

ROLLING ON THE RIVER: PRESERVING AMERICA'S STEAMBOATS

by

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(Under the Direction of JOHN C. WATERS)

ABSTRACT

This thesis was written to encourage the preservation of America's historic steamboats, and to assess the preservation efforts that have been made thus far. The steamboat played an immeasurable role in the early development of the United States and is currently being threatened. Current steamboat preservation is limited in scale and often unorganized, and a need for a comprehensive preservation plan is clear. As modern steam vessels are constructed to re-create the historic steamboat experience, focus must return to the saving of the original vessels. This thesis will examine the development of steam powered transportation in the United States, focusing on the Mississippi River Valley, showcase several operating historic and non-historic vessels, and present recommendations for continued operational success.

INDEX WORDS: Steamboat, Historic Vessel Preservation, Mississippi River

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CHAPTER 1

INTRODUCTION

The identity of America throughout history has centered on promise, opportunity, and a pioneering spirit. From early colonial beginnings to the current fifty-one states, the nation has expanded rapidly, spawned by early Westward movement. Early Americans hailed from all different economic classes and social castes, from poor immigrants looking for a better life to wealthy aristocrats seeking new business opportunities. The great waterways of America were the initial highways that fueled this expansion, especially the mighty and mysterious Mississippi River, and no other vessel represents that history like the steamboat. Steamboats have been continuously used in America since the late eighteenth century, and had an immense impact on the cultural, architectural and technological development of the young nation. No other method of transportation has inspired not only vast advances in machinery, but also literature, art, films and wonder in the hearts of the American people. Mark Twain illustrates this affection in his novel, *Life on the Mississippi*:

When I was a boy, there was but one permanent ambition among my comrades in our village on the west bank of the Mississippi River. That was, to be a steamboatman. We had transient ambitions of other sorts, but they were only transient. When a circus came and went, it left us all burning to become clowns; the first negro minstrel show that came to our section left us all suffering to try that kind of life; now and then we had a hope that if we lived and were good, God would permit us to be pirates. These ambitions faded out, each in its turn; but the ambition to be a steamboatman always remained.”¹

¹ Mark Twain, *Life on the Mississippi*. (New York, NY: Harper Brothers Publishing, 1901) 30

For most Americans today, the image that comes to mind at the word “steamboat” is a grand white vessel covered in Victorian gingerbread woodwork powered by a massive paddlewheel and happily playing calliope music as it steams tourists around a lake or up and down a river. While it is true that many steamboats were quite magnificent, most passengers were not simply seeking a pleasure cruise. For those who could not afford first class passage on these grand vessels, a steam voyage most likely meant hard work chopping wood in exchange for a journey spent sleeping with the animals or cotton bales being transported on the sweltering lower decks, without food or access to restrooms. The men who lived and worked aboard early steamboats developed reputations for being rough and short-tempered, and many towns along the Mississippi became known for unlawful and dangerous activity in the initial days of lower Mississippi River exploration. As the steamboat grew in popularity and sophistication, these towns became bustling and wealthy cities with access to better goods and services provided by the hundreds and sometimes thousands of steamboats passing through their ports each year.

Steamboats hold significance for all different cultures in America, as they carried immigrants to new jobs in the great Wild West, were instrumental in information dispersal as African Americans fought to gain freedom, transported soldiers during several early American wars, and even carried Native Americans across the country as they were relocated during American settlement. Steamboats also prompted river improvements, and the removal of snags and islands and the building of dams and locks for enhanced trade routes and decreased travel times. The great ships were also used for entertainment, bringing music, plays, and even the circus to isolated areas along the

banks of the Mississippi. River ports developed as centers of economy, culture, trade and social activity as the steamboats reached their golden era, especially in the Deep South where cotton was king and rivers were plentiful and wide.

While they contributed to much economic growth and prosperity, steamboats were also responsible for much loss of life and property. No regulations existed for the construction of early steamboats, and as competition between companies and captains grew, catastrophic boiler explosions claimed the lives of many travelers and even some unlucky bystanders who happened to be dockside when a steamboat exploded in port. Although much loved and revered vessels, they were also catalysts for public outcry and demands for government protection and regulations, becoming the first private industry to be regulated by the government for safety. Many modern safety laws developed out of early steamboat inspection and regulation legislation.

In modern times, true historic steamboats in operation are few and far between, and are almost strictly used for museums or entertainment purposes. As railroads and the automobile became more popular and economic methods of transport for goods and passengers, the days of the grand passenger steamboat faded, and barges and tugboats became the most common uses for steam along America's waterways. Steamboats are still viewed as icons of America's past and continued to run overnight passenger trips along the Mississippi River until 2008, when they were threatened by legislation concerning wooden vessels. According to the Maritime Heritage Program operated by the National Park Service, four of the remaining nine vessels classified as river steamboats, passenger steamboats and sternwheel passenger steamers are listed as National Historic Landmarks, and two are listed on the National Register of Historic Places. These vessels

are all listed as in good condition and are treated with care by loving owners and operators, but their continued preservation is threatened by lack of public interest, a shrinking knowledge base, and lack of funding. While the National Park Service with the creation of the National Maritime Initiative in the 1980s has addressed the preservation of historic wooden vessels and maritime history, no specific information exists for the successful preservation of unique steamboats.² No information since 1985 is available on the status of the nine vessels identified as steamboats on Maritime Heritage Program website. If America is to hold on to these links to the distant and not so distant history of her country, a renewed focus must be placed on the preservation of steamboats.

This thesis has been written to examine the current operations of the existing historic steamboats and modern vessels, and explore methods for continuous preservation of these important vessels for future generations. While several steamboats do still operate in the United States, countless have been lost. Most recently, the *Mississippi Queen*, the second largest steamboat ever built, was sold for scrap in 2010 after sitting idle in New Orleans since 2006.³ Reasons for the loss of steamboats stem from difficult economic times, lack of interest and lack of use, but preservation and profit can be achieved through an organized and comprehensive plan. The three steamboats chosen for the case studies in this thesis, The *Belle of Louisville*, the *Delta Queen* and the *American Queen*, represent a small sampling of the boats still in operation, and the recommendations presented apply to the preservation of these vessels, and to vessels in

² National Park Service. Maritime Heritage Program. Available at: <http://www.nps.gov/maritime>. Internet: accessed May 24, 2012

³ Gwen Filosa. "Mississippi Queen Paddlewheel Steamboat Ends its Days in a Scrapyard." *The Times Picayune*. (June 13, 2010) Internet. Available at: http://www.nola.com/business/index.ssf/2010/06/mississippi_queen_paddlewheel.html. Accessed May 24, 2012

similar operational and economic situations. The inclusion of the modern American Queen steamboat in this thesis is based on the logic that while it is modern, it is valid from a preservation standpoint because of the insight it provides into the effectiveness of reproductions and to explore how strategies employed by the modern boat can also be used by historic vessels for increased success. The steamboat is a unique entity that should be treated differently than land-based historic resources and other wooden vessels such as large ocean liners or schooners.

The steamboat represents a common connection for early Americans across all social and economic conditions, and provided a platform where architecture, engineering and culture combined into one majestic vessel. A ride on a steamboat was like nothing else, with the great paddlewheel turning and the whistle announcing arrivals into port cities. While modern, reproduction steamboats do hold value and provide a similar experience, America should strive to hold onto the original vessels that still exist and provide support for their continued operation. Without the combined efforts of owners, the public, and national agencies, these iconic vessels could be lost forever.

CHAPTER 2

STEAMBOAT HISTORY

Early Steam Developments 1712 – 1820

The actual inventor of the steam engine is a highly contested matter, and it proves difficult to credit one individual with producing the steam engine and adapting the technology to boats, but a generally accepted history, especially as it relates to steamboats along Mississippi River system, is presented here. The first actual steam engine can be traced to Great Britain, when Thomas Newcomen created a steam engine to pump water for industrial use in 1712.⁴ This atmospheric engine made its first appearance in America in 1753, when a copper mine in New Jersey flooded and the engine was ordered to pump the water out of the tunnels.⁵ This design was standard until 1765, when a mathematical instrument maker at Glasgow University, James Watt, created a more efficient engine with a separate condenser for steam, called a dual-stroke steam engine.⁶ After several failed attempts to secure financing to build a full-scale model, Watt partnered with Matthew Boulton in 1774 to build the smaller steam engines for manufacturing purposes and found success with the engines in industrial uses.⁷ River transportation and navigation in America at this time depended mainly on flat-bottomed, man-powered keelboats that relied on ever-changing river currents for speed, resulting in

⁴ Leland Johnson, *Full Steam Ahead* (Indianapolis, IN: Indiana Historical Society, 2011), 3

⁵ Ibid.

⁶ F.M. Sherer, "Invention and Innovation in the Watt-Boulton Steam-Engine Venture." *Technology and Culture* 6 (1965) 165-187

⁷ Ibid.

long and inefficient transports.⁸ Many men began to visualize the options of adapting these industrial steam engines for water transportation. One of the first steam-powered vessels appeared in Piccadilly, England in 1785 with Joseph Bramah's patent of a paddle-wheel attached to the stern of a boat driven by a steam engine.⁹ From 1785 to 1787 Kentuckian James Rumsey used a hydraulic jet propulsion method that forced water taken in at the stern of the boat out at the bow, reaching a speed of four miles an hour in his vessel on the Potomac River.¹⁰ These early inventions were promising, but were expensive to make and still relatively inefficient for traveling against strong currents.

The man most often credited with designing the first real steamboat is John Fitch of Connecticut, who in 1786 steamed a forty-five foot skiff-type boat powered by cranks that turned paddles on each side twenty miles from Burlington, New Jersey to Philadelphia in a little over three hours.¹¹ The boat was extremely expensive to make and operate, and the slow speed that was helped by the tides did not convince investors or the public that Fitch had created a groundbreaking invention. Even so, a later boat of his was run on the Delaware River in the summer of 1790 for freight and passenger transport.¹² Fitch, Oliver Evans and John Fox Stephensen made several more attempts at steamboats before Robert Fulton built the first notably successful steamboat in 1807, although Fulton himself had been experimenting with steam since 1793.¹³ Fitch had been granted a monopoly from the state of New York for operation of steamboats on the Hudson River,

⁸ U.S. Army Corp of Engineers. "A History of Steamboats." U.S. Snagboat Montgomery. Available at: <http://www.sam.usace.army.mil/Montgomery/educational.html>. Internet: accessed: accessed Jan 30, 2012.

⁹ S.L. Kotar and J.E. Gessler, *The Steamboat Era: A History of Fulton's Folly on American Rivers, 1807-1860* (Jefferson, NC: McFarland & Company, Inc. Publishers, 2009) 5

¹⁰ Ibid

¹¹ *Two Hundred Years of Steamboating*. DVD. Produced by Gerald W. Sutphin. 2011; Hanover, IN: Rivers Institute at Hanover College

¹² E.W. Gould. *Gould's History of River Navigation* (St. Louis, MO: Nixon Jones Printing Company, 1889)

6

¹³ Ibid.,7

but died before he could utilize it. Robert R. Livingston, a member of the Second Continental Congress and head of one of New York's oldest and wealthiest families, used his connections to secure Fitch's steamboat monopoly rights for himself in 1798 when he created a partnership with his brother in law, John Stevens, to build steamboats for service on the Hudson River.¹⁴ While visiting Paris in 1802, Livingston recruited Fulton, an ostentatious young engineer, to bring steam power to America. The partnership proved successful in August of 1807 when the *Clermont* traveled up the Hudson carrying Livingston family members and potential investors, powered by a low-pressure steam engine designed by none other than Boulton and Watt.¹⁵ E.W. Gould describes the design of this first steamboat as "like a Long Island skiff, it was decked for a short distance at the stem and stern. The engine was open to view, and from the engine aft, a house like that of a canal boat was raised to cover the boilers and the apartments for the officers."¹⁶ The *Clermont* was completely rebuilt during the winter of 1807-8, with a longer hull and was covered with a deck from end to end.¹⁷ These early steamboats also featured masts and sails in case the engines should fail.

¹⁴ Thomas H. Cox, "Contesting Commerce: Gibbons v. Ogden, Steam Power, and Social Change", *Journal of Supreme Court History* 43 (2009) 57 - 58

¹⁵ James Thomas Flexner, *Steamboats Come True: American Inventors in Action* (New York, NY: Fordham University Press: 1992) 321

¹⁶ Gould, 7

¹⁷ *Ibid.*, 8

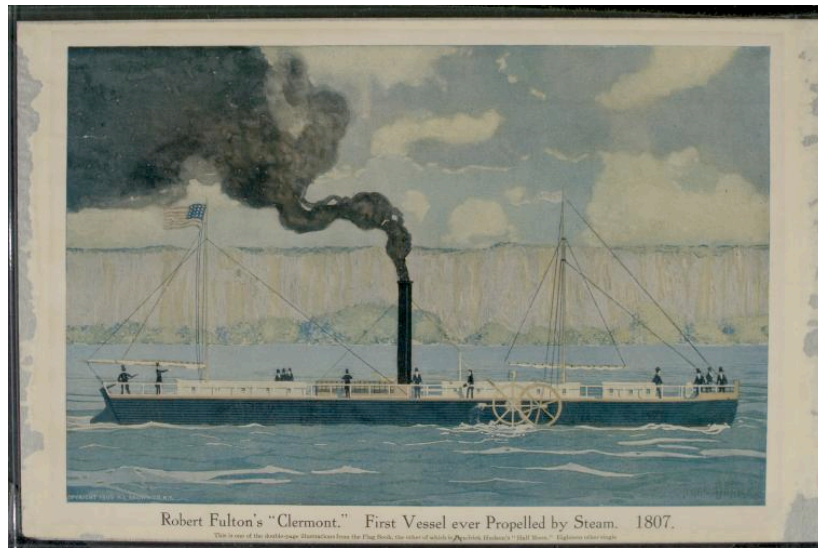


Figure 2.1. Robert Fulton's *Clermont*. (Source: NYPL Digital Gallery)

While these first steamboat experiments were proving successful on early America's eastern rivers, the creation of the Northwest Territory in 1787 and the Louisiana Purchase of 1803 caused the focus to switch to development of the Ohio Valley and the river systems there, namely the mighty Mississippi. Keelboats and barges were the only source of transportation on the lower Mississippi at this time, besides the Native American canoes. This meant that goods could be easily transported downriver, but bringing goods north proved difficult and time consuming. Largely undeveloped, Cincinnati with a population of 2,500, Louisville with 1,250 and Natchez, Mississippi were the only established towns along the river from Pittsburg to New Orleans in 1809.¹⁸ The United States was also entering a time of economic transformation referred to as the market revolution. This meant that farmers were realizing that they could produce surplus product to make money, not just to sustain themselves and their families, but they must

¹⁸ S.L. Kotar and J.E. Gessler, 18

have cost effective upriver transportation to do so.¹⁹ Robert Fulton recognized an opportunity for exploration and profit in this territory, writing “Steamboats will give a cheap and quick conveyance to the merchandise on the Mississippi, Missouri and other great rivers, which are now laying open their treasures to the enterprise of our countrymen; and although the prospect of personal emolument has been some inducement to me, yet I feel infinitely more pleasure in reflecting on the immense advantage my country will derive from my invention.”²⁰ Fulton and Livingston partnered with Nicholas Roosevelt, a man of influence and resources and a great granduncle of Theodore Roosevelt, to investigate the possibility of running a regular steamboat between New Orleans and Natchez, Mississippi by exploring the waters of the lower Mississippi River.²¹ Roosevelt and his wife, Lydia Latrobe, set off from Pittsburg in the summer of 1809 on a large and comfortable flatboat built especially for the journey to chart river channels and depths and also to scout for possible coal deposits along the riverbanks.²² The couple safely arrived in New Orleans that winter, traveled back to New York and reported to Fulton and Livingston that the Mississippi was navigational and the trio then formed the Mississippi Steamboat Navigation Company.²³

Roosevelt, his wife, and their newly born daughter returned to Pittsburg in 1810 with ship builders and steam engineers from New York to build a Fulton-designed steamboat on the bank of the Monongahela River that would be put into service in New

¹⁹ Adam I. Kane. *The Western River Steamboat*. (College Station, TX: Texas A&M University Press, 2004) 10-11

²⁰ *Ibid.*, 22

²¹ James M. Powles. “New Orleans: First Steamboat Down the Mississippi” *American History* (June 2005) 48-55

²² Johnson, 4

²³ Powles, 50

Orleans at the end of its journey down the river.²⁴ While Roosevelt oversaw the construction of the boat, Fulton and Livingston succeeded in securing a monopoly for navigation of the New Orleans territory by steamboats.²⁵ Built of native white pine, the appropriately named steamer, the *New Orleans*, was unlike anything before it. The *New Orleans* featured a copper boiler and a single low-pressure engine with a thirty four inch-diameter cylinder and separate condenser to power its large side wheels and provided plenty of space below the deck for cabins to house up to sixty passengers.²⁶ After several test runs, the steamer set off from Pittsburg on Sunday, October 20, 1811 carrying Roosevelt, his pregnant wife Lydia, their small daughter and large dog, Tiger, along with engineer Nicholas Baker, pilot Andrew Jack, and a handful of deckhands and servants.²⁷ Reaching a speed of eight to ten miles per hour, the *New Orleans* reached Cincinnati two days after departure and Louisville the very next, where Roosevelt surprised local dignitaries dining aboard the boat by steaming her upstream during dinner to prove that upriver travel was not only possible, but simple aboard the powerful steamer.²⁸ Because of low water at the Falls of Ohio, a set of rapids just south of Louisville, the Roosevelts were forced to extend their stay there, and Lydia gave birth to a baby boy. While waiting, Roosevelt steamed between Louisville and Cincinnati, charging local citizens a dollar each for short trips on the boat.²⁹ After over a month of waiting, Roosevelt decided to take advantage of a small rise in the water level and chance crossing the falls, even though the deep hull of this early steamboat would come within five inches of the rocks

²⁴ Johnson, 4

²⁵ Powles, 51

²⁶ Ibid., 50

²⁷ S.L. Kotar and J.E. Gessler, 23

²⁸ Edward Quick and Herbert Quick. *Mississippi Steamboat* (New York, NY: Henry Holt and Company, 1926) 75-76

²⁹ Powles, 52

below.³⁰ Thankfully, the *New Orleans* survived the falls and docked below at the town of Shippingport for several days to stock up on supplies. Here, the boat experienced the first violent shockwaves of the strongest earthquake ever recorded in the United States, the New Madrid earthquake.³¹ The earthquakes intensified as the ship steamed downriver, and the effects of the shifting earth became even more apparent. The old river channels memorized by the captain no longer existed, new channels formed, debris and snags clogged the river and towns that were scheduled as supply stops were completely devastated.³² At one point, the *New Orleans* anchored for a night on a small island in the river, only to find the next morning that the island had completely sunk, and the lines had to be cut from the now completely submerged land.³³

Along with the trials caused by the earthquakes and aftershocks, the *New Orleans* faced several other obstacles such as an onboard fire ignited by firewood kept too close to the stove and attempted attacks by Native Americans residing along the shores.³⁴ The boat was finally welcomed into Natchez, Mississippi on December 30th, 1811 by crowds of spectators lining the high bluffs, and stopped there for several days to celebrate the wedding of Lydia Roosevelt's maid and the boat's engineer, which is said to be the first marriage aboard a steamboat in the world.³⁵ Also notable from the Natchez stop is that planter Samuel Davis entrusted the *New Orleans* with a shipment of cotton bales to sell in New Orleans, the first ever shipment of cotton by steamboat.³⁶

³⁰ Johnson, 8-9

³¹ Ibid.

³² Ibid.

³³ Ibid.

³⁴ Powles, 54-55

³⁵ Ibid.,55

³⁶ Quick and Quick, 88

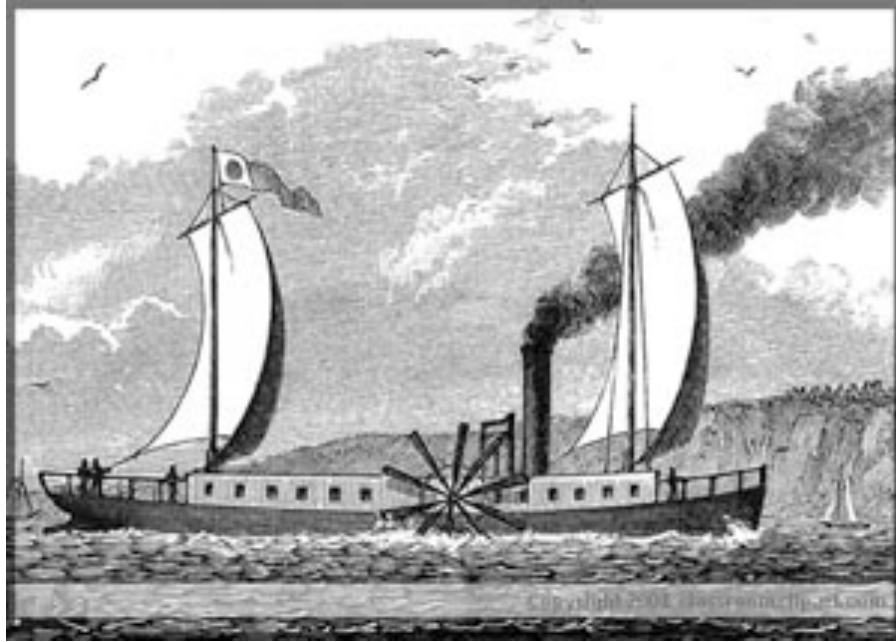


Figure 2.2: The *New Orleans* (Source: The Steamboat Museum)

From Natchez to New Orleans, the trip remained uneventful and the steamer reached its destination on January 10th, 1812, and became the toast of the town for several weeks.³⁷ The *New Orleans* ran regular trips between Natchez and New Orleans transporting passengers and freight until a snag sunk the vessel in 1814, but Fulton salvaged the engine and machinery for use in a new boat, also named the *New Orleans*, to continue this profitable route.³⁸ Roosevelt, Fulton and Livingston dissolved their partnership not long after the *New Orleans* completed its ground-breaking journey, and the Roosevelts returned to New York to follow other enterprises, but Livingston and Fulton continued to build steamboats and engines, even creating a partnership with Lydia's father, Benjamin Latrobe.³⁹ The journey of the *New Orleans* was remarkable, and would spark the imaginations of many enterprising businessmen along the Mississippi River. In fact, almost from the day construction started on the boat, competition was

³⁷ Johnson, 11

³⁸ Ibid.

³⁹ Powles, 54-55

developing rapidly, and the Fulton-Livingston monopoly on steamboats in the territory of New Orleans would soon be threatened.

During one of the first test runs of the *New Orleans*, Roosevelt encountered Connecticut inventor Daniel French on the Monogahela River testing a high-pressure steam engine, which was more powerful and lighter weight than the low-pressure engines being used in the *New Orleans*.⁴⁰ The boats raced, and while the *New Orleans* beat the smaller engine downstream, the small vessel caught up to the big steamer at rapids on the Allegheny, and soon after Daniel French formed a company at Brownsville, Pennsylvania to start building boats with high-pressure steam engines.⁴¹ Henry Miller Shreve, originally from New Jersey but a long-time Mississippi river man and a flatboat captain, is often credited by scholars as being the true father of western steamboating because of his contributions to the design of the boats in association with Daniel French. French and Shreve virtually ignored the Fulton-Livingston monopoly in the New Orleans territory and began construction on the *Comet* in 1813, placing the large wheels on the stern of the boat as opposed to the sides like the *New Orleans*, and it became the first high-pressure steam engine on western waters.⁴² The *Comet* reached New Orleans in 1814, amidst lawsuits being filed by Fulton and Livingston, but only made two unprofitable trips from New Orleans to Natchez before the engines were sold for industrial use.⁴³ Next, French and Shreve built the *Enterprise* at Brownsville and she made two trips to Louisville before steaming to New Orleans, a trip it made in fourteen days.⁴⁴ Fulton had the *Enterprise* seized by the New Orleans authorities when it reached port, but lucky for

⁴⁰ Johnson, 5

⁴¹ Ibid.

⁴² S.L. Kotar and J.E. Gessler, 24

⁴³ Ibid.

⁴⁴ Ibid.

Shreve, a lawyer by the name of A.L. Duncan set bail, doing the same when Fulton attempted to have Shreve seized a second time for violating the terms of Fulton's monopoly.⁴⁵ The *Enterprise* is regarded as being the first steamboat to make a full upriver journey from New Orleans to Pittsburg, and also transported cargo for General Andrew Jackson during the war of 1812.⁴⁶

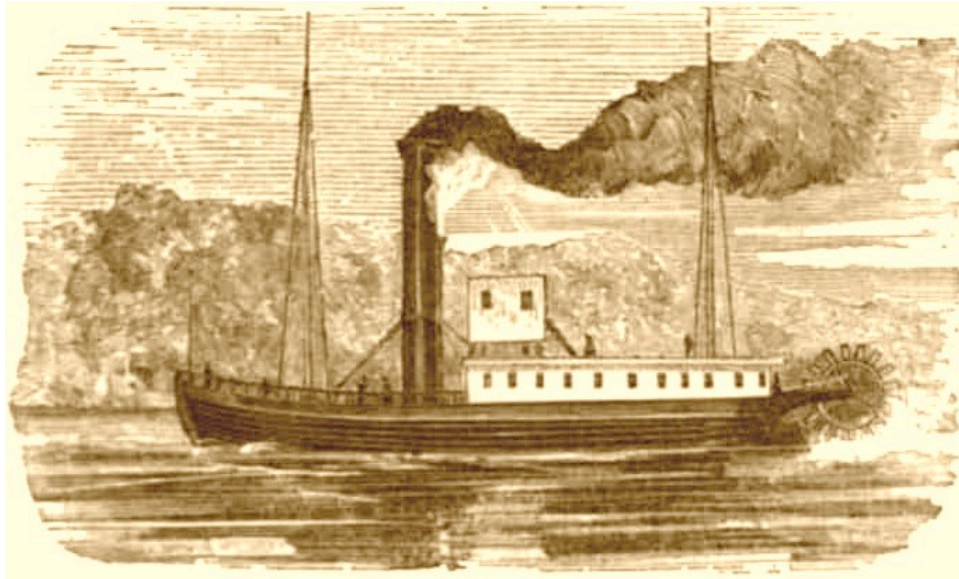


Figure 2.3: The *Enterprise* (Source: www.dolleymadison.net)

Fulton and Livingston continued to build boats during this time, operating the *Vesuvius* in 1814, the *Aetna* in 1815 and the second *New Orleans*.⁴⁷ By the end of 1815, Robert Fulton and Robert Livingston had both passed away, but that did not end the legal battle for a monopoly on the Mississippi River for steam. Edward Livingston, Robert Livingston's younger brother, sued Henry Miller Shreve in federal district court after the *Enterprise* steamed up the Mississippi River, but Judge Dominick Hall ruled that Louisiana could not regulate a public highway – the Mississippi River, and the Louisiana

⁴⁵ Ibid.

⁴⁶ Kane, 50

⁴⁷ Sutphin, 2011

monopoly was invalidated, opening up the western waters for whoever wanted to try their hands at steam boating.⁴⁸

With his legal battles behind him, Shreve was free to build and run as many steamboats as he wished on the Mississippi, and in 1816 designed the *Washington*, which is considered the first steamboat built specifically for use on the western rivers.⁴⁹ Differences in the design of the *Washington* as compared to earlier boats are that it used a horizontally oriented high-pressure engine, placed boilers on the main deck instead of the hull, which created a much shallower hull, characteristics that appeared on almost all western river steamboats to follow.⁵⁰

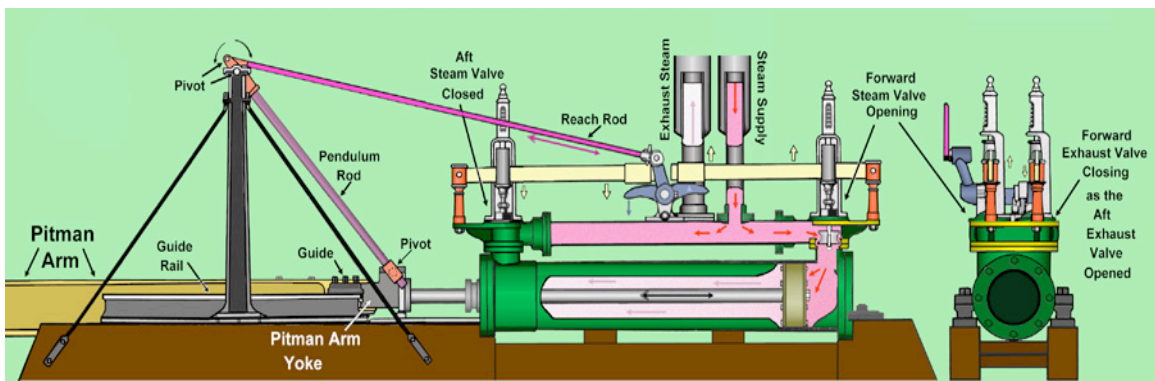


Figure 2.4: Steam Engine Construction (Source: www.steamboats.com)

Even though the *Enterprise* had successfully steamed upriver in 1815, the public attributed the success to a high flood stage of the river, making the trip less strenuous.

When the *Washington* made a round trip from New Orleans to Louisville in 1819 in forty-five days with normal river conditions, Americans were convinced of the true power of the steam engine.⁵¹ James Lloyd asserted, “After this memorable voyage of the

⁴⁸ S.L. Kotar and J.E. Gessler, 26

⁴⁹ Louis C. Hunter, “The Invention of the Western Steamboat.” *The Journal of Economic History*, Vol.3, No.2 (Nov. 1943) 203

⁵⁰ Kane, 50

⁵¹ Hunter, 205

Washington, all doubts and prejudices in reference to steam navigation were removed. Shipyards began to be established in every convenient locality, and the business of steamboat building was vigorously prosecuted.”⁵² Profits reported by steamboat operators astonished the public, as the *New Orleans* made a profit of four thousand dollars in one trip between Natchez and New Orleans in 1817.⁵³ That year, fourteen steamboats operated on the western rivers, and that number more than doubled by 1819.⁵⁴ Shreve and many other steamboat builders continued to build and improve on the vessels to adapt them to the western rivers, adding a second deck and continuously decreasing the hull depth for better navigation of the shallow water. The more powerful, and more dangerous high-pressure steam engine had virtually replaced the low-pressure engine on western waters by the mid 1820s, and side paddle-wheel configuration began to gain favor over Shreve and French’s stern-wheel design.⁵⁵ While some steamboats for western rivers continued to be built in the east, the 1820s saw major steamship building centers develop in Cincinnati, Louisville and Pittsburg that constructed boats specifically for western rivers.⁵⁶ River traffic was evolving and the easy route of trade between Natchez and New Orleans began to spread from New Orleans to Louisville, and by 1820, sixty-nine steamboats were in operation on western waters.⁵⁷

1820 Through the Turn of the Century

Besides New Orleans and a few other ports along the river, the West was still largely uncivilized in the early days of the steamboat, and contained vast amounts of

⁵² James T. Lloyd, *Lloyd’s Steamboat Directory and Disasters on the Western Waters* (Cincinnati, OH: J.T. Lloyd & Company, 1856) 45

⁵³ Hunter, 209

⁵⁴ Sutphin, 2011

⁵⁵ Carl A. Brasseaux and Keith P. Fontenot. *Steamboats on Louisiana’s Bayous: A History and Directory*. (Baton Rouge, LA: Louisiana State University Press, 2004) 9-12

⁵⁶ Kane, 60

⁵⁷ Brasseaux and Fontenot, 8

untapped resources, such as old-growth forests and coal and iron mines. These early steamboat builders took full advantage of these resources for building their mighty steam engines and the boats became primary vessels for industrialization and settlement of the areas along the Mississippi River. America was growing rapidly, with immigrants beginning to migrate to the country and easterners moving west, seeking refuge from the big cities, made possible by the easy and affordable navigation of the steamboat.⁵⁸ In 1824, Chief Justice John Marshall declared monopolies on steamboats unconstitutional, and ruled that Congress had the power to regulate interstate commerce in America under the Commerce Clause of the Constitution.⁵⁹ Marshall declared, “ A thing which is among the states cannot stop at the external boundary line of each state, but may be introduced into the interior.”⁶⁰ The people of the United States supported this decision, and the steamboat industry grew quicker than ever, with more boats providing less expensive fares more affordable for all Americans.⁶¹ The United States Post Office even established contracts for steamboat owners in 1824 to carry mail.⁶² The primary change occurring in the “wild” west due to the steamboat was the growth of trade. Construction improvements allowed for larger tonnage, and sugar, coffee, molasses, cotton, ceramics, wines and other products began to be used regularly in the newly developing towns.⁶³ New Orleans became the principal trade center for this new western territory, fulfilling a projection by the National Turnpike administrative committee in 1816 that stated, “unless the trans-Appalachian roads were much improved, steam navigation would soon make

⁵⁸ Kane, 12-13

⁵⁹ Maurice G. Baxer, *The Steamboat Monopoly: Gibbons v. Ogden, 1824* (New York, NY: Alfred A. Knopf, 1972) 48

⁶⁰ *Ibid.*, 50

⁶¹ S.L. Kotar and J.E. Gessler, 137

⁶² Anthony Fandino. “Early Steamboat Days on Western Waters”. *U.S. Stamp News* (November 2011) 18

⁶³ Kane, 12-13

New Orleans the sole emporium of western commerce, much to the injury of the seaboard states.”⁶⁴ The value of goods deposited in New Orleans went from twenty-six to ninety-seven million from 1830 to 1850 and the city became America’s second largest port of entry for immigrants.⁶⁵ New Orleans grew from a population of seventeen thousand, two hundred forty-two in 1810 to one hundred sixteen thousand, three hundred and seventy-five in 1850, when two thousand, seven hundred and eighty-four steamboats were arriving in the city yearly.⁶⁶

As the west and steamboats developed and the goods and passengers transported became wealthier, the design of the crafts became more comfortable and a race to be the finest, fastest vessel on western waters took center stage. The “packet” boat, a term that applied to a vessel that carried passengers and freight on overnight trips, became the standard prototype for steamboats.⁶⁷ Multi-decked boats became common by the 1830s with the lower, main deck containing the engines, boilers, fuel and cargo space and the upper deck set aside for passengers, with a large main cabin used for meals, dancing and social events in the center and staterooms lining each side.⁶⁸ The upper deck was called the hurricane deck and the crew’s quarters, or “Texas” deck sat atop the main cabin, with the pilothouse on top of it, between the twin stacks that became a feature of western river steamboats.⁶⁹

⁶⁴ Brasseaux and Fontenot, 9

⁶⁵ *Ibid.*, 10

⁶⁶ S.L. Kotar and J.E. Gessler, 249

⁶⁷ Kane, 149

⁶⁸ Norbury L. Wayman. *Life on the River*. (New York, NY: Crown Publishers, Inc., 1971) 147

⁶⁹ *Ibid.*

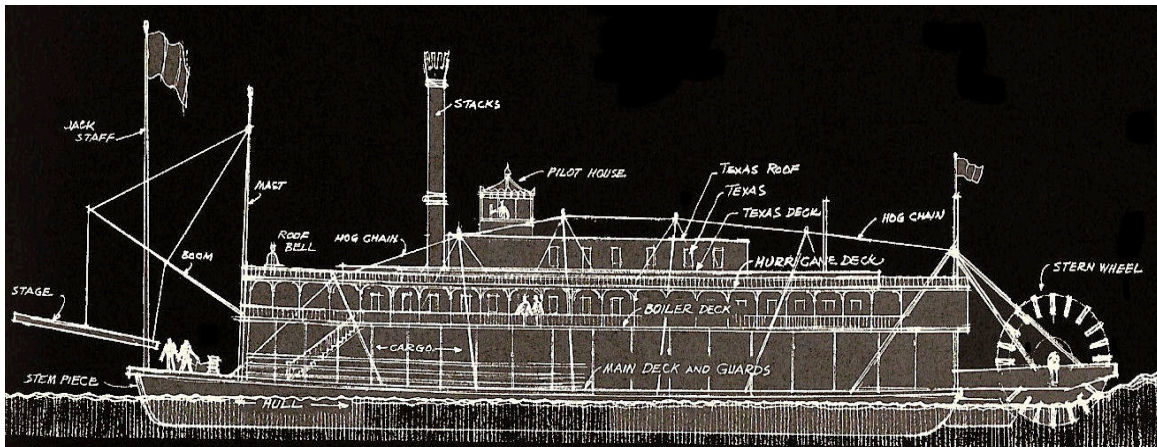


Figure 2.5: Packet Steamboat Layout (Source: www.cincinnativiews.com)

The interior arrangement that developed on the boats featured the men's sleeping quarters towards the front closest to the bar, the main cabin in the middle, and women's cabins and private staterooms for married couples towards the stern of the boat, which was considered the safest area because of its distance from the engines and boilers.⁷⁰ The main cabin, or saloon, became the most ornamented area of the boat and a length of three hundred feet was average by 1852 with a ceiling height of ten to fourteen feet, although at only about twenty feet, the saloons were somewhat narrow.⁷¹ The exteriors also became more refined, as the decks became more decorative and ironwork designs often spanned the space between the large stacks. Steamboats became more than just vehicles for transportation and trade, but also of luxury and entertainment. A report from the *Wheeling Gazette* as quoted by Gould in the 1830s declares, "Music and dancing are the chief amusements; and at night, when the spacious cabin of one of our Leviathan boats is lighted up, enlivened by the merry notes of the violin, and filled with well-dressed persons, it seems more like a floating palace than a mere conveyance for wayfarers."⁷²

⁷⁰ S.L. Kotar and J.E. Gessler, 180

⁷¹ *Ibid*, 181

⁷² Gould, 129

Some boats even featured a calliope, a sort of steam-powered organ that would be played when approaching towns along the river.⁷³

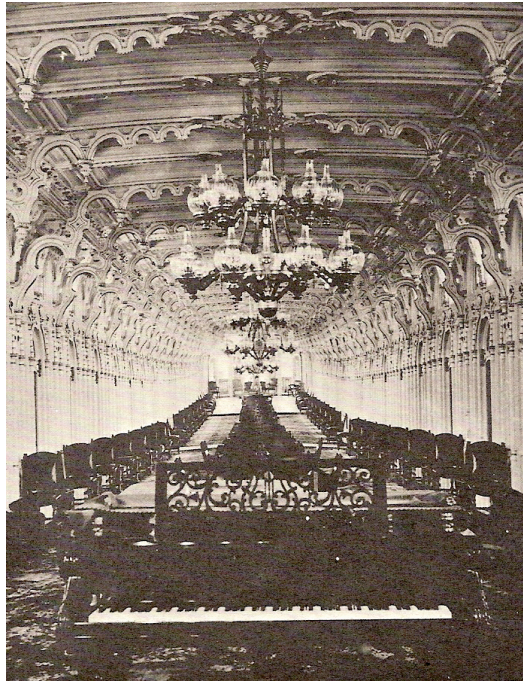


Figure 2.6: Interior of the *J.M. White*, 1878 (Source: Cincinnati Views)

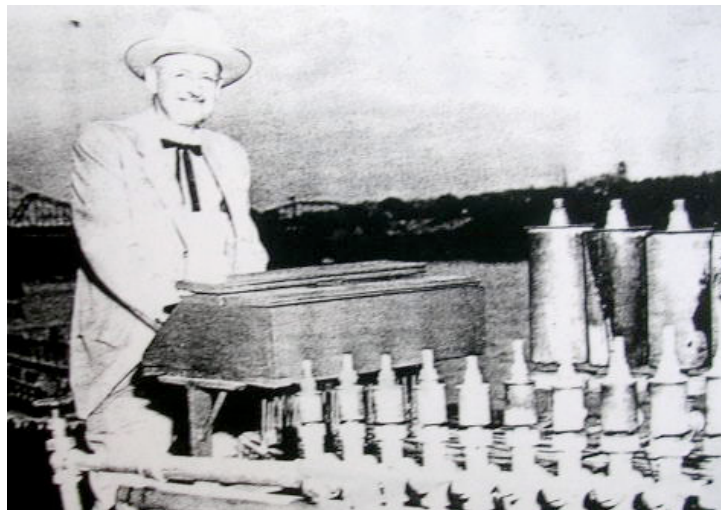


Figure 2.7: Jay Quinby playing the *Avalon* calliope, 1878 (Source: Steamboats.org)

⁷³ Norbury, 148

Indeed, steamboats became the most desirable way to travel, especially for first class travelers who could afford staterooms and meals in the main cabin. Below the grandeur, on the lower deck, were the deck passengers. These passengers paid a very low fare and received no accommodations besides whatever space they could find between cargo and livestock, sometimes paying their fare by hauling in loads of wood from the towns along the way to fuel the engines.⁷⁴ The lower deck was open to the elements and exposed to the heat from the engines and boilers, but the deck passengers usually outnumbered cabin passengers four to one.⁷⁵ While most old grand packet boats are remembered for their lavish decoration and accommodations, the deck passengers below played an equal role in the development of the west, as they consisted of workers, immigrants, and African Americans. Steamboats were also used to transport Native Americans further west during removal, “altering the social fabric of both Native American and Euro-American settlers alike.”⁷⁶

From the 1830s to the Civil War, steamboats reached their heyday and became a way of life along the Mississippi River. Riverfronts became festive, bustling areas, and people would line the streets as bands played and the grand vessels blew their whistles to announce departures and arrivals. New Orleans, Baton Rouge, Natchez, Vicksburg and Cairo became important ports for river trade and travel and population grew rapidly. French journalist Bertrand Dureau said in 1850, “Today steamboats are the salvation of the valley of the Mississippi. They are the most essential agents of its business and social life, and if it were possible to imagine them wiped out for a time, the rising civilization of

⁷⁴ S.L. Kotar and J.E. Gessler, 218

⁷⁵ Ibid.

⁷⁶ Leland Johnson, “Steamboat 2011 History,” Available from <http://rivers.hanover.edu/steamboat2011/history.php> (accessed March 11, 2012)

those extensive regions would disappear with them.”⁷⁷ From 1800 to 1850 the population in the trans-Appalachian West grew by one hundred and eighty-two percent each decade.⁷⁸ Goods became cheaper and more available because it was less expensive to ship them across the country, and timber industries flourished along the river to supply the vast amount of wood needed to build and run the steamboats, taken from the relatively untouched forests of the wilderness.⁷⁹ Cotton became the principal export of the United States, and at the core of this economy was slave labor. The steamboats on the Mississippi became an interesting part of African American heritage during the years leading up to the Civil War. Free people from the north would travel south, and slaves would travel on the boats as well, creating an interesting meeting place for African American workers on the boats, slaves traveling with their masters, and free blacks traveling independently.⁸⁰ African American workers on the boats were often subjected to discrimination and violence, but they were important in the resistance movement, as there are documented cases of boat workers bringing information to slaves in the south.⁸¹

As the boats and technology grew, races between steamboats became many and heated. Records were kept of boat’s travel time between cities, and the fastest boat would receive a pair of gold painted deer antlers or a broom to mount on the pilothouse as a symbol that the boat was the reigning “speed king.”⁸² The terms “crack boats” and “brag boats” became common and referred to fast boats with captains who were not afraid to push the engines to the absolute limit, and the public was so enamored with the sport that

⁷⁷ Harry Sinclair Drago. *The Steamboaters: From Early Side-Wheelers to the Big Packets*. (New York, NY: Bramhall House, 1967) 19

⁷⁸ Kane, 17-18

⁷⁹ Thomas C. Buchanan, “Omen of Evil: Steamboats and the Colonization of the Ohio River Valley.” *Full Steam Ahead* (Indianapolis, IN: Indiana Historical Society, 2011), 94-96

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Norbury, 237

boats began planned races to compete head to head on the water.⁸³ While these races were entertaining, they also often had serious consequences. Engine explosions were already becoming common as the riskier, high-pressure steam engine gained popularity, and racing only contributed to these fatal explosions. There were many ways a steamboat voyage could end in peril, from snags along the river, to sinking, fire or collision, but the frequent explosions, usually involving casualties, and the confusion over why they occurred caught the attention of the nation.”⁸⁴ Boiler construction tended to be low quality and steam engines were often used over and over again, causing structural instability, and water and steam pressure gauges were not standard until almost 1850.⁸⁵ One reason for explosions was that captains would keep boilers running while they were stopped in port, causing them to overheat and explode when the boat pulled away from the dock. Explosions also happened for no obvious reason, when the boilers were operating at normal pressure and temperatures.⁸⁶

Aside from technical problems, steamboats were also plagued with incompetent operators and engineers because of the relative newness of the profession and the public’s fascination with speed and power, prompting racing and encouraging quick and insufficient engineer training.⁸⁷ Steamboat explosions became increasingly frequent and in 1838, three hundred and forty-two people were killed in twelve explosions.⁸⁸ Not only did the explosions cause much death and destruction, but the media coverage of the disasters was rampant and embellished, and some newspapers in Cincinnati, Charleston

⁸³ S.L. Kotar and J.E. Gessler, 138

⁸⁴ Paul F. Paskoff, *Troubled Waters: Steamboat Disasters, River Improvements, and American Public Policy 1821-1860* (Baton Rouge, LA: Louisiana State University Press, 2007) 143

⁸⁵ S.L. Kotar and J.E. Gessler, 68

⁸⁶ *Ibid.*

⁸⁷ Lewis Laska, “Nanotechnology and Exploding Steamboats: “Nobody to Blame” *Nanotechnology Law & Business* 265 (2010) 270

⁸⁸ *Ibid.*

and Philadelphia wrote that the accidents would have a detrimental effect on the steamboat industry's development and financing and called for Congress to step in for the safety of Americans.⁸⁹ One of the worst accidents of that year was the explosion of the *Moselle*, a grand and fast steamboat built in Cincinnati.⁹⁰ The press hailed the boat for its speed, making quick trips and attracting passengers. On Wednesday, April 25th, 1838, all four boilers exploded as the boat pulled away from port, killing two hundred of the estimated two hundred sixty on board. The blame fell to the captain for running the engine at full steam since her maiden voyage, but a Cincinnati editor also accepted some blame for the *Moselle* and other accidents, remarking:

“For this sad result, we, in part take blame; we plead guilty, in common with other presses, of having praised the speed and power of the boat, - a circumstance which doubtless contributed to inflate the ambition of its captain and owners to excel others in rapidity. We feel confident that, if the public are to have any security against steamboat accidents, the press must change its tone. Boats must be praised for their comfort, convenience and the care and discretion of their commanders, - but not for their speed...Safety is better than speed.”⁹¹

States such as Alabama, Louisiana, Kentucky and Missouri passed legislation in the early 1830s to regulate inspection and certification of steamboats, but nothing was truly successful until the Act of 1838 was signed into law by President Van Buren, and this act became the first federal regulation of a private industry.⁹² The act called for one experienced engineer be employed by every steamboat, a five thousand dollar fine for owners for any explosion occurring within fifteen minutes following a boat's departure

⁸⁹ S.L. Kotar and J.E. Gessler, 127

⁹⁰ Ibid.

⁹¹ Southworth Allen, *Steamboat Disasters and Railroad Accidents in the United States 1800 - 1882*, (Farmington Mills, MI: Thompson Gale, 2005) 115-127

⁹² Gregory P. Sandukas, “Gently Down the Stream: How Exploding Steamboat Boilers in the 19th Century Ignited Federal Public Welfare Regulation” (Harvard Law School Library. 2002) Available from http://leda.law.harvard.edu/leda/search/toc.php3?handle=HLS.Library.Leda/sandukas-gently_stream_exploding. Internet; accessed March 23, 2012

from a landing with evidence of negligence, and was enforced by the Department of Justice.⁹³ The Act proved to be a failure, and in the ten years after it was adopted, the number of explosions varied little and injuries and property loss increased. The inspection service created by the act was faulty and corrupt, allowing opportunities for bribery and not providing for any administrative structure leaving inspectors to their own principles, and the judicial system failed to enforce many regulations, prosecuting only twenty-five owners for noncompliance that resulted in convictions in fewer than half of the trials.⁹⁴

Another act was introduced in 1852 that required vessels to undergo periodic hull and boiler inspections and to carry basic lifesaving and fire-fighting equipment. Precise standards for boiler construction and operating pressures were established, a licensing system for all operators of passenger steamboats was set up, hydrostatic testing for boilers was required once a year at one and one-half times the normal working pressure, two safety valves were required as well as pressure and water gauges, plugs to release excess steam, and “doctors” were required to guarantee that the boiler water level stayed at an appropriate level, among other safety and construction standards.⁹⁵ The United States Steamboat Inspection Service was also established and two inspectors were required at each major port, one to inspect hulls and one to inspect boilers, and the regulating body became the Department of the Treasury instead of the Department of Justice with a pyramid of officers put in place for the inspectors to report to and be

⁹³ Ibid

⁹⁴ Richard N. Langlois, David Denault, Samson Kimenyi, “Bursting Boilers and the Federal Power Redux: The Evolution of Safety on the Western Rivers.” (1994) Available from http://digitalcommons.uconn.edu/econ_wpapers/199401. Internet; accessed March 23, 2012.

⁹⁵ Lloyd Milton Short, *Steamboat Inspection Service: It's History, Activities, and Organization* (New York, NY: D. Appleton and Company, 1922) 2

punished if lapses in inspections were found.⁹⁶ The bill was very successful, with the Steamboat Inspection service seeing the biggest improvement, as “The inspectors did not leave river men long in doubt as to their ability and determination to enforce the provisions of the law. Notices soon began to appear in the newspapers of the suspension and revocation of officer’s licenses, of trials of the officers involved in accidents, and of the refusal to grant licenses to steamboats.”⁹⁷ Fatalities from boiler explosions decreased thirty-three percent in the first eight years under the new regulation and between 1860 and 1875, over seven hundred and fifty engineer and pilot licenses were revoked.⁹⁸ The Act of 1852 was a direct result of the public’s desire to be protected and the realization that government needed to take action in private affairs, and also provided an opportunity for Congress to work through legislation for advancing technologies and government regulations, creating a foundation for the establishment of government agencies designed to protect the welfare of American consumers, such as the Food and Drug Administration and the Federal Aviation Administration.

While the decade before the Civil War is considered a golden age for the steamboat industry, it also marks the beginning of the end because of steamboat disasters, several periods of low water, and the construction of railroads. Extension of the nation’s railway system began in 1850, and by 1857 a rail line was completed that connected St. Louis to cities in the West on the Ohio and Mississippi Railroad.⁹⁹ Early rail lines did not provide much competition for steamboats before the civil war for passenger transportation. Rail travel was uncomfortable and complicated. Some rail lines would

⁹⁶ Ibid.

⁹⁷ Ibid.

⁹⁸ Paskoff, 200

⁹⁹ Norbury, 299

stop before connecting with another line owned by a different company, and rail gauges were not standardized, meaning trains from different areas were prevented from traveling through other areas.¹⁰⁰ Bulk shipments were expensive to ship on rail, and steamboats continued to be the primary mode of transportation despite the rapidly increasing rail construction and reduced travel time leading up to the Civil War.¹⁰¹

Other threats to the steamboat industry leading up to the War were the introduction of towboats and barges, used specifically for shipping freight, mainly coal.¹⁰² None of these threats had as much of an effect on the steamboat industry as did the war itself, which would alter the way America used its boats and force other transportation methods to be employed as the countries waterways were open and venerable expanses. The government took over some passenger steamers for transport of troops and supplies, and other boats were covered with sheets of iron plating and heavy wood and outfitted with guns for combat.¹⁰³ Some even used cotton bales as protection, lining the bales in rows around the engines and superstructures.¹⁰⁴ President Abraham Lincoln inflicted a blockade on all Southern ports in April of 1861 in an effort to cut the area off from imports, including guns and ammunition and a federal naval blockade at the mouth of the Mississippi River in May disengaged New Orleans from any international trade. Within a year commerce on the water was reduced by ninety percent.¹⁰⁵ Steamboat construction on Western Rivers declined significantly as well, and the number of boats built in the area dropped from one hundred and sixty two in 1860 to just forty-nine in

¹⁰⁰ S.L. Kotar and J.E. Gessler, 260-262

¹⁰¹ Norbury, 300

¹⁰² Ibid.

¹⁰³ John Fryant. "Floating Architecture" *Design Quarterly*. No 101/102 (1976) 65

¹⁰⁴ Ibid.

¹⁰⁵ Brasseaux and Fontenot, 81-82

1862.¹⁰⁶ Steamboat production would slightly increase in the last couple of years of the war, but the western steamboats had a reputation for being unreliable and irregular, causing passengers and the military to rely more heavily on railroads.¹⁰⁷ The Union army protected the rail lines and they took over as the main modes of transport for sugar, cotton, and other goods from 1863 to the end of the Civil War.¹⁰⁸

When the war ended, cities of the upper Mississippi River Valley began to rely almost completely on railroads, as most of the construction focused in that area. The lower Mississippi valley steamers however, would not feel the full effect of rail construction until the 1870s. For those who had managed to retain their steamboats or could afford to purchase or build new ones after the war, the lower Mississippi Valley provided great opportunity to reestablish business in the steam industry, and it was the only area that regained some of the prosperity of river traffic after the war, albeit short-lived.¹⁰⁹ Nevertheless, steamboat tonnage declined by thirty-five percent between 1869 and 1889 on Western Rivers.¹¹⁰ Barges and towboats were introduced on the Western waters during the years of the civil war for coal transportation, supplying Union forces with coal from the booming mines in Pennsylvania.¹¹¹ The boats could tow large amounts of coal downriver for a much lower price than steamboats. In 1866, the Mississippi Valley Transportation Company organized and shipped grain from Saint Louis to New Orleans, and the towboats and barges became as regular a sight on the Mississippi as the

¹⁰⁶ Kane, 132

¹⁰⁷ Hunter, 551

¹⁰⁸ Brasseaux and Fontenot, 108-109

¹⁰⁹ Gould, 559

¹¹⁰ Brasseaux and Fontenot, 112

¹¹¹ Jack E. Custer "A Synoptic History of Towboating and It's Origins" *Full Steam Ahead*. (Indianapolis, IN: Indiana Historical Society, 2011) 41

steamboats had been just a decade earlier.¹¹² Barges on this line towed an estimated month cargo capacity of three million bushels of grain by 1881.¹¹³ Steamboat men hoped that the barge would revive river trade on the western waterways for agricultural products, but towing became independent from the packet steamers and simply reduced freight rates for normal packet boats, contributing to the decline of the privately owned and operated steamboat.¹¹⁴ Corporate systems began acquiring individually owned steamboats and combining them into larger companies, similar to the railroad system, to respond to competition from the rapidly growing “iron horse”, but these old packet boats were no match for the barges and rails.¹¹⁵ By the mid 1870s, railroads had almost completely supplanted steamboats in the Upper Mississippi valley because of the completed construction of the Louisville and Nashville Railroad and connection lines to the South and West.¹¹⁶



Figure 2.8: Railroad Construction 1850-1861 (Source: www.econedlink.org)

¹¹² Ibid.
¹¹³ Norbury, 312
¹¹⁴ Hunter, 567
¹¹⁵ Ibid.
¹¹⁶ Ibid.

The Lower Mississippi Valley, however, experienced growth in the fifteen years following the Civil War thanks to the cotton trade, and by 1880 steamboat traffic reached levels set before the war.¹¹⁷ It was during these times that some of the largest and most extravagant packet boats were built for service on the lower Mississippi and hauled thousands of cotton bales with each trip. The *Harry Frank* set a record of carrying nine thousand two hundred and twenty six bales of cotton in 1881, and became one of many famous boats to run this area, including the *J.M. White*, the *Natchez*, and the *Robert E. Lee*.¹¹⁸ The *J.M. White* was built in 1878 in Jeffersonville, Indiana and besides being capable of hauling ten thousand bales of cotton, she was also constructed with the finest materials available of the day, including stained glass windows and ornate chandeliers.¹¹⁹ Steamboat races also continued during this time, and the most famous took place in 1870 between the *Robert E. Lee* and the *Natchez* between New Orleans and St. Louis.¹²⁰ Famous Captain Leathers manned the *Natchez* and Captain Cannon steered the *Robert E. Lee*, which had been stripped of all unnecessary equipment including doors, in a race watched by hundreds of thousands of people from New Orleans to St. Louis that was a full expression of steamboat racing as a professional sport in America.¹²¹

¹¹⁷ Ibid., 588

¹¹⁸ Ibid.

¹¹⁹ Sutphin, DVD

¹²⁰ Ibid

¹²¹ Quick, 228-230



Figure 2.9: Race between the *Robert E. Lee* and *Natchez*, 1870 (Source: Louisiana State Museum)

River improvements begun before the Civil War were revived during this time.

The Mississippi was a long, dark and ever-changing mass of water. Western river steamboat captains were expected to completely memorize the rivers they navigated, every point, sandbar, island, and tree, only to have all of it change on their next journey.

Kotar and Gessler state:

“it was estimated that between Pittsburg and the mouth of the Ohio, there was an average of 98 islands. Between the mouth of the Ohio to New Orleans, there might be as many as 126 at any given time. On the Upper Mississippi, it was estimated that from St. Paul to the Illinois River (a distance of 700 miles), there existed 526 islands. Over the course of years, these islands came and went, some disappearing through erosion and others becoming more or less permanent.”¹²²

Sandbars formed around these islands, and eroding soil could cause hundreds of trees to fall into the river and form underwater “snags” that could easily puncture the wooden hull of a steamboat. Henry Miller Shreve developed a “snag-boat” for removing obstructions

¹²² S.L. Kotar and J.E. Gessler, 31

on the rivers in 1829, and they became known as “Uncle Sam’s tooth-pullers.”¹²³ He became especially famous for his clearing of the Red River, considered the most treacherous of all the Western Rivers, prior to the Civil War.¹²⁴ A survey begun by the Army Engineers on the Mississippi and some of its tributaries in 1836 continued after the war in 1866 -1868 to decide what type of work should be done to improve the rivers for steamboats and barges.¹²⁵ Improvements on the mouth of the river at New Orleans began in 1838 and continued through 1875 with the construction of jetties that restricted the current, deepening the channel with the faster flowing water and allowing larger, sea-going boats to enter.¹²⁶ Work on a system of locks and dams on the western rivers had taken place as early as 1814, but a fully workable system was not realized until after the Civil War. A canal around the formidable Falls of Ohio had been built in 1831, but was difficult for large steamboats to navigate, and it was enlarged in 1872.¹²⁷ In 1879 Congress created the Mississippi River Commission and charged them with taking surveys and plans to deepen channels and supply bank protection along the Mississippi to prevent flooding and improve navigation and commerce.¹²⁸ The commission set depth goals for different sections of the river and researched different methods that could be used to achieve them, including dredging and a system of low water dams used on the upper Mississippi, dikes to narrow river channels, and other systems.¹²⁹ Although river traffic was declining, “More money was appropriated by the federal government for the

¹²³ Ibid., 36

¹²⁴ Ibid.

¹²⁵ Norbury, 270

¹²⁶ Ibid.

¹²⁷ Hunter, 184-186

¹²⁸ Ibid., 213

¹²⁹ Norbury, 277

improvement of the western rivers in the decade 1880-1890 than in their entire previous history.”¹³⁰

The late 1880s finally saw the expansion of the rail systems into New Orleans, Baton Rouge and other important river ports in the lower Mississippi and even Natchez, almost completely reliant on the river at the beginning of the decade, was receiving three-fourths of its supplies by railroad in 1886.¹³¹ Mechanical and technological improvements in rail developed rapidly, and the once rattling and uncomfortable rail cars of the early days became more suited for passengers and fares became competitive, and eventually lower, than steamboat passage. Besides fares, railroads could also operate during all seasons and did not depend on river levels and currents for travel, and were considered safer than the steamboats, which still suffered regular explosions.¹³² Railroads would raise prices during seasons steamboats could not operate or low water times, or would cut prices at large river cities to draw river passengers to the rail. Steamboat owners hoped that the Interstate Commerce Act, passed in 1887 for the first federal regulation of the railroads, would prohibit the rail line from continuing this practice, but Congress decided it could only encourage the railroads to be fair in pricing and could not set fares themselves.¹³³ Adding to the river men’s dismay was the great increase in bridge construction for railroads, with fifteen railroad bridges spanning the Mississippi River by 1886.¹³⁴ Steamboat and bridge collisions became common, and many suggested that the steamboat captains ran their boats into the bridges on purpose to discourage bridge

¹³⁰ Hunter, 192

¹³¹ Ibid., 589

¹³² S.L. Kotar and J.E. Gessler, 260-262

¹³³ Hunter, 593

¹³⁴ Ibid, 595

building, but this usually only resulted in damaged or destroyed boats for the captains.¹³⁵ Steamboats lines at this time did not have the resources to improve inadequate landing facilities, and the railroads furthered this dilemma by gaining ownership of the riverbanks, which prevented barges from unloading directly into the adjacent warehouses.¹³⁶ Construction of industrial facilities shifted away from the riverbanks towards rail lines, which also shifted the patterns of city developments.¹³⁷

As steamboats grew less economical for the transportation of goods, they grew in popularity as excursion boats. In the early 1880s some steamboats could be chartered for special occasions or short day trips, with evening dance excursions becoming popular towards the turn of the century.¹³⁸ Some boats would operate exclusively out of one city, while others would travel up and down river, offering excursions in different towns along the way. Although the use of steamboats was fading at the turn of the century, they were still known for their beauty and held an important place in the hearts of the people along the western rivers. Louis Hunter asserts:

“The steamboat not only introduced a rustic people to the age of machinery and steam but to most of those who lived along or traveled on the rivers it probably gave the first significant contact with art – at least art of a sort. Indeed, it became a synonym for elegance and beauty to a generation captivated by the florid and ornate.”¹³⁹

Not only were the mechanics and designs of the steamboats themselves inspiring to those along the river, the entertainment aboard that fully developed after the civil war was equally exciting.

¹³⁵ Ibid., 495

¹³⁶ Norbury, 309

¹³⁷ Ibid.

¹³⁸ Ibid., 214

¹³⁹ Hunter, 390

Showboats, Regulation and the Steamboat through the Present Day

The showboat was a water going vessel that traveled the rivers stopping at towns along the way and performing plays, concerts and other types of entertainment. Life along the western rivers was difficult and isolating for many people in the beginning of the area's development, and a need was identified for an emotional outlet in the form of cultural entertainment. The idea of a showboat reaches as far back as 1817, when young comedy actor Noah Ludlow purchased a crude keelboat and set out on the Allegheny River to Pittsburg and then onto Nashville, performing at local theaters or any venue that would take them.¹⁴⁰ Ludlow purchased a keelboat in Nashville, named *Noah's Ark*, and sailed for New Orleans stopping along the way for performances, some of which most likely took place on the boat.¹⁴¹ *Noah's Ark* never made it to New Orleans, but was actually sold in Natchez as a cotton transport while the crew booked passage on the steamer *New Orleans* to reach the city.¹⁴² In 1831 English actor William Chapman of New York and Philadelphia built a barnlike theater with a crude stage and muslin curtains on top of a one hundred foot long barge that became the first boat specifically built for theatrical performances, often Shakespeare plays.¹⁴³ The Chapman family planned to drift down the Ohio and Mississippi Rivers, stopping along the way for overnight performances at river landings where they would charge fifty cents for admission, but would often accept meat and produce as a substitute for money.¹⁴⁴ The first boat was scrapped upon reaching New Orleans, and for several more years Chapman would

¹⁴⁰ Philip Graham. *Showboats: The History of an American Institution* (Austin, TX: University of Texas Press, 1951) 4

¹⁴¹ *Ibid.*, 7

¹⁴² *Ibid.*

¹⁴³ Norbury, 242

¹⁴⁴ Ken Watson. *Paddle Steamers* (New York, NY: W.W. Norton & Company, 1985) 130

construct a new boat at Pittsburg and repeat the journey, eventually employing a steamer to propel his barge theater down the rivers.¹⁴⁵

Although the Chapmans considered themselves serious actors, many other smaller showboat operations began to copy them in the 1840s and 50s that were less professional, often featuring traveling salesman and peddlers, and the showboat as a whole did not enjoy a good reputation.¹⁴⁶ Circuses were becoming very popular in America before the Civil War, and circus boats developed in the 1850s as it was easier for a company to offer performances onboard than to load and unload equipment and animals when traveling to each stop by land. The most popular circus boat was the *Floating Circus Palace* developed by Spaulding and Rogers in Cincinnati in 1851.¹⁴⁷ The boat was a barge with a large amphitheater built on top that was pushed by a steamboat housing a separate theater, with a combined seating capacity of thirty four hundred guests.¹⁴⁸ The boat operated on western rivers until the outbreak of the war, and was confiscated by the Confederate army in 1862 for use as a hospital boat.¹⁴⁹ The Civil War effectively ended the era of the early showboat, but Augustus B. French, who built five boats named *French's New Sensation* between 1878 and 1901, revived the form of entertainment in the 1870s.¹⁵⁰ Showboats during this time still suffered from ill reputations, and were often met by police upon landing or were not allowed to land at all. One night, French noticed that his entire audience was male, and angrily announced that as his wife was a part of the show, it would be a clean, respectable performance and the men should leave

¹⁴⁵ Norbury, 242

¹⁴⁶ Graham, 21

¹⁴⁷ Ibid.

¹⁴⁸ Norbury, 243

¹⁴⁹ Ibid.

¹⁵⁰ Graham, 40

if they were expecting any less.¹⁵¹ The men did leave, but returned later with their wives, and from then on showboats earned respect and were seen as reputable institutions along the western waters.¹⁵² Showboats became larger and more luxurious during the late 19th century, and French's second *New Sensation* featured a calliope to announce its arrivals and attract customers.¹⁵³

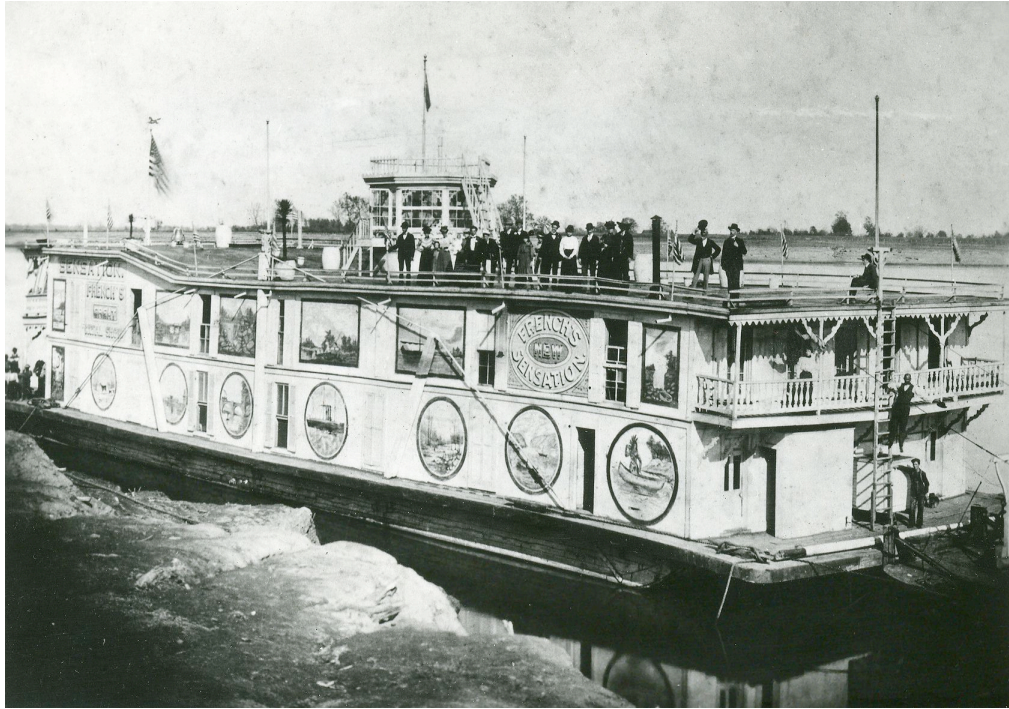


Figure 2.10: *French's New Sensation* (Source: www.steamboats.com)

Family owned showboats became the most successful along western rivers and brought vaudeville and melodrama to river port towns, performing plays such as *Uncle Tom's Cabin* and producing highly paid and popular actors.¹⁵⁴ The glory days of this type of lavish showboat were short lived, and only thirty were operating by 1900 and less than

¹⁵¹ Ibid.,52

¹⁵² Ibid.

¹⁵³ Norbury, 244

¹⁵⁴ Ibid.

ten ran on western rivers in 1930.¹⁵⁵ The automobile was becoming more readily available in America and the rise of the palace cinemas attracted customers away from the river landings in the early twentieth century. Edna Ferber wrote a novel called *Show Boat* in 1926, also to become a play and a film that briefly restored interest in the dying medium, but only for a short while.¹⁵⁶ Some boats tried other tactics to restore interest, and burlesque melodrama developed on showboats in 1919.¹⁵⁷

Perhaps the most successful operators in the showboat industry through the later years were the four Menke brothers, who owned and operated six showboats in the mid to late nineteenth hundreds, including the *Goldenrod*, the largest showboat ever built.¹⁵⁸ Bill Menke purchased the *Goldenrod*, built in 1909, in 1922 and operated her as a traveling showboat until 1937, when she moored at St. Louis and continued to offer weekly performances until 1962.¹⁵⁹ Since then the boat has suffered fire and restoration, changed hand several times, been declared a National Historic Landmark, and was moved to the Missouri River before finally closed in 2001 due to financial problems. She was then moved back to St. Louis, where her future remains uncertain.¹⁶⁰ Although most showboats were not technically steamboats, meaning that they were only pushed by steam engines and did not actually run on steam themselves, they continue to represent what modern America associates with the steam boating era. Like the *Goldenrod*, the few boats that survived into the twentieth century were showboats permanently docked at river ports providing entertainment and a sense of nostalgia for visitors.

¹⁵⁵ Watson, 131

¹⁵⁶ Ibid.

¹⁵⁷ Norbury, 244-245

¹⁵⁸ Graham, 169

¹⁵⁹ "Showboat Goldenrod" Available from: www.steamboats.org. Internet: accessed February 22, 2012

¹⁶⁰ Ibid.

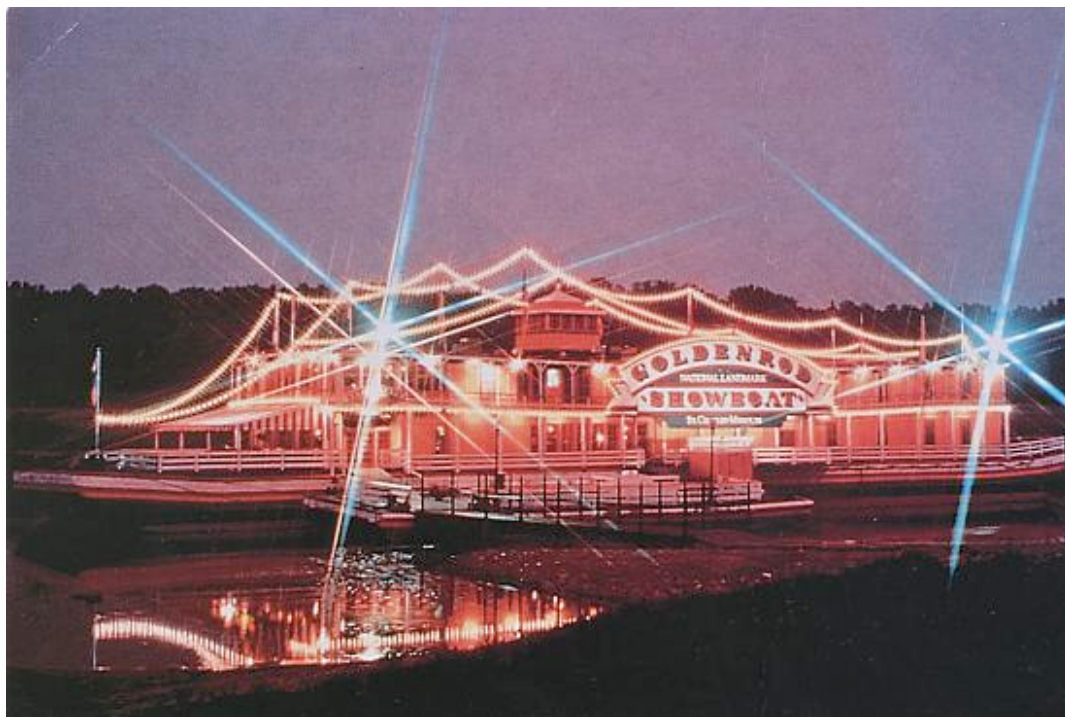


Figure 2.11: Showboat *Goldenrod* (Source: Steamboats.org)

The demise of the steamboats as the primary source of passenger and good transportation not only had to do with new technology and business in America, but also with changing regulations and restrictions concerning the construction and operation of the vessels. Although methods of construction evolved during the golden age of the steamboats as they grew larger and carried more freight, the primary building material was always wood. A towboat built in 1873, the *Alex Swift*, was the first to have a steel hull, but it was not until the 1930s that the lighter, stronger steel hulls became common.¹⁶¹ Even with a steel hull, the superstructure of most steamboats was still wood, and explosions and fires continued to occur as boilers were added to boats wishing to carry more weight. Although the steamboat act of 1852 created a system of inspection that required testing of boilers, there were still disasters through the next decades that

¹⁶¹ Captain Alan L. Bates “Structural Evolution of the Western Rivers Steamboat” *Full Steam Ahead*. (Indianapolis, IN: Indiana Historical Society, 2011) 33-35

resulted in catastrophic loss of life. This led to a new act, passed in 1871 that built on the act of 1852, expanding it to include towboats, ferries, and other steam-powered vessels. It also created an organization called the Steamboat Inspection Service.¹⁶² This act reorganized the licensure and safety requirements for steamboats and created a Supervisory Inspector General who reported to the Secretary of the Treasury.¹⁶³ The reorganization of inspectors in the act of 1871 helped to increase the enforceability of the earlier acts and proved to be a step in the right direction in the regulation of passenger and crew safety aboard the vessels. When steam ship *Morro Castle* exploded in New Jersey in 1934, it brought about the passage of the *Morro Castle* Act of 1936 which changed the name of the Steamboat Inspection Service to the Bureau of Marine Inspection and Navigation. This act required structural fire protection on passenger vessels and required plans to be approved by the Bureau before a boat could be constructed.¹⁶⁴ The Steamboat Inspection Service was transferred to the Department of Commerce and Labor in 1903 and would remain there until its duties became part of the United States Coast Guard during World War II.¹⁶⁵

Further regulation that currently affects steamboat operation is the International Convention for Safety of Life at Sea, which is a maritime treaty first developed in 1914 in response to the sinking of the *Titanic*. The act included new regulations for navigation, construction, life-saving equipment and fire protection, and was originally only developed for sea-going vessels, but later versions would restrict the use of steamboats as

¹⁶² United States Coast Guard. "The Steamboat Inspection Service & The History of Merchant Vessel Inspection." Available from: http://www.uscg.mil/history/articles/Steamboat_Inspection_Service.asp. Internet: accessed February 23, 2012

¹⁶³ Short, 6

¹⁶⁴ Ibid.

¹⁶⁵ United States Coast Guard.

passenger vessels.¹⁶⁶ In 1966, the Safety of Life at Sea Act was passed, which banned the use of wooden overnight excursion boats carrying more than fifty passengers.¹⁶⁷ The steamboat most affected by this law was the *Delta Queen*, which has a steel hull but a wooden superstructure, and was still running overnight trips with its capacity of one hundred and seventy-six.¹⁶⁸ Because the law was mainly aimed at ocean liners, Congress granted an exemption for the *Delta Queen* and continued to renew it nine times until 2008 when the owners decided to operate as a hotel instead of pressing Congress to once again renew the exemption, allegedly because of a political dispute prompted by the efforts of the cruise line owning the *Delta Queen* to disband the crew's union when it purchased the boat in 2006.¹⁶⁹ What these laws and government regulations meant for the few remaining steamboats is that most of them could no longer operate as they were built. Although there were very few true steamboats left at this time, the ones that did exist were forced to reconsider their operations. In the early days of steamboat construction, anyone could sketch an idea for a wooden boat and float it down the river if it stayed above water, but as technology and regulation advanced, engineers were required to design boats and skills such as welding were required for using steel in construction.¹⁷⁰

Even though later ships had steel hulls, fireproofing became more and more important in later vessels and passenger-carrying boats and warships were required to use modern fireproofing materials to meet the many requirements of the United States Coast

¹⁶⁶ "Brief History of IMO". International Maritime Organization. Available at:

<http://www.imo.org/About/HistoryOfIMO/Pages/Default.aspx>. Internet: accessed February 25, 2012

¹⁶⁷ C. Weiser, "Delta Queen Coming Back?", November 2010. Available at:

<http://cincinnati.com/blogs/politics/2010/11/17/delta-queen-coming-back>. Internet: accessed March 1, 2012

¹⁶⁸ Ibid.

¹⁶⁹ Sean D Hammill, "Delta Queen Steamboat Needs Help if it's to Roll on the River" Pittsburgh Post Gazette. (April 2011) Available at: <http://www.post-gazette.com/pg/11099/1138215-455.stm>. Internet: accessed April 9, 2012

¹⁷⁰ Bates, 35

Guard and the American Bureau of Shipping¹⁷¹ Many cruise lines operate throughout America and Europe that carry overnight passengers on vessels resembling steamboats but possess all the modern conveniences and safety features, offering visitors a small insight into the world of steamboat travel, but only in the way of entertainment. The Great American Steamboat company recently acquired the *American Queen* paddlewheel steamboat built in 1995, and will began voyages on the Mississippi and Ohio rivers in April of 2012.¹⁷²

While boats such as the *Goldenrod* and the *Delta Queen* visually represent the glamorous packet boats from the golden age of steamboats, barges and the towing industry are more accurate representations of the steamboat's contributions to modern times. Since the first barge lines began in 1866, towing using steamboats grew in use and several barge lines were organized by 1925, and river improvements continued in response to the needs of these new river vessels.¹⁷³ The largest steam powered towboat ever built was the *Sprague*, constructed in 1901 in Dubuque, Iowa.¹⁷⁴ The *Sprague* could carry about seven acres, or sixty-seven thousand tons of coal in one trip, and was known along the river as "Big Momma."¹⁷⁵ When the boat was first built, there were many mechanical and structural problems, but she was repaired by 1905 and set many records for towboats along the river until she was retired in 1948.¹⁷⁶ The *Sprague* was donated to

¹⁷¹ Ibid., 36

¹⁷² "American Queen." Great American Steamboat Company. Available at: <http://www.greatamericansteamboatcompany.com/steamboating>. Internet: accessed February 27, 2012

¹⁷³ Norbury, 315

¹⁷⁴ Ibid., 314

¹⁷⁵ Ibid.

¹⁷⁶ Custer, 47

the city of Vicksburg, Mississippi upon retirement and was moored along the levee for use as a showboat until 1973, eventually being destroyed by fire in 1975.¹⁷⁷



Figure 2.12: Towboat *Sprague* at Vicksburg (Source: Steamboats.com)

Captain A.C. Ingersoll Jr., president of the Federal Barge lines stated in 1958:

“As the work of developing the network of channels progressed, commerce and industry came again to the rivers, slowly and hesitantly at first, then with increasing enthusiasm as the efficiency and dependability of the new barge transport was demonstrated. This rush of industry to the inland waterways has been particularly pronounced since World War II.”¹⁷⁸

In the 1930s, diesel engines were added to the boats and the sternwheels were replaced by screw propellers, effectively erasing almost all resemblance of the old steamers.¹⁷⁹ Barge and towing technology has continued to increase and barges remain as one of the most cost effective ways of good transportation and continue to stimulate the economies of the

¹⁷⁷ Ibid.

¹⁷⁸ Norbury, 316

¹⁷⁹ Ibid.

cities and towns of the Mississippi River Valley, as the steamboats did in the early nineteenth century.

Many towns along the lower Mississippi River, such as Natchez and Vicksburg, are shadows of their former glory brought about by the steamboat, but still rely on the river to bring tourism and goods to their banks. From the steam engine inventions to current barges, towboats and excursion boats, steamboats have made an incredible impact on the development of population, culture and industry on the Western waters of America, and no other mode of transportation possesses such a rich and varied history. Steamboats were not simply a way of travel, but a way of life for the people of the cities where they stopped. Riverports became lively and populated places, and people flocked to them every time the whistle or calliope announced the approach of the steamboat to townspeople, attracting them to stare in awe and join in the festivities surrounding the arrival of such a great vessel. Mechanical and technological innovations used in modern times were developed out of steamboat technology, and even the evolution and distribution of decorative arts and culture were accelerated by the steamboat industry. While it is impossible to truly preserve steamboats as they once existed because of rules and regulations regarding materials and operations, some interpretation is available through boats like the modern *American Queen*, and the historic *Delta Queen* and *Belle of Louisville*. No voyage is the same, and each boat is operated and managed differently. It is very important that these boats continue to operate as reminders of the development of America, and efforts should be made to interpret the tangible and intangible aspects surrounding steamboats.

CHAPTER 3

STEAMBOAT CASE STUDIES

The boats operating today under the term “steamboat” are distant cousins to the vessels that ran on early America’s rivers, and exist mainly for entertainment purposes. As the boats became obsolete for transportation of goods and passengers, many were abandoned to rot on riverbanks or shipyards. Because of the fragile nature of the boats themselves, preserving original character is difficult and almost impossible, and often times the boats were deserted for financial reasons. In modern times a real steamboat is fortunate to exist at all, much less run with its original engines and carry passengers. Most of the six steam-powered boats that exist in America today date from the mid-twentieth century at the oldest, and have undergone extensive restorations.

The case studies in this chapter serve as a representative sampling of steamboat preservation and interpretation strategies in America, focusing on boats operating in the Mississippi River Valley. The three boats chosen for this study are the *Belle of Louisville* in Louisville, Kentucky; the *Delta Queen* in Chattanooga, Tennessee; and the *American Queen* based out of Memphis, Tennessee. These vessels were selected based on location, age, level of integrity and variations of operation, preservation, and interpretation. Each boat employs different levels of operation, from overnight voyages to a stationary floating hotel. The purpose of selecting these three different boats is to show examples of changes each vessel has undergone, as well as to analyze the operation and preservation of the boat and to analyze their interpretive success. Although the *American Queen* does

not qualify as a historic vessel and is technically a reproduction, she was chosen to explore the value of such vessels. After careful study and consideration, it was determined that the inclusion of a case study highlighting a modern vessel operating in a historic fashion would provide an interesting juxtaposition to a historic steamboat and could also be used as a guideline for successful strategies for historic vessels that struggle to continue operation. While they do not directly address the issues of reconstructions, reproductions, and conversions, Secretary of the Interior's Standards for Historic Vessel Preservation state:

“There are numerous sound justifications for the existence of reconstructions and reproductions. Building them affords an opportunity for study and practice of historic construction methods. Traditional seafaring skills can be learned and historic practices divined from their use as training and demonstration vessels. Through effective interpretation, reconstructions and reproductions can provide for the public tactile and visual illumination of social, economic and technological aspects of maritime history.”¹⁸⁰

Each boat is examined for its history, operation, preservation strategy and interpretative techniques.

Although the case study boats differ in their age, integrity and use, they also share some important similarities, which is why they were chosen for this study. Each boat has experienced times of uncertainty and has received some level of public support for restoration, and has found ways to survive despite the odds against them. Each vessel has undergone one or more restorations and rehabilitations throughout its life. The level of interpretation aboard each boat varies along with the audiences reached, as only one of the boats can actually carry overnight passengers. Overall, all three vessels have developed a social importance in their own right, and continue to serve as representatives of the early days of steamboating on the Mississippi River and its tributaries.

¹⁸⁰ Secretary of the Interior's Standards for Historic Vessel Preservation, 12

The Belle of Louisville, Louisville, Kentucky



Figure 3.1: *Belle of Louisville* (Source: Steamboats.org)

The *Belle of Louisville* is the oldest authentic Mississippi-River style steamboat operating in the world today and is a National Historic Landmark. The boat is located in Waterfront Park in Louisville on the Ohio River. The *Belle* is owned by the city of Louisville Metro and offers lunch and dinner cruises and can also be chartered for weddings and other special events. She is one hundred and fifty-seven and a half feet long and thirty-six feet wide.¹⁸¹

History

¹⁸¹ Watson, 150

The boat known today as the *Belle of Louisville* was originally built in 1914 in Pittsburg, Pennsylvania for the West Memphis Packet Company under the name of *Idlewild* as a ferry and day packet vessel.¹⁸² While the superstructure of the boat was new, the engines were transferred from an earlier vessel, and are estimated to date from 1889 or 1890.¹⁸³

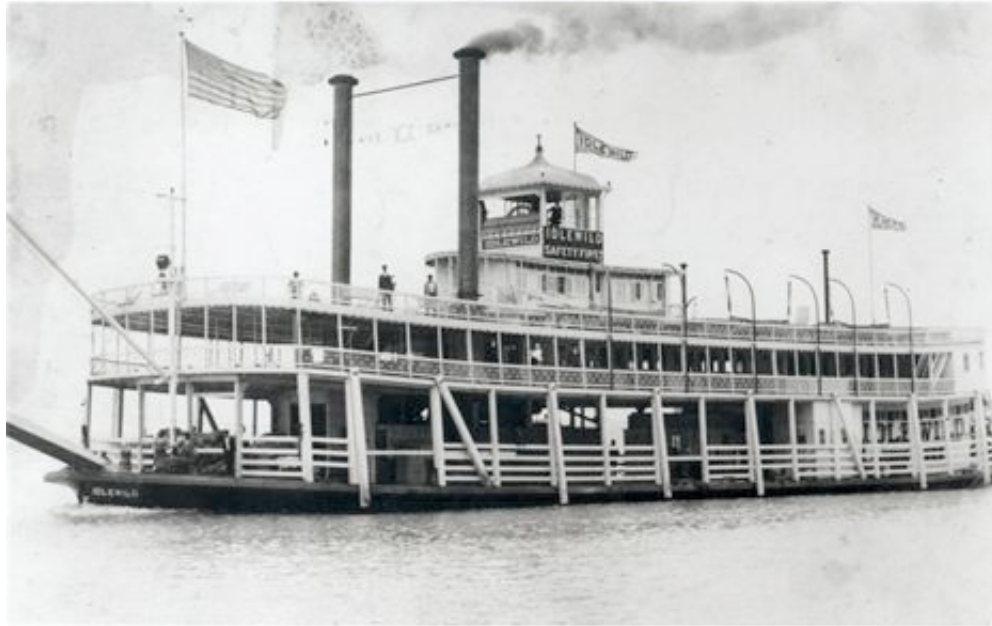


Figure 3.2: *Idlewild* (Source: BelleofLouisville.org)

The *Idlewild* operated as an excursion boat in the early 1920s along the Ohio, Illinois, Mississippi and Missouri river system before she was sold to the New St. Louis & Caloun Packet Corporation of Hardin, St. Louis in 1928.¹⁸⁴ The boat was given a makeover during this time period that included lengthening of the Texas cabin and the addition of Victorian “gingerbread” trim and additional awnings added to cover the exterior decks.¹⁸⁵ In 1931, the Rose Island Company, based about fourteen miles upriver from Louisville,

¹⁸² Kadie Engstrom. “Belle of Louisville: A Window to the Past, a Door to the Future.” (Louisville, 2003) 1

¹⁸³ Kevin Foster, Belle of Louisville National Historic Landmark Study. National Park Service Maritime Landmarks. Available at: <http://www.nps.gov/history/maritime/nhl/belle.htm>. Internet: accessed April 11, 2012

¹⁸⁴ Watson, 151

¹⁸⁵ Engstrom, 2

chartered the *Idlewild* after the burning of their boat the *America* to run trips from Louisville to Fontaine Ferry Amusement Park until 1934, when Louisville became her home port for excursions through World War II.¹⁸⁶ The *Idlewild* towed oil barges during the war and was also used by the U.S.O. as a nightly entertainment venue for soldiers stationed along the banks of the Mississippi.¹⁸⁷

After thirty-three years as the *Idlewild*, J. Herod Gorsage of Peoria, Illinois bought the vessel and renamed her *Avalon*. Gorsage sold her after only one year to E.A Meyer of Cincinnati.¹⁸⁸

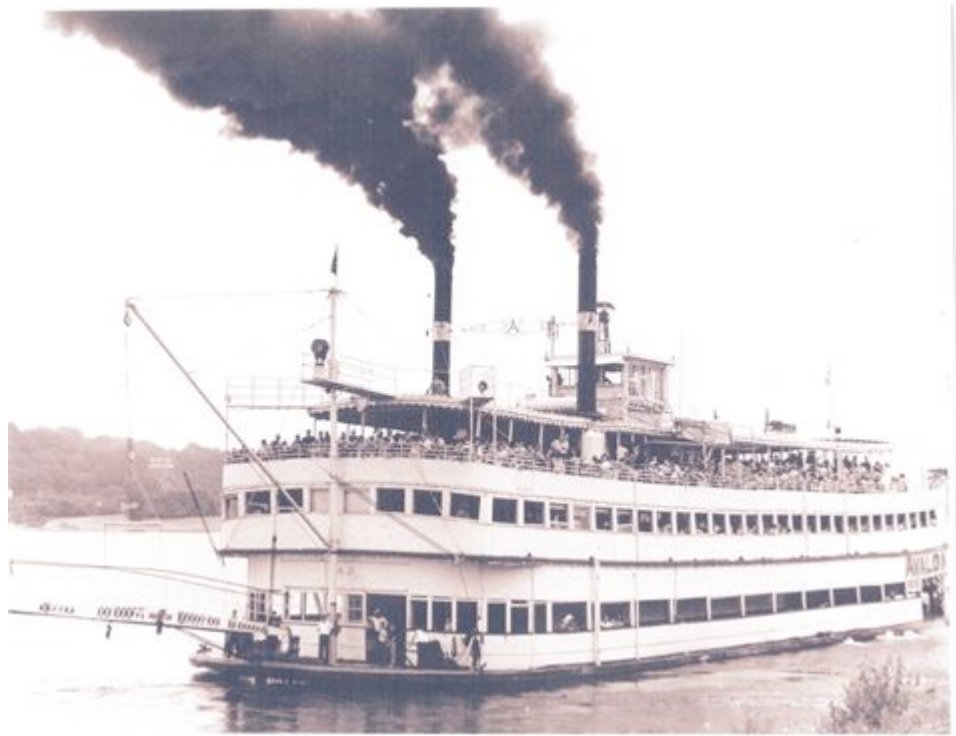


Figure 3.3: *Avalon* (Source: BelleofLouisville.org)

The *Avalon* became one of the most traveled steamboats of her kind and visited more than nineteen states through the 1950's, when a major renovation was done to lengthen

¹⁸⁶ Ibid., 2-3

¹⁸⁷ Watson, 151

¹⁸⁸ Ibid., 157

the operating season of the boat and make her more efficient for river travel.¹⁸⁹ In 1958 the *Avalon* struck a lock gate at Emsworth Dam and many of the passengers were thrown on to the deck, resulting in lawsuits that eventually drove the owner to bankruptcy in 1962.¹⁹⁰ Years of deferred maintenance had turned the *Avalon* into a shadow of its former glory, but the city of Louisville and Jefferson County had a vision for the boat, and purchased her at an auction in 1962 for thirty-four thousand dollars and immediately began a full restoration under the boat's new and final name, the *Belle of Louisville*.¹⁹¹ The *Belle's* first voyage took place on April 30th, 1963 in a race against the *Delta Queen*.¹⁹² The *Belle* has experienced many physical changes throughout her life, including an addition of ten feet to her foredeck. She now runs on oil instead of her original coal and consumes one hundred and fifty gallons an hour on her excursions from the Louisville Waterfront.¹⁹³ The boat features two "scape pipes" flanking either side of the calliope on the roof that allow for exhaust steam to escape from the engine. These types of pipes are only found on two steamboats existing today. The *Belle* will celebrate her one-hundredth birthday in October of 2014, welcoming several other steamboats to Louisville for the celebration.¹⁹⁴

Operation

The *Belle of Louisville* is owned by the Louisville Metro Government and operated by the Waterfront Development Corporation. Although some citizens of Louisville originally opposed the purchase of the run-down vessel in the 1960s, the Belle

¹⁸⁹ Engstrom, 5

¹⁹⁰ Watson, 157

¹⁹¹ Engstrom, 5

¹⁹² "Belle of Louisville and Spirit of Jefferson." Available at: www.belleoflouisville.org. Internet: accessed April 20, 2012

¹⁹³ Watson, 157

¹⁹⁴ www.belleoflouisville.org

has become a fixture of the waterfront and is loved by the community.¹⁹⁵ She is considered a living, operating museum with twenty-four full time staff that increases by fifty during the high season and offers regular buffet lunch cruises, dinner cruises with live music and other themed cruises as the seasons allow.¹⁹⁶ The *Belle* is available for private charters, weddings and corporate events as well. Linda Harris serves as the CEO of the *Belle* and manages all staff and events that take place aboard the vessel. Captain Mark Doty is the main captain of the four full-time and two part-time captains. The *Belle* is marketed as a part of many activities available along the Louisville waterfront along with the smaller, more modern *Spirit of Jefferson*, built in 1936 and running excursions from Louisville since 1995.¹⁹⁷ The United States Coast Guard mandates a dry dock inspection of the Belle every five years, which can cost anywhere from two hundred to four hundred thousand dollars depending on how much of the steel hull must be replaced. The money for these inspections and repairs comes from the Metro Council.¹⁹⁸

Preservation

Preservation aboard the *Belle of Louisville* is a non-stop process. According to the National Maritime Initiative website, she retains one hundred percent of her original fabric.¹⁹⁹ The 1963 restoration was done by noted naval architect Alan Bates and the vessel has undergone several other changes since then, including a 1990 renovation of the Captain's Quarters to more closely reflect the original look.²⁰⁰ An open fresh water valve

¹⁹⁵ Ibid.

¹⁹⁶ The following information about the Belle of Louisville was obtained on February 1st, 2012 by the author through and interview with Linda Harris, CEO of the Waterfront Development Corporation and *Belle of Louisville*

¹⁹⁷ www.belleoflouisville.org

¹⁹⁸ Linda Harris

¹⁹⁹ National Park Service-Maritime Heritage Program. Available at: http://www.nps.gov/maritime/ships/lists/typ_2ppa.htm. Internet: accessed May 2, 2012

²⁰⁰ Engstrom, 11

almost caused the boat to sink in 1997, but she was saved and necessary repairs were made to continue operation. Architects who recently assessed the *Belle* asserted that she is in sound condition and can operate for at least another seventy-five years if preservation efforts continue.²⁰¹ New heating, ventilation and air-conditioning systems were installed in 2010 to extend the *Belle*'s operating season and make her more comfortable for modern passengers. Her current boilers date from 1968 and will soon be assessed for repairs or replacement, but the engines are in exceptional shape for their age and continue to operate beautifully.²⁰² While the *Belle* is in relatively good condition, the expense of maintenance is very high, and increasing budget cuts in federal dollars contribute to the lack of grants and other money available for repairs, especially historically accurate restorations. There is no formal preservation plan in place for the *Belle of Louisville* and repairs are made when needed, in addition to routine maintenance. While the *Belle* is a much loved and visited resource for Louisville, the revenue she brings in does not cover her operation and maintenance costs.²⁰³

Interpretation

Interpretation aboard the *Belle of Louisville* is largely dependent on her appearance and reputation as the oldest continuously operating Mississippi River-style steamboat in the world. On a typical voyage, the captain of the steamboat will provide the passengers with a brief history of the *Belle*, but after that the guests are on their own to explore the vessel. They can wander around freely exploring various rooms and equipment following instructions from a pamphlet and explore the on-board art gallery

²⁰¹ Linda Harris and Kadie Engstrom. "*Belle of Louisville: Sole Survivor of the Pioneering New Orleans.*" *Full Steam Ahead* (Indianapolis, IN: Indiana Historical Society, 2011) Appendix 1

²⁰² Harris and Engstrom, 205

²⁰³ Linda Harris

that displays historic photos of the boat or peruse the gift shop on the second deck. The *Belle* boasts a passenger list from 2011 that included people from all fifty states in the United States, and over twenty-two countries.²⁰⁴ Sixty-two percent of the passengers were from outside of Jefferson County.²⁰⁵ One aspect of interpretation the *Belle* focuses on is education. Classes can arrange for field trips aboard the *Belle* for students in kindergarten through the eighth grade. Teachers can request materials for class to study beforehand, or an in-class reading program can be provided for grades one through three. Kentucky Educational Television partnered with the *Belle* to create an electronic field trip for the boat available free through their website. The site includes a video, a virtual tour, a timeline, vocabulary, a section discussing steamboat related careers and a trivia game. Lesson plans and other instructional resources are also provided for teachers.²⁰⁶ Interpretation on the *Belle* is mostly devoted to her own history and her machinery, and it is a credit to the *Belle* that she still operates as an excursion boat, which was her original purpose.

²⁰⁴ “Visitors on the *Belle of Louisville* Included People from all 50 States, 22 countries.” The Canadian Press. Jan.6, 2012

²⁰⁵ Ibid.

²⁰⁶ “Electronic Field Trip to the *Belle of Louisville*.” Kentucky Educational Television. Available at: <http://www.ket.org/trips/belle>. Internet: accessed April 12, 2012

The Delta Queen, Chattanooga, Tennessee



Figure 3.4: *Delta Queen* (Source: www.deltaqueen.wordpress.com)

While the *Delta Queen* is not the oldest operating steamboat in the United States, she is perhaps the most famous because of her public battle to remain in operation. The *Queen* is regarded as a true legend and as one of the most authentic packet steamboats still in existence, even though she is currently docked in Chattanooga and serves as a hotel because regulations set in place by the Safety of Life at Sea Act. She is two hundred and eighty-five feet long and fifty-five feet high.

History

The story of the *Delta Queen* begins in 1927 on the River Clyde in Glasgow, Scotland where she was first constructed in prefabricated pieces shipped to Sacramento

Bay for assembly before she launched at Stockton, California.²⁰⁷ The California Transportation Company constructed the *Queen* and her twin, the *Delta King*, to run overnight service between Sacramento and San Francisco.²⁰⁸ The two boats were the first vessels the California Transportation Company built to have steel hulls, and at a cost of eight hundred seventy-five thousand each, they were the grandest. Built in the California style, they featured only one smoke stack, a squared-off forward deck and a pilot house placed further forward on the deck than Mississippi River-style steamboats. The superstructures of the boats were made of imported hardwoods and constructed by American craftsmen. Solid oak, mahogany, walnut, Oregon cedar, and teak were used in the interior cabins and the vessel featured cooled and heated staterooms, hot and cold running water, a barbershop, a Smoking Room, a Dining Room, and a Social Hall.²⁰⁹



Figure 3.5: *Delta Queen* and *Delta King* (Source: www.deltaqueen.wordpress.com)

The *King* and *Queen* ran regularly for the next thirteen years, surviving the great depression through mergers of transportation companies in the region and gaining notoriety through steamboat racing. In 1940, the *Queen* was called into service and

²⁰⁷ Watson, 161

²⁰⁸ Brian Hughes. "The Steamer Delta Queen-The Story of A River Legend." Steamboat Bill, Summer 2009. 5

²⁰⁹ Ibid., 7

served as a floating barracks, training facility and troop transport vessel for the United States Navy until 1946.²¹⁰ During these years, the *Queen* was painted gray and even saw combat when riflemen aboard the boat fired upon prisoners who were rioting at Alcatraz.²¹¹ After the war, the *Delta Queen* was stricken from the Navy register and was put up for auction. Captain Tom Greene, head of the successful Greene Line Steamers Company, purchased her in 1946 for \$46,250 and the *Queen* would begin a long journey from California to the Mississippi River.²¹² She was boarded up and prepped at Fulton Shipyard in Antioch, California and was towed by the *Osage* through the Panama Canal before arriving in New Orleans in May of 1947, a little over a month after she began the journey. The *Queen* then steamed her way up the Mississippi to the Greene Line Headquarters in Cincinnati under the direction of experienced river pilot Captain Frederick Way, Jr. before she steamed to Pittsburg for six months of repairs and upgrades.²¹³ The alterations included: removal of a box surrounding the paddlewheel, the transformation of the freight deck into the new dining room, removal of skylights for bathroom installations, enlargement of fuel bunkers, installation of potable water tanks, extension of the forward decks, and a new coat of white paint to replace the Navy grey.²¹⁴ The interior was also renovated and the great brass-fronted Grand Staircase was restored to its original grandeur and a steam calliope was added to announce the boat's arrival.²¹⁵

²¹⁰ Bill Wiemuth. "Delta Queen History." Available at: <http://deltaqueen.wordpress.com/delta-queen-history>. Internet: accessed May 2, 2012

²¹¹ Theodore W. Scull. "Delta Queen: Celebrating the Colorful History of an American Icon." Cruise Travel. May/June 2007. 24-27

²¹² Hughes, 8

²¹³ Scull, 26

²¹⁴ Hughes, 11

²¹⁵ Scull, 26



Figure 3.6: *Delta Queen* in 1949 (Source: www.riverboatdaves.com)

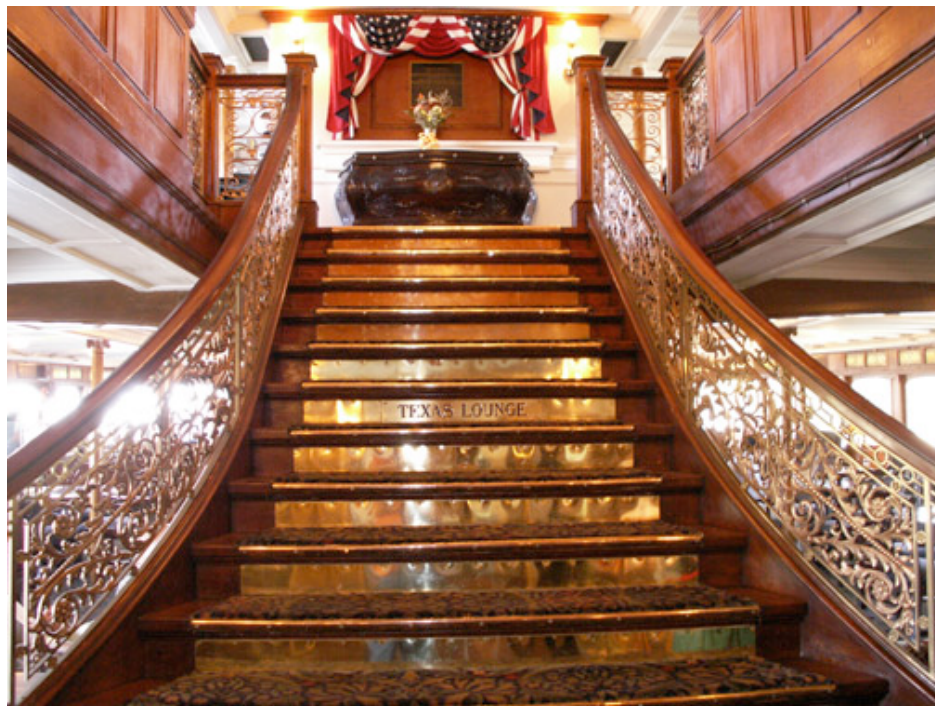


Figure 3.7: The Grand Staircase (Source: www.maritimematters.com)

The renovated *Delta Queen* steamed out of Cincinnati to Cairo, Illinois on June 30, 1948 with Captain Tom Green at the stern. In 1949, Tom Greene's mother Mary passed away in her cabin on the *Delta Queen* after fifty-five years as a riverboat captain,

and Tom was soon to follow in 1950, suffering a heart attack on the *Queen* at the age of forty-six.²¹⁶ Tom Greene's wife Letha took over the Greene Line but suffered some hard times in the 1950s, and sold all of the Greene Line's boats except the *Queen*. Wealthy businessman Richard Simonton bought Green Line Steamers in 1958 and by 1962 all the company's debts were paid off. 1963 saw the revival of steamboat racing when the *Delta Queen* and the *Belle of Louisville* raced in what would become an annual event.²¹⁷ In 1965, Congress enacted the Safety of Life at Sea Act (SOLAS), which prohibited vessels primarily constructed of wood from carrying over fifty passengers, after the devastating fire aboard cruise ship *Yarmouth Castle*, but the *Queen* was granted two exemptions from this law thanks to the quick work of Simonton.²¹⁸ The *Queen* had two years to be retrofitted with fire suppression materials, and quickly painted almost all surfaces with fire-retardant paints developed by NASA. Betty Blake, who served as the public relations agent for Green Line Steamers and later became the president began the "Save the *Queen*" campaign and secured two-hundred and fifty thousand support letters, but unfortunately Representative Edward Garmatz of Maryland opposed the extension of any more exemptions for the *Queen* and she was to have her last journey in October of 1970.²¹⁹ Meanwhile, Bill Muster and Overseas National Airways had bought Greene Line Steamers and the *Delta Queen* had been added to the National Register of Historic Places in June of 1970.²²⁰

Just as the *Queen* began her "final" journey that day in October amid great fanfare, Representative William McCullough of Ohio submitted an amendment to

²¹⁶ Ibid, 27

²¹⁷ Hughes, 11

²¹⁸ Ibid

²¹⁹ Ibid, 12

²²⁰ Ibid.

SOLAS that would extend the *Queen*'s exemptions, and despite some opposition, the amendment was signed in December of that year.²²¹ The exemption was renewed many times in the 1970s and millions of dollars were spent on upgrading her fire prevention systems before Coca-Cola bottling company of New York bought what was now the *Delta Queen* Steamboat Company.²²² President Jimmy Carter and his family cruised on the boat in 1979 and Princess Margaret Rose of Great Britain also sailed on the vessel in 1986.²²³ The company became publicly owned in 1980 but was bought by Equity Group Investments, owned by Chicago millionaire Sam Zell, in 1986 and still operated as the *Delta Queen* Steamboat Company. Zell's Equity Group bought other cruise lines around the United States and created parent company, American Classic Voyages to build new ships, which deterred financial resources from the *Delta Queen* Steamboat Company.²²⁴ Despite this lack of funding, the *Queen* did undergo an extensive restoration in the year 2000 when the wooden columns and beams of her superstructure were hollowed out and filled with steel framework. This led to the discovery of the 1940 grey navy paint that had helped to preserve the wood, which was stripped and refinished.²²⁵

American Classic Voyages declared bankruptcy in October of 2001, and Delaware North Corporation of New York bought the *Delta Queen* and the three boats associated with the company at auction in May 2002.²²⁶ The New Orleans based *Queen* and her crew suffered financially after Hurricane Katrina in 2005, and she was sold the next year to Ambassadors International of Seattle, which created the *Majestic America*

²²¹ Ibid.

²²² Ibid.

²²³ Kevin Foster. "National Register of Historic Places Nomination Form for the *Delta Queen*." (February 1989) Available at: <http://pdfhost.focus.nps.gov/docs/NHLS/Text/70000495.pdf>. Accessed May 10, 2012.

²²⁴ Hughes, 15

²²⁵ Ibid.

²²⁶ Frank X. Prudent. "Back From the Brink: The Triumphant Return of the *Delta Queen* Steamboat Company." *Steamboat Bill*. (Spring 2003) 23-27

Line to run the *Delta Queen*. The Majestic Line was out of business by 2008 and Congress did not renew the *Queen*'s exemption from SOLAS that year, possibly because of a lack of interest from the company.²²⁷ Ambassadors International declared bankruptcy in 2011 and was bought by Xanterra Parks and Resorts.²²⁸ Currently, the *Delta Queen* is docked in Chattanooga, Tennessee and operates as a stationary, floating bed and breakfast. The *Queen*'s twin boat, the *Delta King*, also operates as a floating hotel in Sacramento, California.²²⁹ As of April 3rd, 2012, Judy and Wayne Heller of Daytona Beach, Florida had signed a letter of intent to purchase the *Delta Queen* and tow the vessel to New Smyrna Beach to dock next to the Riverview Hotel.²³⁰

Throughout her long life, the *Delta Queen* has been the subject of many campaigns to save her and has developed a special meaning for many who have worked on her or have simply been passengers. A resident of Berkeley, California, Robert Parkinson, reminisced in 2007 about his first experience with the *Queen* in the 1930s when he

“traveled one-way by steamboat with the return by train-for me the best of both worlds. I was on hand in 1938 when the *Delta Queen* raced the steamboat Port of Stockton and won. I was standing on a San Francisco hill when the *Delta Queen* finally left the Bay Area in 1947, and I sailed in her again in 1985 from St. Louis to Nashville and back.”²³¹

In 1970, the year the *Delta Queen* fought hardest for her survival as a passenger-carrying steamboat, Betty Blake campaigned tirelessly for the *Queen* and was featured on the CBS

²²⁷ Hughes, 16

²²⁸ Bill Wiemuth. “New Owner Acquires the *Delta Queen*.” Available at: <http://deltaqueen.wordpress.com/2011/06/11/new-owner-acquires-delta-queen>. Internet: accessed May 5, 2012

²²⁹ Delta King. Available at: <http://www.deltaking.com>. Internet: accessed June 3, 2012

²³⁰ Bill Wiemuth. “*Delta Queen* Could be Sold and Moved.” Available at: <http://deltaqueen.wordpress.com>. Internet: accessed May 5, 2012

²³¹ Scull, 25

Evening News, The Today Show, Life and Newsweek magazines and the New York Times. Johnny Cash sang a song about the Queen on ABC and three documentaries were made, including one by National Geographic.²³²



Figure 3.8: Betty Blake and Captain Wagner celebrate the saving of the *Delta Queen* (Source: www.steamboats.com/museum)

Operation

The *Delta Queen* is currently operating as a bed and breakfast that is also available for special events such as weddings or corporate dinners. She has eighty-eight staterooms and a guest capacity of one hundred seventy-six. Advertisements refer to the boat as a “Floating Boutique Hotel” and “Chattanooga’s most memorable overnight

²³² A Legislative and Corporate History From the Files of Bill N. Muster and Richard C. Simonton. Available from: <http://steamboats.com/museum/deltaqueen3.html>. Internet: accessed May 5, 2012

stay.”²³³ The operation of the *Queen* is more closely related to that of a standard hotel as she is a stationary ship and does not make any voyages.

The *Delta Queen* has a complicated management structure that is soon to change. She is currently owned by TAC Cruises, a subsidiary of Xanterra Parks and Resorts and has been on the market since her arrival in Chattanooga in 2009 and is operated and managed by Leah Ann and Randy Ingram.²³⁴ The Hellers of Florida are awaiting the City Council of New Smyrna Beach to approve the land lease and also must obtain approval from the Army Corp of Engineers and the Department of Environmental Protection among other agencies before they can move the *Delta Queen*. The boat will stay on the market, but the Ingrams hope to find a buyer who will keep the boat in Chattanooga.²³⁵

Preservation

As with any historic ship, preservation aboard the *Delta Queen* must be constantly monitored, as the upkeep of all of her historic parts is very expensive. She currently has no formal preservation plan in place. The brochure for the *Delta Queen* states, “The historic *Delta Queen* Hotel boasts authentic teak handrails, gleaming brass and Tiffany-style stained glass, and crystal chandeliers throughout the many quaint but spacious public areas on board.”²³⁶ According to the National Maritime Initiative website, she retains eighty-five percent of her original fabric.²³⁷ Changes have been made to the *Delta Queen* throughout the years, with the most happening in the cabin deck, but even these

²³³ *Delta Queen* Hotel, Chattanooga, Tennessee. Brochure. Available from www.deltaqueenhotel.com

²³⁴ Cary O’Neil. “Delta Queen Riverboat will stay in Chattanooga Through Summer.” *Chattanooga Times Free Press*. (May 21, 2012) Available from: <http://timesfreepress.com/news/2012/may/21/riverboat-will-stay-chattanooga-through-summer>. Accessed May 20, 2012

²³⁵ *Ibid*.

²³⁶ *Delta Queen* Hotel Brochure.

²³⁷ National Park Service – Maritime Heritage Program.

alterations date to the late 1940s.²³⁸ According to long-time resident historian, Karen “Toots” Maloy, the *Delta Queen*’s hull was expanded in 1990 so that it more resembled that of a barge hull, to allow for more water storage.²³⁹ Before the new hull was installed, guests were not allowed to drink water from the tap, as one could never be sure if it was fresh water or water from the river below.²⁴⁰ Randy and Leah Ann Ingram have served as managers of the boat since 2009 and have been dedicated to her care and preservation. They held an event called “Rally on the River” on November 4th 2010 in an attempt to raise funds for a private foundation for upkeep of the *Delta Queen* and possible purchase from the parent company. While the event was successful and The *Delta Queen* Preservation foundation was formed, enough funds were not raised for purchase before Ambassadors International declared bankruptcy and support for the foundation has languished²⁴¹ Nevertheless, the *Delta Queen* is able to rely on much support and volunteer efforts from those that love her. Many past crewmembers and passengers of the Delta Queen volunteer their time to paint and polish, and repair the *Queen* to keep her looking like new.²⁴² In April of 2011, over one thousand artifacts from the original construction of the Delta Queen were donated back to the boat and put on display in Chattanooga.²⁴³

²³⁸ Shawn Dake. “Log of the Steamboat *Delta Queen*: Along Southern Rivers Part 2.” Available from: <http://maritimematters.com/2010/09/log-of-the-steamboat-delta-queen-along-southern-rivers-part-two-2>. Internet: accessed May 15, 2012

²³⁹ Interview with Karen “Toots” Maloy. May 21, 2012.

²⁴⁰ Ibid.

²⁴¹ Bill Wiemuth, “Rally on the River.” Available from: <http://deltaqueen.wordpress.com/2010/11/05/rally-on-the-river>. Internet: accessed May 18, 2012

²⁴² Ibid.

²⁴³ Joan Garrett. “Delta Queen Artifacts on Display after Resurfacing.” *Chattanooga Times Free Press*. (April 2, 2011). Available at: <http://www.timesfreepress.com/news/2011/apr/02/delta-queen-artifacts-display-after-resurfacing/?print>. Internet: accessed May 20, 2012

Interpretation

Interpretation aboard the Queen has varied over the years. Like many steamboats, she has employed a “Riverlorian” in the past to provide interpretation for passengers. The term “Riverlorian” is a combination of the words river lore and historian, and was penned by the early historians aboard steamboats to fully describe the interpretive job they held.²⁴⁴ Clara Christensen, a former Riverlorian and tour manager aboard the *Delta Queen* revealed that the Riverlorians would often narrate slide shows that had been prepared for them depicting the history of the *Delta Queen* and host film showings.²⁴⁵ The Riverlorians would also give boat tours to new guests and tell stories of famous passengers, along with ghost stories associated with the *Delta Queen*. They were also allowed to pick their own subjects for talks and share stories and information with other Riverlorians. As a Riverlorian aboard the *Delta Queen*, Mrs. Christensen also “gave a talk about where we were, what had happened there and what was still happening there; fact and fiction.” As for the average passenger aboard the *Delta Queen* when it was still running voyages on the Mississippi, Mrs. Christensen asserted that the guests were normally in their late fifties and came from all different economic backgrounds. The *Delta Queen* had no elevators and therefore attracted a “younger” crowd that tended to be less mobility impaired than newer boats such as the *American Queen* or *Mississippi Queen*. Although some loyal passengers who rode aboard the *Delta Queen* suffered from mobility issues, the staff offered to serve them in the Forward Cabin Lounge.

Currently, the interpretation aboard the *Queen* centers around her entertainment and history told through tours of the engine room and of the Betty Blake library, which is

²⁴⁴ Interview with Bill Wiemuth. May 24, 2012

²⁴⁵ The following information was obtained in an interview with Clara Christensen on April 30, 2012

a large, comfortable room on the Cabin Deck housing books relating to the history of the river and the towns along the way. A documentary film about the *Queen*'s history created by past boat historian Bill Wiemuth runs on a television in the lobby of the vessel.²⁴⁶



Figure 3.9: Betty Blake Library (Source: www.maritimematters.com)

Entertainment aboard the *Queen* includes traditional riverboat songs played on the calliope and celebrations centering around holidays such as New Year's Eve and Easter.²⁴⁷ Dinner and drinks are served weekly in the Texas lounge and period-clad interpreters pose as persons associated with the *Delta Queen* and interact with guests. Live musical entertainment is also offered aboard the *Delta Queen* on a regular basis. There is no full-time Riverlorian aboard the *Delta Queen*, but reunion weekends are hosted annually aboard the boat, where past riders, crew and entertainers are invited back to participate in a four to five day re-enactment of what it was like to sail aboard the

²⁴⁶ Obtained from an interview with Bill Wiemuth. May 24th, 2012

²⁴⁷ Delta Queen Hotel. Available from: www.deltaqueenhotel.net. Internet: accessed May 8, 2012

Delta Queen without the boat leaving the dock.²⁴⁸ Unfortunately, interpretation aboard the *Delta Queen* suffers because she is not able to operate as she was originally intended, and her future once again hangs in the balance.

***The American Queen*, Memphis, Tennessee**



Figure 3.10: *American Queen* (Source: www.foxnews.com)

The *American Queen* is the only steamboat currently running overnight passengers on America's rivers and is very closely related to the *Delta Queen*. She was built entirely of steel in 1995 by The *Delta Queen* Steamboat Company at a cost of sixty million dollars, re-using steam engines from a 1927 dredge boat, the *U.S. Kennedy*.²⁴⁹ As of June of 2012 she was making a voyage down the Mississippi River after her re-launching earlier this year. Possibly the largest steamboat ever built, she is four hundred

²⁴⁸ Karen "Toots" Maloy, May 21, 2012

²⁴⁹ "*American Queen*". Steamboats.org. Available from: <http://www.steamboats.org/american-queen.html>. Internet: accessed May 1, 2012

eighteen feet long and eighty-nine feet high. She has two hundred twenty-two staterooms and can accommodate four hundred-thirty six passengers.²⁵⁰

History

The steamer *American Queen* was built in Morgan City, Louisiana at McDermott Shipyard in 1994. She began her maiden voyage from New Orleans to Pittsburg, following the original 1812 route of the *New Orleans* in 1995.²⁵¹ She uses a paddlewheel for propulsion assisted by two additional propellers. The calliope was built especially for the *American Queen* and has thirty-seven gold-plated brass pipes.²⁵² After the bankruptcy of the *Delta Queen* Steamboat Company, Delaware North Companies purchased the *American Queen* and operated her until 2008 under the Majestic America Line. When the Majestic America Line declared bankruptcy, the *American Queen* was returned to the Maritime Administration and was kept on a lake in Beaumont, TX until Hornblower Cruises and Events purchased the vessel in 2011 and moved her to Louisiana for a six-million dollar renovation.²⁵³ The Great American Steamboat Company based out of Memphis, Tennessee now operates the boat and began river cruises in April of 2012.

Operation

The CEO of the Great American Steamboat Company is Jeff Krida, who was also the president of the *Delta Queen* Steamboat Company when the *American Queen* was built in 1995.²⁵⁴ When the newly formed company purchased the idle vessel, Krida

²⁵⁰ Ibid.

²⁵¹ Shawn Dake. "American Queen Marks Return of a Steamboat to the Mississippi River." Maritime Matters. Available from: <http://maritimematters.com/2012/04/american-queen-marks-return-of-a-steamboat-to-the-mississippi-river>. Internet: accessed May 15, 2012

²⁵² www.steamboats.org

²⁵³ Ibid.

²⁵⁴ Bill Dries. "American Queen Makes Historic Comeback." *Memphis Daily News*. (April 26, 2012) Available from: <http://www.memphisdailynews.com/news/2012/apr/26/american-queen-makes-historic-comeback>. Internet: accessed May 10, 2012

convinced several partners, including the city of Memphis to invest in the boat for the extensive renovation. The city of Memphis invested nine million dollars into the project, which will be repaid out of an eighty-nine dollar boarding fee assessed to every passenger. This fee will also go towards finishing the Beale Street Landing on the Memphis riverfront, which is currently over budget and over its time limit.²⁵⁵ The *American Queen* is scheduled to make forty voyages in 2012 on the upper and lower Mississippi River, along with the Ohio and Tennessee Rivers. All of the cruises have themes, such as Southern Culture and Springtime on the River. The cruises range from nine to thirteen days, some beginning and ending at the same location and some as one-way cruises.²⁵⁶ Passengers may choose from seven different levels of staterooms, with the lowest featuring a single bed and bath and the largest being a suite with a double or queen bed. The grand vessel has many modern amenities, including a pool, gym, a theater and several bars and restaurants. There are also several spaces devoted to “historic” uses such as a gentleman’s card room and a Grand Saloon.²⁵⁷

²⁵⁵ Ibid.

²⁵⁶ The Great American Steamboat Company. “Destination.” Available from: <http://www.greatamericansteamboatcompany.com/destination>. Internet: accessed May 5, 2012

²⁵⁷ Ibid.

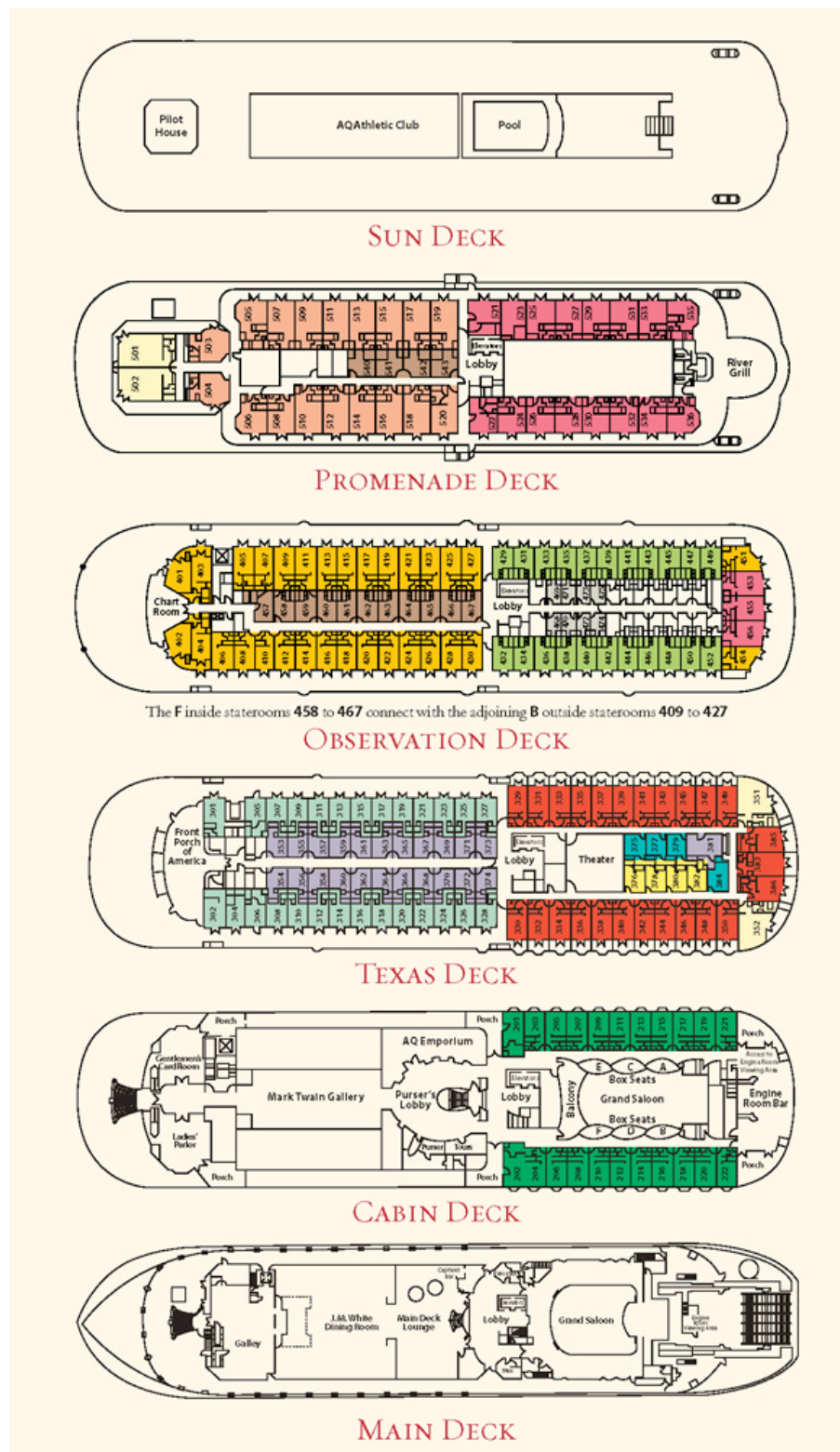


Figure 3.11: American Queen Deck Plan

(Source: www.greatamericansteamboatcompany.com)

At each stop along its journey, the *American Queen* has created guided tours of the towns and also offers bonus excursions that could include a dinner at a local chef's house or an extended tour to a battlefield or antebellum home.



Figure 3.12: *American Queen* Tour bus at Natchez, Mississippi

(Source: www.natchezdemocrat.com)

Preservation

The *American Queen* is a mere seventeen years old, but has nevertheless experienced some renovations to reach its current grandeur. Jeff Krida supervised the original design and building of the *Queen* in the nineties and described the process as one that was focused on authenticity and included long hours of photographic research. The design team focused on re-creating the grandest elements of famous steamboats, such as the spectacular *J.M. White* to create the most magnificent steamboat ever built. The *J.M. White* dining room aboard the *American Queen* is designed after the historic ship's Grand Saloon.²⁵⁸

²⁵⁸ Jeff Krida. "My Sentimental Journey with the *American Queen*." *The Great American Steamboat Company*. (September 2011) <http://www.greatamericansteamboatcompany.com/blog/2011/09/27/my-sentimental-journey-american-queen>. Internet: accessed May 10, 2012.



Figure 3.13: *American Queen* Dining Room

(Source: www.greatamericansteamboatcompany.com)

The recent renovation strove to restore the boat to her original design and involved mostly cleaning, maintenance, and several thousand gallons of white paint.²⁵⁹ The original paint specifications were consulted to discern the colors of the boat, and the original boilers were cleaned and inspected for continued operation. Some of the most extensive work was done on the seventy-nine thousand pound paddlewheel, which was completely removed and disassembled for maintenance and to replace rotted boards before it was reconstructed, repainted and replaced.²⁶⁰ Its original builder, expert Dave

²⁵⁹ Greg Brown. "Camp Shipyard." The Great American Steamboat Company (October 2011) Available from: <http://www.greatamericansteamboatcompany.com/blog/2011/10/05/camp-shipyard>. Internet: accessed May 12, 2012

²⁶⁰ Tim Rubacky, "Big Wheel Keeps on Turning." The Great American Steamboat Company. (October 2011) Available from: <http://www.greatamericansteamboatcompany.com/blog/2011/10/26/big-wheel-keeps-turning>. Internet: accessed May 10, 2012

Morecraft, also refurbished the steam calliope.²⁶¹ The Great American Steamboat Company invested time and resources into refurbishing the *American Queen*, and the result is a modern steamboat with an authentic historic feel. Tim Rubacky, Senior Vice President of Sales, Marketing and Development wrote on his blog, “At the Great American Steamboat Company we don’t feel we are her owner. We feel we are her steward and it is our duty to make certain she survives in her authentic guise for future generations.”²⁶²

Interpretation

Because of the modern nature of the *American Queen*, interpretation is varied and includes a variety of programs that relate to steamboating and river history, and some that do not. CEO Jeff Krida remarked, “we think of the *American Queen* as a time machine, we’re a combination of the modern world and the 19th century all at the same time out here.”²⁶³ The vessel is decorated in a Victorian style and the Grand Saloon is a partial replica of Ford’s Theater.²⁶⁴

²⁶¹ Greg Brown. “The Mighty Steam Piano.” The Great American Steamboat Company. (November 2011) Available from: <http://www.greatamericansteamboatcompany.com/blog/2011/11/01/mighty-steam-piano>. Internet: accessed May 12, 2012

²⁶² Tim Rubacky, “Giants of the Past.” The Great American Steamboat Company. (November 2011). Available from: <http://www.greatamericansteamboatcompany.com/blog/2011/11/18/giants-past>. Internet: accessed May 12, 2012

²⁶³ Dries

²⁶⁴ www.greatamericansteamboatcompany.com



Figure 3.14: *American Queen* Grand Saloon (Source: www.travel.usa.com)

Historic interpretive efforts include the Riverlorians who provide informative talks and programs for passengers, along with a Mark Twain impersonator. Guests may also tour the steam and engine room and talk with engineers and mechanics about the boat's operations. Some of the cruises are themed to include steamboat and river development history, such as the Civil War and Southern Culture cruises, and all cruises offer historic tours of the places where they dock.²⁶⁵ Nightly musical entertainment aboard the regal vessel includes bands from all different genres of American music, from Dixieland Jazz to music from the 1960s.²⁶⁶ The *American Queen* even participated in the old tradition of steamboat racing on May 2nd, 2012 when it raced the *Belle of Louisville* and the *Belle of Cincinnati* in Louisville, ending in a contested win with the *Belle of Louisville*.²⁶⁷ Krida believes that the passengers aboard the *American Queen* “are looking for a great vacation but they'd like to learn something along the way while they're having a good time.

²⁶⁵ Ibid.

²⁶⁶ Ibid.

²⁶⁷ Christopher Kyte. “The Great Steamboat Race.” The Great American Steamboat Company. (May 2012). Available from: <http://www.greatamericansteamboatcompany.com/blog/2012/05/02/great-steamboat-race>. Internet: accessed May 10, 2012

They're hunting for authenticity. There are an awful lot of fake things out there and when they can get the real thing they want it."²⁶⁸

The Great American Steamboat Company's website is extensive and filled with images of the boat and its amenities. The demographic group that is targeted are senior citizens of higher income and education. The website specifically states that the guests are "mostly Americans, 50+, well educated, well traveled, curious, love great cuisine and live entertainment, hope to learn new things while seeing the Heartland of American and making new friends."²⁶⁹ A virtual tour of the boat on the website takes the viewer through not only the ship itself, but also the activities. An older woman who is on the journey with her husband, celebrating their fiftieth wedding anniversary, narrates the video and describes the accommodations, food, entertainment and stops along the way.²⁷⁰ The website also includes several pages for blogs, one that discusses the *American Queen* in the news, and another that is a daily travel journal kept by the President of the boat, Christopher Kyte.

²⁶⁸ Dries

²⁶⁹ www.greatamericansteamboatcompany.com

²⁷⁰ Ibid.

CHAPTER 4

CHALLENGES FACING STEAMBOATS

As illustrated in the case studies, historic and modern steamboats face many challenges. Modern laws and codes must be met, and finances are often limited. There are also many other obstacles that must be overcome for a vessel to be successful today and provide a truly authentic experience for a passenger. The case studies provide a jumping-off point for discussion about the limitations placed on the operation, preservation, and interpretation of historic and modern steamboats in today's world. This chapter will discuss the challenges that exist in each of these areas and analyze the performance of each boat included in the case studies according to the category.

Operation

The ability to operate as they once did is a major issue with historic vessels today because of the current safety laws and standards for water-borne transportation. The law that mostly affected the operation of historic vessels was the Safety of Life at Sea Act of 1966, which effectively ended the option of overnight passenger trips for most large wooden ships that were specifically built for these types of voyages. Large mostly-wooden vessels must find other ways to continue operation that do not involve overnight passengers. Some boats operate as excursion ships, and some are permanently docked and serve as museums. Each type of operation comes with its own set of problems, as illustrated in the case studies. An operational challenge that faces all historic vessels is expense. Running or not, the boats are extremely expensive to own and operate.

Maintenance, upgrades, inspections, and knowledgeable staff are difficult and expensive, but essential for continuously successful operation. Another operational challenge that faces these historic vessels is the pressure to provide modern services and accessibility while maintaining historic character. While a modern day passenger is looking for a historic experience when riding a steamboat, they also expect modern day conveniences such as elevators and large restrooms, and a historic vessel is often not able to accommodate these types of modern technologies. Each vessel included in the case studies is analyzed below for their particular operational challenges.

Belle of Louisville

The first credit for the *Belle of Louisville* is that she still operates as she historically did, as a daily excursion boat, and has continuously operated throughout most of her life. A large part of the *Belle's* operational success has to do with her management structure. Because the boat is owned by the city of Louisville Metro Government in partnership with the Louisville Waterfront Association, the city has a vested interest in the success of the steamboat. The fact that the boat is owned locally is also a plus, as all of the money is kept in the city and no off-site management makes decisions about its future. Marketing for the *Belle* is done well, and she is presented as a part of a total historic experience along the Louisville waterfront that includes the Howard Steamboat Museum and the *Spirit of Jefferson*.²⁷¹ The *Belle of Louisville* has plenty of staff, is able to hire more for her high seasons, and is also successful in securing private charter and wedding event cruises. The citizens of the city of Louisville have an obvious connection to the steamer, and the public support she attracts also aids in her continuous operation.

²⁷¹ The Historic *Belle of Louisville*: The Legendary Lady of the River. Brochure. Available from: www.belleoflouisville.org

Despite all of these positive points, the *Belle* does face some real challenges, mostly in the form of funding. The five year dry-dock inspections required by the Coast Guard are very costly, and take the *Belle* out of service for a period of time that could otherwise be spent making voyages. While she is a very popular attraction in Louisville, the cost of operating and maintaining the ship is currently not covered by the revenue she brings in, which makes any improvements difficult to make and could cause the city to question its financial support of the boat. Another problem the steamboat faces is that her operation is largely based on the weather. Because of its nature, the smaller ship cannot sail in inclement weather and the guests are routed to a dockside buffet or are refunded, often resulting in dissatisfied customers.

Delta Queen

Many of the *Delta Queen's* troubles are rooted in problems with its operation and management structure. It seems as though the future of the *Delta Queen* is always in question, and despite the amount of public support she inspires, she is constantly threatened by outside sources. The most obvious challenge the *Queen* currently faces is the loss of her exemption from SOLAS, which limits her from making overnight passenger voyages. Steamboats influenced the development of laws and regulations which made travel safer for passengers, and now those same vessels are being put out of operation by these same laws. The *Queen* was never meant to be a daily excursion boat like the *Belle of Louisville*, and is too large and expensive to run to warrant day trips. The current management did turn the *Queen* into a hotel to continue operation, but this does not negate all the maintenance that must be done on a waterborne vessel and subtracts from the true steamboat experience. Xanterra, a very large company that manages

properties all over the United States, ultimately owns the *Delta Queen*. A company such as this does not value the *Delta Queen* and, because of off-site management, does not understand the day-to-day operations that take place aboard the boat. They are also much less likely to fight for her survival because she produces such a small amount of revenue when compared to the larger, resort properties. The *Delta Queen* may soon change hands again and be moved to Daytona Beach, Florida to operate as another stationary hotel. This would be a huge loss for Chattanooga and the *Delta Queen*, as serving as a hotel on the ocean is completely out of context for a steamboat such as the *Queen*, not to mention she would be subjected to the possibility of devastating hurricanes.

Despite all these challenges, the *Delta Queen* does benefit from a devoted crew and management that has fought to stay with her and keep her at a level of operation instead of becoming completely obsolete. Those interested in steamboats and preservation follow the publicity she receives closely, and several organizations have been formed in attempts to protect and preserve the *Delta Queen*. The city of Chattanooga does market the *Delta Queen* in conjunction with other events along the riverfront, similar to the *Belle of Louisville*, but is not as invested in her success because they do not have any financial stake in the situation. The *Queen* is available to rent for corporate events and weddings, but lacks many modern conveniences that make a venue attractive for these types of events. If the *Delta Queen* is sold and moved to Florida, there is no way of knowing how she will be operated and what will happen to the devoted people and organizations that have stood by her for so long.

American Queen

The *American Queen* is the newest vessel in the case studies and just began its regular overnight journeys at the beginning of this study. Therefore, the operation can only be analyzed for the few short weeks she has been running. The biggest asset to the *American Queen* is its ownership. Jeff Krida was the former CEO of the *Delta Queen* Steamboat Company, and therefore has experience and is obviously interested in the success of the *American Queen*, as he supervised the building of the ship in 1995. Upon purchasing the *American Queen*, he formed the Great American Steamboat Company, which currently only operates the one boat. A small, local management company with experience in the area is the best system for operation as they are onsite and more involved in every aspect of the boat. The fact that Krida was there for the rise and fall of the *Delta Queen* Steamboat Company also gives him considerable knowledge about how to create a profitable steamboat experience. Krida had the foresight to bring in partners from the ship's homeport of Memphis, and enter into a mutually beneficial partnership to contribute to the success of the company and continuing projects along the Memphis waterfront. While the *American Queen* calls Memphis home, passengers can depart from many cities along the Mississippi River and its tributaries, and have the options of round-trip or one-way voyages along with a variety of trip lengths. All of these available options will reach more potential passengers and will also contribute to increased tourism of the ports along the way. Krida also did an excellent job of partnering with these port-of-call cities in creating day excursions for the passengers when they visit. The *American Queen* has the potential to be a long-running and successful venture because of clever

management and many involved stakeholders who want to see the success of the boat and the overall venture.

The main challenge facing the *American Queen's* success is the ability of the management and staff to execute the voyage at the levels promised in the marketing material. A high level of planning and coordination went into making the voyages run smoothly, and the ship must rely on cooperation from the ports along the way, the weather, and newly trained staff for the journey to go as planned. All of the training and coordination also involves many partnerships that must be maintained and is very expensive to maintain. The *American Queen* has the potential to be highly successful if they prove their commitment to the continued operation of the boat and of the success of the stakeholders involved.

Operation Summary

The case studies above show the operational problems historic and new steam vessels encounter. The *American Queen* naturally overcomes the obstacles easier because of her modern construction, but she will eventually face many of the same problems as the *Belle of Louisville* and the *Delta Queen* without a strategic plan for her future. The main operational challenges facing steamboats today are overcoming legal restrictions, overcoming expense of operating to be financially stable, and finding ways to accommodate modern passengers with the restrictions of a historic vessel.

Preservation

Possibly the most important aspect of historic resources is preserving them for future generations. Historic vessels are especially important because of their fragile nature. Ship preservation in America began in the twenties when the *USS Constitution*

was saved, and has slowly made progress ever since. The National Park Service conducted a survey of historic maritime resources in 1984 and then created the National Maritime Initiative in 1985.²⁷² The National Maritime Initiative's purpose is to survey, evaluate, and recommend preservation methods for historic maritime resources. The National Maritime Heritage Act was passed in 1994, which gave the Initiative authority to participate in developing national maritime heritage policy and a grants program to support maritime heritage preservation and education projects.²⁷³ The Secretary of the Interior commissioned Michael Nabb to draft standards for Historic Vessel Preservation in the late 1980s, and they were adopted in May of 1990.²⁷⁴ The Secretary of the Interior's Standards for the Treatment of Historic Properties include four treatments: preservation, rehabilitation, restoration and reconstruction. The original Standards for Historic Vessel Preservation included six treatments: acquisition, protection, stabilization, preservation, rehabilitation and restoration. Like the standards for historic properties, the historic vessel standards range from acquisition as the least invasive because it only involves an entity becoming responsible for a vessel, to restoration, which involves replicating and replacing historic fabric that may no longer exist.²⁷⁵ The guidelines suggest that before a historic vessel is even acquired, an extensive preservation plan should be developed that names the treatment that will be used for the vessel, and plans for funding sources and management.²⁷⁶ Preservation is also a challenge for these

²⁷² James P. Delgado. "Grim Realities, High Hopes, Moderate Gains: The State of Historic Ship Preservation." *The National Park Service CRM Bulletin*, V.12, no 4. (1989)

²⁷³ Maritime Heritage Program. "About Our Program." Available at: <http://www.nps.gov/maritime/more.htm>. Internet: accessed May 18, 2012.

²⁷⁴ The Secretary of the Interior's Standards for Historic Vessel Preservation Projects with Guidelines for Applying the Standards. U.S. Department of the Interior, Office of the Secretary. National Park Service. National Maritime Initiative. (May 1990)

²⁷⁵ Ibid.

²⁷⁶ Ibid.

ships because while they are steamboats, their uses and appearance have changed over time because the use of the vessels changed, as was the historic nature of steamboats. As more efficient technologies for good and passenger transport were developed, the boats became strictly passenger ferry vessels and used for entertainment purposes. Owners and operators seeking to restore historic steamboats should choose a time period they feel most represents the history of the individual vessel for their preservation strategy, while also acknowledging the ever-changing nature of the ship and respecting the current operation. Some of the vessels presented in the case studies, such as the *Belle of Louisville*, continue to operate in a way that respects historic use, while others such as the *Delta Queen* can be viewed as more of an adaptive reuse, because it is now a hotel as opposed to a passenger ferry vessel.

The vessels presented in the case studies do not have preservation plans or long-term management plans and implement preservation on an as-needed basis. This is in opposition to the standards and does not allow for effective preservation, even if the vessels are currently considered to be in good condition. Much of this is due to lack of funding, which is a problem across all areas of historic vessel preservation. The Maritime Heritage Program implemented a grants program in 1998 that was funded from proceeds of scrapped vessels from the National Defense Reserve Fleet, but problems with worker safety caused the funding to be cut after the first year. No historic ship specific grants are currently available.²⁷⁷ Another obstacle in obtaining funds for historic vessel preservation are that there are no tax credits available such as the ones offered by the National Park Service for the restoration of historic buildings. Many battles have been fought over our

²⁷⁷Maritime Heritage Program. "Grants." Available from: <http://www.nps.gov/maritime/grants.htm>. Internet: accessed May 20, 2012.

nation's historic buildings, but historic boats receive far less attention when being threatened. Public support is crucial for the continued preservation of historic steamboats as it could provide additional private funding. Upgrading the vessels and providing for greater accessibility is also a preservation challenge, as these changes must be undertaken with great sensitivity to the historic character of the boat. Several boats have found ways around adding elevators and access ramps through creative programming. Each boat's current preservation status is discussed below.

Belle of Louisville

Preservation on the *Belle*, as with any historic structure, is something that must be examined carefully for success and failures. The *Belle* operated under several names throughout her life, and is currently preserved as the *Belle of Louisville*, which is name she received when she was purchased by the city of Louisville in the 1960s. At that time, famed maritime architect Alan Bates was commissioned to execute a "historically accurate" restoration of the vessel, although to what time period the *Belle* was restored to is uncertain. Nevertheless, the *Belle* retains the image of a historic steamboat and is very successful in retaining and still using her historic engines for propulsion.

Some preservation challenges faced by the *Belle* are the need for updates to improve passenger comfort and the lack of funding. As with many historic structures, the boat must be updated to meet current code requirements and levels of comfort passengers expect. It is a very difficult task to add modern heating, ventilation, plumbing and fireproofing systems in a historically sensitive manner. Another preservation challenge is that the ship must replace parts of the steel hull according to the Coast Guard requirements every five years after inspection. These repairs and replacements are very

costly, and are difficult to plan for. Lack of funding in general is a real problem for the *Belle*. There is no formal preservation plan in place because the staff cannot financially plan to execute it, and repairs are done as needed in a piecemeal fashion. The *Belle* must create a more formal preservation strategy for the vessel, or unforeseen costs could cause her to cease to operate.

Delta Queen

The *Delta Queen*, throughout all of her trials, has maintained many of her historic finishes and overall layout. The Grand Staircase, arguably her most recognizable feature, is preserved and continues to be one of the most photographed elements of the *Delta Queen*. Like the *Belle of Louisville*, she has been updated with modern conveniences to provide for passenger comfort. Unfortunately, these upgrades can be very difficult to make and lead to problems such as very low ceiling heights in bathrooms and more compact guest accommodations. While the *Queen* maintains much of her historic equipment, engines and boilers that stay idle will deteriorate faster than those that are regularly operated and cared for. While efforts to form a preservation foundation for the *Delta Queen* began, the foundation lacks organization and its future is uncertain. If the vessel is moved to the ocean, a new preservation plan should be formed that addresses the new environment the *Delta Queen* will experience.

American Queen

Because of the modern nature of the *American Queen*, preservation does not yet fully apply to the vessel. The renovation she underwent in 2011 did involve preservation efforts like the cleaning and testing of the historic engines and boilers and the large paddlewheel. The design team does deserve credit for attempting to create a historically

accurate vessel with modern materials. Preservation challenges could arise for the *American Queen* in the future, as passenger safety laws and codes will inevitably become stricter and technology evolves. The *American Queen* should create a preservation plan to negate future repairs and provide for any improvements that must be made.

Challenges in Preservation Summary

Historic vessel preservation is an ever evolving that deserves more attention and study. Our nation's historic vessels aided the development of America, and are therefore responsible for the construction of many great historic structures. Technologies are available for saving historic wood and fabric of these ships, but they are very expensive. Historic vessel preservation is not only threatened by funding, but also by lack of education and the need for these historic vessels to upgrade their accommodations according to passenger expectations, risking loss of authenticity. Efforts to preserve these historic steamboats in their original condition should be made, but because of the modern restrictions facing them, adaptive reuse preservation strategies are also appropriate treatments.

Interpretation

Interpretation planning for historic ships is a broad category that not only can span many generations, but many places and people as well. Unlike most historic buildings that have remained in one area for a long period of time, most historic steamboats have traveled far and wide and have served many purposes throughout their lives. Interpretation aboard any given vessel should not only tell the stories of the individual boat, but how steamboats shaped the culture of the early United States and evolved into what they are now. As mentioned in the case studies, the position of a

“Riverlorian” has been established aboard many steamboats to lead interpretive talks and share the history of steamboating with the passengers aboard. Some boats also employ musical entertainment, and costumed interpreters to act as past passengers aboard the boats. Problems with current interpretive efforts include lack of authentic information, an inability of the vessels to truly operate as they once did, and providing interpretation that will appeal to a wide variety of audiences. The boats presented in the case studies will be further discussed below for their interpretive strategies.

Belle of Louisville

Interpretation on a daily cruise on the *Belle of Louisville* is mostly focused on Louisville and the regional area, but she does employ the use of outside sources to expand the audience she reaches. Once again, the fact that she does use her original engines and takes passengers on day excursions reflects the ship's original use, which is part of an authentic experience. On a regularly scheduled buffet cruise, the captain does give passengers a brief history of the *Belle* and Louisville, but the voyage provides little to no information about the development of steamboats and how they shaped America's current waterways and the cities along them. Passengers are free to explore the ship and visit the steam room and view historic photos of the boat from past days, but this is entirely self-guided. According to popular social media websites, the *Belle* displays awards and photos on the walls of the ship, which contribute to an atmosphere and a feeling of importance for the visitor.

The *Belle* has an education program in place for school children of Louisville, and it is very successful. Education and reaching out to children is a very important part of interpretation, and children who are exposed to the boat at a young age will grow up with a

vested interest in the boat and can have a strong impact on the future success of the ship. The educational website is also an excellent interpretation resource for all, not just for schoolchildren and provides a level of accessibility to those who may not be able to make the trip. The *Belle* is also successful in attracting a diverse crowd when compared to similar boats. Because of the affordability of the trip and the nature of the voyage, passengers from diverse backgrounds and geographic locations choose to make the trip.

The *Belle* lacks in interpretation in that she only presents part of the story of steamboats and the role she played in the development of the vessels, and has no formal interpreter. Guests are generally more interested in the sights along the river and the buffet than the actual steamboat experience. Also, the information presented aboard the *Belle* generally focuses on more light-hearted aspects of traveling, and there is no interpretation provided about how life would have been for deck passengers or African Americans in the days of the steamboats. Effective interpretation includes a level of provocation, and guests will generally relate better to information if it affects them personally in some way. A visitor does not retain information presented in a generic manner. There are also some authenticity issues with the events aboard the *Belle*. During the buffet, there is often a disc jockey that plays music for the guests. While entertainment aboard an excursion boat was usually provided, it would be more authentic to have a band or a play, which would be a more memorable and historically accurate way of providing entertainment.

Delta Queen

Interpretation aboard the *Delta Queen* relies heavily on her reputation and appearance. Her interior still reflects the original design of the passenger steamer and

provides passengers with a wealth of information about the boat. Although there may not be any formal programs, the resources available in the Betty Blake library provide passengers the opportunity to learn about steamboats, river development and the history of towns along the rivers of America. The *Delta Queen* is a special boat because although she is most modernly known for her journeys along the Mississippi river and tributaries, she began her journey in California and therefore connects people from all across the United States. Another aspect of interpretation that is addressed by the *Delta Queen* is a bunk room, advertised as a “crew member” experience. The rooms are small and feature a bunk bed, although they do have modern amenities such as plush bedding and a private bath. While not totally authentic, this allows for people of different economic backgrounds to be able to experience life on a steamboat because of the lower expense. The *Queen* does employ interpreters to act as different characters that were part of her history to interact with visitors during dinner and drinks. In-character interpreters are often a very effective way to relate to guests and convey information that would be lost through speeches or informative panels.

Interpretation challenges aboard the *Delta Queen* are obvious. She is not allowed to run as an overnight passenger vessel, which creates a context problem. A stationary steamboat serving as lodging for visitors is not historically accurate, and therefore the *Delta Queen* is used in a different context than she was originally built for. She still provides overnight stays, but her steam engines are never used and guests cannot fully experience what it was truly like to ride these fascinating vessels. In the past, the *Queen* has been home to many Riverlorians who gave talks on her history and how she fits in with the rich history of the steamboating industry, but there is no current Riverlorian to

provide this interpretation for visitors. The *Delta Queen* has just begun to offer educational programs for local school children, but still attracts mostly tourists. She could be used as an excellent interpretive vessel for children and others in the area, but she operates almost exclusively as a hotel, diminishing the community connection to her. A further interpretation issue will develop if the *Delta Queen* is moved to the ocean, where she will be completely removed from her historic context and the interpretation will certainly suffer.

American Queen

As far as interpretation goes, the *American Queen* is a paradox. Overall, she has a very successful and effective interpretation plan despite being a modern vessel.

Passengers may choose from a variety of themed voyages that mostly relate to steamboat and river history, and the tours provide all encompassing information about not only steamboats and the river, but the cities they stop through. There are always at least two Riverlorians on board to give talks and presentations and be on hand for any general questions a passenger may have. They are knowledgeable in many areas including the flora and fauna passengers experience along the riverbanks. The most effective interpretation is the full experience that passengers can take overnight trips on a vessel that runs on steam, which is historically accurate even though the ship is fully modern and provides luxurious accommodations. On its maiden voyage, many ports along the way even hosted welcoming ceremonies involving people in antebellum costume and music, which is a reference to the dockside ceremonies of the glory days of steamboat travel.



Figure 4.1: *American Queen* greeted by costumed interpreters at Natchez (Source: www.greatamericansteamboatcompany.com)

While all of these interpretive options are excellent, the *American Queen* does lack in presenting information about the true nature of past steamboat life. The voyages are very expensive, even for the lowest cost room, and are therefore not an option for persons who do not have the means for this kind of travel. This results in a limited audience and a less diverse experience. While many of the grand old packet boats were very luxurious and attracted wealthy patrons, they also took aboard deck passengers who usually counted for most of the travelers. Deck passage was miserable and did not provide the passengers with any amenities. The *American Queen* blatantly caters to a certain economic group, and the interpretation could be improved for less expensive options marketed as a crewmember or deck passenger experience that would still provide a comfortable experience. This option could also attract a younger crowd who could bring a different view to the voyage, benefitting all the guests. Also, the *American Queen*

provides no interpretation or programs for children. Because her marketing is aimed mostly at retired couples, it almost appears that children are not welcomed aboard the ship. The *American Queen* does provide for some excellent means of interpretation, but could take a lesson from vessels such as the *Belle of Louisville* to attract a younger and more diverse crowd for a more authentic experience.

Challenges in Interpretation Summary

Every historic resource must decide what is the most important story to tell and find the best ways to tell the stories, and every situation is different. Each boat presented in the case studies has some similarities in their interpretation plan, but some are more limited in resources than others. With the wealth of information that surrounds steamboats, there are many opportunities for interpretation, and many challenges. Finding a program that provides an authentic experience for a visitor, is informative and thought provoking, and appeals to a diverse audience can be difficult, not only in the actual physical appearance of the steamboats but also in the intangible elements. The table below summarizes the challenging elements faced by modern steamboats and how each case study vessel meets them.

Table 4.1: Summary of Challenges Faced by Case Study Vessels

Elements	<i>Belle of Louisville</i>	<i>Delta Queen</i>	<i>American Queen</i>
Operating in Original Fashion	X		X
Receives Public and Private Support		X	X
Financially Stable			X
Included on National Register of Historic Places	X	X	
Utilizes a Preservation Plan			
Maintains Volunteer Work Program		X	
Employs Full-time Interpretive Staff			X
Includes Programs for Schoolchildren	X	X	
Provides Variety of Interpretive Activities			X

CHAPTER 5

RECOMMENDATIONS AND CONCLUSIONS

Recommendations

The successful operation of a historic steamboat in today's modern world is difficult, and even modern vessels such as the American Queen face challenges to create an authentic, profitable experience. The case studies presented in this thesis provide a glimpse into how three differently operated vessels face the challenges and explore different methods to address the challenges. While some boats have been successful in many areas, there is also room for improvement. This chapter will suggest the most effective methods for successful steamboat operations that can be applied to the vessels presented in the case studies and propose new strategies for improving the steamboat experience.

Operation

In a National Park Service Cultural Resource Management Bulletin from 1989, Lynn Hickerson, an employee of the Maritime Preservation Department of the National Trust, wrote, "If historic ships are to be commercially viable, they-with rare exception-must operate. These vessels must be able to carry passengers."²⁷⁸ Operation is absolutely the key to the success and continued preservation of a historic steamboat and as discussed in the previous chapter, it is a very expensive and involved process. All three vessels have different management structures and are operated in different ways. While none are

²⁷⁸ Lynn R. Hickerson. "Preserving Historic Steamboats through Operation" National Park Service CRM Bulletin. v12. no4. (1989)

immediately threatened by closure, some are barely making profits needed for necessary and/or desired improvements. For a steamboat to be truly and continuously successful, operators should strive to implement several elements into a comprehensive management plan, and national policies concerning wooden boats should be adjusted to secure the future of these important resources.

- Form Public/Private Partnerships. The most successful operation of a historic steamboat is one that involves the city in which it is based. The *Belle of Louisville* is owned solely by the city of Louisville and is struggling financially because it must compete with so many other programs the city and county fund. While the city embraces the boat and makes efforts to continue her operation, she would benefit from a relationship with a private company with financial resources to supplement county funds. The *Delta Queen* is privately owned, and suffers from a lack of involvement by the city of Chattanooga. While the city appreciates the *Delta Queen*, they do not have a vested financial interest, nor does it receive benefits from the location of the *Delta Queen*. The *American Queen's* agreement with the city of Memphis to assist in a construction project in exchange for loans, is an excellent strategy for success. Both the boat and the city benefit from the *American Queen* and she receives financial support from several different sources. The operators of the *Delta Queen* could reach a similar agreement with the city of Chattanooga to more fully develop the riverfront area if the city would agree to provide funding for preservation or purchase of the *Delta Queen*. Involving several different types of investors creates a more developed and stable plan for

historic resources. This type of partnership also creates opportunities for increased marketing for both entities, which could provide an economic boost through tourism.

- Form Partnerships with other Historic Attractions. Historic steamboats could also benefit with partnerships with other attractions in the town where they are located or in towns along the voyage route, like the *American Queen*. The *Belle of Louisville* is marketed as a part of the historic waterfront at Louisville, but ultimately operates as a completely separate entity. The Howard Steamboat museum is located in Jeffersonville, Indiana, directly across the river from the *Belle of Louisville*. There are many opportunities for combination tours or events where visitors could explore both sites, among others, as part of a total package. Including other land-based sites in a tour would also provide for an improved bad-weather option for guests when the *Belle* is forced to cancel a voyage due to inclement weather. *The American Queen* does an excellent job of coordinating tours for its guests at each stop along the way. This creates excitement and interest from these communities and financially benefits the local historic resources and businesses as well. Natchez, Mississippi business owner Jonathan Wood said of the American Queen's return to the city, "It's the best form of advertising for a city when a tourist can come whet their appetite on a short trip. It's an opportunity that presents itself for a long-term investment."²⁷⁹ While boats such as the *Delta Queen* do not have the option of making long voyages, there are still

²⁷⁹ Justin Whitmore. "Local Shops Report Success From American Queen." *The Natchez Democrat*. May 7, 2012. Available from: <http://www.natchezdemocrat.com/2012/05/07/local-shops-report-success-from-american-queen>. Internet: accessed May 22, 2012

opportunities to create heritage tourism partnerships with other historic resources in Chattanooga that might include a tour or a stay at the *Delta Queen*. There are endless opportunities for partnerships between historic steamboats and other historic resources, and effective marketing could lead to increased visitorship and funds for all involved.

- Responsibly Provide Accessibility and Modern Conveniences. While many heritage tourists are seeking an authentic experience, the fact is that they also expect modern conveniences that are often difficult to accommodate on historic vessels. Historic ships that carry passengers for extended periods of time are held to a higher standard than a typical historic building because facilities must be included on the ship and cannot employ other structures for use as modern restrooms, etc. Accessibility can also be a problem because ramps and elevators cannot be installed on these historic vessels without affecting the character of the boat. Unfortunately, historic vessels must adjust to a level to provide modern conveniences such as accessible restrooms and Internet if they hope to attract modern tourists. The *Delta Queen* has found a way to provide handicap passengers with accessibility by allowing for special programs to be held on lower decks for those who cannot climb stairs. While not ideal, these solutions are the least invasive but still provide passengers with accessibility. Larger and accessible restrooms must also be provided, but should be placed in an area where they will least impact historic character of the vessel. Modern technologies such as wireless Internet and television are not historically accurate luxuries, but could be provided in specific areas of

the ship for those who desire to use them. The vessels should also strive to make visitors aware of what may or may not be provided aboard the historic ships before they board.

- Adjust Safety Laws Concerning Historic Vessels. The most obvious operational problem facing historic vessels is their inability to carry overnight passengers because of their wood construction. The *Delta Queen* was able to operate under an exemption by Congress for many years after the 1966 SOLAS law was enacted, but recently lost its exemption and is docked indefinitely. Historic vessels are held to the same safety standards as modern vessels, mainly for passenger safety. While historically, wooden vessels suffered many accidents, these were mostly due to operator error and can easily be prevented with the use of responsible navigation and safety procedures. Historic buildings receive special considerations when it comes to interpretations of safety laws and codes, and the same consideration should be extended to historic vessels. Like historic buildings, historic ships should be placed under a separate set of standards specifically tailored to their method of operation. Currently, the only options for boats like the *Delta Queen* is to replace her wooden superstructure with steel, which would severely affect her character and could be subject to a Section 106 review if any federal funds were used. Other than that, the *Delta Queen* exceeded all other fire and safety standards set by the Coast Guard and has never been involved in an accident. Standards for historic wooden vessel preservation could be adapted from the *Uniform Code for Building Conservation* written by the International Council

of Building Officials and the National Fire Protection Associations publications about the protection of historic structures and sites and the rehabilitation and adaptive reuse of historic structures to provide for traditional wood construction in buildings. People today make decisions everyday to bungee jump, ride roller coasters and take many other risks, could they not also be trusted to make a personal decision to ride a steamboat if the risk was made known to them? A waiver could be developed informing the passengers of the laws regarding wooden vessels and they could then decide if they wanted to make the voyage or not.

Preservation

While all of the topics discussed could fall under the category of “preservation” for historic vessels, these recommendations apply specifically to the strategies for physical upkeep of the structures, including funding. The last recommendation under operation can also fall into the category of preservation as the historic fabric of steamboats can be better protected if these changes take place on a national level. Historic steamboats are naturally fragile, and a characteristic of boats is that they were never meant to last forever. They were built to serve their purpose until the cost of upkeep outweighed the profits being made. While this is historically true, we have now realized the importance of preserving these vessels as a part of our cultural heritage. If a steamboat continues to operate, most of the original fabric will eventually have to be replaced, but measures can be taken to keep original material for as long as possible. While technologies exist to prevent rot and repair historic steam engines, the professionals and products involved are expensive and not always readily available. For

steamboat preservation to grow and become a more reachable goal, owners, operators, the public and government agencies should focus on several tactics.

- Develop a Preservation Plan. While this might seem an obvious initial task, none of the steamboats mentioned in the case studies currently follow a written preservation plan. Planning for future preservation needs and improvements is essential for fundraising and maintaining historic character of these resources for future generations. The Secretary of the Interior’s Standards for Historic Vessel Preservation Projects states, “Responsible historic vessel preservation is a thoroughly planned and documented, systematic, four-phase process guided by the Standards set forth in this document.”²⁸⁰ The process referred to includes developing a realistic plan, implementing initial measures for preservation, implementing the selected treatment goal, and then performing maintenance on the vessel according to the plan.²⁸¹ Developing preservation plans can be a very expensive endeavor, but choosing a specific treatment that clearly defines the context, condition and operation of a historic vessel and maintaining it according to a routine plan can ward off expensive repairs later and extend the life of a historic steamboat. Implementing a defined plan with realistic, reachable goals, can also assist owners with better financial management, allowing them to anticipate when large amounts of money are needed for maintenance.
- Extend Investment Tax Credits to Historic Ships. Because the planning and repairs of historic vessels are expensive, assistance should be provided to

²⁸⁰ The Secretary of the Interior’s Standards for Historic Vessel Preservation Projects. 8

²⁸¹ Ibid.

those who are actively engaged in saving these important resources. The creation of a preservation plan could be a basis for a certification program for vessels to qualify for tax credits, similar to historic structures. All of the steamboats in the case studies are commercially operated and if they were land-based resources, they would qualify to receive federal tax credits from the National Park Service. The credits provide a twenty percent income tax credit for the rehabilitation of historic, income producing buildings. Both the Belle of Louisville and the Delta Queen would qualify for these credits if they were buildings instead of ships. Historic ships are an even more fragile resource than historic buildings and fewer monetary resources are available for their repair. Tax credits aid in the purchase of historic structures, and could help to preserve future steamboats that might otherwise be lost. The National Trust recognizes the importance and the tenuous state of maritime preservation in Information Sheet #42, but does not speak to any specific monetary resources that are available for ship preservation.²⁸² The public support of organizations such as the National Trust could promote the creation of special programs and tax credits available specifically for historic ships.

- Increase Public Awareness and Involvement. The National Trust for Historic Preservation could also provide more direct information about historic ship preservation to the public and preservation world, and create a higher level of interest. Many of those who have been passengers on these historic steamboats feel a great connection to them, as evident by the public support

²⁸² The National Trust for Historic Preservation's Information Center. Information Sheet #42. Maritime Preservation. Washington DC. (April 2010) Available at: www.preservationnation.org. Internet: accessed May 19, 2012

shown for the *Delta Queen* throughout her life. This support was a factor in the granting of the exception that allowed the *Delta Queen* to continue to operate. Preservation began as a grassroots movement, and the public must feel involved and connected to something to organize support. Steamboats should work to make the people of their town feel included in the ship's operation, not simply market to tourists. Special events, such as discounted "local" tours and events could create a larger amount of public support for steamboats and make them aware of the expense it takes to operate the vessels. "Friends" groups and foundations formed by members of the community would greatly benefit steamboats, not only in publicity but financially as well. Foundations provide an excellent source of protection for historic resources that designation cannot provide alone. The *Delta Queen* is possibly the most loved steamboat but support for her has waned since she became a stationary hotel and her exposure decreased. Involvement and organization of the public to generate support is essential for continued funding and preservation of these vessels.

- Develop Citizen Volunteer Program for Historic Vessels. Along with the education and awareness of the public comes actual preservation work that could be performed by members of the community. In the United States, the world of steamboating is small and intimate. Some of the maintenance performed aboard the *Delta Queen* is strictly volunteer, and other vessels could also use these volunteer efforts to aid in preservation. Volunteer weekends could be established for craftsman from the community to come

and help with specific preservation needs. Volunteer weekends are also an excellent way to engage the public. A person feels a much stronger connection with a historic resource if they feel they have been a part of saving it through hands-on work. Volunteers donated many of the materials used aboard the Belle of Louisville during her 1960's renovation, and the steamer *SS Master* of Canada was saved and is completely maintained and run by a group of dedicated volunteers.²⁸³ The boats could also benefit from connecting with several maritime preservation programs and historic preservation programs in colleges throughout the United States. They could serve as a case study for students learning how to create preservation plans or take a summer intern aboard the ship. Not only would these types of programs be beneficial for the vessel itself, but the participants would also understand steamboats and the challenges that face their preservation.

Interpretation

Interpretation aboard steamboats, historic or modern, is not so much a challenge as it is an overwhelming opportunity that should be taken very seriously by the owners and operators of the vessels. The ability to truly connect with visitors and have them take away an appreciation for steamboats and their preservation would benefit the vessels in the short and long term. There are endless stories to tell about the long history of steamboating and the individual boats, and choosing the correct and most authentic strategy, while still providing the visitor with a pleasant experience is a paradox many historic resources face. Interpretation is always an approximation of what modern people assume the past was like, and each individual reacts differently depending on his or her

²⁸³ SS Master Society. Available at: <http://ssmaster.org>. Internet: accessed May 20, 2012

own life experience. The average person would probably picture a steamboat to be something like the *American Queen*, a grand Victorian palace, but this was not always the case. The *American Queen* is operating in an authentic steamboat fashion, but is not an authentic historic steamboat. Interpretation aboard these vessels today largely focuses on the romantic and happier times of the steamboat, because the visitors aboard the vessels expect to be entertained. While much of the historic fabric is retained on these vessels, the true authenticity comes from the actual passenger experience on a steamboat. The only steamboat presented in the case study that does not operate in its historic fashion is the *Delta Queen*, which is forced by law to stay moored to land. Therefore, much of the integrity of an authentic experience is maintained, with the addition of some modern conveniences that affect many historic resources. Even the *American Queen*, which is a modern steam vessel, maintains much historic integrity because it does use true historic steamboat engines for propulsion up and down the rivers. Each individual vessel must be analyzed according to its specific situation and interpret the history with the best resources available. While much of the interpretation aboard steamboats is effective, there are several areas where the operators could increase their interpretive efforts.

- Provide Educational Programs for Children. The only vessel in the case studies that currently provides regular programs for school children is the *Belle of Louisville*. The program is very successful and reaches a large number of local school children on site, in the classroom, and through the website. According to Freeman Tilden's book, *Interpreting our Heritage*, "Interpretation addressed to children should not be a dilution of the presentations to adults but should follow a fundamentally different approach."

To be at its best it will require a separate program.”²⁸⁴ Steamboats should provide programs for children that engage them in the history of the vessels and the continued need for their preservation. Class field trips led by a crewmember on a steamboat could provide exposure to steamboats that they otherwise might never have. This early learning experience could create an early feeling of attachment to the historic vessel and steamboats in general, and create future stewards of historic vessel preservation. The children’s interest may also encourage parents and friends to visit the historic vessel and provide a greater community connection.

- Provide a Greater Variety of Interpretive Opportunities. While a variety of themed cruises do provide visitors and passengers with some options, they often appeal to only one type of audience. There is often a stigma associated with the passengers that take steamboat voyages: older, white, middle to upper class passengers. A limited type of passenger group creates a narrower experience for every passenger. Tilden asserts in *Interpreting Our Heritage*, “Interpretation should aim to present a whole rather than a part and must address itself to the whole man rather than any phase.”²⁸⁵ Implementing a greater variety of events that would appeal to a younger, more diverse crowd would greatly improve the experience of all visitors and allow preservation efforts to reach larger audiences. For example, the *American Queen* could offer tours on its stops that included biking and kayaking trips to historic attractions that might attract a more adventurous crowd, or food tours for

²⁸⁴ Freeman Tilden. *Interpreting Our Heritage*. (Chapel Hill, NC: University of North Carolina, 2007) 35

²⁸⁵ Ibid.

those who are interested in experiencing southern food. Another way to expand interpretation on board traveling or stationary vessels is to provide participatory interpretive programs. Visitors could assist in day-to-day routine maintenance or visit the captain in the pilothouse to learn how he operates the ship. Brochures for different levels of self-guided tours could also be provided. Some visitors may be more informed and interested in the mechanical aspects of a steamboat, while others are more interested in the famous people that rode aboard them. Providing several brochures or tours catering to different levels of interpretive experience would reach a larger number of people. Exploring ways to incorporate how life might have been for a crew member or a deck passenger would also interest a different group of people and would provide a memorable and provocative experience for the participants.

- Create Personal Experience Interpretation. A step above costumed interpreters pretending to be a past rider of a historic boat is a person who was a real passenger. Although many people who were a part of these steamboat's history have passed away, there are still thousands of past riders, crew members, captains and craftsmen all across the United States who love the vessels and would volunteer as interpreters. A visit to a place such as Pearl Harbor is much more moving and real when a speech is given by a survivor than a park ranger. As stated previously in the preservation section, many people are willing to volunteer for maintenance, and the same people could be used for interpretation. Because steamboats ran along the Mississippi into the

twenty-first century, the group of people who have memories of these boats is diverse in age and location. Historic steamboats could promote a meeting of anyone who wanted to share their stories and use this for interpretation value, in addition to possibly finding out information previously unknown.

- Employ Full-Time Interpretive Staff. A full-time person in charge of interpretation aboard a steamboat is essential for the interpretive plan. The *American Queen* currently employs at least two Riverlorians on board the ship at all times. The Riverlorians give presentations to the guests and are available for questions during office hours in the chart room. Karen Maloy said that while the availability of the Riverlorians is good, she believes that daily, scheduled talks attracted more guests than a Riverlorian simply being available in a certain part of the boat, which she asserts is difficult to find.²⁸⁶ Maloy stated that when she was a Riverlorian aboard the *Delta Queen*, her scheduled morning talks attracted a full audience, even before the boat started serving breakfast during the talks.²⁸⁷ A full-time staff member in charge of interpretation could provide a comprehensive, cohesive plan for the steamer and plan not only presentations, but also signage and how the information will be presented to guests who do not attend presentations. Most passengers that visit steamboats are looking for an authentic historic experience, and the history of the vessel should be easily accessible and available to all passengers depending on their level of interest.

²⁸⁶ Karen Maloy.

²⁸⁷ Ibid

Immediate Action Recommendations

While all the recommendations listed are important for future success and worthy of attention, some are long-term goals and require resources be put in place before they can be achieved. The recommendations identified below qualify as immediate action recommendations, in that they can be achieved quickly and are important for creating a greater awareness about steamboats and the threats to their survival. One recommendation is chosen from each category.

- Adjust Safety Laws Concerning Historic Vessels. While this recommendation requires action by Congress, owners, operators and public supporters should begin lobbying campaigns asking the government for exemptions to the laws keeping historic steamboats from carrying overnight passengers. If vessels such as the *Delta Queen* were to gain the ability to operate as they did historically, options for her future would not be so limited.
- Develop a Preservation Plan. All historic resources should have a preservation plan, including historic vessels. Standards for preservation exist and should be consulted when creating this plan. Well-developed preservation plans could also act as a basis for extending Historic Tax Credits to vessels.
- Provide a Greater Variety of Interpretive Opportunities. Those in charge of interpretation aboard steamboats should re-evaluate the interpretive efforts aboard the vessel and look for ways to attract a more diverse group of visitors. A larger variety of visitors will promote a greater awareness of steamboats importance, which will create a sense of stewardship.

This discussion about the limitations facing steamboats because of their unique

position in the preservation world illustrates the need for future study about the treatment of moveable historic resources. Currently, ships and boats are classified as “structures” on the National Register Nomination form, along with resources such as bridges and barns. While a steamboat does share some of these same characteristics, it is very different from these other structures because it was made to travel from place to place. Further research in the creation of a separate category for moveable resources such as boats, automobiles and trains is recommended in addition to the above recommendations.

Recommendations Summary Table

Table 5.1: Summary of Recommendations

Category	Recommendation
Operation	<ol style="list-style-type: none"> 1) Form Public/Private Partnerships 2) Form Partnerships with other Historic Attractions 3) Responsibly Provide Accessibility and Modern Conveniences 4) Adjust Safety Laws Concerning Historic Vessels
Preservation	<ol style="list-style-type: none"> 1) Develop a Preservation Plan 2) Extend Investment Tax Credits to Historic Ships 3) Increase Public Awareness and Involvement 4) Develop Citizen Volunteer Program for Historic Vessels
Interpretation	<ol style="list-style-type: none"> 1) Provide Educational Programs for Children 2) Provide a Greater Variety of Interpretive Opportunities 3) Create Personal Experience Interpretation 4) Employ Full-Time Interpretive Staff
Immediate Action	<ol style="list-style-type: none"> 1) Adjust Safety Laws Concerning Historic Vessels 2) Develop a Preservation Plan 3) Provide a Greater Variety of Interpretive Opportunities

Conclusion

Steamboats are a fascinating and important part of the cultural, technological, and architectural history of the United States. The fact that efforts have been made to replicate historic steamboats shows that there is still a place for these vessels today, albeit simply for entertainment value. While replicating original steamboats does aid in the

education of the modern public about these vessels, more efforts should be focused on preserving our existing historic steamboats. Owners and operators should combine strategies focused on operation, preservation, and interpretation to keep their vessels not only financially viable, but a valued and interesting resource for current heritage tourists. These vessels are not only important for educational value, but can also be great economic resources for a community.

The successful operation of a historic vessel in today's modern world is a difficult process with many roadblocks and uncertainties. The recommendations provided in this thesis apply to the boats presented in the case studies. They could also be used as a basis for the creation of a comprehensive plan for the future protection of historic vessels in general. Unfortunately, many steamboat operators do not have the luxury of unlimited funds for their vessel, but with careful planning, a strategy for preservation could be formulated and create greater awareness about historic steamboats. Even the *American Queen*, which is a truly modern vessel, assists in the education of not only visitors, but crew members and staff as well. Important lessons can be learned from each vessel presented in the case studies and applied not only to steamboat preservation, but to historic vessel preservation in general. The National Maritime Initiative created in 1985 worked diligently to identify and list hundreds of historic vessels to a national registry, but none have been added since the initial push.

Dr. James Delgado, past director of the National Maritime Initiative wrote, "Historic ship preservation, with the right encouragement and carefully applied money and effort, could ultimately save the Nation's historic ships for future generations to enjoy and appreciate, but the money and the effort must be conscientiously and

consistently well applied, understanding that the passage will be storm-tossed, marked with uncharted shoals and rocks, and safe haven in port not always clear. The ship savers, however, must stay the course.”²⁸⁸ This statement could not be truer for our Nation’s historic steamboats. Owners, operators, and the public must come together and fight to save these important links to our past. Steamboats represent the pioneering spirit of early Americans, and that same spirit must be revived in order to preserve them for future generations.

²⁸⁸ James P. Delgado. “Grim Realities, High Hopes, Moderate Gains: The State of Historic Ship Preservation,” *National Park Service CRM Bulletin*. v.12, no 4. (1989)

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