



trucks and cockerel are 24-carat gold-leafed. The figurehead is based on photos of the ship, and the close-up photo of the figure on the original builder's half model. The planking on the quarterdeck and aft house is properly curved and tapered.

The masts and yards are made of lancewood and painted white where appropriate. *Thermopylae* was unusual in having white rather than black spars. All rigging is of a nickel-chromium alloy designed to never disintegrate like rigging made of thread. The larger sizes are twisted up to simulate rope and painted to represent natural or tarred standing rigging.

The sails are formed from a Japanese rice paper called masa. Wooden formers were carved to the shape of the sail and the wet paper gently pulled over the form to give the curves two dimensions. A cloth was stretched over the paper to keep the shape while drying. This shaped

piece of paper was then painted and sanded to look like a sail. Cloth lines were drawn on with pencil, and reef points made up of wire. The flags are made from neutral-pH glassine, painted and curled to represent flags flying. The red duster is at the peak of the gaff, with the house flag at the main truck. She makes her number, 1569, under the second distinguishing pennant. This is from Marryat's code. The Hume model shows the house flag painted on the ends of the catheads, and this is also done on this model.

A crew of 17 figures is shown about the decks and in the rigging, with the ship's cat leaning into the lift of the deck on the main hatch. The sea is carved from English lindenwood, which is harder and crisper to work with than American basswood. The botanical difference is *Tilia Cordata* or *platiphylos* versus *Tilia Americana*. The base is made of strips of black walnut.



### **United States Brig of War *Argus***

Scale: 1"= 16' LOA 10 1/2"

*Basswood, Boxwood, Apple, Lancewood, Painted Basswood Sea with Laurel Burl Base*

*Argus* was a handsome brig built in 1803. She was 94' 9" in length with a 27' 4" beam, and 12' 8" depth of hold. Her original armament was 16 24-pound carronades and 2 long 12's. She was one of four vessels built to reinforce the squadrons in the Mediterranean who were combating the depredations of the Barbary powers. She was designed by Joseph Hartt, and built by Edmund Hartt in Charlestown, Massachusetts. She had a tall, narrow rig as befitted her service in the Mediterranean. She was captured by HBM Brig *Pelican* in the channel on August 14, 1813.

McCaffery consulted multiple sources to ensure the accuracy of his model, these included two lines plans of *Argus* in the National

Archives. Noted Maritime Historian Howard Chapelle (1901-1975) also did a redrawing of these in *The History of the American Sailing Navy*, lowering the steeve of the bowsprit to allow the inboard end to properly 'bury' on deck. Chapelle also fleshed out many details from other sources. We are also fortunate to have an actual survey made of her by the British after her capture in the Admiralty records, while an indent of articles needed for her construction and equipage is held by the New York Historical Society. For the set of the sails McCaffery used the paintings of Robert Salmon (1775-1845). There are at least five paintings showing how the mainsail was twisted by having the main lower and topsail yards braced differently. This twist adds considerably to the liveliness of the ship's appearance in the model.

The model's hull is carved from solid basswood and planked over. The deck planking is made of crab apple wood, laid 'sprung in', that is, it is curved and tapered fore and aft. All deck fittings and accoutrements are





fitted together including hatch gratings, the ship's wheel, and fiferails. The boats are shown nested, with the thwarts of the lower boat removed to lower the center of gravity. All guns are fitted and rigged with tackles. A large crew is placed at various points on the model, engaged in diverse tasks. The ship's cat is lounging on deck. The masts and yards are made of lancewood, and all tops and trestletrees are built up. The rigging is made of *Nichrome* wire. It is essential to use a strong wire like this to establish the catenary of the rigging, and show the lines under the influence of wind. This type of wire also gives proper set to the various flags and pennants.

The sails are the most important aspect of this model. McCaffery uses two approaches to get the effect of realistic sails. The first, for sails that are fully set with 'belly', he uses a Japanese hand-made paper called *masa*. He carves wood forms to the exact shape and size of the sail to be made. The paper is quickly soaked with water, and carefully pulled into

shape over the form. When dry, it is then painted and sanded until smooth. Then he adds cloth lines, bolt ropes, reef points, and other details. The result looks convincingly like an actual sail. For jibs and staysails, the artist cuts the scallop shaped edge of the sail where it strains against the stay. Sails that are clewed up are carved from apple wood. This is a slow, exacting process, as there are no straight lines, even where the sail is fixed to the yard. The main topsail on this model is also made of wood. This is because of the complex sags and bulges where the sail is taken aback against the main mast and rigging

The incredibly realistic sea is carved from basswood, then painted to show a small chop of waves. McCaffery has set the hull of the ship with some heel to leeward, with the bow rising up through the waves as she makes her way forward. The model is mounted on a custom-made laurel burl veneer base.

“While there is no right way to make a miniature, there are certain absolute standards of research, permanent and archival materials and sound construction materials that must be strictly adhered to.”

Lloyd McCaffery





## THE DOCKYARD MODELS

**When the British Admirals decreed in 1716 that a scale model of every naval vessel that was proposed to be built or rebuilt be submitted for their approval prior to construction, a whole new type of ship model came into being. The Admiralty style or *Dockyard Model* was primarily conceived to showcase the design aspects and construction details of a particular vessel. Because the ship's rigging was essentially standard, the models built for the Admirals' scrutiny**

consisted of the ship from the keel up to the deck only. These were often made by professional ship model makers employed by the Royal Navy. For historians, these surviving Dockyard models still provide valuable information about ship construction of the past. In the following models, McCaffery has adopted this '*dockyard style*' approach to further our modern understanding of the construction methods employed in these complex creations of another era.

*Above: Detail of Schooner Yacht America, 1851*



*Based on the original hull lines taken from the yacht in 1851, McCaffery's model utilizes harmonious woods to help reveal the unique design and construction methods that made the Schooner Yacht America the envy of the 19th-century yachting world.*

### **Schooner Yacht America, 1851**

Scale: 3/8"=1' LOA 39 1/2"

*Poplar, Apple, Holly, Cherry with Black Walnut Base*

There's a reason why the One Hundred Guinea Cup, which was contested off the Isle of Wight on August 22, 1851, at the invitation of the Royal Yacht Squadron ("Open to yachts belonging to clubs of all nations") was renamed the *America's Cup* from that day forward. The American Schooner *America*, sailing under the flag of its owner John Cox Stevens, the Commodore of The New York Yacht Club so bested the competition as to astonish the British yachting community, whose motto had been "*Britannia rules the waves.*" In fact, *America's* victory gave birth to one of the most notable sporting observations of all time – When Queen Victoria asked a companion "Who came in second in the race?" and he replied "Ah, your Majesty, there is no second!"

As a result of *America's* triumph, her design was intensely scrutinized throughout her career, and, more than any other, this single vessel came to symbolize the beginning of the Golden Age of Yachting. Subsequent to the race, *America* spent time under different owners, serving as a racing and cruising yacht, a training vessel and even a warship for the U.S. Naval Academy during the Civil War. In 1921, she was donated to the U.S. Naval Academy, however, in 1942 the shed in which she had spent her last two years collapsed, and the great yacht was no more.

Lloyd McCaffery's remarkable model gives us a builder's eye view of the significant design and construction that still makes her the envy of the yachting world today. This model was built to reveal the construction and interior layout of the hull to better understand how she



*The port side of the model is partially cut away to reveal construction details and interior furnishings including the ship's cat. On deck the figures of the ship's designer George Steers and owner John Cox Stevens give a sense of the scale of the model.*

was built and used. There are a number of interesting aspects of her design and building which are not generally known and which are displayed here for the first time. The model is based on the hull lines taken from the actual yacht in 1851. This was done by the British Admiralty when she was in England for the race. The dockyard surveyors had a proven track record of accurate measurement of many hundreds of vessels over a span of several centuries. Thus these lines provide a true shape of the yacht at that point in time. She measured 95' 6" on deck, 23' extreme beam, and drew 11' aft.

The other important source of information on her construction is the Cedergren material. This consists of sketches, watercolor renderings of her interior and a scale plan, all made by Pehr Wilhelm Cedergren of Sweden (1823-1896). He personally inspected the yacht when she was in England. This information can be found in the *Log of Mystic Seaport*, Vol. 29 #3, October, 1977. The framing dimensions come from

the list of scantlings on the *Stearman Sail Plan*, dated October 31, 1851. This list also provides much additional information on her construction. In the model, poplar was used for the framing, with apple wood for all other structural components. Dark apple wood contrasts with lighter sap wood to delineate the scarf joints in the keel.

There are three figures on the model. John Cox Stevens, Commodore of the New York Yacht Club and a prime figure in the syndicate formed to create the yacht, is seated in the cockpit. He gestures with his right arm "across the pond" to indicate the future course of the venture. In his left hand he holds a telescope, symbolic of navigation and vision for the future. The other figure in the cockpit is George Steers, designer of the *America*. At his right side are papers representing the correspondence which brought about the birth of the yacht. In his left hand he holds a ruler, symbolizing his role as designer. Another figure is placed in the focs'l just to show scale. Various crew items are placed there, and some





*America was one of the first vessels to be built with the diagonal iron strapping seen above in McCaffery's model. This kept her hull from sagging or "hogging" over her long life.*

kitchen utensils clutter up the galley. A cat pursues an elusive quarry along the top of the keelson. The door knobs are turned from holly, and all the brass work is lacquered.

It is not generally recognized that *America* was built with diagonal iron strapping. This type of reinforcing is documented in the building of the Clipper *Great Republic* as well as other vessels. It appears to have come into use in 1850, and thus *America* was one of the first vessels to have it. An article from June 22, 1851, in the sports newspaper *Spirit of the Times* states that she had diagonal iron braces about four feet apart. But most interesting are the photographs taken inside the yacht when she was at Trumpy's Yard at Annapolis, Maryland from 1940 to 1945. These photographs very clearly show these braces. Circumstantial evidence also supports their use. The photos taken of *America* show that she never hogged, and this would be impossible with the small backbone she had unless there was some other system of support for the

hull. The *New York Marine Register* and *New York Lloyd's Standards* provided information on how the knees and deck beams were constructed and placed. On the model the framing on the starboard side is cut away in two areas to show how the iron braces were fitted. The first course was laid against the inside of the framing, with the frames being cut away or rabbeted so the iron was flush with the inside surface of the framing. The next course of iron was laid at 90 degrees to the first and riveted at the crossings. The ceiling was scored and rabbeted to fit over the second course of iron, flush with the framing on the inside of the vessel. This is exactly how McCaffery has shown it in the model.

The early 1800s were a period of transition when it came to laying the deck planking. All vessels prior to about 1810 had the deck planks laid "sprung," that is, with a curved taper to match the shape of the hull. Thus the planking would start out at the centerline running straight fore and aft, but gradually curve so that it matched the curve of the side of



*McCaffery's unique approach of only partially planking the deck allows us to look downward at the layout and fixtures below deck.*

the ship. This is described as late as 1856 in the *Practical Shipbuilder* by Lauchlin McKay. The evidence for this method being used up to that time is overwhelming. In constructing the model, McCaffery laid the deck aft of the break in this manner and left all the deck plank off the deck forward of the break. This follows the procedure used on the fishing schooners.

Here the deck fittings are of choice dark apple wood to imitate mahogany. Early photographs of actual yachts show mostly natural finished deck furniture with white reserved for the inside of the bulwarks. The model's furnishings are waxed to give a sheen that looks like gloss varnish at this small scale.

The artist's stern carving is based on the original, which is preserved today at The New York Yacht Club. The trailboard decoration follows the design on the British lines drawing as copied by Maritime Historian

Howard Chappelle (1901-1975). All are carved from boxwood with a natural finish. The model is mounted on cherry pedestals and placed on a plinth with black walnut trim. The nameplate features the artist's own calligraphic design.

While many models have been built of this important yacht, few have peeled away the exterior shell to reveal the construction and interior details with the refinement and elegance of McCaffery's model. Close examination of it reveals that every joint, every scarf, every turning on every fixture is perfectly executed so that, viewing the model from every angle, we can see for the first time what only her original builders saw, all shown here exactly proportioned to scale.



*The starboard side of the model clearly shows the bulk of the massive hull. McCaffery has left most of the planking off to give us a clear view of the framing of the USS Constitution, painted in her original yellow ochre and black colors. The 1 1/2" Hercules Figurehead (shown above) measuring 12' on the actual vessel is carved from a single piece of boxwood and painted white.*

### **USS Constitution, 1797**

Scale: 1" = 8' LOA 25"

*Cherry, Apple, Boxwood and Holly with Poplar and Black Walnut Base*

Internationally recognized as America's national ship, *USS Constitution* is one of the most famous vessels in history, as well as being a fine-looking frigate. This model was created to demonstrate how the ship was built, with special focus on the fitting of the diagonal riders. The original drafts by Doughty were used, along with the extensive written descriptions by the ship's original designer Joshua Humphreys (1751-1838). This material spells out the size and fitting of all the components

of her hull. Paintings of *Constitution* by Antoine Roux (1765-1835), Michele Felice Cornè (1752-1845) and Thomas Birch (1779-1851) were used as a reference for the ship's appearance. The hull framing on the starboard side was built up out of cherry. The main structural elements such as the keel, beam, knee, and riders, are of apple wood. The interior was made with boxwood. The outside planking on the starboard side is made of holly, with a number of strakes left off to show some of the framing. McCaffery shows her painted in yellow ochre as she appeared when she was launched in 1797.





*This port side cut-away view with all interior decks and furnishings removed allows us to see the unique diagonal support system that the ship's architect, Joshua Humphreys, designed. These massive supports fortified Constitution's hull in battle and have enabled her to survive today as the world's oldest wooden fighting ship.*

Windows in the stern and quarter galleries are glazed, with the frames half-lapped of thin pieces of boxwood. The figurehead is carved from a single piece of boxwood. It is based on the description given by Humphreys, the eyewitness account of the Rev. Dr. Bentley and the Michele Felice Cornè watercolor of the ship.

The main structural members on the interior, such as deck beams, were severely cut back to give a clear view of the riders. All scarp joints in the keel and stem are cut and fitted. The hull is configured as originally built, with closed bulwarks on the quarterdeck. This results in a model

that gives an understanding of how Humphreys envisioned her, before any changes were made. There are six figures created specifically to show scale, and these are placed around the model. A cat takes it all in from his perch on the keelson. The model is mounted on a base and plinth of acacia burl veneer with a maple insert.

Remarkably, today, USS *Constitution* is afloat in Boston, Massachusetts still fully commissioned as a United States Naval vessel.



FIGUREHEADS OF THE





UNITED STATES NAVY (1749-1892)



## The Collection of Miniature Figureheads of the United States Navy (1749-1892)

*When the ordinary difficulties of miniature ship modeling and carving proved not enough to challenge the supreme skills of Lloyd McCaffery, he sought out a new project to showcase his unique ability to combine important historic research with carving in three dimensions. His choice was to take on the task of researching the entire history of United States Naval Ship Figureheads and recreate them in exquisite detail, each just 2" - 3" high!*

*Here in the artist's own words was his process:*

I have long recognized that recreating the fabulous decorations of old ships at miniature scales is the most challenging aspect of ship modeling, yet enjoyable and rewarding all the same. Certainly the epitome of all marine carving is the figurehead. Recreating the human form in wood to a reduced size is challenging enough, but to do it in miniature can be intensely difficult, and achieving the human face particularly so. The ultimate challenge is obtaining a likeness of a specific and well-known person. I have long contemplated the idea of a collection of ship figureheads in miniature, but an entire collection would have to overcome problems of relative size, and the choice of an appropriate scale proved a vexing problem. Too small, and much detail on the full-size figures could be lost. Too large, and it is not a sufficient challenge. Then, too, a collection of random subjects from the vast panoply of figures available would lack focus and limits.

To tighten up and unify such a collection, I narrowed the field to figureheads associated with the growth of the United States Navy, from its earliest colonial antecedents to the decline of major ship carving in the late 19th century. I estimated that I could accurately portray at least 40 and perhaps as many as 60 of these figures. The result is a unique assemblage of historically significant miniature carvings that can inspire and teach people about these fascinating relics of a bygone era in our history. The collection is further unified by being the product of a single artist working in a distinctive style and technique, yet respecting the appearance and workmanship of the originals. Where the original figure has survived, such as the Jacksons and Franklins, I replicate what the ship carver did while presenting it in my own style.

A tremendous amount of research was necessary before any carving could begin, to ensure the accuracy and authenticity of how each figurehead appeared from every angle. For this project, the quality and extent of information available for these figures varies greatly. In the best-case scenario, the actual figurehead survives, typically in a museum. In other cases, original ships' plans were extremely helpful. In addition to drafts, any U.S. Naval vessel that was unfortunate enough to have been made a prize by the British would have its lines documented and saved in Admiralty records. Written descriptions by eyewitnesses to a launching—or even the occasional acerbic criticism of a new figure on a ship—provide supplemental information. The many paintings, drawings and woodcuts made of these ships were another valuable source, although their accuracy and authenticity also varies widely. Some artists, such as the Roux family of Marseilles, were noted for their scrupulous accuracy; they were, after all, paid to sketch and paint ships with precision.

I have also taken to studying examples by the original carvers. Even if other figureheads by the same carvers might not have survived, more often there are allegorical, religious, Masonic, and decorative carvings still extant. The famous sculptor William Rush (1756–1833), for example, began his career as a



**The Collection of Miniature Figureheads of the United States Navy (1749-1892)**



*A selection of carvings from the Figureheads of the United States Navy Collection.*

ship carver, having carved four of the original six frigates' figureheads. While these have not survived, there are almost a dozen surviving full-sized figures he created for various architectural applications. These figures show how he handled drapery, hands, poses and costuming. I can take certain aspects of these carvings and apply his manner of working to a figure

of which we have a description but no surviving example. With the preliminary scholarship completed, I can then move on to designing and carving each figure. I explain my methodology for creating this figurehead collection in detail on page 56.



### ***McCaffery's Methodology for the Figurehead Collection:***

#### **Materials:**

For carving, I use boxwood (*Buxus sempervirens*). Seen everywhere as the green, clipped hedge plant along sidewalks, it has a secret afterlife as the finest material for miniature carving. It is very hard and requires much work to finish the surface to eliminate any blemishes of the carving process. It has an extremely fine, tight and diffuse porous grain, and a lovely tawny yellow color. It can be quite light when first cut, and exposed to sunlight it mellows to a darker yellow tan. For the stem and bases, I use apple heartwood. It has a dark reddish-brown color and makes a nice supporting contrast to the carved figure. I did not want this part of the structure to compete with the carvings.

#### **Scale:**

I settled on the scale of 1/4"=1', or 1:48 life size. This is the standard scale for many of the official "dockyard" models, many of which are preserved to this day. This scale allows much fine detail on the surviving figures to be replicated in miniature, yet the whole collection can be displayed in a small area and readily grasped by the viewer as an organic whole.

#### **Technique:**

My overall approach to carving is what I call "peeling an onion". I gradually reduce the material all over, taking off thin layers to carefully work down to the final surface. This must be done with great sensitivity, as there is no replacing material once it is removed. I utilize many techniques that I have learned or developed over the years such as turning the figure, while examining its ever-changing profile. This is a key to doing faces, as any disturbance to the ideal contours stands out. I sometimes strike a centerline for those straddle figures but otherwise start working on the block without more than a brief sketch. When I have reached the final surface, I hold very small pieces of fine 500/600-grit sandpaper between tweezers and begin sanding. This can take a few days or sometimes weeks to get the proper finish. I then scrape and burnish the wood to a high polish in certain areas, usually the convexities. This gives a nice return of the light falling on the surface and increases the sense of depth. Boxwood can be polished to a high sheen without any finish, but I use a dilute varnish to provide a penetrating finish which brings out the color and depth of the wood.

#### **Mounting and Display:**

Each piece is fitted to a stem of dark apple wood. The dimensions for the stems are usually taken from original draughts or reconstructed from other source material such as paintings. These stems are usually tapered in thwartships thickness. I fit the cheek rails leading up from the trailboards, as this helps tie the figure to the stem. I originally thought of making the entire bow of each ship, complete with headrails, but this would entail much more work, and the question arose as to what to include and what to leave out. I decided on the stem approach as the most viable. The stem is mounted against a backboard, and the whole is supported on an apple wood base.

This growing assemblage of the historic relics of our naval heritage will be a unique artifact and statement about this aspect of our nation's history. I do not know of any other collection like it. As the pieces are all the same scale, by the same artist and presented alike, they form a distinctive display, which is inspirational, informative, and educational. I firmly believe this collection should be kept together as an organic whole, displayed for public benefit. Perhaps it can be placed in a museum as a self-contained collection of these miniature recreations of a lost culture.



The Collection of Miniature Figureheads of the United States Navy (1749-1892)

*The United States Navy Figurehead Series is a work-in-progress with 41 finished and another 11 planned to complete this unique collection. The existing figureheads in the collection have already been the subjects of exhibitions at the United States Naval Academy Museum in Annapolis, Maryland and The Erie Maritime Museum in Erie, Pennsylvania.*

**Completed Figureheads of the United States Navy Collection:**

- 1749 44-Gun Ship of the Line HMS America
- 1776 34-Gun Frigate Hancock \*
- 1776 32-Gun Frigate Raleigh
- 1776 32-Gun Frigate Randolph
- 1778 36-Gun Ship Confederacy \*
- 1779 42-Gun Frigate Bon Homme Richard
- 1781 Privateer Ship Rattlesnake \*
- 1782 74-Gun Ship of the Line America
- 1797 44-Gun Frigate Constitution - Hercules \*
- 1797 44-Gun Frigate United States \*
- 1797 38 Gun Frigate Frigate Constellation \*
- 1798 28-Gun Subscription Vessel Merrimack
- 1799 32-Gun Frigate Essex \*
- 1799 36-Gun Frigate Philadelphia \*
- 1799 28-Gun Frigate John Adams
- 1800 44-Gun Frigate President \*
- 1803 Brig of War Syren - Knight \*
- 1803 Brig of War Syren -Mermaid \*
- 1803 Brig of War Vixen
- 1803 Brig of War Argus
- 1805 Brig of War Hornet \*
- 1808 44-Gun Frigate Constitution - Scroll \*
- 1809 Brig Hamilton
- 1813 General Armstrong
- 1813 Ship Scourge
- 1814 90-Gun Ship Independence
- 1815 74-Gun Ship Franklin \*
- 1816 74-Gun Ship of the Line Columbus
- 1817 74-Gun Ship of the Line Delaware \*
- 1820 74-Gun Ship of the Line USS North Carolina
- 1820 74-Gun Ship USS Ohio
- 1822 44-Gun Frigate USS Potomac \*
- 1822 120 Gun Ship USS Pennsylvania
- 1834 44-Gun Frigate USS Constitution - Jackson\*



**Completed Figureheads of the United States Navy Collection (continued):**

- 1834 44-Gun Frigate USS Constitution - Jackson \*
- 1836 38-Gun Frigate USS Macedonian \*
- 1837 Sloop of War USS Cyane
- 1847 44-Gun Frigate USS Constitution - Jackson \*
- 1849 Revenue Cutter Joe Lane (aka Campbell)
- 1858 Sloop of War USS Lancaster
- 1864 74-Gun Ship of the Line USS Alabama \*

**Planned Figureheads of the United States Navy Collection:**

- 1774 30-Gun Man of War Alfred
- 1776 28-Gun Frigate Virginia
- 1777 40-Gun Frigate South Carolina
- 1782 74-Gun Ship of the Line America
- 1799 20-Gun Sloop of War Patapsco
- 1814 74-Gun Ship of the Line Washington
- 1814 Brig of War Saranac
- 1815 74-Gun Ship of the Line Franklin
- 1815 16-Gun Brig of War Chippewa
- 1843 20-Gun Sloop of War USS Portsmouth
- 1892 Protected Cruiser USS Olympia C-6

*\* These Figureheads are shown on pages 58 - 69*

**36-Gun Ship, *Confederacy*, 1778**

*Confederacy* was a most unusual ship in her proportions, being very long, narrow and shallow of draught. She had row ports and was almost a "galley frigate". There is the usual controversy over her designer, and this is hashed out in Howard Chapelle's book *The History of the American Sailing Navy*. She was built by Jedediah Willett in Norwich, Connecticut on the Thames River in 1778. She was captured by the British without firing a shot, and this sad event means that at least we have the draught made with details of her profuse carvings. McCaffery used all this historical information to ensure accuracy. The figure has sometimes been referred to as a Greek warrior, however, in the trailboards it is depicted as an animal with teats. This depiction brings to mind the she-wolf of the myth of the founding of Rome. The draught is torn just between the figure and the wolf, and McCaffery suspected this is where Romulus and Remus would be depicted. Therefore he used Roman material as the basis of his carving.

The figure is carved from a single piece of boxwood with the short sword and shield added. McCaffery turned studs individually with tennons to fit the leather straps on the kilt. This is a straddle figure, and the legs and greaves are the same port and starboard. The intricate detail of the face and plumes on the helmet are just the type of miniature carving that sets McCaffery's work apart from all the others.





**34-Gun Frigate, *Hancock*, 1776**

Described by the British as "the finest and fastest frigate in the world", she was captured by the British, and thus we have her draught with the figurehead drawn on the stem. A most handsome figure, it depicts American Statesman John Hancock in colonial dress. We have a description by a British spy of a man's head with a small cocked hat. This is a straddle figure, fitted to the tapered stem. This fitting is a tricky act in miniature, with repeated trial and shave of the components to insure a tight seam. The stem profile and the pose for the figure were based on the original draught. The figure's carved coat is based on the original dress coat of John Hancock, which is preserved to this day. The buttons for his miniature waistcoat were individually turned on the lathe with tennons.



**Privateer Ship, *Rattlesnake*, 1781**

This vessel was not part of the Continental or Federal navies. McCaffery included it in this collection to illustrate the use of legalized piracy during this period.

Governments would issue "Letters of Marque" to ships, termed "Privateers", to prey on the shipping of enemies. Due to *Rattlesnake's* capture by the British, we have an original drawing of her lines which depicts the figurehead as an Indian, albeit with a strange topknot. Chapelle's redrawing of the original draught was used for the outline of the stem, while the original drawing was used for the details.



### 32-Gun Frigate, *Essex*, 1799

This ship was one of the "subscription" frigates donated by the citizens of Salem, Massachusetts to the new U.S. Federal Navy. She was designed by William Hackett and built by Enos Briggs. She had a very interesting career before being captured off the coast of Valparaiso in 1814. For reference there is the original draught by Hackett, though the entire plan is very crudely drawn, with the stem in particular being too long and stretched out forward. No other plan of this period shows this type of stem, and McCaffery used Chapelle's redrawing, which fairs the stem in very nicely. Much detailed information on this ship has been preserved, and *The Frigate Essex Papers* by Philip C. Smith reprints much of it. The Joseph Howard (1780-1857) watercolor, which is still in existence, clearly shows the full figure of a Native American.

McCaffery referred to Howard Chapelle's stem profile and the Howard painting with the figure holding a hawk in the right hand, tossed over the shoulder, and a staff in the left. Opposition movement required the left leg to be striding forward. The long hair worn loose and the necklace were reproduced. The entire figure was carved from a single piece of boxwood, with the tomahawk and staff added in the hands. Even the fingers and fingernails were detailed.



### 44-Gun Frigate, *United States*, 1797

The *United States* was one of the original trio of 44-gun frigates authorized for the new U.S. Federal Navy. She was actually the first ship launched May 10, 1797 from Humphrey's shipyard in Philadelphia. She is famous for capturing HMS *Macedonian* under the command of Stephen Decatur Jr. and thus is forever linked to that ship. She survived until 1866.

McCaffery used the Chapelle draft to establish the stem profile and location of cheek knees. There is a very crude painting of this ship, showing a figure holding a spear. Fortunately we have Humphrey's description and original carver William Rush's details, and the latter gives the indication of the spear. The artist followed this description along with the style of other Rush figures for pose, drapery and details. This figure of the "Goddess of Liberty" is the result.





### 38-Gun Frigate, *Constellation*, 1797

This ship was another of the original six frigates authorized by the U.S. Congress in the Navy Act of 1794, for the new U.S. Federal Navy. McCaffery used a copy of the original draught preserved in the National Archives for referring to the profile of the stem. Some interesting written material survives concerning her figurehead, including the initial list of names and ideas, with descriptions that the original carver William Rush envisioned. McCaffery also referred to a description of the actual finished head, written by Rush himself. This took the form of a letter published in the *Federal Gazette & Baltimore Daily Advertiser* on August 9, 1797. He describes the head as a female figure, and goes into detail about the pose of the figure and various emblems he carved.

These were good materials for reconstructing the figure, though exactly how the details were arranged might be difficult to puzzle out. Fortunately someone took issue with what Rush had done and wrote a caustic letter to the same paper, which published the criticisms on Sept. 6, 1797, the day before the ship was launched. It seems the viewer couldn't find anything good to say about the figure, or the trailboards or stern, for that matter. But these searing comments provide a good reality check on just what Rush did do, as the critic was basing his observations on his view of the finished ship.

A female figure is shown with flowing hair, right arm raised, probably holding a torch or light. Her right arm rests on a sphere, under which is a pyramid of rock with flame ascending from it. The scale, mirror, dove, Herculean club encircled with laurel and Phrygian cap of liberty were placed based on the written descriptions. The figure is scaled to fit the "space for the figure" given on the draught. The artist used the dozen or so surviving figures by Rush for pose, anatomy, drapery and details. Incredibly, some of the figures included fittings like a scale and mirror!

This figurehead carving is a good example of how McCaffery pulls together information from a variety of original reference materials to recreate a carving that would otherwise never be seen and appreciated.



### 36-Gun Frigate, *Philadelphia*, 1799

This 36-gun ship was built by subscription by the citizens of Philadelphia, Pennsylvania between 1798 and 1799 and presented to the U.S. Navy in 1800. Her career began surreptitiously in the Caribbean during the Quasi War with France, when she captured French vessels and reclaimed six merchant ships. However, she met a very different fate off the Barbary coast where continued piracy against American vessels by sailors under command of the resident Pasha resulted in the first Barbary War. Unfortunately for her, while sailing off Tripoli, on October 31, 1803, she ran aground on an uninhabited reef. Despite every effort by Captain William Bainbridge, including throwing all their massive cannons overboard and even sawing off masts to lighten her load, she was stuck on the reef. Bainbridge and his men were forced to surrender and turn the valuable frigate over to pirates; however the Americans weren't quite finished. In an act of bravado and incredible daring in February, 1804, a small boarding party led by Lt. Stephen Decatur, Jr. snuck into the harbor and burned the mighty ship in the harbor, ensuring that the pirates would not be able to raise her for their own use.

McCaffery used Howard Chappelle's redrawing of the draught as the basis for the stem profile. For the figure there exist two contradictory drawings. The sail plan by Hutton in the Lenthall Collection shows a strange figure with both hands grasping the club of Hercules over his head. The other draught, however, shows a figure clad in lion skin with the club over his shoulder. Fortunately, we have a reference in Claypoole's *American Daily Advertiser* (November 8, 1799) stating that the left hand was placed on the fasces. This description is congruent with the carving of Hercules for *Constitution*. Since William Rush was the carver of both figureheads, this makes sense.

Her original figurehead was also lost to history, but using original plans, McCaffery was able to reconstruct it for the ages.





#### 44-Gun Frigate, *President*, 1800

*President* was one of three 44-gun frigates authorized by the U.S. Congress in 1794 and a near sister of USS *Constitution*. She was built by William Doughty and Christian Bergh, and launched in New York on April 1, 1800. The building draught for these ships was by Josiah Fox. The ship was captured by the British on January 15, 1815.

The original ship draught dated April, 1795, was used to determine the profile of the stem. It included a description of what the figure should look like: a bust of George Washington supported by two female figures, port and starboard. The figures were carved by Daniel N. Train. The description is quite convoluted, and it would have been difficult to reconstruct the figure, if not for two remarkable watercolors of the ship by French artist Antoine Roux (1765-1835). Noted for their scrupulous accuracy, the Roux family of Marseilles produced detailed paintings of many vessels, including *President*. One of these, titled "President in a Gale", is in the collections of the USS Constitution Museum. Another, in the New York Public Library, shows the ship entering the port of Marseilles. Detailed close-ups of these two paintings were used to carve this replica. The paintings show the figurehead as a bust of George Washington, with the figures holding a mirror, scales on an escutcheon, and a hand on the fasces. The escutcheon behind Washington looks to be edged with acanthus leaves, and this is congruent with the other treatments of the period.

This figurehead was complex to carve, with many elements that needed to be precisely fitted together. In addition, it is most difficult to realize a likeness of a specific individual, in this case Washington. McCaffery used the William Rush (1756-1833) terracotta bust and his full-length woodcarving for this. The two supporting figures have faces only 1/8" high, yet are delineated by McCaffery in extraordinary detail.



**Brig of War, *Syren*, 1803**

These two figureheads from the Brig *Syren* (later renamed *Siren*), illustrate the difficulties in researching and determining what a figurehead from over 100 years ago actually looked like.

This fine brig was built in 1803 and saw service in the Mediterranean, Algiers and Tripoli during the Barbary War. When a peace treaty was signed in Tripoli on June 10, 1805, she returned to Washington, D.C. In 1810, her name was changed to *Siren*. She was captured in July, 1814 by HMS *Medway* and no more was ever heard of her.

Her draft survives in the National Archives in Washington, D.C. It is presented in *Personnel and Ships' Data* in NAV DOCS. Howard Chapelle presents a redrawing with a lowered angle of bowsprit in the *History of the American Sailing Navy*. There is also an Admiralty report with spar dimensions, made after the ship's capture. McCaffery used the Chapelle draft to establish the stem profile and lower cheek knees. But the figurehead of a knight drawn on the draft may not have been used, or possibly it was changed, because Chapelle notes and illustrates a female figure, evidently a mermaid, which was on a crude Admiralty draft. To resolve this discrepancy the artist carved both.

The knight figure is quite a striking action figure. The miniature buttons or studs for the kilt and cuirass were hand-turned by McCaffery. The mermaid required referring to sculptures of the period. All the scales for the lower body are incised.





### Brig of War, *Hornet*, 1805

*Hornet* was built in Baltimore, Maryland in 1805 and saw service in the War of 1812 under the command of James Lawrence, whose dying orders while commanding USS *Chesapeake* during her battle against HMS *Shannon* in 1813, "Don't give up the ship!" have become the stuff of Naval lore.

To reconstruct her figurehead McCaffery referenced Howard Chapelle's redrawing of the original draught in *The History of the American Sailing Navy*, 1949 (Fig. 65), and a recently discovered original drawing of the figurehead to create this delicate carving of an eagle with spread wings, holding a Union shield.



### 74-Gun Ship, *Franklin*, 1815

This large ship-of-the-line was the first vessel laid down at the Philadelphia, Pennsylvania Navy Yard by Samuel Humphreys and Jonathan Penrose. Launched in 1815, she sailed to England and later became the flagship of the Mediterranean Squadron. She returned to the United States in April, 1820, and from October, 1821 through August, 1824, she served as flagship of the Pacific Squadron. She was eventually broken up in 1853.

Fortunately, her original figurehead is preserved today at the U.S. Naval Academy Museum. It is one of the few actual figureheads by William Rush (1756-1833) that have survived the ravages of war and time.

For further reference, McCaffery consulted the naval architect John Lenthall's original plan and personal watercolors and drawings made by William A.K. Martin (1817-1867) and Thomas Birch (1779-1851), which clearly showed the design of the distinctive acanthus scroll around the figure.

The volutes of this scroll corkscrew out as they spiral in, a challenge for any sculptor, made even more forbidding in extreme miniature, yet McCaffery manages it with ease.



#### 74-Gun Ship of the Line, *Delaware*, 1817

*Delaware* is the third ship of this name. She was a 74-gun, built in 1817, and launched in 1820 at Norfolk Navy Yard in Virginia. There were several other ships built to this design. She survived until 1861, when she was burned at Norfolk. Howard Chapelle's stem profile was used for this figure. The original figurehead of Tecumsah has survived, and is preserved today at the U.S. Naval Academy in Annapolis, Maryland. The actual wood figure is preserved indoors and a bronze casting of it is on display on the grounds. This makes Tecumsah, the celebrated Shawnee Chief, one of the most recognizable and famous of all figureheads.

McCaffery carved this figurehead at the scale of 1/4"=1' taking measurements and photos for this purpose right from the figure. There is a great deal of detail on this figure, from the pipe, wampum, knife and hawk to the oak leaves and acorns bunched below the torso. The cheek rails fair up into the scrolls on port and starboard. The scowling face is surmounted by stylized feathers.



#### 44-Gun Frigate, USS *Potomac*, 1822

The USS *Potomac* was launched in May of 1822, although her fitting-out was not completed until 1831. Her figurehead was a bust of prominent Virginian Captain John Smith. Her long career included the shelling of the Sumatran town of Quallan Baton in retaliation for the capture of the U.S. merchant ship *Friendship* and the massacre of her crew. After cruises to protect American interests in the Caribbean and the coast of Brazil and service during the Civil War, she was finally decommissioned in January, 1877.

To achieve an amazing miniature likeness, McCaffery used the most accurate period woodcut print of Smith, and he referred to Howard Chapelle's draught in *The History of the American Sailing Navy* for the mounting.



**38-Gun Frigate, USS *Macedonian*, 1836  
Prize of the War of 1812**

This vessel began life as a 38-gun frigate of the Royal Navy in 1812. She was captured in a famous sea fight by the U.S. frigate *United States* on October 30, 1812. She served in the U.S. Navy until 1835, when she was broken up. Incredibly her original figurehead, a stylized image of Alexander the Great, survived and is displayed outdoors at the U.S. Naval Academy. McCaffery used Chapelle's draught for the stem profile and location of the cheek rails. This draught is his redrawing of the class draught for these British frigates, as her original draught has not survived. There is an 1851 watercolor by Charles Parsons titled "Old Macedonian, Wallabout Bay", which shows a frigate hauled out on mud flats.

This carving is based on photos and measurements made in 1995 during McCaffery's visit to the U.S. Naval Academy, as well as photos supplied by the museum staff. The photos show some surface details that have since eroded. The lower cheek rail from the draught fairs very nicely into the scrolls on both sides of the actual figure.



**74-Gun Ship of the Line, USS *Alabama* (aka USS *New Hampshire*)  
1864**

The USS *Alabama* was actually laid down in 1819 but launched as the USS *New Hampshire* in 1864. This ship was one of the 74-gun ships-of-the-line built after the War of 1812. For reference, McCaffery used the draught in *The History of the Sailing Navy*, as redrawn by Chapelle based on a draught of the USS *North Carolina*, another 74-gun ship of the line. The original figurehead was by Laban Beecher. This carving was based on a drawing by M.V. Brewington of the original figure in *Shipcarvers of North America* (Fig. 41, p. 45). The figurehead is unusual because of the arms raised over the head.





**Figureheads of the USS *Constitution*, 44-Gun Frigate,  
1797 - 1834:**

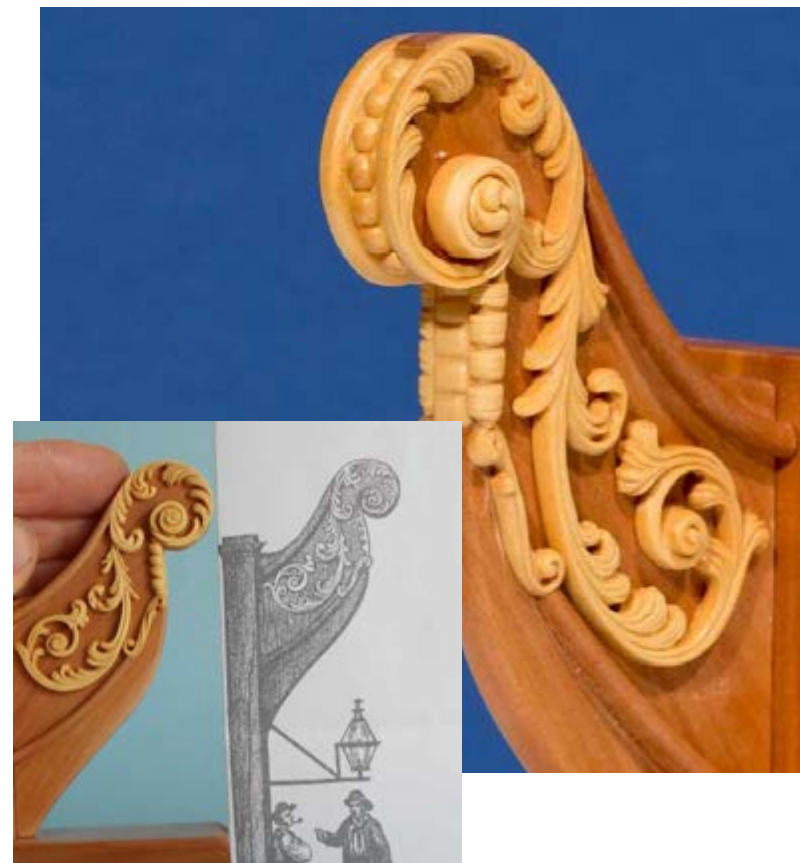
**Hercules, 1797**

McCaffery had excellent sources for the figurehead of Hercules, including the original draught from 1795 by Josiah Fox, which gives the shape of the stem. He also had the description of the figure written by carver William Rush, who submitted ideas for the figure, which was actually carved by the Skillin brothers of Boston, Massachusetts. There also exists an eyewitness description by the Rev. Dr. William Bentley. Most compelling is the gouache by French painter Michel Felice Corne (1762-1832). All these sources show a Hercules figure, his right arm raised holding a scroll representing the Constitution of the United States, his left hand resting upon the fasces. His left leg is forward, as seen in the painting. He is clad in a lion skin, with a baton or club lying beneath him. There are also some representations of Hercules figures by Rush from this period which are congruent with the general trend in sculpture from that era. The figure is carved from a single piece of boxwood except for the scroll. The cheek rails were placed as they were defined in the draught, to tie the figure to the stem.



**Scroll, 1808-1834, War of 1812**

The original *Constitution* figurehead of Hercules was "broken into pieces" in a collision with the frigate *President* on Sept. 4, 1804. The log has a few entries explaining that a "billet" was fitted by local carpenters. This billet was on the ship until the ship was given a large repair in 1808. At that time, Daniel Train carved a billet and other decorations for the vessel. This is the scroll she had during the War of 1812. Fortunately there exists a woodcut and a photograph of the decorations. The USS *Constitution* Museum has a stereograph photo of the navy yard with a distant view of the stem and scroll. Even better is a starboard side view of the scroll, which matches what is seen in the photograph. Two sailor lads lounging at the base provide some sense of scale. McCaffery used this information and the original draught to create his carving. It has a large, S-curve acanthus foliage scroll, with the upper end corkscrewing out in a billet. The lower end is a simple spiral. The artist referred to the partial billet in the Peabody Essex Museum, as well as a much more complete billet said to be from USS *Independence*, last seen at the Alameda Navy Yard. This decoration is much more than just a billet head, occupying the space a conventional figurehead would on the stem.



**Figureheads of the USS *Constitution*, 44-Gun Frigate,  
1797 - 1874:**

**Andrew Jackson, 1834**

This piece replaced the scroll of the 1812 era and is probably the most controversial of all figureheads. When the ship was given a major repair in 1833, Commodore Elliot commissioned a Hercules figure to replace the scroll. During the refit, President Andrew Jackson visited Boston, Massachusetts. In response to his popularity, Elliot had a full-length figure of Jackson carved and placed on the ship by Lyman Beecher. However, in one of the oddest acts in American presidential history, persons unknown snuck into the shipyard one night before the ship was even launched and literally sawed the head off the figure already mounted on the ship. A replacement head was quickly commissioned. The figure and head now reside in the collections of the Museum of the City of New York.

**Andrew Jackson, Replacement Head, 1834 (*inset photo at right*)**

The smallest carving in this collection, the replacement head replicates the original Andrew Jackson head (seen above). The original was not re-discovered until 2011.

**Second Andrew Jackson, 1847-1874**

This full-length figure of Jackson was carved in 1847 to replace the first Jackson. It is a better piece of sculpture with a sense of life and forward movement not found in the first folk-sculpture piece. It was on the ship until 1874, when it was removed and sent to the U.S. Naval Academy, where it remains to this day. McCaffery took photos and measurements of the figurehead, and used this material, along with the profile of the stem, to create this miniature. It is carved of one piece of boxwood, with the buttons turned on a lathe with tennons, which fit into holes bored in the figure.



“The ability to carve and work at an extreme miniature scale is developed only through experience. I cannot stress enough that this is a solitary endeavor.”

Lloyd McCaffery





*A distinguished grouping of McCaffery's 1" to 2" tall boxwood portrait busts each mounted on an apple wood base. Top Row: Admiral Horatio Viscount Nelson, George Washington and Buffalo Bill, Bottom Row: Brutus, John Paul Jones, Mark Twain and Thomas Jefferson*

## SHIP CARVINGS & OTHER MINIATURES

**In the 18th and 19th centuries, striking decorative carvings were** commissioned from Master Artists to decorate the bows of many commercial and naval sailing ships. The subjects usually related to the name of the vessel and held a powerful symbolism for the sailors aboard her. As works of art, these 'figureheads' are considered representative of some of the finest sculptural carvings of their age.

McCaffery's ability to reproduce the details of these massive creations in extreme miniature scale is nothing short of remarkable. In an on-going effort to create new and more difficult challenges for his skills, McCaffery has expanded his subject matter, which showcase his unique abilities to solve problems of extreme miniature scale that no other carver would even consider tackling.



### **Royal Charles Stern Decoration**

Scale:  $\frac{1}{4}'' = 1' \quad 3'' \times 3''$

*Boxwood with Black Walnut Base*

This miniature carving is a replica of the major stern decoration that once adorned the great ship *Royal Charles* of 1660. The original is 12' 3" wide and is preserved today in the Rijksmuseum in Amsterdam. The ship was built by Peter Pett at Woolwich, England in 1655 for Oliver Cromwell. She was renamed *Royal Charles* by Charles II on his return from Holland. She was a major unit of the fleet during the Second Dutch War. She was captured by the Dutch during their in-

famous raid up the Medway and taken to Rotterdam as a trophy. The ship was eventually broken up, but the stern decoration has survived to this day.

In preparation for carving this intricate miniature, McCaffery spent time in the Rijksmuseum in Amsterdam, Netherlands, taking measurements and photographs of the original carving. The original had a subtle curve to it to fit the shape of the ship's stern, and this subtle curve is duplicated in McCaffery's miniature carving. It is mounted on a pedestal with a base of black walnut.



**Double Equestrian Figurehead of the 100-Gun Ship  
*Royal George of 1756***

Scale: 1/4" = 1' Height: 5 1/4"

*Boxwood, Apple Plinth with Acacia Burl Base*

This woodcarving is a miniature representation of the massive figurehead of the 100-gun ship *Royal George* of 1756. At 21' tall, it is the largest and most intricate type of figurehead ever carved. The vessel had a long career which finally ended when she capsized and sank while undergoing minor repairs in 1782. She is one of the ships the Colonial Navy had to contend with during the Revolutionary War. The figurehead was of the type known as "double equestrian," because it showed a figure, representing King George, astride a horse on both sides of the ship. In addition there are two cherubs, three crowns and two swords that make up this complex figure.

McCaffery's miniature is carved from a single piece of boxwood (*Buxus sempervirens*). It is very difficult to find pieces of boxwood thick enough for carvings like this. This material has an extremely fine grain, making it ideal for fine details. The figure is mounted on an apple wood stem and plinth. The part representing the stem is tapered athwartships like the original. The royal arms are carved in bas relief just above the end of the stem. Many different specialized tools are used to create such carvings, including diamond and carbide dental burs and miniature chisels which McCaffery had to manufacture himself.



*Top: Detail of figurehead*

*Bottom: Figurehead shown actual size*



### HMAV *Bounty* Figurehead, 1787

Scale: 1/2"=1' Height: 3"

Boxwood, Pear Stem with Acacia Burl Base

*Bounty* was surely one of the most famous ships in history, the mutiny aboard the *Bounty* was one of the most notorious stories in the history of the Royal Navy, yet her figurehead has been much misunderstood by ship modelers. Only by going back to the original description was McCaffery able to discover that it depicted a figure of a "pretty" lady in a riding habit.

This figurehead wears a long gown buttoned down the front, with multiple capes and cuffs. Her shirt had lace at the wrists and neck. A brimmed hat with a tall crown is tied with a ribbon finished in a bow, and ostrich plumes complete the millinery. Since this is a straddle figure, the stem must taper upwards, and this is readily seen when the figure is viewed from the bow. McCaffery combined all the historical references to recreate *Bounty's* figurehead with a degree of accuracy never before achieved. The figure is carved from boxwood with a riding crop in her right hand. She is mounted on a base astride a pear stem and acacia burl veneer base.

Below: *Bounty* (actual size)



Above: Detail of *Bounty* Figurehead

### Morning Light Figurehead

Scale: 3/8" = 1' LOA 3"

Boxwood, Apple Plinth with Acacia Burl Base

Woodcarver John W. Mason was an intriguing figure of the mid-1800s. While he left a number of beautiful pen-and-wash drawings of figureheads of the time, very few of his actual carvings are extant. McCaffery has used Mason's renderings to reconstruct Mason's elegant Morning Light figurehead in miniature, whose flowing drape gives a sense of movement and speed.



Left: Detail of Morning Light Figurehead



Above: Morning Light (actual size)



*Above: Detail of Ancient Victory*

*Below: Ancient Victory (actual size)*



### **Ancient Victory**

Height: 1 ½"

*Boxwood, Apple Plinth with Acacia Burl Base*

This figurehead is McCaffery's interpretation of what such a figure might have looked like. It is based on a number of Greek figures as well as the remarkable figurehead of the French Le Rivoli, a model of which is in the Trianon Collection.

The figure is carved from a single piece of boxwood. The trumpet is turned and hollowed out, and she holds a laurel wreath, with the pinky and forefinger extended to ward off the "evil eye."

It stands just over 1 ½" and is mounted on a turned apple wood sphere placed on a narrow pyramid.

*Below: Detail of Pilot House Eagle*



### **Pilot House Eagle**

Height: 1 3/8"

*Boxwood, Apple Plinth with Acacia Burl Base*

On small vessels such as tugs, a pilot house was built to shelter the crew, and a carved eagle was placed on top as a decorative motif. This miniature carving is McCaffery's interpretation of that traditional decoration. The design is based on the many actual eagles that have survived, with particular reliance on the work of Master Carver John Haley Bellamy (1836-1914). The piece is carved from boxwood, with the body and main wings tenoned together. All the feathers are carved in, with the primary and secondary wing feathers carved individually and inserted into a rabbet in the trailing edge of the wing. The tail feathers likewise are individually carved and tenoned. The bird grasps a turned stanchion of apple wood with end finials of boxwood. The carving is mounted on a pedestal and plinth of apple wood. This is fastened to a base of acacia burl veneer finished with 15 coats of hand-rubbed varnish.

**Velociraptor**, Late Cretaceous Period

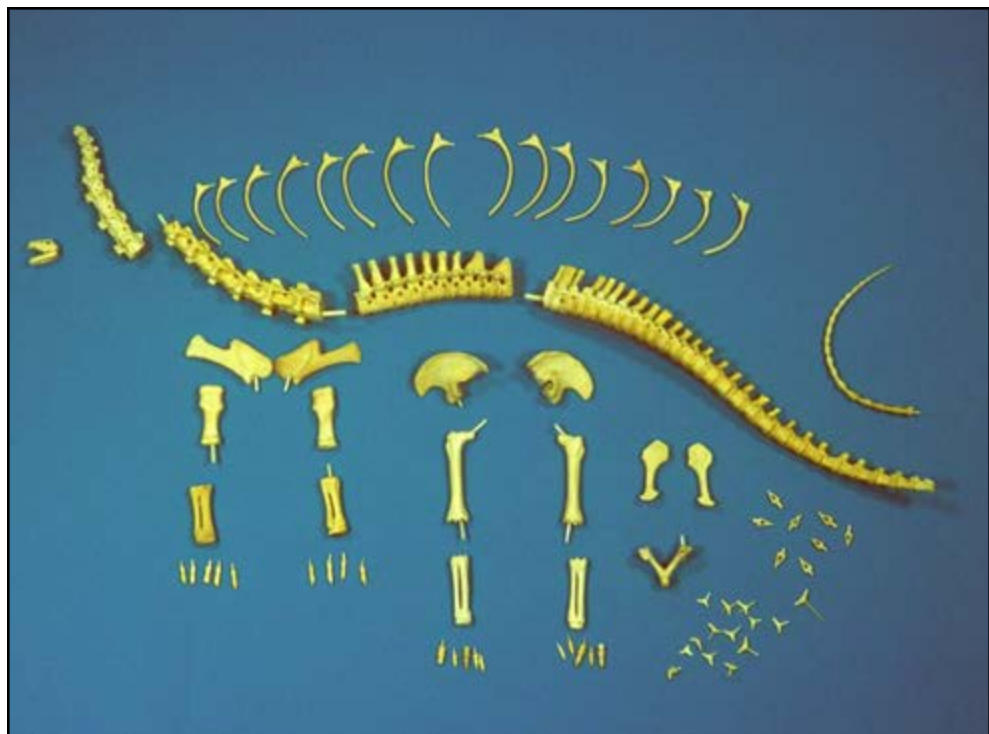
Length: 15"

*Boxwood, Holly, with Acacia Burl Base*

McCaffery is always searching for new and more difficult challenges. To this end, he decided to create a series of fascinating dinosaur skeletons based on the latest forensic research into their bone structure. In typical McCaffery style, his dinosaurs are not simply carved to just look like their subject, they're actually constructed of many tiny individually carved pieces, subtly shaped to scale then pegged together (instead of glued together which would eventually dry out) and perfectly fitted. Of course, to create a further challenge, the 15" sculpture of the Velociraptor seen here is not static but shown in movement so that every bone is visible, contorted and turned as it would be in real life.

While the sculpture is made of boxwood, the tiny teeth are made of holly, individually drilled out and fitted into the jawbone.

Ranging in size from a 3" sculpture of an Apatosaurus to this 15" Velociraptor, other prehistoric dinosaurs sculpted by McCaffery include Sabertooth cat, Diplodocus, Elasmosaurus and the Imperial Mammoth.





### **Wells Fargo Concord Stagecoach**

Scale: 1/2" = 1' Length: 5 1/2"

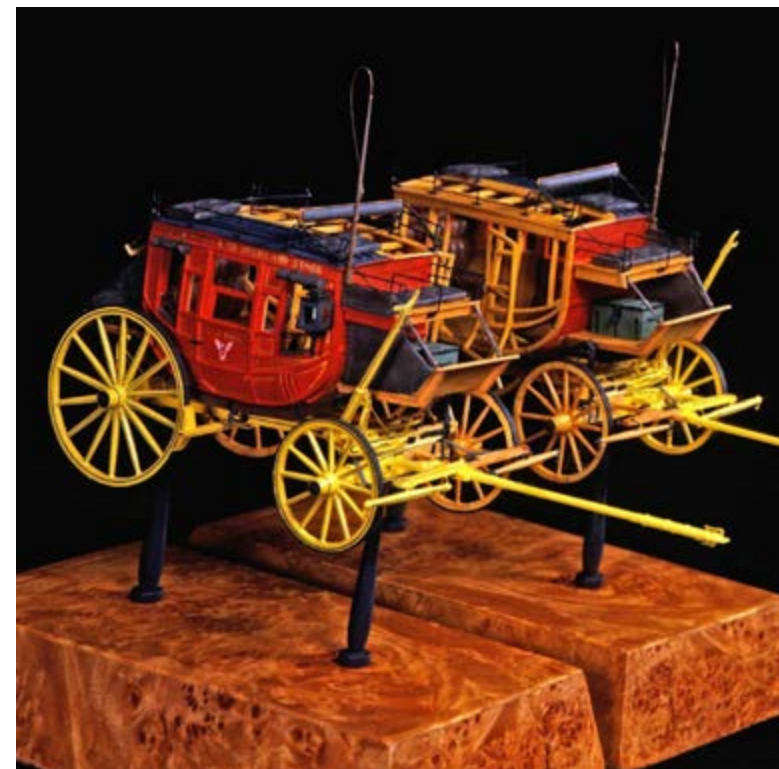
*Hawthorne, Apple, Boxwood, Degama and Bamboo with Acacia Burl Base*

The stagecoach is a classic icon of the Old American West. The Concord coach is a transplant from England and was perfected in New England. It also proved ideal for the rough terrain in the Western states and was a major factor in the settlement of the region.

The coach consisted of two major assemblies: the running rig, or chassis, and the unsprung frame and wheels. The entire coach body, with boots, seats and leather covers, is suspended on the running rig by two thoroughbraces, massive leather springs that run from front to back on each side of the frame. This design helped to cushion the ride, though Mark Twain's description of traveling in a coach compares it to riding a roller coaster.

This miniature stagecoach is constructed exactly like the full-sized original, with wheels, coach frame and details faithfully following the type. The result is this jewel-like miniature, with all the fittings of the original in a work that is less than three inches high.

McCaffery's model presents the coach in two finishes. The right side is fully paneled, painted and decorated so as to present the eye with the image of the finished coach. The left side is left as a frame, showing the natural finished wood used in construction, with all the lap joints, pegs, and mortises used to fasten the structure together. The coach body panels are left off, to show the interior setting, and provide insight into methods of assembly.



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Pan-American Japanese-American Amity Hall, Kushimoto, Japan  
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Maritime Museum of San Diego, California, "*Masterpieces in Miniature: Figurehead Woodcarvings and Model of Britannia,*" September 5, 2009 - May 31, 2010  
Bancroft Library, University of California at Berkeley, California, "*Darwin and the Evolution of a Theory,*" September 1, 2009 - December 23, 2009  
Newport Art Museum, Newport, Rhode Island, "*The History of the Yacht Coronet,*" International Yacht Restoration School, 1999  
Seaman's Church Institute, New York, New York, "*Aubrey's World - The Maritime World of Patrick O'Brian,*" April, 1998- May, 1999  
Big Horn Gallery, Fairfield, Connecticut, "*Lloyd McCaffery - Master of Miniatures,*" 1995  
Mystic Seaport Museum Gallery, Mystic, Connecticut, "*Lloyd McCaffery Miniatures,*" 1987

**Awards:**

First in Class III - Small Craft, Prince Frederick's Barge; 1986 International Ship Model Competition, National Maritime Museum, Greenwich, England  
First Place - Scratch-Built Sailing Ships, HMS *Bounty*; 1985 Ship Model Competition, Mariner's Museum, Newport News, Virginia



## THE BOOK

In order for Lloyd McCaffery to achieve the level of historical accuracy and elaborate detail in an extreme miniature scale, he had to literally invent his own totally new techniques and methods. These were so revolutionary that in 1998 the British publishing house Conway Maritime Press, Ltd. commissioned McCaffery to write a book about his philosophy and processes.

The result was *Ships in Miniature: A New Manual for Modelmakers*. In the over-140 pages illustrated with photographs, McCaffery speaks to ship modelers and connoisseurs of the art form. He discusses in detail the qualities he believes a good ship model must contain, from proper research and aesthetics to proper construction and materials, including the design of the final display presentation.

He tells how he had to make his own miniature tools to work at such a small scale, explaining how if a deck plank needed to be 1/16" wide, he first made a miniature plane which he then used to fabricate that miniature plank.

Reprinted by Conway Maritime Press in 2002, it has become the classic manual in the world of miniature ship modeling.

Here's a brief excerpt from the book's introduction:

*"The last few decades have seen a major revival of interest in marine history, and a growth in the creation and collection of marine art. The psychological and sociological reasons for this have been explored elsewhere. One of the subjects of particular fascination is the miniature ship model, and an increasing number of people want to make these miniatures. There is, therefore, a growing demand for the practical information on construction. I have written this book to provide the instruction, and set standards for the research, construction and display of miniatures."*

