Blaze Interligi HRVI Spring Intern 2009 Research Paper 1

## Hudson River Sloops

Sloops supported Hudson River Valley commerce through the late 1700s and early 1800s, and impacted American development as a whole. Through time changes in the requirement of ships and the technology available resulted in adaptation among Hudson River sloops, eventually leading to the extinction of the sloop as a part of Hudson River commerce. However, without such a craft, the Hudson River, New York, and America would not have developed in the manner in that they did.

The Hudson River sloop that thrived during the late 1700s and early 1800s emerged from a long line of Dutch predecessors. The first ships constructed for the Hudson River were the same as those that the Europeans built for hundreds of years for their own river systems.<sup>1</sup> The initial Dutch presence in the Hudson River Valley introduced such crafts as the 'boeyer', 'galioot', 'sloep', and 'jacht', which they produced for navigating the extensive waterways of the Netherlands. Each form of vessel had several subcategories created for use in specific environments. Within the 'jacht' class there were several variations that adapted riggings, hull design, wood types, and mast types to suit the craft to the needs of its intended use.<sup>2</sup>

Not until the English took control of the Dutch colony that the English influence on Hudson vessels was seen, though a small number of Englishman resided in the Dutch colony prior. Combining the Dutch influence into their designs, a number of English craft

<sup>&</sup>lt;sup>1</sup> Paul E. Fontenoy, *The Sloops of the Hudson River: A Historical and Design Survey* (Mystic, CN: Mystic Seaport Museum, Inc., 1994) 15.

<sup>&</sup>lt;sup>2</sup> Fontenoy, *Sloops*, 16-25.

were constructed including a craft type called the 'hoy' from the design called the 'heude' as well as the 'sloop' or 'shallop' (both names are utilized to describe the same craft). The sloop has a single mast with a fore and aft rig placed further up on a shallow hull. They ranged from sixty to even one-hundred-and-forty feet at the largest, depending on the type of sloop. This craft was then further re-envisioned by altering hull patterns and sail plans to be exported for use outside of the Dutch colony in locations such as Jamaica and Bermuda. In the new English settlements on the Hudson, shipbuilders understood the advantages and disadvantages inherent in each European design and this knowledge helped them to create a craft that specifically fulfilled the needs of the colony's inhabitants.<sup>3</sup>

On the Hudson, owners and shipwrights made specific adaptations to the sloop for Hudson River navigation. For example, they utilized red cedar for the sides and white oak for the bottom because the red cedar could withstand exposure to the elements better than the oak, but oak has the ability to hold up against the rocks and sand of the Hudson Rivers.<sup>4</sup> Similarly, upright masts enabled quicker lowering of sails to prevent the often sudden strong gusts of wind from blowing the craft out of control.<sup>5</sup> Isaac Weld, Jr., recorded, "The captain of the sloop we were in, said, that his mainsail was once blown into tatters in an instant, and a part of it carried on shore."<sup>6</sup> These noted Hudson related alterations made the Hudson River sloop unique to the river and its intended use.

A golden age of Hudson River sloop commerce took advantage of this extensive American waterway to ship between the two main centers of business on the river,

- <sup>5</sup> Ibid; 35.
- <sup>6</sup> Ibid; 41.

<sup>&</sup>lt;sup>3</sup> Ibid; 24-25.

<sup>&</sup>lt;sup>4</sup> Ibid; 33.

Albany and New York City. Albany was geographically advantageous because through the mid to late 1700s it was at the center of trade with western territories and Native Americans. Fur, lumber, flour, and peas, all came from trade with Native Americans or even smuggled from the French.<sup>7</sup> The ships were specially adapted for the bulky cargo they often carried. Similarly, the river opened up travel and trade through Albany to other states northeast of New York State including Connecticut and Massachusetts.<sup>8</sup> A Swedish naturalist, Peter Kalm, in 1749 shed light on the sloop ownership when he wrote: "All the boats which ply between Albany and New York belong to Albany," a trend not altered until the mid 1800s.<sup>9</sup> This is not to downplay the extreme importance of New York City to Albany as well as the Hudson River Valley region. With New York City as the principal international exporter and similarly, Albany as the principal marketplace for raw materials, sloop cargo haulers were essential to the success of the New York colony.<sup>10</sup>

Cargo was a main component of Hudson River sloop commerce but was paired with passenger travel as an equally important business for sloop operators and owners. Sloops were adapted to support passenger travel specifically because it provided comfortable and speedy transportation up and down the Hudson River.<sup>11</sup> Many passengers noted the excellent accommodations of Hudson sloops. Two British travelers visiting North America in the 1790s recorded evidence to this, "Our sloop was no more than seventy tons burthen by register; but the accommodations she afforded were most

- <sup>9</sup> Ibid; 32. <sup>10</sup> Ibid; 87-90.
- <sup>11</sup> Ibid: 35.

<sup>&</sup>lt;sup>7</sup> Ibid; 32.

<sup>&</sup>lt;sup>8</sup> Ibid; 43.

excellent and far superior to what might be expected on board so small a vessel."<sup>12</sup> This is not to say the ships were small, the size of vessels had to be considerable because the ships could carry passengers and cargo, but these were river going ships and not oceanic vessels. Many passengers recorded points about cabin size and how it was of concern due to sloop competition.<sup>13</sup> Large ships were necessary because the passenger trade was so extensive; some sloops carrying twenty-five to thirty passengers a trip.<sup>14</sup> As the desire for passenger travel increased in the early 1800s, competition intensified among sloops, creating passenger-only crafts and increasing the size of the cabins as well as other comforts onboard. One ship, the *Illinois*, had a cabin stretching half the length of the vessel.<sup>15</sup>

The speed of the passage by sloops is important to both cargo and passenger commerce. The trip could be made in twenty hours if wind, weather, and tide were favorable. However, more often there was no critical urgency and the voyage from New York City to Albany took three days.<sup>16</sup> This is due to the fact that during the unfavorable tides, sloops would dock at local settlements along the river to re-supply and allow their passengers to go ashore. Similarly, there was often no rush and passengers appreciated the stays on land as well as an opportunity to view the scenic Hudson's shores. Resupplying often had to do with buying goods that would serve passengers as well as the crew. Fontenoy states, "It was a practice for sloop operators to stop daily to take on board supplies of fresh food and milk, and replenish stocks of firewood for the stove." <sup>17</sup> The

- <sup>13</sup> Ibid; 35.
- <sup>14</sup> Ibid; 46.
- <sup>15</sup> Ibid; 49.
- <sup>16</sup> Ibid; 44.
- <sup>17</sup> Ibid; 42.

<sup>&</sup>lt;sup>12</sup> Ibid; 40.

sloop commerce reverberated in economic ways up and down the Hudson River, not only as a means of transportation for passengers and cargo but to bring business to the region.

To boost popularity of sloops and attract business, *The Experiment*, a Hudson River sloop, was outfitted for and made the journey from New York City to Canton, China in 1785-87. The Experiment was unique due to the fact that it was equipped specifically for the initial journey to Canton as a larger and comfortable craft. Upon its successful journey, although relatively less lucrative than expected, The Experiment became famous as a passenger sloop noted for its extreme regularity in schedule.<sup>18</sup> The owner placed an advertisement boasting about *The Experiment* and its sister ships the Elihu S. Bunker and Laban, Paddock stating, "Master, of 120 tons each - built for carrying passengers only. Bunker leaves Hudson every Sunday morning at 9 o'clock and New-York every Wednesday evening at six o'clock."<sup>19</sup>

There were considerable dangers that confronted sloops. By the early 1800s, Hudson River Valley sloops were adapted specifically to survive the dangers of the river. Though many of the common problems of the river were accounted for, there was little that could be done (other than good captaining) about the shallows around Albany and high winds to effect sloop travel.<sup>20</sup> One such occasion recorded by Dirck Ten Broeck: "After a long & tedious passage we struck at the Overslagh within half an hour after we left you, and remained aground all Sunday afternoon."<sup>21</sup> More often than not, sloops would stop and anchor at night in this area, or when facing unfavorable tides due to the

- <sup>18</sup> Ibid; 38. <sup>19</sup> Ibid; 48-49.
- <sup>20</sup> Ibid; 35.
- <sup>21</sup> Ibid; 42.

difficult nature of the stretch.<sup>22</sup> Owning and operating a sloop could be dangerous both personally and fiscally.

Sloops were owned and operated in three distinct ways. One classification of sloop owners includes landowners, merchants, and manufacturers. These owners hired captains and crews to carry the owner's cargo up and down the river for sale or transport. One such sloop, the Alida, was owned by Robert Livingston and carried ore and limestone to be worked, then transported away the finished castings. Any unused space on cargo vessels was then sold for a freighting cost supplementing the cost of operating a business and a sloop.<sup>23</sup>

A second group of owners made their living directly from sloop ownership and operation. The sloop skippers owned their own crafts and relied on their earnings to maintain their vessel and support themselves. Captains would carry freight and passengers at a price, but also, at times, made profits through trading their own goods on a small scale. To build their crafts, they brought in local businesses to fund them. Over time, the captain and small business might both remain invested in the ship, but sometimes the owner-operator would buyout the other shareholders. One such captain was Jehoiakim Bergh of the Antelope and the Washington.<sup>24</sup>

The third group of sloop owners was entrepreneurs who hired skippers and crews to operate their ship though the owners benefited from the monetary gains of freight and passenger travel. These owners considered investing in a craft to be a lucrative endeavor. At times this sort of venture fell into the second type of owners when the operator gained a share of ownership in the craft. Through collecting commissions on consigned goods

<sup>22</sup> Ibid; 42. <sup>23</sup> Ibid; 77.

<sup>&</sup>lt;sup>24</sup> Ibid: 77.

and small scale personal stock, trading by the land based entrepreneur significantly supplemented the costs of hiring a crew and maintaining the ship.<sup>25</sup>

Owning a sloop on the Hudson River was profitable, but also an expensive venture. In 1823, the pinnacle of sloop operation on the Hudson, the cost of materials and labor for the creation of a sloop by the Hand & Kenyon, a shipwright, was \$7,626.05. The building and outfitting of the sloop took over a year.<sup>26</sup> Building, operation, and maintenance were costly, but owning a sloop could be extremely lucrative. Between 1782 and 1794, Peter Van Gaasbeck, who was of a Kingston based family, owned several sloops, each making  $\pounds 450$  to  $\pounds 550$  each year by hauling freight. The operating costs however were only £250 to £300 per sloop providing substantial gains for Van Gaasbeck. The potential to make a good living as an owner or owner-operator was considerable. Most secured a comfortable living, if not becoming moderately wealthy.<sup>27</sup> A crew member in the late 1700s was moderately profitable as well, making £2 to £3 a month. In the early 1800s their wages raised about a pound. Though some members of the crew were employed year round, others were only seasonally or monthly. A "club" was pooling of funds that provided funding for provisions for the crew. The club was contributed to by the crew and owner though some specialty items were paid for by the owner alone such as spirits and venison for holidays.<sup>28</sup>

The export trade business made New York City one of America's central ports and it grew considerably through the early 1800s from seventy-one-million dollars in 1800 to one-hundred-and-eight-million in 1807. This economic explosion was interrupted

 <sup>&</sup>lt;sup>25</sup> Ibid; 78.
<sup>26</sup> Ibid; 85.
<sup>27</sup> Ibid; 82.

<sup>&</sup>lt;sup>28</sup> Ibid: 79.

by the war with Britain in 1812, but would rise again quickly following the war.<sup>29</sup> One report shows that New York Harbor in 1810 was home to 206 sloops, and by 1832 it served as a port for so many that no estimate was made; just an overall number on the Hudson of twelve-hundred.<sup>30</sup> Though extremely prosperous in the early 1800s, the sloop trade was experiencing changes it in part created. The economic makeup of the Hudson River Valley changed. No longer was it an opening to new territories, it was now surrounded by a well-situated society, providing reputable industries that required high mobility. This economic explosion resulted in an increase in the number of sloops, argues Paul E. Fontenoy, affecting the increase in exports of New York Harbor, thus influencing the development of the United States.<sup>31</sup>

The prosperity of the sloop trade was not destined to last; it was overcome by a new challenger. The advent of steam power was brought about by the journey of Robert Fulton's North River Steam-Boat; know better as the Clermont, in 1807. This signaled the beginning of the end for the dominant sloop. By combining a concentration on passenger travel with regularity, the steam boat threatened the Hudson River sloop fleets in an immediate way. Boasting a thirty-six hour travel time from New York City to Albany no matter the weather conditions; steam could easily claim regularity over sloops. Steam was however, distinctly slower than the fast sloops, however, only with weather, tide, and all other conditions favorable. If conditions turned against the sailing craft, steam had the advantage. Speed itself only became an issue when sloops had to compete with steam. The passenger who formally welcomed longer trip due to the beautiful scenery now

- <sup>29</sup> Ibid; 45. <sup>30</sup> Ibid; 46.
- <sup>31</sup> Ibid: 45.

wanted regularity and efficiency.<sup>32</sup> Coupled with an increased demand in regular passenger travel during the early 1800s, these factors increased competition among sloop operators and the threat of the steam. Sloop operators not only built larger passengeronly transports with well furnished cabins, but began to offer packet-line service. For example, as previously mentioned, the owners of *The Experiment* offered regularly scheduled departure and arrivals.<sup>33</sup>

Adaptations made by Hudson River sloops to become more competitive only stalled the inevitable rise of steam power as the predominant mode of passenger travel on the Hudson. By the 1840s, steam was threatening the sloop cargo business as well; a prosperous trade that was only growing with the opening of the Erie Canal in 1825. Obsolete passenger steam boats became towboats.<sup>34</sup> Yet again the sloop altered its shape to attempt to be a better cargo ship with more carrying capacity and increased speed in the face of increased competition among steam and other sloops, but no change to hull shape, riggings, and equipment could overcome the advantages of steam.<sup>35</sup> With improvements made on steam ships and construction of railroads along the banks of the Hudson, sloops were driven into two trades, local passenger travel and the freighting of low priority bulk cargo.<sup>36</sup>

The cost of maintaining and operating a sloop was becoming disadvantageous within the new economic structure. Keeping these costs down by hiring smaller crews and fundamentally changing the structure of the ships was one way to adapt. The sail of the sloop was often the largest problem in the ships' design. The weight of the sail

<sup>&</sup>lt;sup>32</sup> Ibid; 46-47. <sup>33</sup> Ibid; 48-49.

<sup>&</sup>lt;sup>34</sup> Ibid; 63-64.

<sup>&</sup>lt;sup>35</sup> Ibid; 65-69.

<sup>&</sup>lt;sup>36</sup> Ibid: 70.

required a large crew to hoist and handle it. Moreover, it put a large amount of strain and damage on the vessel and its gear. The solution was to alter the sloops into schooners, dividing the sail area between two masts, solving this fundamental problem of sail size and need for a large crew.<sup>37</sup> Sails still remained important for freight till the end of the century, but more often as schooners than sloops, and even then schooners were threatened by steam. The trend towards schooners rather than sloops through the mid-1800s signaled the very end for Hudson River sloop.<sup>38</sup> Though not as good as the sloop in certain situations, the schooner balanced the cost effective pressures of what was becoming a steam powered economy.

Some sloops survived till the turn of the century but many were converted to schooners or utilized as unrigged harbor lighters, barges, or simply beached and deteriorating hulls.<sup>39</sup> Today, a replica of the Hudson River sloop still travels the Hudson River. This ship is called the *Clearwater*, but has a distinctly different purpose than did the sloops of the nineteenth century. *The Clearwater Inc.* educates people about the environment of the Hudson River Valley, conducts advocacy programs, and through a number of events, celebrates the region. This sloop itself serves as a mobile classroom, traveling to educate people about environmental issues. The goal of *The Clearwater Inc.* is made of volunteer members who have "dreams for a better world and an unwavering belief that, as individuals, we can make a difference in bringing about a cleaner, safer world for ourselves and future generations."<sup>40</sup>

<sup>&</sup>lt;sup>37</sup> Ibid; 70.

<sup>&</sup>lt;sup>38</sup> Ibid; 75.

<sup>&</sup>lt;sup>39</sup> Ibid; 76.

<sup>&</sup>lt;sup>40</sup> The Hudson River Sloop Clearwater, Inc., "About Clearwater"; available from <u>http://www.clearwater.org/about.html</u>; Internet; accessed 25 February 2009.

Though the golden age of the Hudson River sloop is over a hundred years in the past, the effects of these marvelous vessels are felt today through the impact they had on American commerce as a whole. These vessels and their predecessors were the main infrastructure of early American economy, making New York City the economic giant it is today. Without the development of the New York Harbor, and therefore the development of the sloop, American economic development would have been drastically different.