Commodore* to fulfill the *junta*'s needs once *Commodore* was based in Jacksonville, Florida? Finally, and most importantly, what event or series of events sent the *Commodore* to seafloor the night of January 1, 1897?

Construction

Commodore was constructed in 1882 at the Neafie and Levy yard, Philadelphia, Pennsylvania (GPO Vessel Registry 1884:298). Any information that could be gleaned from company records or ship plans was lost when the yard went bankrupt at the close of World War I, and the records were lost.[4] According to the first registry record in 1882, Neafie & Levy constructed the ship with one deck, one mast, one plain head, and a round stern (Philadelphia Registry May 5, 1882). *Commodore* held 129.78 tons under the

[4] All enquiries into the yard's records have been met by historians and archivists alike with the same result: no one knows what happened to the yard's records, but they have been lost since shortly after the war.

tonnage deck, 4.85 tons at the forward break, 39.20 tons at the aft break, and 4.42 tons in the aft crew space (Philadelphia Registry May 5, 1882). The vessel had a registered length of 122.5 feet, a breadth of 21.0 feet, and a draft of 9.0 feet (Philadelphia Registry May 5, 1882). According to the ship's 1884 registry in the *Merchant Vessels of the United States,* the *Commodore* (official registry #126017), was rated at 178.25 gross tons and 99.25 net tons (GPO 1884:298).

Commodore had a maximum draft of 10.0 feet and an average interval of 12.65 feet between each of the ten hull sections (Tonnage Admeasurement of Steam Tug *Commodore* of District Philadelphia, May 5, 1882). The surveyor noted the vessel had ten sections with three enclosures (Tonnage Admeasurement of Steam Tug *Commodore* of District Philadelphia, May 5, 1882). The 1884 American Shipmaster's Association Record lists *Commodore* as a screw steam sloop built in Camden, New Jersey (*American Shipmaster's Association Record 1884*:805). The *Record* indicates the Hawkins Brothers owned the tug and used it as a fishing vessel. According to the *Record*, the ship was built of oak and yellow pine with copper, and iron fasteners. *Commodore* had two bulkheads, a single engine boiler (it makes no mention of deck boilers or machinery), and an engine with a 26-inch bore and 30-inch stroke (*American Shipmaster's Association Record 1884*:805). Although the vessel's usage as listed in the 1884 *American Shipmaster's Association Record* contradicts the usage reported in the 1882 Philadelphia Registry and the 1884 *Merchant Vessels of the United States* records the vessel's construction details match. It is possible the Hawkins Brothers could not find work for the tug at first and instead registered the vessel as a fishing boat. Until further information can be found, the

usage of the *Commodore* as a fishing vessel is uncertain, but it is clear the records match the tug *Commodore*.

The ship was built with a single expansion steam engine that attached to a four-bladed propeller. The listed 1884 homeport was Greenport, New York, corroborating her New York service record (GPO 1884:298). Built as a harbor tug, the *Commodore*'s minimal net tonnage allowed her to maximize the engineering spaces.

The *Commodore* was issued a temporary enrollment at the Port of Wilmington, North Carolina, in July 1896. Temporary Enrollment No. 11 (July 14, 1896) records that the vessel had one deck and one mast (Temporary Certificate of Registry, December 8, 1896, Jacksonville, Florida). The New York harbormaster affirmed that Frank L. Arnold (also of New York) was *Commodore*'s rightful owner, and Thomas H. Morton the vessel's master (Temporary Certificate of Registry, December 8, 1896, Jacksonville, Florida). At the foot of the document, a notation indicates SS *Commodore* was "duly registered at the port of Jacksonville" (Temporary Certificate of Registry, December 8, 1896, Jacksonville, Florida). The temporary enrollment corroborates the vessel's refit in Wilmington, and relocation from New York to Wilmington, North Carolina, and to Jacksonville, Florida. The vessel's boiler and machinery were refit in Wilmington after sixteen years in service and three covert trips to Cuba. The tugboat's refurbishment did not solve the aging vessel's problems, if Captain Murphy's comment to Stephen Crane after the ship's loss is to be believed: "The *Commodore* was a rotten old bucket of junk" (Paine 1922:169). How then was this "old bucket of junk" used in the Filibustering Fleet?

Filibustering

After the Wilmington refit, *Commodore* was relocated and based at Jacksonville, Florida. By March 1896, *Commodore* was actively running guns for the Jacksonville *junta*. On March 14, 1896, *Commodore* passed *Three Friends* at Cedar Key (where the crew was loading men and munitions) while returning from a successful voyage to Cuba (Mueller 1986:124). According to some sources, *Commodore* was on her eighth filibustering trip to Cuba at the time of the ship's loss (*New York Tribune*, January 3, 1897). By the fall of 1896, *Commodore*'s crew, like other filibusterers, was having a more difficult time simply clearing United States waters.[5]

The *Daily Florida Citizen* reported on December 14, 1896, the *Commodore* would receive clearance papers from Jacksonville provided the vessel was not headed for Cuba. A telegram sent from the secretary of the Treasury to Jacksonville granted the *Commodore* clearance for Truxillo, British Honduras. The permission to leave was granted only because of affidavits sworn by Captain Morton. The affidavits claimed *Commodore* would neither take arms to Cuba nor violate neutrality by taking an expedition to Cuba. In an interesting twist of fate, however, Captain Morton became ill before sailing, and Captain Lewis of the filibusterer *Dauntless* took Morton's place (*Daily Florida Citizen*, December 14, 1896:1).

Captain Morton's sudden illness after signing sworn affidavits about the *Commodore*'s voyage appears to have been a ploy to gain *Commodore* clearance to undertake another trip to Cuba. Without Morton on board, *Commodore* was not required

[5] Chapter II addressed the legal issues filibustering crews had when attempting to run guns to Cuba and the landmark decision issued by Attorney General Harmon about the legality of such trips.

to adhere to the sworn sailing orders; *Three Friends*'s captain had played the trick before with great success. With clearance in hand, *Commodore* left the Jacksonville customs dock and moved across the St Johns River to the Old Savannah Florida & Western Railway Wharf. Local Cubans admitted to the newspaper that the wharf contained a cache of weapons that was being loaded onto *Commodore* for transport to Cuba. Cubans also informed the paper that the clearance papers would be obtained from the collector of customs (thanks to the attorney general's ruling on filibusters), and that if clearance were refused, *Commodore* would still leave Jacksonville. Jacksonville's collector of customs maintained that if *Commodore* attempted to leave port without the proper paperwork, the vessel would be interdicted by the Revenue Cutter *Boutwell* and impounded by the U.S. government (*Daily Florida Citizen*, December 14, 1896:1).

The intrigue surrounding the December 14 expedition continued when reporters at the *Florida Daily Citizen* found a leading Cuban to comment: "twenty-five men would be taken along on the *Commodore* as 'porters' to assist the crew in handling the arms. Of course, these men will have to come back on the boat,' he said, 'as we cannot leave them in Cuba under the law"(*Daily Florida Citizen*, December 14, 1896:1). If the voyage proceeded to British Honduras according to Captain Morton's affidavits, there would be no reason for the Cuban "porters" to be left in Cuba. Apparently, the captain's illness was indeed faked. Adding to the intrigue surrounding *Commodore*'s December filibustering trip was the arrival of *Three Friends* at the mouth of the St. Johns River. *Three Friends*'s arrival forced the Revenue Cutter *Boutwell* off station to the river's mouth to investigate. Luckily, the newspaper's reporter again had the scoop and reported

Three Friends' role in the affair was to take "a large number of Cubans to their destination." Unfortunately, the reporter could not confirm the information because the Cubans in question were not due into Jacksonville until the morning of the 14th. The article concluded by claiming *Commodore* was bait for Spanish spies so *Three Friends* could sail unnoticed (*Daily Florida Citizen*, December 14, 1896:1). Based on the newspaper's account, the ploy, if it was indeed a ploy, failed miserably. News stories surrounding *Commodore*'s loss two weeks later mentioned stranded Cubans waiting on *Commodore* and *Three Friends* on a desolate key at the time of the ship's sinking. Perhaps the stranded Cubans were part of the December 14 expedition.

Commodore's final voyage to Cuba began with a celebratory send-off by local Cubans and well wishers at the city dock on December 31, 1896. Before *Commodore* cleared Jacksonville for Cuba on January 1, 1897, she ran aground four times in the St. Johns River. Ironically, after grounding at Commodore's Point, the Revenue Cutter *Boutwell* assisted *Commodore* off the bar. *Boutwell* was tasked with preventing filibusterers from leaving port. Strangely, either *Boutwell*'s captain ignored *Commodore*'s reason for clearing to sea (it was in all the newspapers at the time), or he failed to see a reason to stop the ship from leaving. *Commodore* crossed the bar into open ocean at 1400 hours on Friday January 1, 1897, and by midnight had run one hundred miles down the coast (*Daily Florida Citizen*, December 14, 1896:1). The *Commodore*'s crew steamed southeast to Cuba and into a fierce nor'easter that almost swamped the ship at the St. Johns bar. Meanwhile, USS *Newark* remained anchored in Key West overnight despite orders to depart for Jacksonville to "prevent filibustering

expeditions (Captain Mchisten to US Secretary of Navy, January 5, 1897)." *Newark* arrived in the St. Johns on January 2 and learned of *Commodore*'s departure and sinking from the *Boutwell* (Mchisten 1897). The *Newark* steamed for Mosquito Inlet to proffer assistance to the wrecked crew and to learn what had happened to *Commodore* (Mchisten 1897). When the vessel arrived seven to twelve miles NNE of Mosquito Light, the captain noted a great deal of wreckage and concluded *Commodore* was a complete loss (Mchisten 1897). Assuming all survivors were accounted for, *Newark* steamed towards Jacksonville (Mchisten 1897). While enroute, *Newark* met with SS *Three Friends*, whose captain informed *Newark*'s captain that eight men were still missing from *Commodore*. Returning to *Commodore*'s wreckage, *Three Friends* and *Newark* searched in vain for survivors (Mchisten 1897).

Accounts estimating the value of *Commodore*'s cargo vary between $3,000 and $10,000 (*New York Tribune*, January 3, 1897, *New York Times*, January 3, 1897). Allegedly, *Commodore* had fifteen tons of arms, dynamite, and war matériel aboard when she sank (*New York Tribune*, January 3, 1897). The cargo also supposedly contained Mauser, Winchester, and Remington rifles (*New York Tribune*, January 3, 1897). Many newspapers of the time claimed the ship's loss was a great blow to the *juntas* in the United States because of the large quantity of munitions lost. The New York *junta* publicly disagreed:

> The report that the expedition was a valuable one is a mistake. We sent the *Commodore* out with a very small cargo of arms and ammunition on board to test the possibility of being able to ship arms to Cuba openly. I do not believe that all the material on board is worth more than $3,000,

> and the greater part of this may be saved. (*New York Tribune*, January 3, 1897)

Witnesses and "experts" also disagreed over the cause of *Commodore*'s sinking. Cuban crewmembers claimed a traitor hidden in the aft hold scuttled *Commodore* (Philadelphia January 3, 1897). An anonymous expert from Brooklyn claimed the ship sank because the chief engineer left the main seacock open while running the pumps. The expert claimed that the open seacock fed four major areas within the ship and quickly overwhelmed the pumps (*New York Tribune*, January 3, 1897). In the same issue, the paper reported that the ship was overloaded with coal, and the groundings in the St. Johns River resulted in split seams. These split seams caused the ship to take on prodigious amounts of water in the open ocean and finally sink (*New York Tribune*, January 3, 1897).

Commodore's loss resulted in the death of eight crewmen, but at the time of the accident, those on shore had no way of knowing what had happened. One of the first individuals to learn of *Commodore*'s loss off Mosquito Inlet was Principal Keeper Thomas Patrick O'Hagan at Mosquito Inlet Lighthouse (See Figure 5). O'Hagan had served as principal keeper at the lighthouse since 1893 and was responsible for rescuing two lifeboats containing *Commodore's* passengers on January 2, 1897 (*The Beacon of Mosquito Inlet: A History of the Ponce De Leon Inlet Lighthouse*, Thomas Taylor 1993:34). When the two lifeboats of Cubans arrived on the beach shortly after noon, Keeper O'Hagan transferred the men across the inlet to New Smyrna Beach in his sailboat, *Irene* (Taylor 1993:34). Once in New Smyrna Beach, the crewmen boarded the

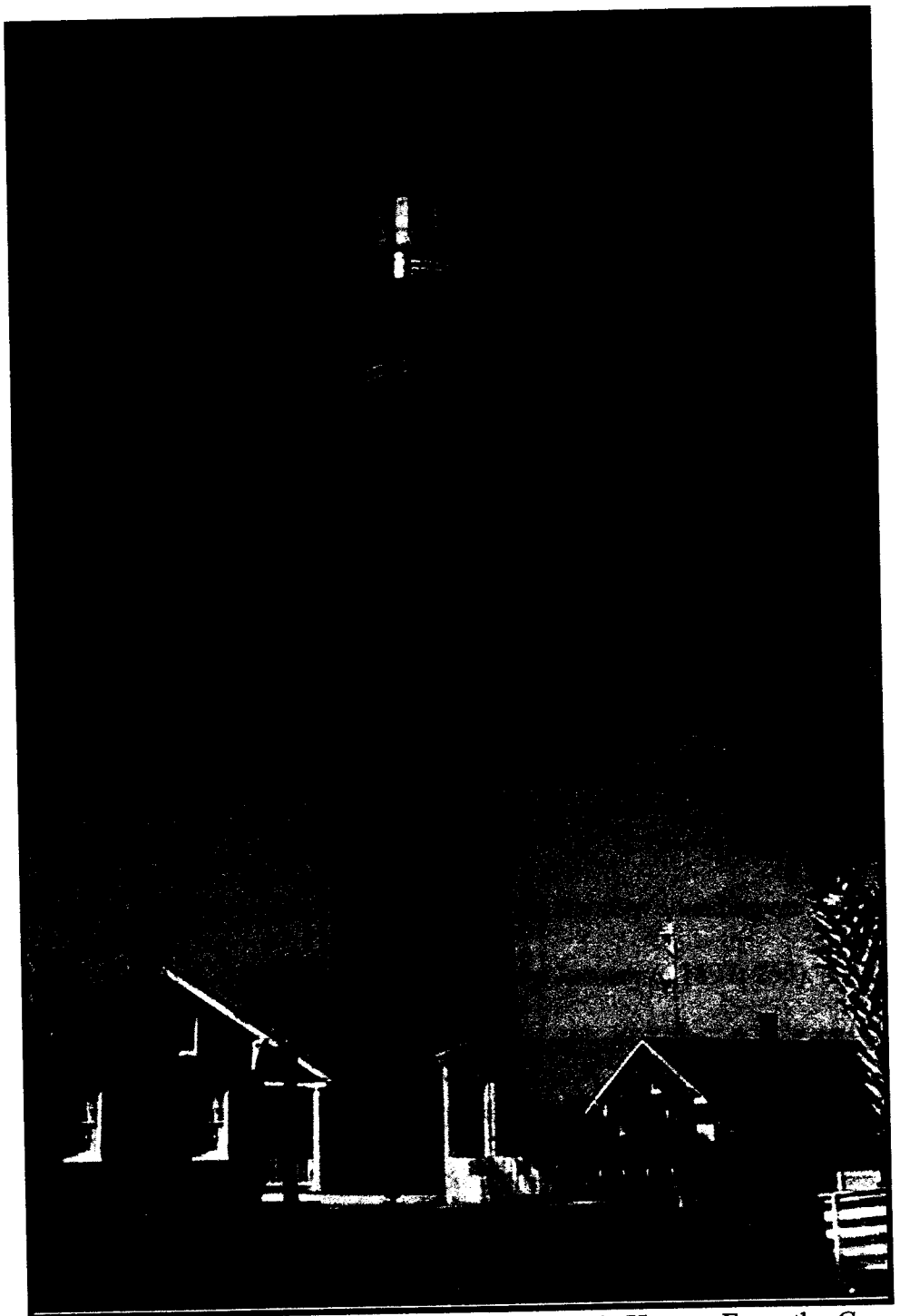

Figure 5: Ponce Inlet Lighthouse and the second Keeper's House. From the *Commodore* wreck site, this red brick tower matches Crane's description, and looks "precisely like the head of a pin (Image courtesy Rick Allen, Nautilus Productions 2002)."

train for Jacksonville, where the survivors told a tale of betrayal and treason. None of the men, however, gave a detailed accounting of the ship's loss. For information about the shipwreck, Stephen Crane is the best source of information.

Stephen Crane's Eyewitness Account

SS *Commodore*'s loss on the night of January 1, 1897, in a nor'easter left the yellow press scrambling for more information. Stephen Crane, the most literate and only author among *Commodore*'s crew, was the only member to publish an eyewitness version of the loss. Prior to writing his famous short story, "The Open Boat," Crane first published a newspaper account of the *Commodore*'s last voyage in 1897 for the *New York Times*, while recovering from his wounds in Jacksonville. Much of the account was later altered and edited to create "The Open Boat," but the initial story was written from a newsman's perspective.

There was a feeling of celebration surrounding the ship's loading on January 1, 1897 (Crane in Staffman, *Stephen Crane's Own Story* January 6, 1897: 255). Crane described the black stevedores loading boxes of ammunition and bundles of rifles into *Commodore*'s hold, while Cubans sang along the dock. "There was none of that extreme modesty about the proceeding which had marked previous departures of the famous tug," Crane wrote (Staffman 1952:255). The report mentioned the disinterest of Revenue Cutter *Boutwell*'s officers riding at anchor only a short distance away (Staffman 1952:255). The departure of the ship was delayed when the custom office detained the Cuban leaders and *Commodore*'s officers at the customhouse until after dusk (Staffman

1952:255). Crane described a fog rolling in just as the *Commodore* released her dock lines and headed down river to the ocean (Staffman 1952:256). Less than two miles from the dock the "atrocious fog caused the pilot to ram the bow of the Commodore hard upon the mud and in this ignominious position we were compelled to stay until daybreak (Staffman 1952:256)." The following morning Revenue Cutter *Boutwell* came to *Commodore*'s aid and pulled her free. (Staffman 1952:257). Suspicious now of *Commodore*'s mission, *Boutwell* trailed the steamship from a half-mile astern to make certain the tug did not pick up more Cuban fighters as had been done in the past by the "Filibustering Fleet" (Staffman 1952:257).

At Mayport, the river pilot, who had already run the tug aground once, disembarked *Commodore*, and an ocean pilot came aboard (Staffman 1952:257). No sooner had the ocean pilot joined the hapless *Commodore*'s crew than the ship once again ran aground on a sand bar. This time the crew freed the tug by running the engine in reverse (Staffman 1952:257). At this point *Boutwell*'s Captain Kilgore seemed to have thought *Commodore* unlucky and asked Captain Murphy if he truly planned to head to sea. Murphy replied the ship was indeed headed to sea (Staffman 1952:257). Crane wrote, "the Commodore came to enormous rollers that flee over the bar...a certain light-heartedness departed" the ship's crew (Staffman 1952:257).

The oncoming tempest clearly frightened Crane even at the outset of the voyage. He described the storm-tossed voyage and the *Commodore*'s passage: "as her stout bow lunged at the great black waves she threw flashing, roaring cascades to either side" (Staffman 1952:258). Crane's description of rollers crashing over the tug's gunnels and

his inability to sleep for fear of being "fired through a bulkhead" painted a vivid image of the storm's violence (Staffman 1952:258). Crane later went to the pilothouse where he dozed off and on (Staffman 1952:259). Near midnight when the captain came on watch, the chief engineer reported that the water in the engine room was rising (Staffman 1952:259). Neither the captain nor the engineer spoke Spanish, so they woke the Cuban leaders to ask them to get their men to help bail in the engine room (Staffman 1952:259). Crane volunteered to bail and described the scene in the engine room: "There was a quantity of soapish sea water swirling and sweeping and swishing among machinery that roared and banged and clattered and steamed, and, in the second place, it was a devil of a ways down below (Staffman 1952:259)." At this time, Crane and the Cubans formed a bucket brigade dumping the water from the engineering spaces out a door to windward (Staffman 1952:259).

Crane helped the engineer and crew operate the pumps. Quickly the water overwhelmed first the pumps and then the men, leaving Captain Murphy no choice but to give the order to abandon ship (Crane 1897:260). The first small boat away from the ship carried twelve Cubans and luggage. The remainder of the ship's crew was still aboard the sinking tugboat (Crane 1897:260). After several hours all the men were clear of *Commodore*; this left Crane, Murphy, the ship's engineer, and the ship's cook in the captain's yawl, which remained tethered to the sinking *Commodore* by a 40-foot line in the hopes of keeping the crew together until the last moment (Crane 1897:262). By dawn, the ship was still afloat, and men were back aboard the sinking vessel. The third mate's boat had foundered leaving him and his men to fashion rafts (Crane 1897:263).

Crane's account stated the first mate and several men were stranded aboard the tug when their small boat was smashed against the hull (Crane 1897:264). Rather than wait for the captain's yawl to return to the ship, these men leapt into the sea never to be seen again (Crane 1897:264). At this point, several crewmen lashed together a makeshift raft and begged Captain Murphy for a tow. Murphy obliged them and had a line fastened between the yawl and rafts (Crane 1897:264). The men aboard the rafts in search of safety began to pull themselves closer to the yawl, and Crane was forced to cut the connecting towrope (Crane 1897:264). Crane and Montgomery rowed the yawl towards the engineer on the raft in hopes of tossing him a line (Crane 1897:265). They failed, and the men on the raft were lost (Crane 1897:265). Eight men were lost the night of the wrecking, and the oiler (Higgins) later succumbed to his wounds after reaching shore.

Commodore finally slipped beneath the waves early in the morning, according to Crane:

> She lurched to windward, then swung afar back, righted and dove into the sea, and the rafts were suddenly swallowed by this frightful maw of the ocean. And then by the men on the ten-foot dingy [Crane, Murphy, Higgins, & Montgomery] were words said that were not words – something far beyond words. The lighthouse of Mosquito Inlet stuck up above the horizon like the point of a pin. We turned our dingy toward the shore. (Staffman 1952:265)

Crane's account remains the only complete accounting of the events surrounding the *Commodore*'s loss in the early morning hours of January 2, 1897. Crane did not interject an opinion as to the cause of the sinking. The loss of eight men clearly horrified Crane and was more important for him to relate than to speculate about the cause for the ship's loss. His account lacked the sensationalism of other news reports. His was no tale of

traitors or treason, no explanation about faulty valves or engineering, no commentary on the groundings. Crane focused on how the tug sank and how the crew failed to prevent her loss.

"The Commodore Sinks At Sea:" The Newspaper Accounts[6]

Newspaper accounts of *Commodore*'s loss are somewhat more sensationalized than Crane's version of events discussed above. Papers along the eastern seaboard picked up the story of *Commodore*'s loss and relayed it to their readers in Jacksonville, Philadelphia, and New York. The *Florida Times Union*'s headline "The Commodore Sinks At Sea," was the least sensational of the headlines following *Commodore*'s sinking, but the article's author was not without poetic license (*Florida Times Union*, Sunday, January 3, 1897 headline.) The story proffered one of the more likely hypotheses regarding the ship's loss when it suggested: "It is thought that when the vessel went ashore in the St. Johns River, her heavy shock caused her seams to open (*Florida Times-Union*, January 3, 1897:1)." The article went on to report confidently that *Commodore* was "now resting on the bottom of the sea, twenty fathoms below the surface, about eighteen miles north of Mosquito Inlet (*Florida Times-Union*, January 3, 1897:1)." (Unsurprisingly to divers and boat captains familiar with Florida waters and affiliated with the *Commodore* Project, the site actually lies in 11-13 fathoms of water.) The picture painted of *Commodore*'s last moments was vivid, and if accurate, is of considerable value. The story follows Crane's version of the events in agreeing that the

[6] It should be noted here that none of the newspaper accounts list reporters' names under the story title. For this reason, credit can only be given to the newspapers quoted, not the reporters who wrote the stories.

vessel ran aground several times leaving the St. Johns River, and was almost swamped crossing the bar to sea at 1400 hours on Friday. According to the *Florida Times-Union*, by midnight the ship was taking on water:

> The swash of the water in the hold as the vessel rolled from side to side soon alarmed everyone on board. A panic ensued, but Captain Murphy, Stephen Crane, R.A. Delgado and one or two others soon quieted the excitement and put everybody to work on the pumps and with buckets....The steam pump was started and for two hours the water poured over the sides in streams....(*Florida Times-Union*, January 3, 1897:1)

While the story agreed with Crane, with the exception of the remark about the newsman's heroism in quieting the panic, a new detail was revealed. According to the *Times-Union* story, the vessel's crew continued to pump the bilge while turning westward. Captain Murphy and the crew apparently believed they were more than forty miles offshore, since they attempted to steam east to avoid running afoul of USS *Newark*. At 0230, Captain Murphy ordered the men to abandon ship and by 0300, the ship was emptied of crew. This report did not mention any loss of life; in fact, the reporter wrote that all the men were believed alive and well. The story noted that twelve of the men had already made it to Jacksonville aboard the Florida East Coast Railway, no doubt the men rescued by Ponce Inlet Lighthouse Keeper Thomas O'Hagan (*Florida Times-Union*, January 3, 1897:1). The article's terse prose could not have been complete without the romantic sensationalism so prevalent in newspaper stories at the time:

> The night was dark and they could not see what became of her, but as she was rapidly filling with water, they are all confident that she is now resting on the bottom, and old Neptune has been supplied with enough arms and ammunition to blow up the island of Cuba....(*Florida Times-Union*, January 3, 1897:1)."

The *Times-Union* presented a filibuster loaded with enough war matériel to change the course of the Cuban insurrection but lacked the factual nature of Crane's account. The *Times-Union*'s story did corroborate Crane's assertion that the ship's pumps simply could not keep up with the amount of water pouring into the ship. The image of water pouring "over the sides in streams" signals the catastrophe about to overcome *Commodore* and her crew (*Florida Times-Union*, January 3, 1897:1). The *Times-Union* has also given archaeologists a hypothesis to test when looking at the wreck site. If the groundings caused the *Commodore*'s ultimate demise, perhaps the evidence is still present beneath the sand.

In reporting *Commodore*'s story, the press became caught up in the heroic actions of one of their own. A story appearing in the *New York Press* quoted the cook as saying "That newspaper feller was a nervy man...these newspaper fellers have got spunk, if they do tell such awful whoppers at times" (*New York Press*, January 3, 1897:3). An interesting quote no doubt, particularly since it allegedly came from a correspondent in Daytona Beach, perhaps Crane himself.

Not to be outdone, the *New York Press* printed an account of the ship's loss on January 4, 1897 (three days after the sinking). The three-line headline showed the leanings of yellow journalism: "More of the Filibusters Safe. Young New York Writer Astonishes The Sea Dogs By His Courage In The Face Of Death! Cubans Assert a Traitor Sunk the Vessel." (*New York Press*, January 4, 1897:1). By the night of January 3, 1897, the paper had reports of seventeen of the twenty-eight men safely ashore and said there was a "slight chance of seven more yet alive" (*New York Press*, January 4,

1897:1). By the time this article made the front page, Crane, Captain Murphy, the cook (Montgomery), and two seamen had made landfall in Daytona (*New York Press*, January 4, 1897:1). According to Crane's account, there were only four in the boat including himself. The paper quoted a survivor who stated, "The tug sank at 7 o'clock Saturday morning, twenty miles off New Smyrna, and the Americans on board remained till the last moment. A traitor in Spanish pay was the cause of the leak (*New York Press*, January 4, 1897:1)." According to the source, *Commodore* turned toward shore at 0300 and deployed two boats filled with Cubans at that time. The story mentioned the capsizing of one boat, which killed six Cubans, and the swamping of another lifeboat containing nine men. It also mentioned the nine men who were swamped built a raft, but were lost from sight (*New York Press*, January 4, 1897:1). The unnamed source described the final moments of the *Commodore*:

> Captain Murphy, Stephen Crane, the novelist and correspondent; Higgins, myself and one other sailor took to the ten-foot dingy at the last moment. We tried to save the men in the water around us, but the heavy seas and blinding wind swept them from us. The spray was so thick that we could only see a few rods. Their cries were heartrending, but we could do nothing, it requiring all our efforts to keep our small boat right side up. (*New York Press*, January 4, 1897:1)

The remainder of the story printed in the *New York Press* closely matched Crane's account. It told of the men in the small boat bailing for twenty-four hours before being capsized near shore. The story ended with the death of Higgins (the oiler) who was clobbered by timbers and died on shore (*New York Press*, January 4, 1897:1). Perhaps the most interesting item was the story's allegation that someone in Spanish pay must have caused *Commodore*'s sinking, an allegation that is still unproven.

While other papers told a story of treachery and loss, the *New York Tribune* on January 4, 1897, addressed the loss of not only the ship but the crew as well. In a desperate attempt to locate the missing men and lost ship, Jacksonville's customs collector authorized another well-known filibustering ship, *Three Friends*, to search for survivors (*New York Tribune*, January 4, 1897:1). The article pointed out that the customs collector's unwillingness to grant leave for *Three Friends* to search for survivors for almost forty-eight hours meant almost certain death for the eight men still missing (*New York Tribune*, January 4, 1897:1). According to the article, the crew's status was as follows on January 3: twelve survivors were in Jacksonville (these were the first Cuban survivors), three survivors in Daytona with one dead (Murphy, Crane, and Montgomery survived, but Billy Higgins died), four were alive in Ormond (the second Cuban boat), and eight from the raft were missing, but believed alive (See Figure 6) (*New York Tribune*, January 4, 1897:1). The discrepancy in this story was that the reporter claimed the eight men on the raft were Cuban-an impossibility (*New York Tribune*, January 4, 1897:1). The raft held the eight men whose boat was smashed and who returned to *Commodore*. Of those men, three were drowned on the ship and three were on the raft that was cut free (Crane 1897). None of these eight men were Cuban; all were Americans including the first mate, the chief engineer, and several black sailors (Crane 1897, Taylor undated:2).

The *New York Press* on January 5, 1897, agreed with the January 3 *Florida Times-Union*'s story and theory about the *Commodore*'s sinking on January 2. The

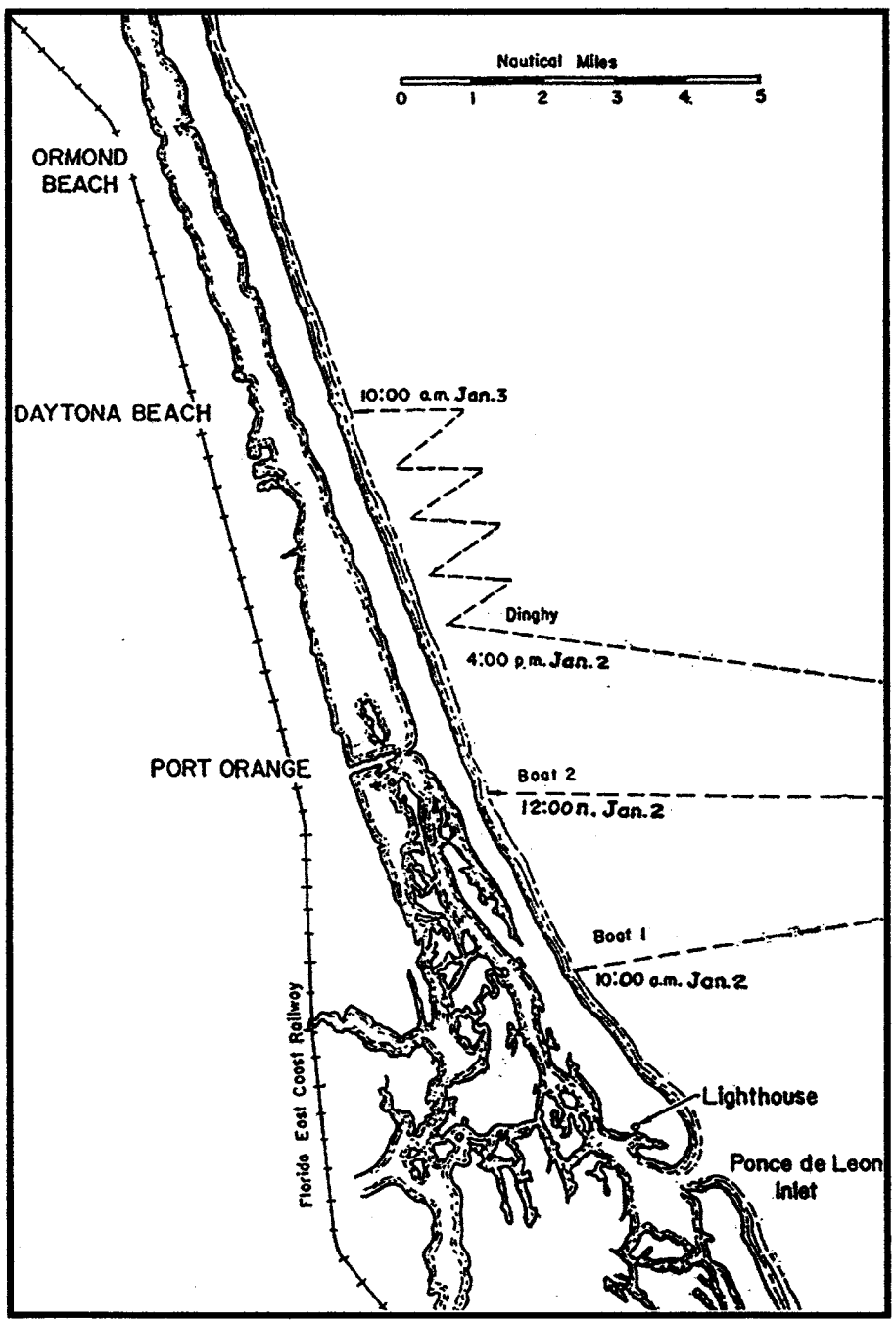

Figure 6: Map showing the three boat landings made by *Commodore* survivors. Boats one and two contained Cuban freedom fighters. Boat one was rescued by Keeper O'Hagan at Ponce Inlet, and boat two landed in Port Orange. The dinghy held Stephen Crane, Captain Murphy, Montgomery, and Higgins aboard. The dinghy's voyage inspired Crane's story "The Open Boat." (Image courtesy Ponce Inlet Lighthouse Association 1998)

headline for the *New York Press*'s January 5 story read "Commodore Said to be Overladen" (*New York Press*, January 5, 1897:1). The paper went on to quote Captain Murphy, and acknowledged the captain doubted treachery caused the wrecking (*New York Press*, January 5, 1897:1). When forced to comment decisively on the cause of the leaks and their appearance, Captain Murphy only stated "the leaks were not there early Friday evening, but were there at midnight (*New York Press*, January 5, 1897:1)." Murphy stated the Cubans appeared dispirited when the ship began taking on water, but Crane was the first to proffer aid during the disaster (*New York Press*, January 5, 1897:1). The *New York Press* first seized on treachery and treason as the likely cause of the *Commodore*'s demise. By January 5, however, the *New York Press* embraced the theory that the ship's loss was caused by overloading with coal, munitions, arms, and medicines, paired with the groundings in the St. Johns River.

By January 5, 1897, the Jacksonville *Florida Times-Union* convinced Captain Murphy to allow an interview. The captain revealed the engineer informed him at midnight that *Commodore* was taking on water and "the pumps would not heave the water" (*Florida Times-Union*, January 5, 1897:6). Murphy was informed the pump was blocked, and the suction gone. The captain explained that when the coal in the engine room became inundated, coal dust was washed into the pumps thereby causing the blockage. He went on to state that he believed the engineer's neglect and not sabotage caused the pump's failure (*Florida Times-Union*, January 5, 1897:6). For the first time, it was learned the captain ordered wood, oil, and alcohol into the furnaces to provide enough steam to reach Mosquito Inlet only eighteen miles to the west (*Florida Times-*

Union, January 5, 1897:6). If true, the addition of these fuels would have certainly increased the temperature in the boiler and furnace to the point that when the ship sank, the seawater could have caused an explosion. Captain Murphy also stated the ship carried enough steam to travel three miles before the ship's fires were doused (*Florida Times-Union*, January 5, 1897:6). If *Commodore* steamed three miles to the west, she would have been within fifteen miles of Mosquito Inlet – within range of where the wreckage lies today.

The captain's accounting of the wrecking event itself is a vital clue to the way the ship sank. The final important detail related to the *Commodore*'s wrecking event comes from the captain's statement: "I let go the anchor to get her head to the sea and told the men to quietly proceed to man the boats (*Florida Times-Union*, January 5, 1897:6)." Dropping the anchor to deploy the ship's boats is a common practice when abandoning ship, and it should have brought the ship's bow to windward. The archaeological evidence, however, shows the aft portion of the wreck running from the southeast to the northwest. Perhaps the vessel pivoted when sinking to the bottom, but there is little explanation for how the vessel came to lie on the bottom if anchored with head to wind. The bower anchor may still be present on the site in its deployed formation, and it is for this reason as well as Captain Murphy's statements that archaeologists are still looking for the anchor. Reports from the Volusia County Reef Team place the bower anchor in an incongruous position to the northwest of the wreckage. Captain Murphy's recollection also describes who was in which boat at the time the *Commodore* sank. (See Table 1) Unfortunately, Captain Murphy only accounted for twenty-seven of the twenty-nine men

aboard *Commodore* the night she sank. Of the twenty-seven listed , First Mate Graines, Tom Smith, the unnamed stoker, an engineer, and three men in Boat 3 were all lost. All eight men killed at the time of the ship's sinking were Americans.

Table 1
Placement of Men in *Commodore*'s Boats at Time of Sinking

Boat 1	Boat 2	Boat 3	Captain's Yawl	Raft	*Commodore*
Julio Rodriguez Baz (commanding)	Paul F. Rojo (commanding)	First Mate Graines†‡ (commanding)	Capt. Murphy (commanding)	Chief Engineer‡†	First Mate Graines†‡
Manuel Gonzalez	Ricardo Delgado	Tom Smith†‡	Montgomery (Steward)†	Stoker†‡	Three unnamed men†‡
Luis Sierra Madros	Felix de los Rios	Stoker†‡	Billy Higgins (Oiler)	Tom Smith†‡	
Jesus Alvarez	Emelio Marquez	Chief Engineer†‡	Stephen Crane (AB, author)		
	Vetura Linares	Three unnamed men†‡			
	Romeo Hernandez				
	J. Francisco Blanco				
	Jose Hernandez				
	T. Becenor				
	Lino Soldera				
	Gabriel Martin				
	Santiago Diaz				
Total: 4	Total: 12	Total: 7	Total: 4	Total: 3	Total: 4

† Denotes the eight men known to have died as a result of the sinking.
‡ Denotes the seven men who were in Boat 3 at the time it was smashed. These seven returned to *Commodore* and either boarded the raft and died or were lost when the tug slipped beneath the waves.
(Based on data from the *Florida Times-Union*, January 5, 1897:6)

The Theories

The documentary record leaves a few theories that need exploration if the reason for *Commodore*'s loss is to be determined. There are allegations of treason, deliberate scuttling, overloading, seams bursting, blocked pumps, and misunderstood valves. The only two informants following the tugboat's loss who refused to speculate were Crane and Captain Murphy. Archaeologists, historians, and divers at *Commodore*'s wreck site have sought answers to the alternate hypotheses for over two decades. At this time, there is no way to prove or disprove any of the newspapers' theories without excavating the site, an option considered unsuitable at this time within the current research design. Although it is impossible to determine from the documentary record what caused *Commodore* to sink on January 2, 1897, it is possible to partially recreate the ship's final moments from the wreckage strewn on the seafloor. First, however, the site had to be found. The unlikely teaming of an English professor from Jacksonville University and a diver from Daytona Beach led to the discovery of the site believed to be the sunken *Commodore*.

CHAPTER V:
"SAVE FOR THE TOPS, WHICH WERE OF FOAMING WHITE:"
THE SITE

Discovering *Commodore*

Newspaper accounts at the time of *Commodore*'s loss claim the ship sank "twenty fathoms below the surface, about eighteen miles north of Mosquito Inlet" (*Florida Times-Union*, January 3, 1897). The ship's loss in 120 feet of water more than eighteen miles from shore made locating the lost *Commodore* difficult at best. How then was the vessel found? If *Commodore* suffered the same fate as other "rediscovered wrecks" what salvage work has occurred at the site? This chapter addresses the discovery, state of the site, and salvage attempts made at the site believed to be the lost *Commodore*.

Anecdotal evidence, suggests that the wreck site known to archaeologists and PILHA as the alleged SS *Commodore* has been dived since the 1950s. Local fishing charter captains and divers well into their eighties maintain that they dived the wreck known as the "steamship" for three decades before Don Serbousek "discovered" the site (Don Hampton, Jan Neal, John Lane, Denise Morrisette, personal communications May 2002-June 2004). Fortunately, few artifacts were removed from the wreck site during these early years. Apparently, divers believed the site to be of little interest beyond spear fishing.

Don Serbousek's interest in the *Commodore* wreck site began in the early 1980s when Jacksonville University English professor Peggy Friedman contacted him about searching for the ship Stephen Crane wrote about in "The Open Boat." In a 1987 interview, Serbousek mentioned that when Friedman approached him about *Commodore*,

they both believed the ship could easily be located using Crane's short story ("Found: Crane's 'Open Boat,' A short story leads to an underwater treasure." *Newsweek*, Begley & Belleville 1987:52). Friedman's interest in the vessel came from her love of diving and her career in literature. She felt Crane's short story could be used in conjunction with the historical record to locate the vessel. At the time Friedman approached Serbousek he was already diving a wreck that had yielded numerous bullets, rifles, and a pulley with the date 1885 stamped into it (Begley & Belleville 1987:52). Both believed Serbousek had located the lost *Commodore* (Begley & Belleville 1987:52). Serbousek's dives on the site began in the early 1980s. Unfortunately, Serbousek's dive logs for the *Commodore* site do not begin until 1985. By then, he had begun mapping the site and recovering artifacts (See Figure 8). When asked about the extent of the site in the 1980s, he said there was more machinery extant as well as an anchor to the northwest (Serbousek personal communication May 2003). Serbousek told reporters that the most dangerous aspects of the work were sharks and the great depth of the wreck (Begley & Belleville 1987:52)[7]. Of particular interest to later archaeologists is the article's description of Serbousek's methods: "divers searched 10-foot squares laid out in a grid, using small rakes and the heels of their hands to find artifacts by 'fanning' the sand" (Begley & Belleville 1987:52).

[7] The site lies in 70-80 feet of water dependent on tide, time of year, and wave action.

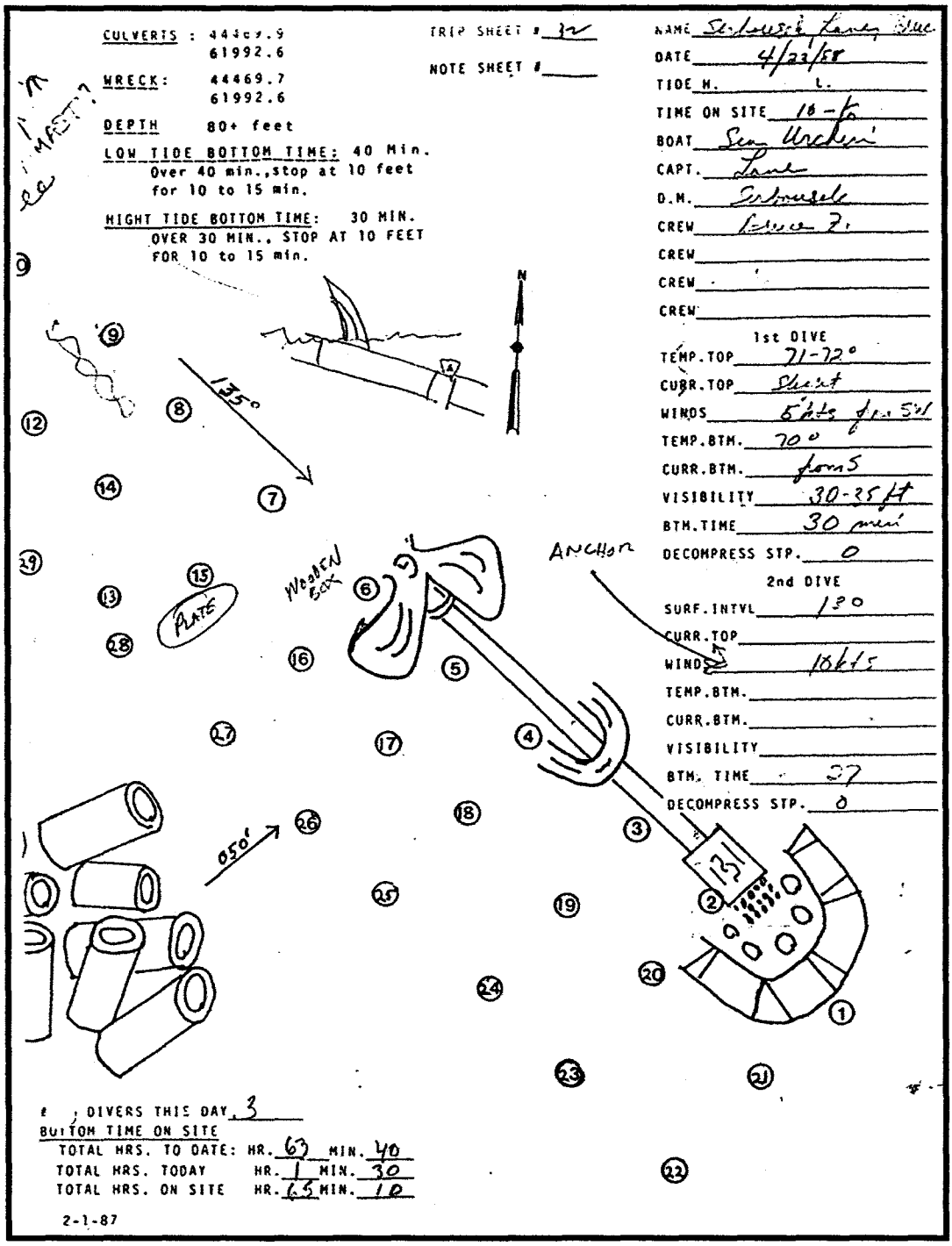

Figure 7: The map above is Serbousek's site plan for *Commodore*. The numbered circles indicate steel rebar stakes Serbousek placed on the site to provenience artifacts. The change from this map to the archaeological site plan has dramatically altered PILHA's understanding of the site and its remains. (Image courtesy PILHA)

An avocational archaeologist and diver, Serbousek wanted to map the artifact remains as carefully as possible. To accomplish his goal Serbousek and his divers placed upwards of 30–eight-foot long pieces of steel rebar on the site. The stakes were driven into the soft shell hash bottom and then labeled with a number (see Figure 8). Every artifact recovered from the wreck site was then tagged with the stake number it was near. The map Serbousek generated was then marked with the day's finds near the appropriate rebar number. Serbousek's method left him with copious pages of dive logs and marked rebar positions showing where artifacts were located. His desire to accurately record artifact provenience may also have had the unwitting effect of helping galvanically protect the wreck site for another ten years. The rebar's continued corrosion may have acted as a passive electrolytic couple for the engine machinery at the site. Serbousek worked to showcase the wreck site and protect it from the local sport divers. In addition to the artifacts Serbousek acquired from the *Commodore* site (which he loaned to PILHA in 1996 for conservation and curation), he had very clearly defined reasons for wanting to dive the *Commodore*:

> Why we work the *Commodore*...My interest is
> 1st I feel it should be of very great interest to all Volusia and the outside world.
> 2nd We should find some very interesting artifacts around it.
> 3rd Possibly we can prove if its steam bilge pumps were sabotaged or not.
> 4th We can help [illegible] write the end to the *Commodore* sinking and to Stephen Crane's "Open Boat."
> 5th It's a real challenge to dive and salvage the remains of the *Commodore* at that depth and will be a[n] ongoing project for years.
> (Norman Serbousek, Abstract "Discoveries of the Ship I call the *Commodore*," undated, circa 1987)

PILHA staff and several archaeologists agree with Serbousek's assertion that the site believed to be *Commodore* is of significance and interest to Volusia County, the state of Florida, and the nation. The vessel played an important role during a critical time in Florida, American, Spanish, and Cuban history. The responsibility of the keepers at the Mosquito/Ponce Inlet Lighthouse to rescue *Commodore*'s crew is linked with PILHA's present day responsibility for the wrecked *Commodore* in the form of the site's title held by PILHA.

The wreck site's artifact assemblage and the material previously recovered are of value for material cultural study. Artifacts recovered by Serbousek's team range from a toilet base to hundreds of lead bullets, several concreted rifles, framing components, rubber gasketing material, and what may be the remains of an electrical relay. The total number of artifacts recovered is impossible to know as Serbousek gave away artifacts to interested parties as late as 1997. All of the known extant artifacts date to the appropriate time range for the wreck site. Those artifacts in the possession of PILHA are in archival or wet storage, or on display in an exhibit at PILHA that presents the *Commodore*'s importance and her conservation and preservation by PILHA.

Serbousek's third point, about the bilge pumps, is intriguing. Unfortunately, the vessel remains have been battered heavily by passing hurricanes, storms, and present day looters. At this time, the pumps have not been found in the wreckage, and the resources do not exist to support site excavation.

Serbousek's desire to finish telling the untold story of *Commodore*'s wrecking is one that PILHA and archaeologists also find important. PILHA is finding ways to help

disseminate the information from archaeological work at the *Commodore*. The importance of the site has already led to two exhibits at PILHA, several conference papers by the author, a high school outreach program with the Cambrian Foundation, assistance from Lighthouse Archaeological Maritime Program (LAMP), and numerous public presentations on the archaeology and history of the wreck site and SS *Commodore*.

The fifth reason Serbousek worked the *Commodore* wreck site parallels the interest of the Cambrian Foundation and the Volusia County Reef Team. The site to both organizations is a logistical challenge and a place to test their abilities and equipment. The Cambrian Foundation used the site as a training exercise for deeper and more technical projects. Several of the divers used the site to test new rebreathers and their ability to multitask at depth (See Figure 8). PILHA and archaeologists see the site as a valuable *in situ* resource that needs to undergo no further recovery efforts until proper conservation and curation facilities can be obtained.

The "salvage" of the *Commodore* site is precisely what should be avoided at all costs. Previous salvage at the site by Serbousek and his team has left it unstable and damaged many artifacts that could have helped archaeologists better understand the wreck site. The salvage mentality generated during the early years of Serbousek's work at the site recently resurfaced when an "endangered" artifact was recovered by a local Reef Team member without any archaeological provenience. The intact brass and glass porthole in question was lying exposed on the seabed. A member believed he was recovering a "one of a kind" artifact. PILHA already had a porthole from the site, and in January 2005, a third example of a porthole was given to PILHA after sitting for

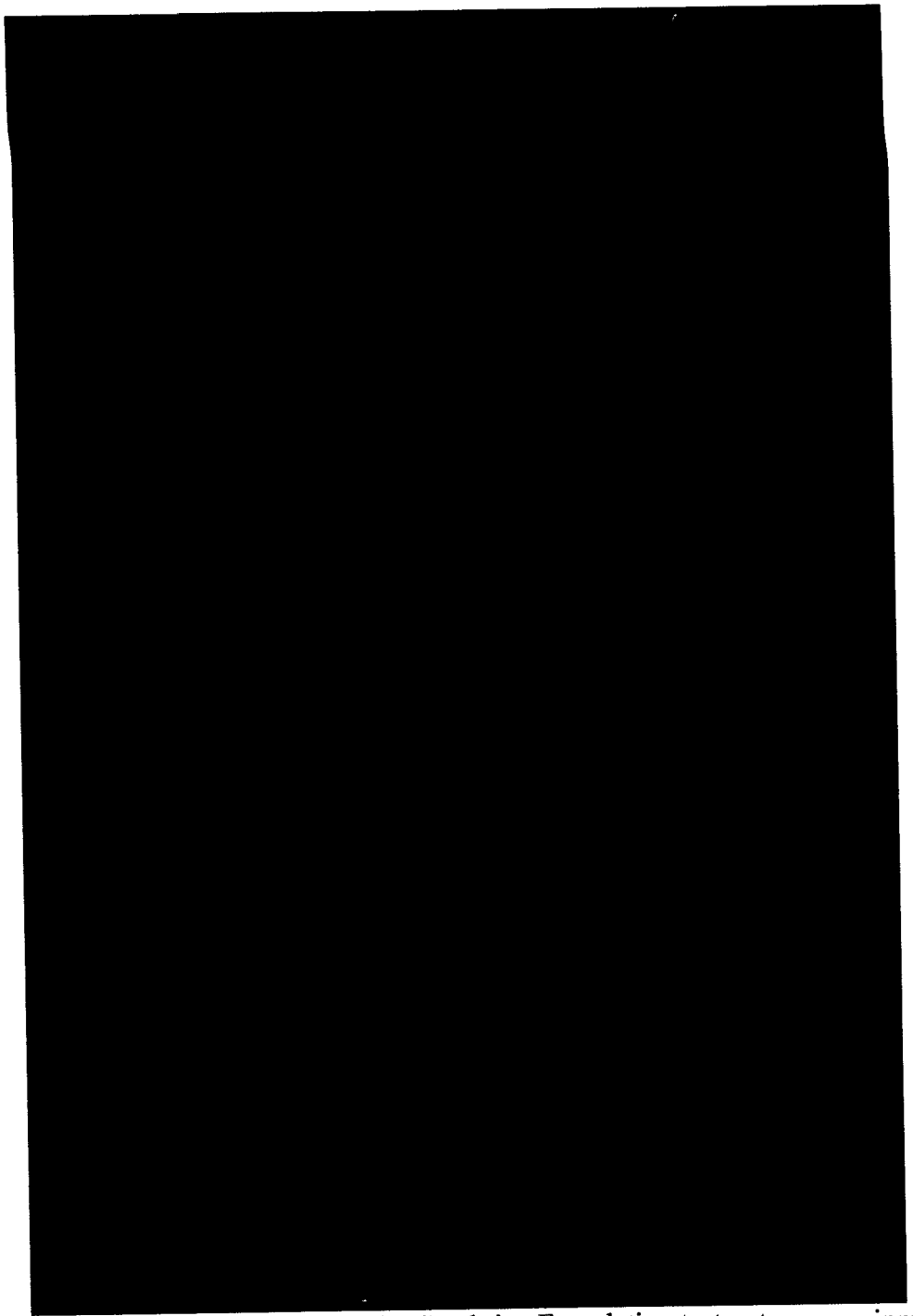

Figure 8: Two research divers from the Cambrian Foundation test out new equipment while mapping the windlass during the 2002 field season. The windlass is probably associated with the donkey boiler located near the engine. (Image courtesy Rick Allen, Nautilus Productions 2002)

twenty-five years under a diver's bedroom dresser. The Volusia County Reef Team is under loose PILHA and archaeological supervision, and is tasked with measuring the angle of the engine remains above the sand and monitoring damage to the site. Unfortunately, past procedures have left their mark, and members periodically recover artifacts that they feel may disappear if left behind. The regrettable lack of provenience and damage to artifacts from both recovery methods and lack of conservation has caused a rift between the joint titleholders of the site: PILHA and Serbousek.

Serbousek's discovery of the wreck site is a contentious issue in Ponce Inlet, Florida. Many local divers feel they deserve credit for the discovery. Serbousek is the person who identified and began actively "protecting" the wreck site. Serbousek and Friedman's partnership resulted in the information later used by archaeologists and PILHA staff to identify the site, and by the Middle District Court to award ownership in 1998. Originally interested in pursuing an admiralty claim for the wreck site, Serbousek hired lawyers to have the necessary paperwork completed during the early 1990s. Unknown to Serbousek until years later, the paperwork was never completed or submitted. The wreck site remained accessible to any diver interested in diving and salvaging artifacts, which is how several of the artifacts in PILHA's care were recovered. Serbousek and PILHA jointly filed for custody of the wreck site in 1997. PILHA and Serbousek believed that joint ownership would speed the court proceedings if Serbousek did indeed hold a previous admiralty arrest. The 1998 award of joint title by the Middle District Federal Court in Orlando to PILHA and Serbousek resolved Serbousek's fears of unwanted salvage.

The site's salvage largely ceased during the late nineties when Serbousek stopped diving because of medical complications and age. The Volusia County Reef Team continued to dive the site for photographic and fish monitoring purposes. Despite the Reef Team's desire to pursue archaeological work at the site, PILHA was not prepared to undertake a field season until the summer of 2002.

While PILHA was gathering resources for fieldwork on *Commodore*, the Cambrian Foundation offered its services. The Cambrian Foundation is a 501(c)3 non-profit whose mission is to further understanding of the aquatic realm. The Foundation's role in the dive community has helped to foster stronger relationships between technical divers, archaeologists, and scientists on state, federal, and international levels. The donation of the Foundation's talents, time, and logistical support have helped NOAA at the USS *Monitor* National Marine Sanctuary and assisted environmental conservationists, hydrologists, and explorers in Mexico's Yucatan Peninsula. Cambrian's offer of assistance to PILHA and the Volusia County Reef Team came with years of diving experience, and most importantly, no price tag. The Foundation's offer to PILHA eventually resulted in the 2002 field season. When Cambrian and PILHA first began putting together a 2002 field season, neither organization had ever placed a diver on the wreck site. Preliminary planning relied heavily on anecdotal information, Serbousek's initial field maps, and guesswork. Both nonprofits also knew that they needed the services of an archaeologist to develop a research design and oversee the project.

Location

The remains of the vessel believed to be SS *Commodore* lie in 70-82 feet seawater, approximately twelve miles from Ponce Inlet, Florida. The site, just as Stephen Crane wrote in the "Open Boat," affords a view of the lighthouse that makes it "look precisely like the point of a pin." The wreck lies on a mixture of sand and shell hash with the shell predominant. In some places shell hash depth exceeds 4-6 inches with sand beneath. The site is located near an artificial culvert reef that was mistakenly dropped in the early 1990's, but shows minimal marine life colonization. The site is home to a large game fish population, however, which brings in tourist fishing boats almost daily. Visibility ranges from less than two feet to over one hundred feet depending upon time of year. A deep-water upwelling event from September 2003 through November 2004 from the Gulf Stream dropped visibility on the site to less than 5 feet with a red algal bloom and temperatures below 60 degrees Fahrenheit .

The site stretches more than 110 feet in length and approximately 50 feet at its widest point. The wreck lies in a southeast to northwest orientation with the bow to the southeast as determined from GPS coordinates taken from bow and stern. The site's orientation implies the vessel was running to the southeast towards Cuba when it sank.

Although minimal current is typically observed on site, the wreck's shallow depth paired with a strong storm usually results in storm surge on the bottom. Current and wave actions clearly have an effect as wave ripples are routinely noted in the shell hash. It is unknown at this time what effect the active 2004 hurricane season had on the site.

Most wreckage lies to starboard (the southwest) with a debris field stretching aft of the stern (northwest). Few remains have been noted on the port side (northeast) of the engine and propeller shaft. On the starboard side a small boiler, fire tubes, ammunition boxes, and an anchor have been located (See Figure 9). To port are several small bullets and steam fittings. The minimal coverage afforded the site by the shell hash yields easily to hand fanning and has revealed much wreckage 2-3 inches beneath the overburden. The debris field suggests the vessel sank stern first, rolled to her starboard side, and at some point, the bow broke and swept to the northwest (toward shore).

The site's dominant feature is the engine. Rising 10.4 feet from the bottom, the engine is a key reference for other features on the site. The propeller shaft stretches aft of the engine assembly to the four-bladed propeller; both are iron. The shaft is rapidly corroding based on three years of field data and the propeller is partially buried, but is still upright. The wooden hull associated with SS *Commodore* is rarely visible at the site, but the metal plate and machinery remain. The warm, terredo-rich waters have destroyed a large percentage of the wooden hull remains. The iron remains are in good shape at this time.

Florida's northeast coast is an active hurricane area. Long shore currents, the Gulf Stream, and a soft, sandy and shell hash seafloor typify Ponce Inlet's coastline. The shallow bathymetry and constant estuarine mixing from Ponce Inlet, result in poor visibility and current damage on the *Commodore* site. Scouring, and wave marks on the site indicate that passing waves and storms routinely make their mark on the wreckage.

Figure 9: Disarticulated wreckage *in situ*. Note the small donkey boiler that is probably associated with the windlass in Figure 8, and the disarticulated boiler fire tubes. Boiler debris from an explosion litters the site near the engine. (Image courtesy Cindy Burnham, Nautilus Productions 2002)

Salvage Work Prior to 2002

Prior to Serbousek's work at the wreck site in the 1980s and 1990s, no one had methodically investigated the wreck site. It is the understanding of PILHA and others now involved in the project that few artifacts were removed from the site prior to Serbousek. This hypothesis has been tested several times by PILHA and staff with the use of newspaper articles, interviews, and requests to Volusia County residents to report for identification any artifact they may have recovered from the site. The call for information came with a request for PILHA to be allowed to photograph and examine the artifact and then return it to its owner. The responses to these calls for information have been minimal, and discussions with dive shop owners seem to indicate the wreck site has not been looted by many local divers. Serbousek's work in the 1980s and 1990s resulted in the recovery of several hundred artifacts. The use of rebar grids on the site paired with Serbousek's memories form the bulk of the information known about artifact provenience from this time.

CHAPTER VI:
"AND ALL OF THE MEN KNEW THE COLORS OF THE SEA:"
THE ARCHAEOLOGY

The discovery of the site alleged to be the remains of *Commodore* in the mid 1980s and the subsequent salvage of the site left a single question remaining: Are these the remains of *Commodore*? Local divers, museum staff, and even the Middle District Court believe the site to be *Commodore*. To answer the question PILHA and Serbousek needed a professional archaeological survey of the site and an assessment of the artifacts. Three years of fieldwork and artifact analysis have resulted in a tested and verified site identity, and given PILHA an opportunity to educate its visitors about maritime archaeology. This chapter follows the *Commodore* Project from 2002-2004. The methodology for fieldwork is presented first, followed by the work conducted in 2002, 2003, and 2004. Finally, archaeological findings, vessel findings, and the smaller artifactual remains are discussed. The findings presented here prove the site believed to be the *Commodore* is indeed the lost SS *Commodore*.

Archaeological work at the site believed to be the Steamship *Commodore*'s remains has been underway since February 2002. A videographer and photographer assisted the archaeologist obtain a general site orientation and documentation which assisted in field planning. A preliminary site survey was made of the wreckage and one roll of photographs was shot. Work began with a field season in May 2002 resulting in a site plan, an engine mosaic, a preliminary artifact analysis, and site recommendations for both future work and conservation. In May 2003, a two-weeks were spent assessing artifacts for a baseline for conservation needs, drawings of all artifacts in PILHA's

possession, and making two reconnaissance dives at the site with archaeological personnel. Work during the summer of 2003 completed the artifact database of PILHA's *Commodore* collection. An April 2004 field expedition involved assistance from the Lighthouse Archaeological Maritime Program (LAMP) at St. Augustine Lighthouse and Museum, Inc. This one-day expedition documented the engine, propeller, and shaft in detailed field drawings and finalized archaeological site identification.

Methodology

The *Commodore* Project's methodology delineated three years of research on the site and with the artifact collection. The project methodology created was a non-disturbance survey, allowing for minimal hand fanning and no artifact recovery. The methodology also accounted for minimal information about the site's sediment layers, a team with little or no archaeological training, and the artifacts already in PILHA's care.

A February 2002 reconnaissance dive at the site guided decisions about mapping methods and baseline type. The February dive resulted in preliminary photos of the site's *in situ* remains and sediment identification. The dive raised questions about running a straight baseline over the site because of the vertical relief of the engine and propeller. With the height of the engine and propeller shaft off the bottom, it made more sense to run the baseline to the starboard side of the wreckage, but parallel to the engine assembly. The offset baseline was anchored with eight-foot long rebar and two turnbuckles to remove slack in the cable. The baseline 0'0" point began twenty feet forward of the engine remains to encompass remains visible above the sand. The baseline's 170'0"

endpoint stretched aft of the propeller and through the site's debris field. The ¼ inch steel baseline was used with a 200-foot long fiberglass construction tape graduated in feet and tenths. Cross lines were laid in and attached to the baseline in ten-foot increments with the exception of the engine grid. The cross lines were anchored beyond the visible wreckage with four-foot sections of steel rebar. Despite efforts to make all cross line lengths uniform, the disarticulated wreckage resulted in several cross lines in excess of thirty-feet in length. The engine grid was a twenty-foot grid on the baseline, and a 15.25-foot grid at the edge of the debris.

The methodology required teams of two to map each grid in plan view to scale, trilaterate major features, and then draw an elevation plan of the grid square. Once a grid was completed, the team moved to the next assigned grid taking care to not excavate the wreck or harm artifacts. Teams were supposed to draw elevation maps of major features within their grids, but the complexity of the assignment for non-archaeologists resulted in few elevation drawings. The only exception to the buddy team protocol involved the videographer who teamed with the site archaeologist.

The mapping methodology was modified to document the engine assembly's large size and intricacy. With only ten divers in the water and a single archaeologist, there was not enough time to map the engine and the site accurately. To address the problem the project videographer, Rick Allen, swam preplanned lanes over the engine assembly from all angles, while the archaeologist focused on mapping machinery such as the propeller and taking basic engine measurements (See Figure 10). This video was edited and stills removed to create a mosaic of the engine. The remainder of the site

while being archaeologically mapped was also video mosaiced over the course of the second week. The video provided a running documentary record of site activities and provided information about the site unseen in field drawings and the February photographs. The method worked well and resulted in 100 percent coverage of the site remains.

The crew's arrival on April 29, 2002 marked the start of ten days on site. Divers were divided into teams of two based on their experience level and their preferred buddies. Over the course of ten days, ten divers logged 3,375 hours mapping. At the end of the project a full site plan was complete and the site cleaned up. Divers used either semi-closed rebreathers or twin tanks with an Enriched Air Nitrox 40 (EAN40) fill.[8] Bottom times averaged 66 minutes and were completed with team decompression. Boat operations took place from the forty-two feet long *Sea Dog Diver*.

The final step in the field methodology required the *Commodore*'s remains be mapped in relation to the shoreline. To accommodate the site's distance from shore GPS coordinates were recorded at baseline endpoints marked with lift bags and used to orient the site to shore.

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[8]EAN40 or Enriched Air Nitrox 40 is a special blend of dive gas that reduces the amount of nitrogen in the diver's back gas (his/her breathing supply) from 78% to 59% and increases the oxygen content from 21% in air to 40%. The decrease in nitrogen and increase in oxygen allows a diver to stay at depth longer and decreases the risk of decompression sickness. For example, a dive on the *Commodore* using air would allow divers only 33 minutes work time. A diver using EAN40 could remain on the bottom working for over an hour provided the gas supply lasted.

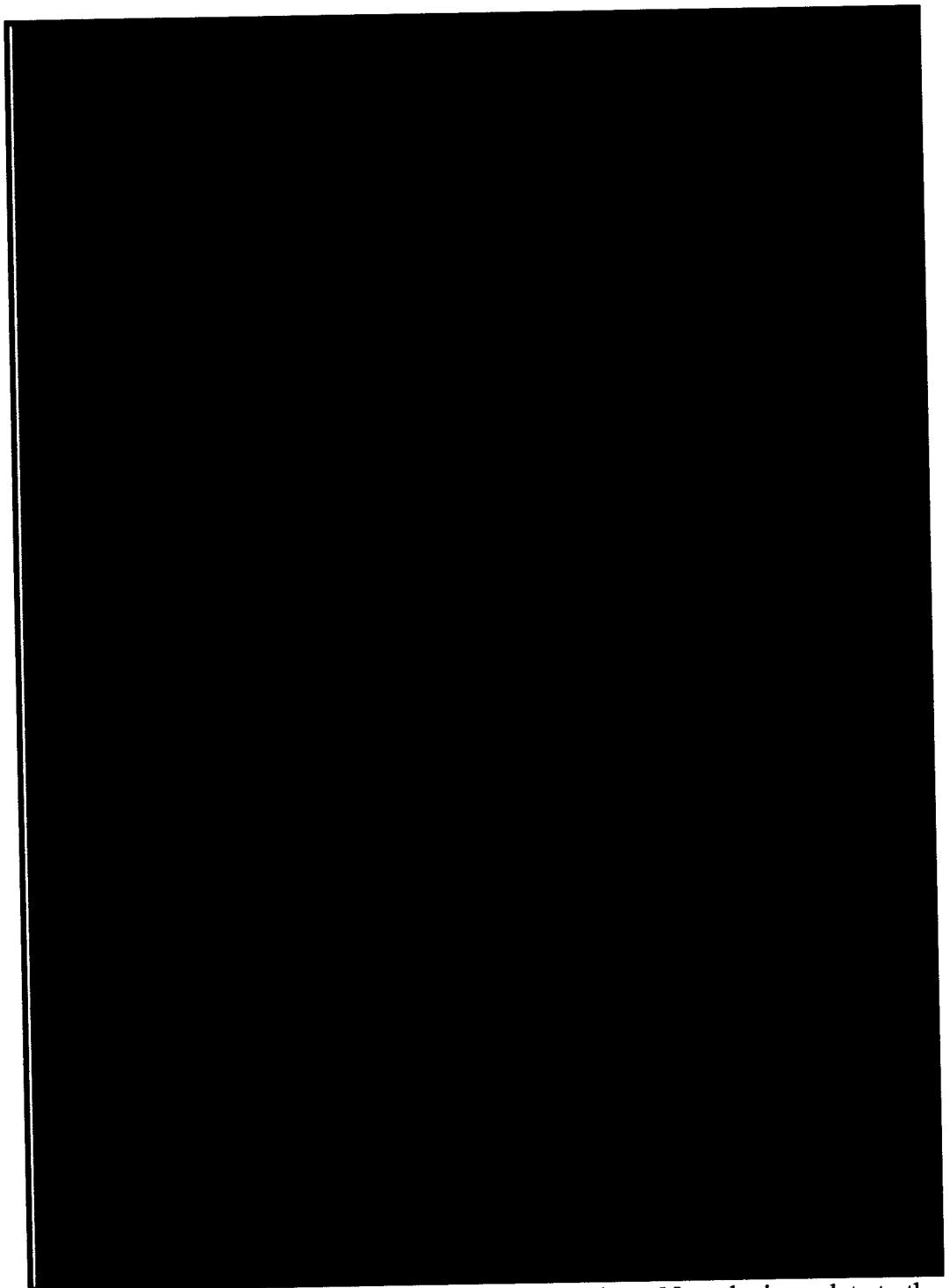

Figure 10: Plan view of the propeller, shaft, and iron plate. Note the iron plate to the bottom left and the collapsed propeller shaft to the right of the propeller. (Image courtesy Rick Allen, Nautilus Productions 2002)

Artifact Recording Methodology

The methodology incorporated the need for artifact study and mediation. PILHA maintains a large collection of artifacts from the wreck site that required conservation and documentation. Proper artifact assessment, documentation, and mediation were an integral part of the project methodology. All artifacts either in dry storage at PILHA's archives or in wet storage would be identified where possible, drawn in feet and tenths, photographed, radiographed, tagged, and inventoried. Artifact information was incorporated into PILHA's digital collections database and recommendations for conservation were given to PILHA for curation.

2002 Season

Archaeological work began April 29, 2002 when the team arrived in Ponce Inlet. The crew also needed some archaeological mapping training. A mapping class took place on April 29 off the seawall at PILHA Executive Director, Anne Caneer's house. The location was chosen for two reasons: the crew stayed at Caneer's and because of the abundance of cultural material adjacent to the seawall. The abundance of nineteenth and twentieth century bottles, coquina, and chain gave the crew an opportunity to distinguish man-made objects from natural ones in a safe, but partially submerged environment (See Figure 11). The crew was divided into teams of two. Each team had a slate, a tape, and

Figure 11: The *Commodore* Project team practiced archaeological recording off the nineteenth century Pacetti family seawall. The site shows an eighteenth century seawall, with nineteenth and twentieth century seawalls built side by side. Here team members Bob Ogoreuc and Tim Killinger work to map in a coquina block dating to the nineteenth century wall. (Photo courtesy Ponce Inlet Lighthouse Association 2002)

an assigned grid. Over the course of two hours, the teams learned to map quickly, and look for things that "didn't belong." The preliminary land training proved invaluable when the teams hit the water on April 30.

The first day at the site, April 30, 2002 resulted in site orientation dives, and the laying of the baseline. The 170-foot baseline was anchored at either end with rebar and tightened with a turnbuckle. Lift bags were used to denote either end of the baseline for surface personnel to mark with GPS. The forward endpoint and zero mark is at the engine. The aft endpoint anchoring the baseline is in the sand 170 feet away. The rebar, and cross line endpoints remain *in situ* as reference points for another field season, and galvanically protect the wreck.

The project remained a pre-disturbance survey with minimal hand fanning. No artifact recovery or excavation occurred, and only minimal disturbance of the seafloor was permitted. No dredging or airlift equipment was on site, and the project was mentioned to as few locals as possible to prevent looting on a site kept out of the public eye for decades. Another aspect of the work was a cleaning of all PILHA's concreted artifacts and tagging of those in need of radiographic analysis.

Cross lines were installed and distances, angles, and measurements recorded for all cross line endpoints. Archaeological mapping began with the forward-most grids. Following a pre-dive briefing each day the crew divided into buddy teams either returning to previously assigned grids, or moving onto new ones. The entire site was numbered within the grids beginning at the 0'0" point on the baseline with odd numbers

to starboard and even to port. These numbers served to identify work zones for each team on every dive.

The friend teams quickly learned to map their areas to scale. Divers noted unusual features like webbing, rifle casings, or packed cartons on their slates and transferred the information to the main site plan each afternoon. At the close of the first five days of mapping, 30 percent of the site had been mapped, excluding the engine section.

During the second week, the project videographer and another diver arrived as several teammates left. The project videographer spent his time "mowing the lawn" as he moved over the site creating a video mosaic. The video mosaic provided critical detail of the engine allowing the completion of recording by May 10, the project's end date (See Figure 12). The video mosaics also provided information about the site missed by divers or overlooked because of time constraints.

By the second week, the teams worked faster and more accurately at mapping. Hand fanning in the port side grids between the propeller shaft and baseline uncovered boilerplate and other large features continuing beneath the shell hash. Fanning revealed a fair amount of wreckage such as bullets and iron plate within 3 inches of the sediment's surface.

The most troubling incident of the field season occurred during the second week. During the night while the field crew was ashore, recreational divers curious about the

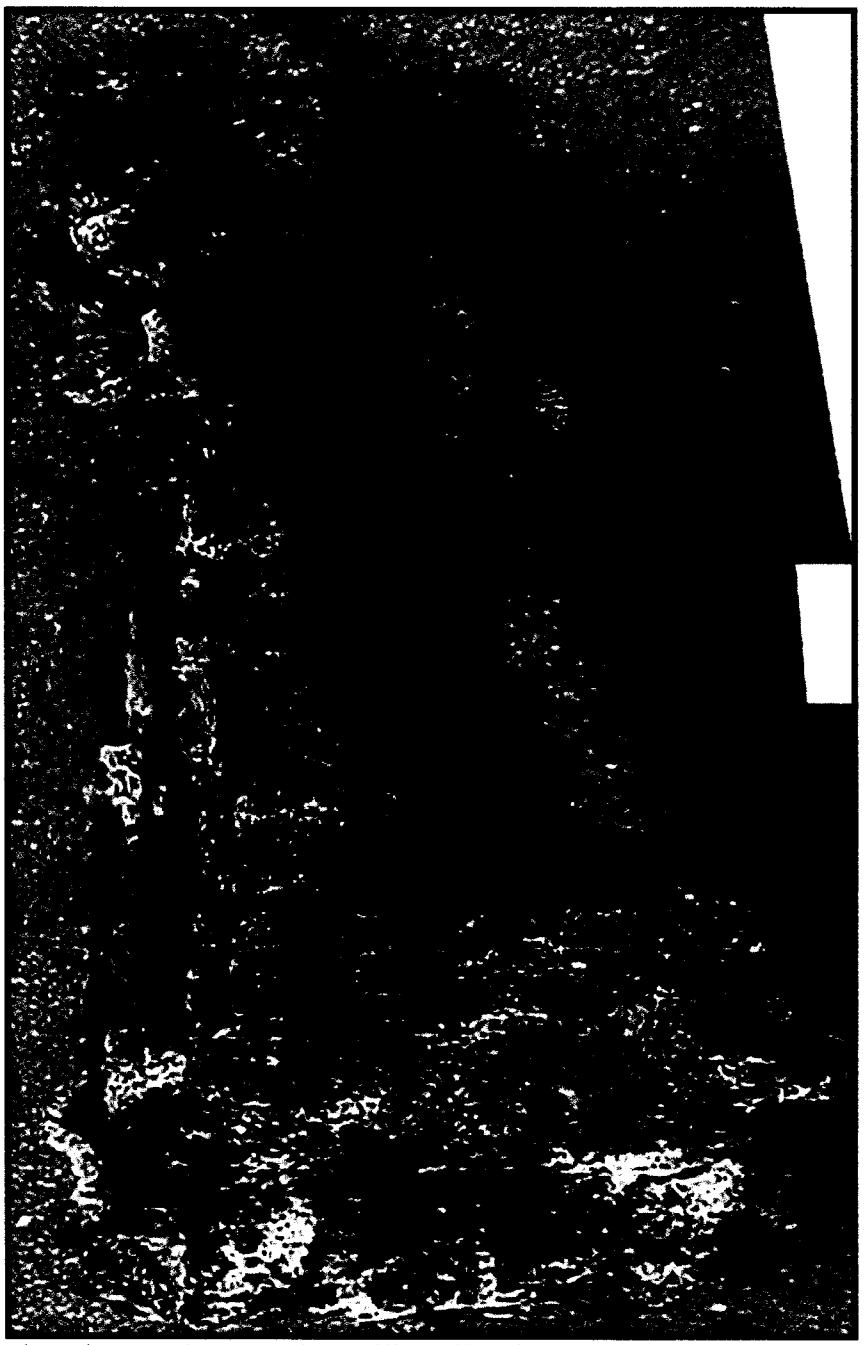

Figure 12: Plan view engine mosaic. Stills pulled from the video mosaic swum by videographer Rick Allen were combined to create this image. Note the condenser and piston mounts at the top of engine. This image was scaled and used to complete the site plan in conjunction with diagnostic measurements. The engine is lying to starboard, and the metal is rubbed smooth where the engine is rotating on the seafloor. (Image courtesy Rick Allen, Nautilus Productions and author 2002)

activity dived the site. The damage caused by recreational divers pounding concretion away, and blowing holes in the sand with scooters is irreparable.

While no excavation or artifact recovery occurred in the 2002 field season, a great deal was learned. The final day at the wreck site the crew recovered all cross lines, the baseline, tapes, and other modern site debris. The rebar was *in situ* as late as May 2004 when last observed and remains a valuable tool for relocating cross-line and baseline endpoints for site analysis and mapping.

The 2002 fieldwork resulted in a detailed site plan for the wreckage believed to be that of SS *Commodore* (See Figure 13). The detailed archaeological survey found no evidence that the site is other than a late nineteenth century site, and trained a series of technical divers in underwater archaeological methods.

2003 Season

The 2003 season focused on material cultural study delineated in the Project methodology. A requirement in the title granted to PILHA and Serbousek by the Middle District Court in Orlando for the alleged *Commodore* wreck site stipulated PILHA conserve and preserve all recovered artifacts including those already recovered and those still on the site. The 2003 work sought to organize, number, photograph, document, stabilize, and assess the artifacts in PILHA's care. During the 2002 season a quick assessment of all artifacts currently in PILHA's possession showed problems with the collection. Two site dives were also planned for 2003 to assess the site's preservation and the amount of slump observed where the engine meets the propeller shaft; a problem first noted when 2002 photographs and video were compared with images taken ten years prior to the 2002 field season.

The following problems guided the 2003 work. First, the artifacts housed in wet storage were galvanically coupled with one another and their tags via stainless steel wire. Stainless steel wire was wrapped around each artifact and connected to the numbered tags. The rifle concretions, pipe concretions, and what is believed to be an electrical relay were degrading at an accelerated rate. The problem was rectified immediately, but the tags associated with many artifacts were missing and needed replacement (See Figure 14).

The artifacts in wet storage, those in the archives, and those on display were disintegrating. Visitors and staff routinely reported new damage to artifacts on display

Figure 14: Ship's frame, concreted rifle, and assorted ferrous concretions in wet storage at Battel Laboratory. Serbousek recovered these objects in the 1990s and have been in wet storage ever since. Many of the tags were missing prior to the 2003 assessment project. (Image courtesy Ponce Inlet Lighthouse Association 2002)

or in storage. At one point in 2003, a shellacked rifle fell apart inside a display case as a visitor was walking past. Artifact degradation needed resolution before further site work could be conducted.

The artifacts themselves lacked documentation when the 2003 season began. Few photographs, no drawings, and a minimal paper trail provided provenience or provenance information. Worse, many of the artifacts had never been identified making conservation impossible. Before conservation could begin or the artifacts could be displayed, documentation had to be resolved.

PILHA needed a conservation plan paired with an assessment process that could be handled by PILHA. A great deal of time was spent on this aspect of the process during the 2003 season. The artifacts in PILHA's collections had not been professionally assessed either at the time of their recovery from the *Commodore* site or since. In fact, no record existed showing how the artifacts had looked following their recovery or during the intervening decade.

When *Commodore* artifacts were brought to PILHA in 1996, they were delivered in cardboard boxes, empty paint cans, and Tupperware containers. In the intervening six years, the artifacts had never been studied by museum staff or moved to better storage. At the time of the 2002 field season, then curator Bud Solano was advised to begin moving all artifacts into an acid free environment. Curator Solano removed approximately half of the collection to museum quality containers prior to the 2003 documentation project.

Museum facilities at Ponce Inlet Lighthouse are less than ideal for stabilizing artifacts from a marine environment. The museum operates one of the few remaining complete light stations in the country. The 1887 outbuildings and major facilities originally associated with the tower are still on the grounds and used for exhibit spaces. The Principal Keeper's House has been PILHA's Museum of the Sea for almost twenty-five years. The house, built of brick with interior walls made of horsehair plaster laid directly on the brick, is highly susceptible to humidity and temperature changes. Adding to the problem are the 117-year-old windows, floors, and walls. Although the structure contains an HVAC system, the *Commodore* artifacts on display in the museum were degrading rapidly. The environmental conditions were being exacerbated by three things: first, the artifacts were displayed with brass hooks and nails; second, the artifacts underwent dramatic ultraviolet and heat fluctuations because of the case's proximity to a window; and third, some of the displayed artifacts were never conserved. The unconserved artifacts had been shellacked to demonstrate to visitors what "treasure" looked like before it was cleaned. An assessment of the artifacts in the display revealed the need to relocate most of them to a more stable environment while leaving them on display. Those that had not been conserved were removed from exhibit in 2003 and documented thoroughly (with the exception of the disintegrating rifle mentioned above) (See Figure 15).

Work in 2003 focused on resolving the problems associated with the artifacts already in PILHA's care. Archaeological staff completed artifact documentation photographs, scaled drawings, and artifact locations and assessments. During the first

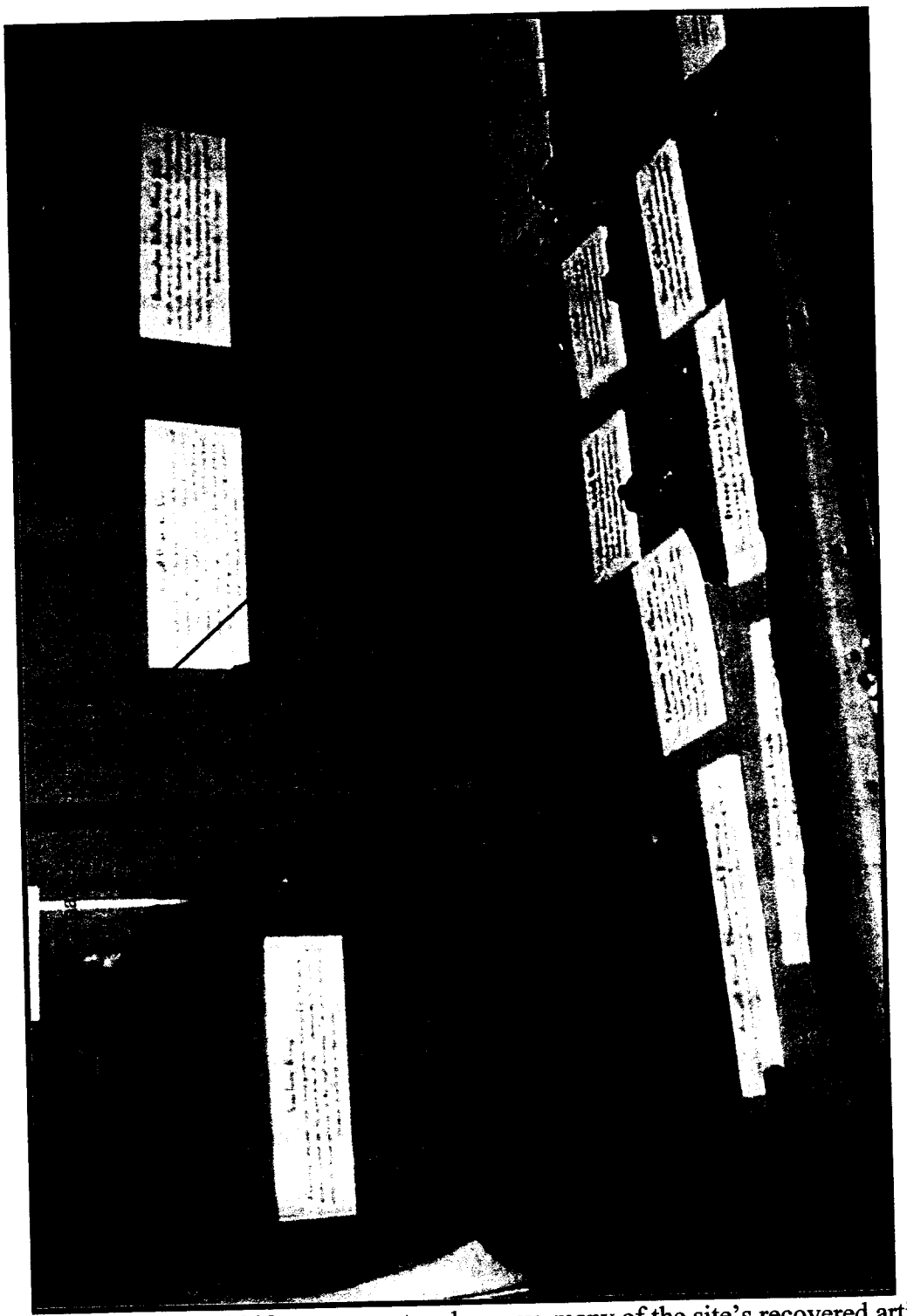

Figure 15: Prior to the 2003 assessment and survey, many of the site's recovered artifacts were displayed on acidic burlap without conservation or acid barriers. Note the shellacked rifle, anchor, and ring. (Author 2003)

week, approximately half of the collection in wet and archival storage was drawn, measured, labeled, photographed, stored appropriately, and its location noted. The second week project staff completed documentation of the wet storage artifacts and the remainder of the artifacts in archival storage.

Work focused primarily on identifying artifacts within concretions that should receive immediate conservation for preservation or display purposes. Degradation noted in 2002 had slowed dramatically in the intervening year. The removal of the stainless steel galvanic couple substantially slowed the artifact deterioration. Radiographs made by the Volusia County Sheriffs Bomb Squad in June 2002 proved several hypotheses true regarding concreted objects. The electrical relay, arguably the most complex artifact to conserve and document was radiographed at the same time that several rifles were x-rayed (See Figures 16, 17). These images have yielded better information about the internal workings of the Remington .43-caliber. For speed and accuracy the field crew first photographed each concretion or artifact taking care to record important features that would aid in tracking or identification in the future. These photographs were later downloaded to PILHA's digital archive for future use. The artifact or concretion was then drawn to scale, with the diagnostic surface being the one drawn. If an artifact presented several diagnostic surfaces, they were all drawn until a documentary record existed for the artifact. In the case of the electrical relay, for example, four views of the artifact were sketched in the hopes of preserving the piece when it is completely disassembled for conservation. Once the artifacts were photographed and drawn, the tag already included in the photo and drawing was attached to the artifact. The tag was made

Figure 16: Volusia County Sheriffs Office Bomb Squad technicians prepare to radiograph the electrical relay. Because of the artifact's complex construction information about its interior interested archaeologists and conservators. (Image Courtesy Ponce Inlet Lighthouse Association 2002)

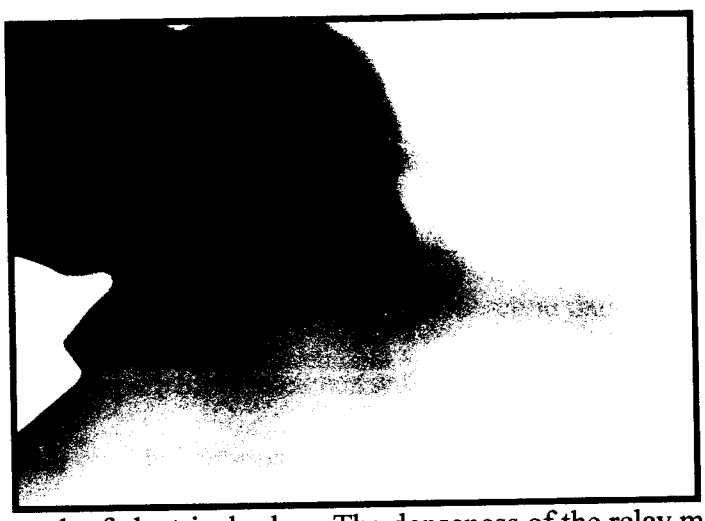

Figure 17: Radiograph of electrical relay. The denseness of the relay makes it impossible to view the inside, but a sleeve can be seen to the right where the shaft reenters the relay. Images like this will prove beneficial when conservation begins. (Image courtesy Ponce Inlet Lighthouse Association 2002)

of mylar and contained the new accession number for the collection, artifact, and date. Both the field logs and artifact database contain the artifact numbers so artifacts can be tracked in the future. These tags are still attached to the concretions in wet storage and the artifacts in curatorial storage. The two-week project resulted in 226 artifacts being assessed, 111 pages of field drawings and 254 individual drawings.

The research design called for one or two days of dives on the site believed to be the *Commodore*. The goal of the dives was to ascertain the state of site preservation by documenting major changes to the site through measured drawings, visual survey, locating the missing bower anchor, and measuring the height of the engine's reduction gears from the sand and comparing the measurement to the previous year's data. Survey to the aft of the engine and along the western edge of the debris field was dedicated to finding the anchor noted by Morrisette, Jan Neal, John Lane, and Don Serbousek over the years. Unfortunately, none of the divers relocated the bower anchor. The weather, fickle as always in May, cooperated for one day of dive operations allowing the author, Matthew Muldorf, and former Volusia County Reef Team diver Denise Morrisette to survey the site over the course of two dives.

The archaeologists noted further boilerplate concretion damage where fresh rust blooms were starting. Comparison of sketches with the 2002 video also showed damage that was less than a year old. Indications of looting were also present on the site. Aft of the steam engine a square hole approximately 3 ½ feet on a side and 3 feet deep had been dug. Although the site is frequently used by fish for nests, the hole was clearly man made. The divers also used reels forward of the engine to search again for artifacts or

hull debris where the bow should be. Surveys in 2002 failed to discover any wreckage forward of the engine, but in 2003 a single piece of cuprous pipe was found 25 feet forward of the engine and was left *in situ* indicating the presence perhaps of ship's structure previously unrecorded. The only recovery of the expedition was the removal of monofilament line left on the site by sport fishers.

The 2003 fieldwork ended in May, but further work on the site and with the artifacts over the summer by the author corroborated an important hypothesis. Project personnel believed local recreational divers looted the *Commodore* site in May 2002. During the winter of 2002-2003, a noted deep-water diver and author contacted project staff to obtain the positioning numbers for the *Commodore* site and requested photographs for use in a new book. When denied the photos and GPS coordinates, the individual advised PILHA and project staff that the numbers were in his possession and would be published with whatever photos he took. Notified by PILHA and archaeological staff that he would be liable for damage caused by publishing the site's latitude and longitude coordinates, and be charged with trespassing, the diver backed off the publication. Unfortunately, it was clear that the site coordinates were in general circulation after twenty years of secrecy. PILHA and project staff feared evidence of looting would be discovered during their next dive in the spring of 2003. Neither PILHA nor project staff were wrong. Beginning in May 2003 and continuing through September, man-made holes were found on the site by archaeologists and Reef Team members alike. It is unknown what artifacts may have been removed from the site. This unfortunate consequence of archaeological enquiry on a site hidden in plain view for

decades is redefining how PILHA and archaeological staff educate the public and local dive shops about the site. Notably, the local dive shop owners are actively working with PILHA to protect the site and are stakeholders in conserving the site.

Despite a successful project in 2003 and copious documentation of the artifacts, little fieldwork at the site was accomplished. The 2003 project gave PILHA a much needed conservation baseline concerning the artifacts within its care. All the artifacts loaned or donated to PILHA since 1996 had been assessed, drawn, photographed, and assigned an accession number. Each artifact had been carefully studied, and the assessment was given to PILHA to guide future conservation efforts. Dives at the wreck site resulted in the knowledge that the site's coordinates were clearly known within the maritime community.

2004 Season

With the close of 2003, PILHA and project staff believed two major goals needed to be met in 2004: engine mapping for site identification and conservation protocols. If possible, PILHA and project staff wanted to begin conservation of artifacts in 2004. The question of the site's identity had not been resolved; staff believed that if the engine could be matched to the ship's *Registry* specifications a good case could be made to identify the site as *Commodore* (See Figure 19). With those goals in mind, a 2004 proposal was made to PILHA and a research design crafted.

In 2004, one day was allotted to record the vessel's propulsion system. In April, three archaeologists from LAMP dived the *Commodore* site and focused on obtaining

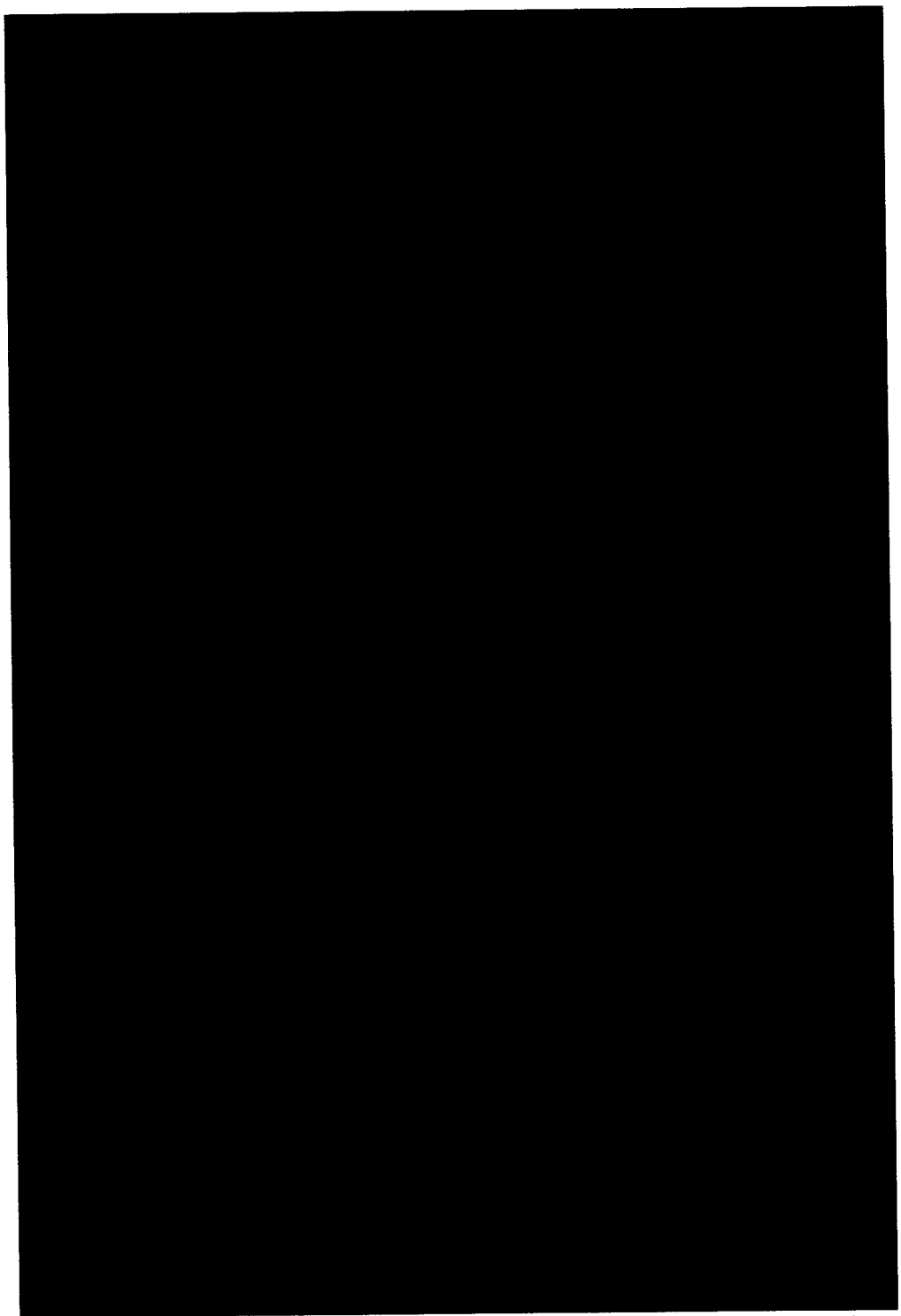

Figure 18: Looking aft to the engine. Note the engine's sideways orientation. The piston and condenser mounts lie to starboard. Note the angle the engine is leaning at on the sand. (Image courtesy Rick Allen, Nautilus Productions 2002)

detailed measured drawings of the engine, the propeller shaft, and the propeller. The three areas were drawn in detail that was impossible on prior expeditions to the site because of bottom time limitations. The outcome of the one-day dive assisted in confirming the identity of the site.

John W. Morris, III, executive director of LAMP and the engine expert on the team, was responsible for mapping the engine in detail. Previous measurements of the engine had relied on a combination of scaled sketches and video mosaics. Morris's measurements and drawing suggested a 36-inch stroke and a 24 to 27-inch bore. These measurements match closely with the *American Shipmaster's Record Association 1884 Registry*'s specifications of a 26-inch bore and a 30-inch stroke for *Commodore*'s engine.

Robin Moore, LAMP archaeologist and conservator, recorded the elevation and slump of the shaft, while drafting a detailed and accurate drawing of the shaft. Previous drawings of the shaft had been cursory sketches with minimal measurement. Moore's drawing focused heavily on the thrust bearings, stuffing box, and shaft. Since the 2002 field season the engine is under scrutiny by divers visiting the site. The angle between the sand and the engine continues to increase, and divers are asked to measure the "slump" for clues to the site's continuing degradation (See Figure 19). Moore's profile shaft view in conjunction with previous sketches allowed a better comparison point to study engine slumping.

The dive revealed a great deal of damage to the site apparently caused by anchoring activity. The site serves as an excellent habitat for game fish and a "sure spot" for the local charter fishermen. Anchoring activity between 2003 and 2004 damaged

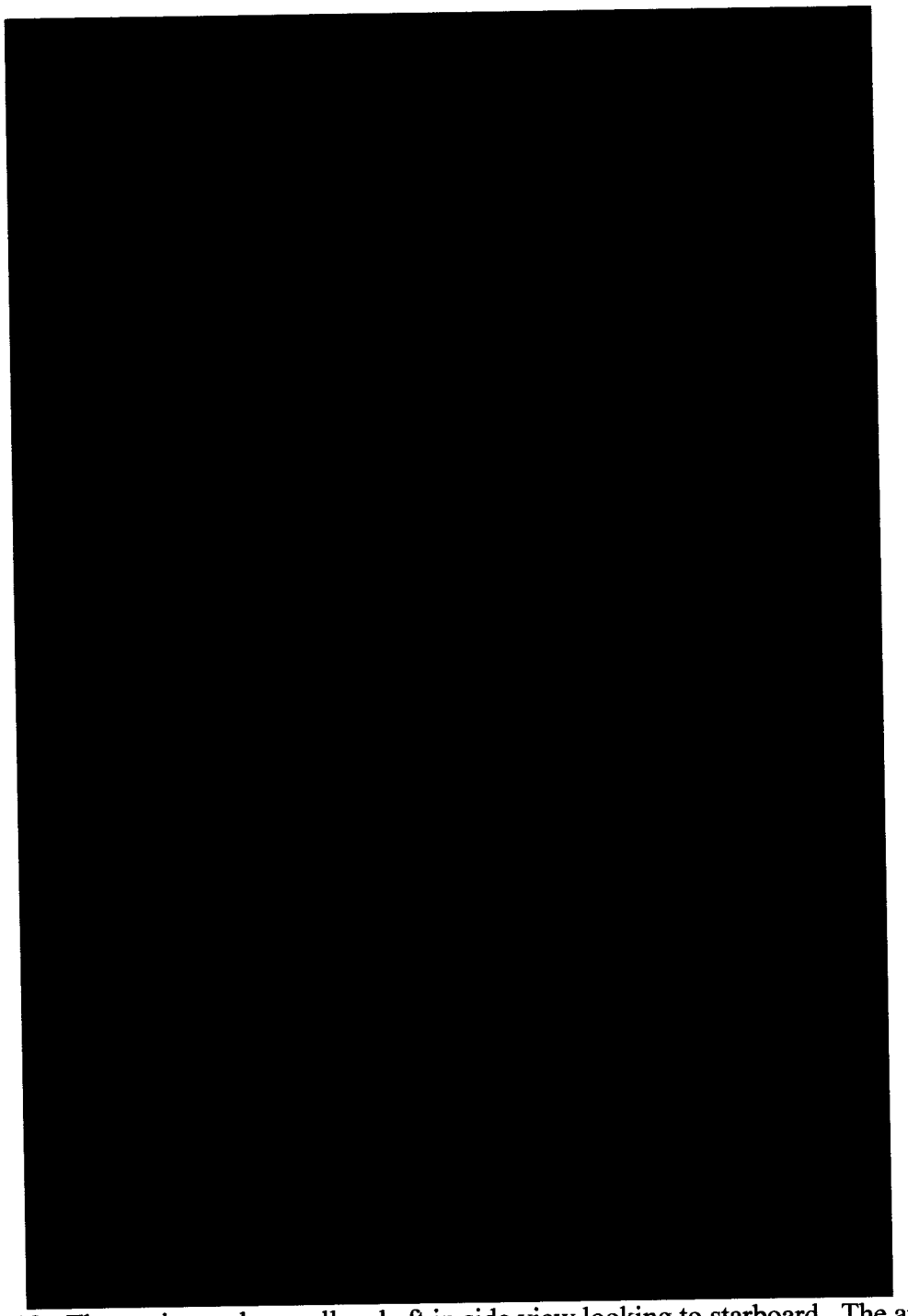

Figure 19: The engine and propeller shaft in side view looking to starboard. The area between the propeller shaft and engine shows evidence of the propeller shaft's collapse. Measurements of slumping are taken in this area. (Image courtesy Rick Allen, Nautilus Productions 2002)

much of the boilerplate. It appears that the damage is accelerating. Little looting damage was noted. It is possible that the dive was made too early in the season for looters to have been active on the site.

Findings

A process of scouring and reburial is evident on the site. Minimal burial of major features on the site, and a greater exposure of the site in May 2002 and again in April 2004 indicate tremendous sediment transport. In February 2002 and May 2003, less of the site was exposed in comparison to the features observed in May 2002 and April 2004. At this time, it is impossible to say whether this is the result of winter storms, a particularly bad storm, or simply seasonal sediment transport. If there is a seasonal sediment transport over the site then portions of the site will be more readily accessible during particular times of the year. Studies of the sediment transport may help determine what artifacts are at higher risk. Certainly, the greater scouring around the engine, boiler, and propeller indicate current movement strong enough to carry sediment, but minimal current has been observed during three years of dives.

A minimal amount of wood was observed on the site during the 2002 and 2003 dives. The wood averaged 4 inches molded and sided. The wood has a close grain resembling oak and the exposed pieces have a great deal of deterioration from terredo worms. Unfortunately, because the wood is rarely visible and it is so poorly preserved it is difficult to know whether the remains represent framing components of the ship's lower hull.

Figure 20: Plan view of the donkey boiler. Unlike the ship's main boiler which exploded when the ship sank, the donkey boiler shows no damage from the wrecking event. The donkey boiler sits surrounded by boiler debris. (Image courtesy Cindy Burnham, Nautilus Productions 2002)

The boiler found on site is too small to have supplied the necessary steam for the engine (See Figure 20). The small boiler is most likely a donkey boiler, which was used to power the windlass, pump, or heavy lifting equipment. The intact structure of the boiler may indicate it was not in use at the time the ship sank.

Other large iron plate found in large quantities near and aft of the engine may be the engine boiler's remains. The plate is riveted, and sections appear to have fire tubes running through them. All plate is heavily concreted with iron corrosion and marine growth except those pieces hammered by sport divers and anchors. If the ship sank during a winter storm in icy waters with a full head of steam as reported, it is likely the boiler exploded.

The engine and propeller assembly are the dominant features of the site. The propeller shaft is iron and appears sheathed in lead. The shaft supports both the engine and propeller remains. The shaft measures 28 feet from the engine to the propeller bushing. Sheathing is peeling from the shaft on the base and has collapsed at the propeller bushing. The propeller itself is a four bladed Loper wheel, a design prevalent on Philadelphia-built and Great Lakes vessels. The propeller's design allowed wooden vessels to be fitted with steam engines without damage to the hull. Discovery of this propeller paired with the absence of hull structure indicates the wreckage is associated with a wooden vessel.

The engine assembly is still under investigation. The largest feature on the site, the engine is 12.7 feet long by 10.4 feet high and 5 feet wide. The engine is a direct acting, single expansion engine. An engine plate identifying manufacture has yet to be

found and may exist beneath the sands surrounding the site. Compensating for concretion growth, corrosion, and the difficulty of measuring inside the engine, Morris agreed that his measurements matched the 26-inch bore and 30-inch stroke reported in the *American Shipmaster's Record Association 1884 Registry*. Much as modern day engines have unique specifications, so too did marine engines from different companies. The matching stroke and bore measurements between the archaeological site and the building specifications indicate that this engine belonged either to *Commodore* or to another Neafie and Levy engine. While extremely doubtful that another Neafie and Levy engine was lost off Daytona Beach, confirmation of the site's identity required matching the material culture to *Commodore*'s historical record. For the first time, proof beyond anecdotal material culture existed to confirm that the site is the lost filibuster SS *Commodore*.

Pieces of iron railing were found during the 2002 survey. The two sections are both located on the port side of the baseline between the engine and baseline. They are located near the 15 feet and 30 feet marks on the baseline. Both sections of railing are curved with supports dividing the railing. Their use is unknown, but the two sections may be part of a deck rail or part of a railing around the engine.

A partially concreted windlass was located on site at the 100-foot baseline mark. The windlass is still intact and may have pawls for stud link chain but no note was made during the 2002 survey. Observation of the windlass and the anchor chain nearby will occur during the next series of reconnaissance dives in 2005. The only anchor located on

Figure 21: Small anchor and railing in plan view. The anchor lies on concreted chain in the center of the debris field. The large anchor seen by Reef Team members lies southeast of the site. (Image courtesy Cindy Burnham, Nautilus Productions 2002)

the site appears to be of wrought iron manufacture. The anchor measures 7 feet in length and approximately 4 feet across the crown (See Figure 21). The anchor is lightly concreted and lies on what may be anchor chain. Despite concretion growth, the anchor appears to be similar in form to an Admiralty anchor, but without a stock.

Two boxes of rifle cartridges were found during the May 2002 two-week field project. Both boxes were examined *in situ*, mapped and left undisturbed partially buried. The bullets match those already recovered from the site, but were found in new locations. Later site dives in 2003 and 2004 did not relocate the boxes suggesting perhaps that the boxes are either still safely *in situ* or have been removed by looters.

The *Commodore*'s material culture is primarily military or mechanical in nature. The *in situ* material culture is more diverse than the material culture housed at PILHA. The collection housed at PILHA contains the artifacts turned over to PILHA following the court ruling in 1998. Artifacts still *in situ* were either too large to recover (i.e. the engine), or had not been located by Serbousek. *In situ* material culture of interest for identification purposes are the engine, the propeller and shaft, the boiler remains, the donkey boiler and windlass, and the two crates of packaged ammunition. Material culture of particular interest for site identification housed in PILHA's collection includes rolling block rifles, bullets and cartridges, an Alfred Meakin plate, a clay pipe stem, and an A.B. Babbit bronze ship's block. The vessel and artifacts are addressed below.

Vessel Discussion

The Neafie & Levy Yard built the tug *Commodore* with a wooden hull and steam propulsion. A tugboat needs to be sturdy and powerful. Although built of wood instead of steel, *Commodore* had a powerful direct acting single expansion steam engine. According to the registry information, the engine had a piston with a 26-inch bore and a 30-inch stroke and a single boiler (*American Shipmasters' Association 1888*:208). These dimensions match those of the engine at the *Commodore* site. Although the engine has been turned on its side either as part of the wrecking or as a function of storm surge (there is wear along a section of the engine suggesting the engine may rock on the sand), the piston and internal workings are intact. Matching the stroke and bore on the engine *in situ* with the engine specifications from the Neafie & Levy Yard corroborates the hypothesis that the site is *Commodore*. The April 2004 expedition proved the engine *in situ* matches the 1882 Neafie and Levy engine built for *Commodore*.

Commodore's wooden hull required a balanced propeller and shaft to avoid damage to the ship's hull. A four-bladed loper wheel (or Philadelphia Fly Wheel) was selected. Vessels are strained by the forces exerted upon the hull by the means of propulsion (Desmond 1999:35). Whether the vessel's means of propulsion is sail or steam, there are specific points where the ship will experience greater strain (Desmond 1999:35). *Commodore*'s screw propeller was designed to cause little to no transverse strain on the hull (Desmond 1999:35). Instead, the strain *Commodore*'s hull underwent related to the balancing of both the engine and the propeller. If either the engine or the

propeller were unbalanced, the effect on the hull would be similar to the transverse strain associated with sailing vessels (Desmond 1999:35).

The Philadelphia Flywheel or Loper Wheel was designed to bridge the gap between wooden hulls and steam technology. Using a four bladed propeller on a wooden ship provides a balanced propeller and one less likely to cause vibration. The propeller remains *in situ* at the *Commodore* site match the loper wheel design. The propeller's maximum preserved diameter measures 6 feet 1 inch. The measurement cannot be verified without uncovering the remains of the buried blades. Non-disturbance mapping and survey indicated that at least two and possibly three of the propeller's blades are sheared away, leaving approximately 20 percent of the blades available for study (See Figure 21).

The boiler remains, and small donkey boiler at the site support the documentary record. According to the registry records and merchant shipping lists, *Commodore* had a single boiler with its engine (*Sixteenth Annual List of Merchant Vessel of the United States for the year ended June 30, 1884*). Boilerplate remains litter the site around the engine and propeller shaft. The violent explosion causing the boiler to shatter requires extreme heat, poor workmanship, or the sudden cooling of a hot boiler. *Commodore*'s sinking in a January nor'easter provided water cold enough to shatter and explode a hot boiler. According to documentary sources, Captain Murphy ordered wood, alcohol, and coal into the boiler to keep it burning as he tried to get to Mosquito Inlet, assuring the boiler would have been exceptionally hot when the sea finally overwhelmed the pumps. Although no survivors discuss an explosion at the time of the ship's sinking, the

Figure 22: Two of the four blades on *Commodore*'s propeller, looking forward. Note the broken blade to the upper left and lack of hull structure in background. (Image courtesy Cindy Burnham, Nautilus Productions 2002)

survivors do mention the final whistle from the vessel as it began to sink beneath the waves. Debris at the wreck site appears to support the hypothesis that there was an explosion as the vessel sank.

The small donkey boiler and the windlass are also of interest for site identification (See Figure 22). Use of donkey engines and boilers to run deck machinery aboard sailing vessels dates from the early 1860s (*The Persistence of Sail in the Age of Steam: Underwater Archaeological Evidence from the Dry Tortugas*, Donna J. Souza 1998:50). The presence of a donkey boiler and steam-powered windlass suggests the ship sank after 1860.

Material Culture: Small Artifacts

Discovery in 2002 of two intact wooden crates of ammunition *in situ* was a particularly important find. Although several hundred bullets and cartridges were recovered from the wreck site in the 1980s, no further recoveries or sightings of ammunition had been reported for several years. The crates are still packed as they would have been when they left the factory. Their manufacture and the matching size of the cartridges with those in the collection at PILHA leave little doubt that the crates contain .43 caliber shot. *Commodore* sank with 15 tons of munitions aboard including:

a half ton of dynamite
40 bundles of Remington rolling-block rifles
a number of bundles of Mauser and Winchester rifles
204,000 rifle cartridges
1,000 Hotchkiss cannon rounds
2,000 dynamite cartridges for the dynamite gun
barrels of clothing
boxes of drugs and medical supplies (Taylor 2)

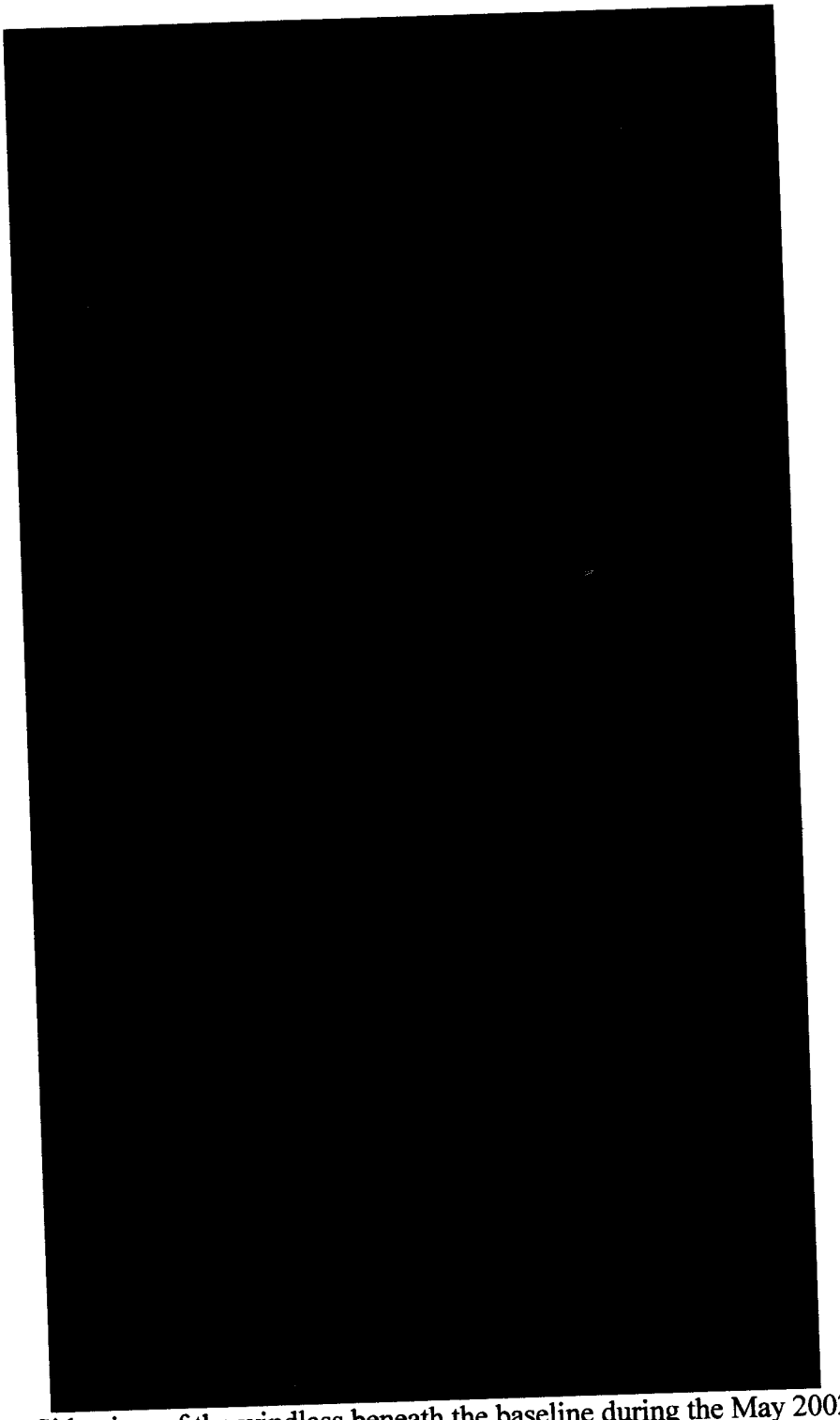

Figure 23: Side view of the windlass beneath the baseline during the May 2002 season. Although the windlass was mapped *in situ*, concretion layers make it difficult to ascertain whether the pawls allowed the use of stud link chain. (Image courtesy Rick Allen, Nautilus Productions 2002)

Although the list does not reveal how many cartridges of each caliber were shipped, we do know from archaeological research that the Remington's were .43-caliber.

Among the artifacts recovered from the *Commodore* site prior to 1998 is a group of pieces, concretions, and parts of .43-caliber Remington rolling-block rifles (See Figures 24, 25, 26). The rolling block mechanism was a remarkable advance over previous bolt mechanisms. The design was simple and meant to decrease jamming. The design worked on the premise of interlocking sections that pivoted off one set of pins. The hammer and breechblock both rolled on pins that allowed the back thrust of the fired shot to be taken by the breechblock (Stebbins 1958:2). The presence of several rifles of this type on the wreck site matches the cargo list printed in the newspapers following the sinking. Many rifles recovered from the site have fallen apart, but many pins, hammers, and internal pieces to the rolling block have survived. Several hundred bullets and cartridges were recovered at the same time as the rifles. The match of the rifle caliber with the ammunition supports the identification of the site as *Commodore*. Few ships traveled this route, at this time, with several crates of ammunition aboard.

An ironstone plate was recovered from the site and donated to PILHA in 1996. The plate measures 10 inches in diameter with a white glaze finish. The back of the plate is inscribed with the words "ROYAL IRONSTONE CHINA" above the Meakin crest of a winged lion, unicorn, and coat of arms. Beneath the crest are the words "ALFRED MEAKIN ENGLAND." Alfred Meakin was a registered trademark from 1875-1897 when the company changed names to Alfred Meakin Ltd. With the date range of 1875 to

Figure 24: Concreted rifle with rolling block mechanism still intact beneath concretion. This artifact is one of several rifles still in wet storage and radiographed for analysis. (Image courtesy Ponce Inlet Lighthouse Association 2002).

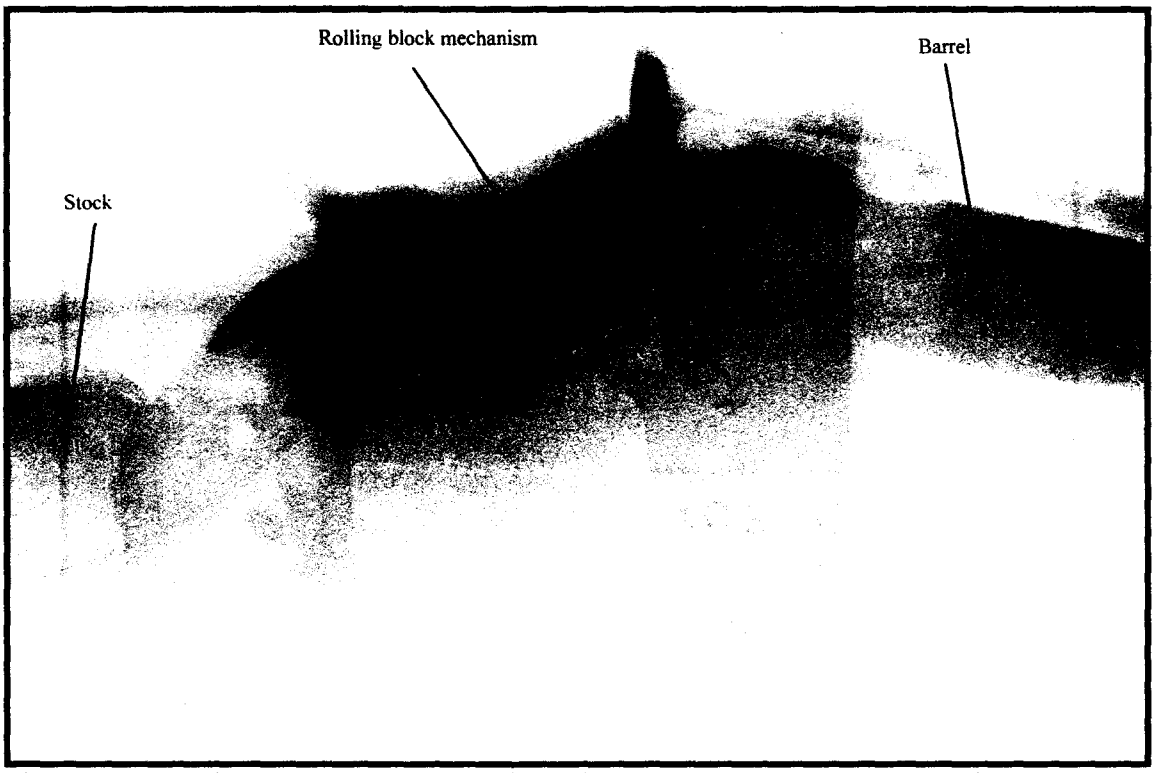

Figure 25: Remington rolling block rifle radiograph showing the interior of Figure 22. Note the degraded areas of the rifle's trigger, trigger guard, hammer, breech, and barrel seen here as lighter areas. (Image courtesy Ponce Inlet Lighthouse Association 2002)

Figure 26: Two Remington rolling block examples. To the left is a Remington Argentine Model 1879, 11mm rifle, and to the right a Spanish Oviedo Arsenal 11mm musketoon. (*Shooting the .43 Spanish Rolling Block*, Croft Barker 2003:16)

1897, a possible time frame for the site is established. SS *Commodore* was built in 1882 and lost in 1897. This may place the plate's use date range at the later half of the life of Meakin's trademark.

One of the few personal artifacts recovered from the wreck site is a white clay pipe stem, inscribed with the words "W. MASTERS" on one side and the number "352" on the other. The pipe stem is broken in two and requires conservation. Archival research for information about the maker has failed to uncover any information.

When divers with Serbousek recovered a bronze snatch block in 1996, they had no idea it would be a datable artifact. Once the artifact was cleaned and displayed, the words "A.B. Babbitt 1885" were visible. The date and name gave a date after which the block could have been placed aboard the vessel and before which the ship could not have sunk. The snatch block is one of the best datable artifacts from the wreck site (Figure 27).

The cultural material collected from the wreck site and still *in situ* matches the period for *Commodore*'s sinking. The engine's bore and stroke matching the *1884 List of Merchant Vessels of the United States*, and *Tonnage Admeasurements of Steam Tug* Commodore *of District Philadelphia* is validation of the site's identity. The engine's distinct form matches a later example of a triple expansion Neafie and Levy engine curated by the Mariner's Museum in Virginia. Based on the wreck site engine's stoke, bore, and design it is highly likely that this engine represents the one from the lost SS *Commodore*. Matching Remingtons and shells fit the list of supplies documented in newspaper stories and help to prove the hypothesis that the vessel lying at the wreck site

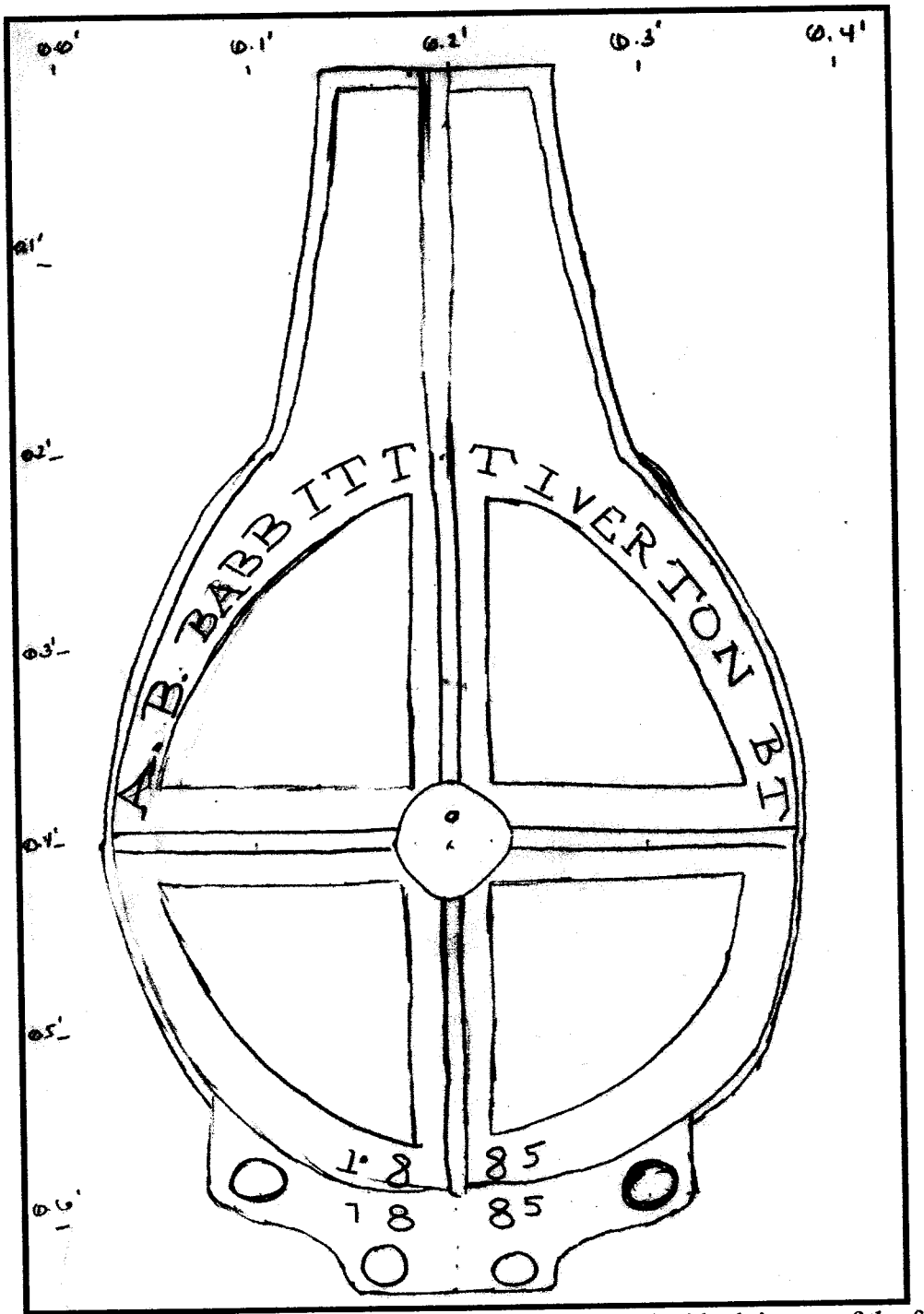

Figure 27: A.B. Babbitt Tiverton bronze block rear view. The block is one of the few datable artifacts recovered from the *Commodore* site at this time. (K. Eslinger field drawing May 2003)

was carrying an unusual amount of weapons. The fact that these rolling block rifle concretions are Remington-style rolling blocks and are listed in the shipwreck documents further corroborates the site's identification. The Alfred Meakin plate with its date range of 1875-1897, and the A.B. Babbit block, with 1885 stamped into it, help narrow the range of the wrecking. With the data from the site, engine, the rifles, the block and the plate it can be stated with some confidence that the wreck site to which PILHA and Serbousek hold claim is a late nineteenth century, single expansion, wooden-hulled, steam ship. The evidentiary trail from newspaper articles and survivors also corroborates the hypothesis that the site is indeed Steamship *Commodore* lost in the early morning hours of January 2, 1897.

CHAPTER VII:
CONCLUSIONS

The *Commodore* Project and the site represent the end of Crane's "Open Boat" now the vessel and the men have come back into port. Archaeologists, historians, and staff at PILHA can tell the story of the men who never had the opportunity to tell theirs. The legacy of the Mosquito/Ponce Inlet lighthouse as a beacon to the shipwrecked crew and the assistance of Keeper O'Hagan in rescuing many of the crew who arrived in Mosquito Inlet in 1897 is carried forward today by archaeologists and staff at Ponce Inlet Lighthouse. *Commodore* has proven to be a valuable teaching tool with local divers, students and visitors to the lighthouse.

This study focused on a single question: are the wreck site remains held under joint titles by the Ponce Inlet Lighthouse Association and Norman Serbousek those of SS *Commodore* sunk on January 1, 1897? Based on historical data, archaeological survey, and artifact study the wreck PILHA and Serbousek own is indeed *Commodore*. The original Tonnage Admeasurements for *Commodore* from May 5, 1882, list the vessel with a length of 122.5 feet (Tonnage Admeasurements of Steam Tug *Commodore* of District Philadelphia, May 5, 1882). The wreckage of the engine, propeller shaft and propeller stretches for almost forty feet thereby accounting for almost a third of the vessel's original length – a measurement consistent with the machinery to hull size ratio of the time. The 1884 *American Shipmaster's Association Record* lists *Commodore* with an engine having a 26-inch bore and a 30-inch stroke. Archaeological survey in 2004 suggests a 24 to 27-inch bore with a 36-inch stroke. Accounting for calcareous deposits

and marine growth, the bore and stroke of the engines are comparable. This finding clearly identifies the alleged *Commodore's* remains as the lost Steamship *Commodore*.

The presence of rolling block rifles on the wreck site is another important indication of the site's identity. The confirmation of the caliber of the ammunition and rifles as .43 caliber matches the preference of the Cuban revolutionaries for Remington .43s (Musicant 1998:55). Cases of ammunition and several rolling block rifles located in the sand suggest the vessel was gun running. Few vessels traveled the east coast of Florida in the 1890s with weaponry. Vessels carrying arms and munitions were either naval vessels or filibusters.

Taking into account Florida's close association with Cuba and its political sphere, it is not surprising that Floridians assisted Cuban revolutionaries at the end of the nineteenth century. The use of *Commodore* to run guns for the Jacksonville *junta* in 1895 and 1896 was a wise move for the Cubans. *Commodore* was fast, maneuverable, and able to clear port without filing a destination. There can be little doubt that the shipwreck site identified by Don Serbousek in the 1980s as the *Commodore* is indeed the final resting place of the *Commodore* and eight of her crew. The machinery, the munitions, and the artifact assemblage match the historical documentation. The wreck matches the remains of a wooden steamer lost in a storm. Despite lying hidden for almost a century, the wreck site can finally be identified as the Steamship *Commodore* and take its place in national and international history.

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APPENDIX A:
SERBOUSEK'S 1996 ARTIFACT INVENTORY

APPENDIX A:
SERBOUSEK'S 1996 ARTIFACT INVENTORY[9]

Donor	2003 No.	1996 No.	Description	Tag No.
Serbousek	2003-2-115	96COM001	Riveted metal plate 6 ½" x 3 ¼"	N/A
Serbousek	2003-2-65	96COM002	Encrustment, possible box corner concretion w/ 5/8" bullet	N/A
Serbousek	N/A	96COM003	Metal chunk, 11 ¼" x 5 ¾"	N/A
Serbousek	N/A	96COM004	Coal 3 ½" x 3 ¼"	N/A
Serbousek	2003-2-166	96COM005	Iron rod with hook end, 26" long	#5
Serbousek	N/A	96COM006	Chunks? 2 each	N/A
Serbousek	N/A	96COM007	Wood piece w/metal rod protruding, 11 ½"	#7
Serbousek	N/A	96COM008	Wood chunks, 4 each	N/A
Serbousek	N/A	96COM009	Metal chunks & rods, 6, largest 17 ½"	#9
Serbousek	N/A	96COM009a	Wood piece with metal protruding, 9 ¾"	#9
Serbousek	N/A	96COM010	Pipe section, 3 ½" long, 3" diameter	N/A
Serbousek	N/A	96COM011	Plate w/stanchion [sic] 8 ½" long, 7 ½" high	N/A
Serbousek	N/A	96COM012	Encrusted gun remnant, 9" x 2 ½"	N/A
Serbousek	N/A	96COM013	Chunks, 2 each, 12" long	N/A
Serbousek	N/A	96COM014	Large metal ring (Bull nose) ~22" diameter, 7" thick	#14
Serbousek	2003-2-162	96COM015	Steam pump	N/A
Serbousek	N/A	96COM016	Pipe	N/A

[9] All information comes from the document created by Tom Taylor, Don Serbousek and John Lane in 1996. Descriptions are quoted from the "ACCESSION NUMBERS FOR *COMMODORE* ARTIFACTS LOANED BY DON SERBOUSEK, JAN NEAL, JOHN LANE, BRUCE ZARAJCJYK, AND TOM TAYLOR (Using the tag numbers with which he identified the artifacts and located where they were found on the wreck. Where not tagged, numbered in order of the "Item List" developed by the Lighthouse Association.)."

Donor	2003 No.	1996 No.	Description	Tag No.
Serbousek	2003-2-120	96COM017	Metal chunk, 8"	#17
Serbousek	2003-2-66	96COM018	Broken pieces of threaded pipe,	N/A
	2003-2-67		2 each, 3 & 4" long	
	2003-2-68			
Serbousek	N/A	96COM019	Chunk, 11 ½" x 8"	N/A
Serbousek	N/A	96COM020	Chunks, 5 each, < 2 ½" long	N/A
Serbousek	2003-2-94	96COM021	Leather pieces, 3 each, 10" & 11" long	N/A
	2003-2-96			
	2003-2-98			
Serbousek	N/A	96COM022	Rod (pipe or gun?), 6 ½" long	N/A
Serbousek	N/A	96COM023	Gun, 25 ½" long	#23
Serbousek	N/A	96COM024	Metal, curved, 4" wide	N/A
Serbousek	N/A	96COM025	Metal rod, 7 ½" long	N/A
Serbousek	N/A	96COM026	Metal rod, 7" long	N/A
Serbousek	N/A	96COM027	Encrusted gun, 22 ¼" long, 6" wide	#27
Serbousek	N/A	96COM028	Wood chunks, 4 each	#28
Serbousek	N/A	96COM029	"Half-moon" metal, 4 ½"	N/A
Serbousek	N/A	96COM030	Coal, 6, each less than 4 ½"	N/A
Serbousek	N/A	96COM031	Iron, 15, each less than 6"	N/A
Serbousek	N/A	96COM032	Wood, 5, each less than 7"	N/A
Serbousek	N/A	96COM033	Metal, 4, each less than 3"	N/A
Serbousek	N/A	96COM034	Encrusted gun, 20" long, 5" wide	#34
Serbousek	2003-2-179	96COM035	Pipe with flange, "L" shaped, 19" long,	#35
			flange side cross section 21"	
Serbousek	2003-2-158	96COM036	Metal rod, 19 ½" long	#36
Serbousek	2003-2-185	96COM037	Anchor, small boat, double fluke	#37
			12 ½" shank, 19 ½" between flukes	
Serbousek	N/A	96COM038	Block of wood, 9 ½"x5"x4"	N/A
Serbousek	2003-2-52	96COM039	Two lead sheeting mast collars	#39
	2003-2-54		12" diameter	
Serbousek	1996-75-2	96COM040	Ship's turnbuckle, 29" long	#40

Donor	2003 No.	1996 No.	Description	Tag No.
Serbousek	2003-2-56	96COM041	Curved pipe, 10" long, 1" diameter	#41
Serbousek	N/A	96COM042	Metal rod, less than 9" long	#42
Serbousek	N/A	96COM043	Curved metal rod, ~40" long, 1 ¾" diameter	N/A
Serbousek	N/A	96COM044	Pipe, 19" long, 6" wide	N/A
Serbousek	2003-2-146	96COM045	Chunk? 17 ¼"x5"	#45
Serbousek	N/A	96COM046	Metal chunks, 6, each 7"	N/A
Serbousek	1996-75-4 2003-2-139	96COM047	Two "V" shaped brackets, 11"x8" & 13"x10 ½"	N/A
Serbousek	2003-2-157	96COM048	Metal rod, 14" long	#48
Serbousek	N/A	96COM049	Metal rod, 16 ½" long	#49
Serbousek	N/A	96COM049a	Metal rod, 12" long	#49
Serbousek	N/A	96COM050	Metal rod, less than 9" long	#50
Serbousek	N/A	96COM050a	Encrusted gun with bullets encrusted Measures 24"	#50
Serbousek	N/A	96COM051	Pipe section, 8"x4"	N/A
Serbousek	2003-2-172	96COM052	Head of anchor chain with ring, 42"	N/A
Serbousek	N/A	96COM053	Coal and metal, "T" shaped chunk, 10" long	N/A
Serbousek	2003-2-79	96COM054	Metal pipe, 6 ½" long	N/A
Serbousek	1996-75-1	96COM055	Metal, machete blade, 25" long	N/A
Serbousek	N/A	96COM056	Ammo crate board with encrusted Bullets, 13" long	N/A
Serbousek	2003-2-150	96COM057	Encrusted gun with shell casing on side 22"x4 ½"	#57
Serbousek	2003-2-127	96COM058	Metal chunk, 7"	#58
Serbousek	2003-2-116	96COM059	Metal rod, less than 9" long	#59
Serbousek	N/A	96COM060	Wood pieces, 2, each less than 9" long	N/A
Serbousek	N/A	96COM061	Coal chunk encrustment, 13" long	#61
Serbousek	2003-2-78	96COM062	Chunk? 6 ½"	N/A
Serbousek	2003-2-149	96COM063	Chunk, 16"	#63

Donor	2003 No.	1996 No.	Description	Tag No.
Serbousek	N/A	96COM064	Metal chunk, 9 ½" long	N/A
Serbousek	2003-2-104	96COM065	Metal rod	#65
Serbousek	2003-2-73	96COM066	Metal rod, 9" long	#66
Serbousek	2003-2-72	96COM067	Metal rod, 13"	#67
Serbousek	N/A	96COM068	Metal pipe, 15" long	N/A
Serbousek	N/A	96COM069	Chunks, 2	N/A
Serbousek	N/A	96COM070	Metal (?) chunk, 10"	N/A
Serbousek	N/A	96COM071	Thick metal object with truncated Triangular shape cut-out, 12"x7"	#71
Serbousek	2003-2-95	96COM072	Leather, 8" [its actually rubber]	N/A
Serbousek	N/A	96COM073	Metal chunks, 18, each less than 5"	N/A
Serbousek	N/A	96COM074	Wood chunks, 24, each less than 10" long, many with holes (bolt holes?), one with square brass rod in wood	N/A
Serbousek	N/A	96COM075	Metal rods, 4, each 12", 8", 5 ½", 5 ½"	N/A
Serbousek	N/A	96COM076	Chunk, 14"	N/A
Serbousek	N/A	96COM077	Chunk, 6 ½"	N/A
Serbousek	N/A	96COM078	Chunks, 13, each less than 18"	N/A
Serbousek	N/A	96COM079	Chunk, 6"	N/A
Serbousek	N/A	96COM080	Pipe, 20"	N/A
Serbousek	N/A	96COM081	Pipe, 6"	N/A
Serbousek	N/A	96COM082	Chunks, 4, each less than 5"	N/A
Serbousek	N/A	96COM083	Chunks, 2, each less than 9"	N/A
Serbousek	N/A	96COM084	Large chunk, 26" long, 6-7" thick	N/A
Serbousek	N/A	96COM085	Metal pipe, 90 degree joint, ~5" diameter	N/A
Serbousek	N/A	96COM086	Copper pipe, ~70" long, ~3" diameter	N/A
Serbousek	N/A	96COM087	Copper pipe, ~60" long, ~2 ½" diameter	N/A

Donor	2003 No.	1996 No.	Description	Tag No.
Serbousek	N/A	96COM088	Copper pipe, ~30" long, 2 ½" diameter, "L" shape	N/A
Serbousek	N/A	96COM089	Copper pipe, ~50" long, ~2 ½" diameter	N/A
Serbousek	N/A	96COM090	Copper pipe, curved, ~51" long, ~2 ½" diameter	N/A
Serbousek	N/A	96COM091	Large copper tubing with flange on one end, "L" shaped, 7" diameter, 122" long	N/A
Serbousek	1996-75-6	96COM092	Barrel fragment for Remington rolling block, .43 caliber rifle, preserved	N/A
Serbousek	1996-75-13	96COM093	Wood stock fragment for Remington rolling block, .43 caliber rifle, preserved	N/A
Serbousek	1996-75-7	96COM094	Barrel butt crew plate from Remington rolling block, .43 caliber rifle, preserved	N/A
Serbousek	1996-7-11	96COM095	Lock ring from lock mechanism of Remington rolling block, .43 caliber rifle, preserved	N/A
Serbousek	1996-7-8	96COM096	Lock mechanism, part B, for Remington rolling block .43 caliber rifle, preserved	N/A
Serbousek	1996-75-9	96COM097	Lock mechanism part C for Remington rolling block, .43 caliber rifle, preserved	N/A
Serbousek	1996-75-10	96COM098	Trigger release mechanism, part D From Remington rolling block, .43 caliber rifle, preserved	N/A
Serbousek	1996-75-19	96COM099	Bullets and partial shells in paint bucket	N/A
Serbousek	2003-2-184	96COM100	Bronze ship's block engraved with "A.B. Babbitt, Tiverton, RI, 1885"	N/A

Donor	2003 No.	1996 No.	Description	Tag No.
Serbousek	2003-2-169	96COM101	Glass sight glass from ship's boiler	N/A
Serbousek	2003-2-186	96COM199	Remington, rolling block, .45 caliber In good condition	N/A
Neal	N/A	96COM200	Brass pulley fitting, 8" long with angled end with ring	N/A
Neal	1996-74-5	96COM201	Lead knob	N/A
Neal	1996-74-6	96COM202	Brass sheave bracket from block	N/A
Neal	1996-74-7	96COM203	Brass cabinet lock	N/A
Neal	1996-74-2	96COM204	Lignum vitae block sheave	N/A
Neal	1996-74-3	99COM250	Brass sheave wheel axle	N/A
Neal	1996-74-4	99COM251	Brass sheave wheel for 96COM200	N/A
Lane	1996-73-2	96COM300	Rifle cleaning brush core segment brass	N/A
Lane	1996-73-1	96COM301	Port (red) running light lens fragment	N/A
Lane	1996-73-3	96COM302	Sextant fragment, wood and ivory (?)	N/A
Lane	1996-73-4	96COM303	Ship's spikes, 6, iron and bronze	N/A
Zarajcjyk	1996-72-1	96COM400	Clay pipe stem	N/A
Taylor	1996-71-1	96COM500	Dinner plate, marked with coat of arms "Royal Ironstone China, Alfred Meakin, England," found July 10, 1996	N/A
Taylor	N/A	96COM501	3 Remington, rifle .43 caliber shells encrusted together	N/A

APPENDIX B:
2003 ARTIFACT INVENTORY

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2003 ARTIFACT INVENTORY

Accession No.	Old No.	Artifact	Drawing No.	Donor
1996-71-1	96COM500	Ironstone plate	9	Taylor
1996-72-1	96COM400	Clay pipe stem	98	Zarajcjyk
1996-73-1	96COM301	Red light fragment	N/A	Lane
1996-73-2	96COM300	Rifle brush	N/A	Lane
1996-73-3	96COM302	Sextant fragment	8	Lane
1996-73-4	96COM303	6 Ship's spikes	N/A	Lane
1996-74-2	96COM204	Lignum vitae block sheave	N/A	Neal
1996-74-3	99COM250	Brass sheave wheel axle	N/A	Neal
1996-74-4	99COM251	Brass sheave wheel	NA	Neal
1996-74-5	96COM201	Lead knob	1	Neal
1996-74-6	96COM202	Brass sheave bracket	2	Neal
1996-74-7	96COM203	Brass cabinet lock	98	Neal
1996-75-1	96COM055	Machete blade	N/A	Serbousek
1996-75-2	96COM040	Ship's turnbuckle	N/A	Serbousek
1996-75-4	96COM047	V shaped bracket	N/A	Serbousek
1996-75-6	96COM092	Conserved rifle barrel fragment	N/A	Serbousek
1996-75-7	96COM094	Conserved barrel butt plate	N/A	Serbousek
1996-75-8	96COM096	Conserved lock mechanism	N/A	Serbousek
1996-75-9	96COM097	Conserver lock mechanism	N/A	Serbousek
1996-75-10	96COM098	Trigger release	N/A	Serbousek
1996-75-11	96COM095	Lock ring from rifle	N/A	Serbousek
1996-75-13	96COM093	Conserved wood rifle fragment	N/A	Serbousek
1996-75-19	96COM099	Bullets and shells	N/A	Serbousek
2003-2-3		White ironstone plate	9	Zarajcjyk
2003-2-4		Bronze spike	10	
2003-2-5		Curved bronze spike	11	
2003-2-6		Bronze spike in wood fragment	12	
2003-2-7		Bronze bolt in wood fragment	13	

Accession No.	Old No.	Artifact	Drawing No.	Donor
2003-2-8		Concretion with trigger	13	
2003-2-9.1		2 barrel concretions	N/A	
2003-2-10		16 pieces red rubber	14	
2003-2-11		Rolling block rifle piece	15	
2003-2-12		Bronze spike fragment	16	
2003-2-13		Clay ceramic fragment	N/A	
2003-2-14		Concreted rolling block	N/A	
2003-2-15		Bronze spike	17	
2003-2-16		2 brass shell caps	17	
2003-2-17		Bronze spike fragment	17	
2003-2-18		Metal washer	17	
2003-2-19		White ironstone frag.	17	
2003-2-20		Box fragment	17	
2003-2-21		Metal nut fragment	17	
2003-2-22		Concreted rolling block	N/A	
2003-2-23		12 pieces of coal	N/A	
2003-2-24		Copper sheet metal	18, 19	
2003-2-25		Rifle block concretion	N/A	
2003-2-26		Wooden fore stock	20	
2003-2-27		Concretion with 16 shells	20	
2003-2-28		2 percussion caps	20	
2003-2-29		One lead bullet	21	
2003-2-30		Concreted shell casing	N/A	
2003-2-31		Crushed shell w/bullet	21	
2003-2-32		Concreted rolling block	N/A	
2003-2-33		7 breech concretions	N/A	
2003-2-34		Bronze dump	22	
2003-2-35		Iron spike fragment	21	
2003-2-36		Retaining plate & pin	21	
2003-2-37		Lead strip with ridge	21	
2003-2-38		Lead strip with ridge	21	

Accession No.	Old No.	Artifact	Drawing No.	Donor
2003-2-39		Bronze dump fragment	22	
2003-2-40		Bronze dump fragment	22	
2003-2-41		Cupric pipe fragment	23	
2003-2-42		Bronze dump	24	
2003-2-43		Bronze spike	25	
2003-2-44		Cow bone w/spike	N/A	
2003-2-45		Cow bone fragment	N/A	
2003-2-46		Framing component	26	
2003-2-47		Framing component	27	
2003-2-48		Wooden block	28	
2003-2-49		Pyramidal concretion	29	
2003-2-50		Iron plate concretion	30	
2003-2-51		Iron shackle	31	
2003-2-52	96COM039	Lead mast sleeve	N/A	Serbousek
2003-2-53	96COM039	Lead mast sleeve	N/A	Serbousek
2003-2-54	96COM039	Lead mast sleeve	N/A	Serbousek
2003-2-55		4 concreted rolling blocks	N/A	
2003-2-56	96COM041	Pin in concretion	32	Serbousek
2003-2-57	96COM072	L shaped concretion	29	Serbousek
2003-2-58		Iron spike fragment	33	
2003-2-59		Iron spike fragment	35	
2003-2-60		Iron pin concretion	34	
2003-2-61		Iron spike concretion	34	
2003-2-62		Small iron concretion	35	
2003-2-63		Iron concretion with wood	34	
2003-2-64		Concretion with dump	35	
2003-2-65	96COM002	Wooden box corner	36	Serbousek
2003-2-66	96COM018	Wrought iron pipe fragment	36	Serbousek
2003-2-67	96COM018	Wrought iron pipe fragment	37	Serbousek
2003-2-68	96COM018	Wrought iron pipe fragment	37	Serbousek
2003-2-69		Concreted iron pin	36	

Accession No.	Old No.	Artifact	Drawing No.	Donor
2003-2-70		Concreted iron pin	36	
2003-2-71		Concreted iron pin	37	
2003-2-72	96COM067	Concreted iron pin with wood	38	Serbousek
2003-2-73	96COM066	Concreted iron pin	39	Serbousek
2003-2-74	6COM119	Concreted iron pin	39	Serbousek
2003-2-75	96COM052	Iron concretion	40	Serbousek
2003-2-76		Rifle barrel concretion	41	
2003-2-77		Small concretion with wood	42	
2003-2-78	96COM062	Small concretion	43	Serbousek
2003-2-79	96COM054	Small concretion	43	Serbousek
2003-2-80	96COM056	Small iron concretion	43	Serbousek
2003-2-81		Iron pin concretion	42	
2003-2-82		Small ferrous concretion	42	
2003-2-83		Large concretion	44	
2003-2-84		Lead pipe concretion	45	
2003-2-85		Crushed lead mast collar	N/A	
2003-2-86		Cupric pipe with threading	47	
2003-2-87		Crushed cupric pipe	46	
2003-2-88		Iron strapping rod	48	
2003-2-89		Small block GMC piston	96, 97	
2003-2-90		Iron pin concretion	49	
2003-2-91		Iron pipe, rod concretion	50	
2003-2-92		Concretion with wood	49	
2003-2-93		Bullet and iron pin concretion	51	
2003-2-94	96COM021	Rubber sheet 1	52	Serbousek
2003-2-95	96COM072	Rubber sheet 2	52	Serbousek
2003-2-96	96COM021	Rubber sheet 3	53	Serbousek
2003-2-97		Rubber sheet 4	54	
2003-2-98	96COM021	Ferrous plate concretion	51	Serbousek
2003-2-99		Iron square spike concretion	51	
2003-2-100		Iron pipe concretion	55	

Accession No.	Old No.	Artifact	Drawing No.	Donor
2003-2-101		Iron concretion with bullets	55	
2003-2-102		Small iron plate concretion	55	
2003-2-103		Concretion with stone	56	
2003-2-104	96COM065	Iron concretion with pin	57	Serbousek
2003-2-105		Rifle barrel concretion	58	
2003-2-106		Bolt hole concretion	56	
2003-2-107		Ferrous concretion	56	
2003-2-108		T-shaped concretion	60	
2003-2-109		Concretion	59	
2003-2-110		Pin from relay	59	
2003-2-111		Small iron concretion	61	
2003-2-112		Small iron pipe concretion	62	
2003-2-113		Iron plate concretion	61	
2003-2-114		Iron rod concretion	62	
2003-2-115	96COM001	Iron plate with rivets	61	Serbousek
2003-2-116	96COM059	Iron pipe	62	Serbousek
2003-2-117		Ferrous plate concretion	61	
2003-2-118		Shell concretion	62	
2003-2-119		Small concretion	62	
2003-2-120	96COM017	Ferrous concretion	63	Serbousek
2003-2-121		Small concretion	63	
2003-2-122		Iron plate	64	
2003-2-123		Iron plate	65	
2003-2-124	96COM055	Small concretion	66	Serbousek
2003-2-125	96COM060	Concretion	66	Serbousek
2003-2-126		Small concretion	66	
2003-2-127	96COM058	Coal and iron plate	67	Serbousek
2003-2-128		Small ferrous concretion	66	
2003-2-129		Iron concretion with strap	67	
2003-2-130		Iron pin concretion	69	
2003-2-131		Iron plate concretion	68	

Accession No.	Old No.	Artifact	Drawing No.	Donor
2003-2-132		Small ferrous concretion	68	
2003-2-133		Iron and coal concretion	69	
2003-2-134		Ferrous screw from relay	68	
2003-2-135		Percussion cap concretion	69	
2003-2-136		Small concretion	68	
2003-2-137		Concretion	70	
2003-2-138		Small iron concretion	68	
2003-2-139	96COM047	Engine mount	71	Serbousek
2003-2-140		Iron pin concretion	70	
2003-2-141	96COM019	Iron concretion	70	Serbousek
2003-2-142		Iron concretion w/2 cavities	72	
2003-2-143		Ferrous pipe/gun barrel	73	
2003-2-144	96COM047	Iron concretion	75	Serbousek
2003-2-145	96COM008	Iron and coal concretion	74	Serbousek
2003-2-146	96COM045	Ferrous concretion	76	Serbousek
2003-2-147		Iron concretion	77	
2003-2-148		Iron concretion	78	
2003-2-149	96COM063	Iron plate concretion	79	Serbousek
2003-2-150	96COM057	Concreted rifle	80	Serbousek
2003-2-151		Concreted iron pipe/rod	81	
2003-2-152	96COM009	Concreted iron rod	82	Serbousek
2003-2-153	96COM036	Concreted iron pipe	83	Serbousek
2003-2-154		Small iron pin	84	
2003-2-155		Coal	84	
2003-2-156		Concreted pin	85	
2003-2-157	96COM048	Concreted iron barrel	86	Serbousek
2003-2-158	96COM036	Iron connecting rod	87	Serbousek
2003-2-159		Pipe and flange fitting	88	
2003-2-160		Coal piece	84	
2003-2-161		Small concretion	84	
2003-2-162	96COM015	Engine relay (?)	89- 92	Serbousek

Accession No.	Old No.	Artifact	Drawing No.	Donor
2003-2-163		Cupric steam pipe	93	
2003-2-164		Crushed copper pipe	94	
2003-2-165		Crushed copper pipe	95	
2003-2-166	96COM005	Retaining plate and pin	21	Serbousek
2003-2-167		10 assorted coal pieces	98	
2003-2-168		Concreted bronze dump	99	
2003-2-169	96COM101	Glass boiler sight glass tube	N/A	Serbousek
2003-2-170		5 brass shell casings	100	
2003-2-171		11 lead bullets	100	
2003-2-172	96COM052	Anchor ring, shackle, chain	101	Serbousek
2003-2-173	96COM027	Concreted rolling block rifle	N/A	Serbousek
2003-2-174		Concreted. iron stone plate	102	
2003-2-175		3 pieces of coal	103	
2003-2-176	96COM007	Dump in wood fragment	104	
2003-2-177		Concreted copper pipe	105	
2003-2-178		Wood fragment	106	
2003-2-179	96COM035	Concreted iron pipe w/flange	107	Serbousek
2003-2-180		Cap and shell casings	N/A	Serbousek
2003-2-181		Large cupric steam pipe	111	Serbousek
2003-2-182		Air chamber	108	
2003-2-183		Marine head	109, 110	
2003-2-184	96COM100	AT Babbit block	7	Serbousek
2003-2-185	96COM037	Small boat anchor	6	Serbousek
2003-2-186	96COM199	.45 caliber Remington rifle	N/A	Serbousek
2003-2-187		Bronze spike fragment	16	
2003-2-188		Bronze spike fragment	16	
2003-2-189		Bronze spike fragment	16	
2003-2-190		Bronze spike fragment	16	
2003-2-191		Bronze spike fragment	16	
2003-2-192		Bronze spike fragment	16	

APPENDIX C:
TITLE JUDGEMENT

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
ORLANDO DIVISION

"IN ADMIRALTY"

PONCE DeLEON INLET LIGHTHOUSE PRESERVATION ASSOCIATION, INC. and DON SERBOUSEK,

Plaintiffs,

-against-

THE UNIDENTIFIED, WRECKED, AND ABANDONED VESSEL, HER TACKLE, ARMAMENT, APPAREL AND CARGO, LOCATED AT COORDINATES 29° 12.23' N. LATITUDE AND 80° 46.44' W. LONGITUDE, BELIEVED TO BE THE STEAM VESSEL COMMODORE,

Defendant.

Case No: 98-1299-CIV-ORL-18A

ORDER THAT: (1) VESSEL BE STORED WITHOUT KEEPERS; (2) PLAINTIFF PONCE DeLEON INLET LIGHTHOUSE PRESERVATION ASSOCIATION, INC. BE APPOINTED SUBSTITUTE CUSTODIAN OF ARTIFACTS RECOVERED FROM THE VESSEL

It is hereby

ORDERED, that after seizure of the defendant Vessel in accordance with the *In Rem* Warrant of Arrest issued by the Court, the United States Marshal for the Middle District of Florida shall permit the Vessel to be "stored without keepers,", i.e., there is no

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need for the marshal, his deputy, a security guard, or any other person to guard the Vessel during the period of its arrest; and it is further

ORDERED, that plaintiff Ponce DeLeon Inlet Lighthouse Preservation Association, Inc. (the "Association") is hereby appointed substitute custodian of any artifacts that it recovers from the Vessel, and that the Association is to keep such artifacts in its custody and safekeeping until further order of this Court, preserving and protecting them in the manner described in the Verified Complaint.

Dated: December 28, 1998

United States ~~District~~ Magistrate Judge