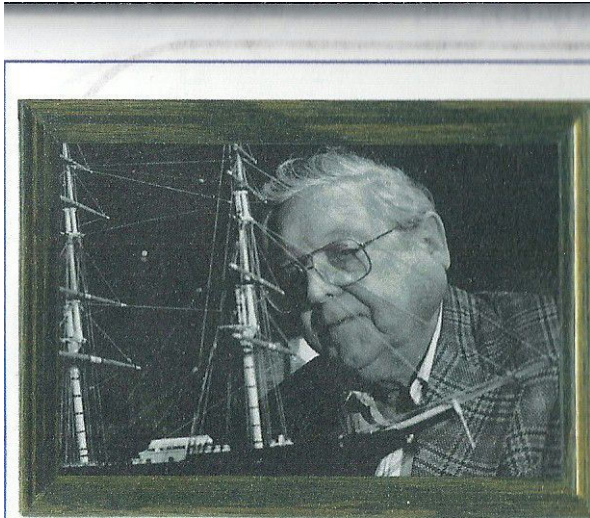


Docent Materials for the Ed Marple Ship Models



The Channel Islands Maritime Museum has become the only repository for all of Ed Marple's exquisite collection of ship models. As docents, we are expected to become well-acquainted with the short histories of the original ships upon which Ed Marple fashioned his models, and to be able to point out some interesting details on the individual models. The collection contains the following models of ships, crafted in the order listed:

1. The Swordfish, a clipper ship.
2. The Charles W. Morgan
3. The Leon [a collier, or coal transport ship]
4. The Endeavor
5. The Conqueror
6. The Royal George
7. The steamship Robert E. Lee
8. The Royal Katherine
9. The Sovereign of the Seas, and his last model, left incomplete:
10. The Prince

The source for this training pamphlet was a letter written by Dorothy Marple to Gary Farr, dated 20 Feb. 1991. It may be found in the archives in the C.I. Maritime Museum's Harry Nelson Library. The digital photographs used here were taken by Chip Stevens. The older photos [as indicated by the texture from printed photographs] were taken by 'Dwayne' with no last name on the labels. The photograph of the Sovereign of the Seas in the museum Plexiglass was taken by Robert Collins.



1st: The Swordfish was the first wooden model that Ed Marple attempted. The original clipper ship was designed and built by William H. Webb in 1851 to carry gold miners and their supplies to California for the trading company of Barclay and Livingston. The Swordfish set a speed record of 91 days from New York to San Francisco, and that record was broken only once. Later in its lifetime, it entered the China trade from Canton, China to New York. Once again, on this trade route, it set the fastest time ever recorded for a sailing ship.

This was the first wooden model that Ed completed, from a kit he purchased in 1965, and he was quite dissatisfied with the results. The hull was made of a solid block of wood, rather than using framing pieces, to which he soon switched. He made only one more model with a solid hull and upon which he used paint. Prior to making wood models, he learned how to rig the standing and running rigging by hand on plastic 'kit' models.

2. The Charles W. Morgan from a kit. The original ship was built in New Bedford, CT in 1841 and is the last known existing whaler, home port Mystic Seaport, CT.



This model was the last made with a solid hull of pine, and it too, was painted. With this model, Ed began to form his own parts to enhance the kit, which included the standing and running rigging, and handmade iron work: yardarm bands, jack stays, whaling tools (harpoons, cutting out spades, etc.), yardarm parrals, and tripod tools (grinding wheels). The handmade woodwork that he added included oars, anvils, parrels, grinding wheel, trying out tools and barrels.



3. The Leon, the original being a coastal brigantine of the 1880s, was used as an English freighter into the North Atlantic to Sweden, Norway and Denmark. The owners used her as a coal carrier.

The model! This was Ed Marple's first plank-on-frame model, hand built from the keel up, in which he used 43 frames. This is the first model that Ed converted from the standard kit model's 1/8 inch-to-a-foot scale, to 3/16 inch scale. For the hull he used bass wood, the rails, water ways, hatch covers and cabin trim were Philippine mahogany. Spars, tops of masts, capstans and gallows were formed with rosewood.

Ironwork, yardarm cranes, wisker booms, pumps parrals, dolphin strikers, spar bands and sheaves are handmade. All dead eyes, etc, are assembled with threaded nuts and bolts and all of the rigging is functional. Decks are planked to size using black tar paper joints to simulate those on the original ship. The dinghy is complete with standard equipment and parts. The scrollwork and ship's name are hand-carved from boxwood. Skylights and windows are made of Plexiglass.





4. The Endeavor: This was Captain Cook's original ship, a barque of mid 1700s era in which he discovered many of the islands of the South Pacific. Captain Cook selected the Endeavor for refitting because he needed a rounded hull for the extra cargo space it provided. Although Cook died in Hawaii, the Endeavor was not in service with him on this, his final voyage.



The model: The hull below the waterline is planked with black walnut. Above the waterline, he used bass wood. The wales and rails are made with African black wood. For the lower deck he used teak, and on the upper deck, boxwood.

The outside hull and deck are planked to scale, and fastened with wooden dowels, or as they called them, 'tree nails.' All joints in the model are fastened by the wooden dowels as it was done in the original ships.

The hatch gratings are cut and fitted with boxwood. Hatch frames and various trim are made with black walnut. Ports and transom windows are trimmed in rosewood and the windows are Plexiglass. The window scrolls are hand carved from boxwood, as are various hatch ladders. For the gallows, knight heads and channels, he used African blackwood.





The masts are made of pine and reinforced with cherry wood; the tops and various fittings are formed from black walnut. The masts and bowsprit all have shivs that function.

5. The Conqueror: The original ship was a third rate, 74-gun battle ship, built in Plymouth, England, in 1793. In 1804, Captain Pellew was appointed captain and she was employed on channel service until she sailed to join Lord Horatio Nelson in the Battle of Trafalgar. She was the 4th ship following HMS Victory, Lord Nelson's flagship. She served in many battles and more than held her own.



The model: This is Ed Marple's only 'scratch'-built model in the scale of 1/8th inch, and it was his first English man-o'-war. This model was scaled down from plans obtained from the Maritime Museum located in Greenwich, England. They sent Ed Marple photostats of the original ship plans and Ed built directly from these.

The lower hull was made with black walnut and the wales are made with ebony, with bass wood inserted in between. The lower deck was made with a wood called maripringa. This model also has handmade gratings. The capstand and the cannonballs are made of ebony.

The 2nd and 3rd decks are made with teak. This model includes handmade buckets hanging from the aft side of the upper deck, to be filled with sand, with which they put out fires.



Notice the two stern lanterns that Ed made, and the anchor and cannons made of ebony.

Each cannon has a hole bored down the center. Notice the two cannon on the top aft deck with the cannon balls next to them. They are rigged as the original ship had been. Also note that the rigging lines are stowed as they would have been at the bottom of the masts, when the work was done. Around the sides of the aft deck, note the hammock netting, where the sleeping hammocks were hung during battle, to catch flying shards of wood.

This figurehead is the only painted object on any of Ed Marple's models made from scratch. After he carved it out of boxwood, the helmet, shield and all, he left the man nude. Reconsidering this later, he used gesso to put clothes on him, and the gesso is painted. He never did that again.



6. The Royal George: Built by J. Pownell at Woolrich, the first keel was laid in Jan. 1746, and she was launched 1 Feb. 1756. She was a first rate Man-o'-War and she carried 108 guns, including cannon and carronades. At the time, she was considered to be the most beautiful ship afloat, the perfection of naval architecture. She was a fast ship and held the distinction of having carried more admirals' flags than any other ship, up to the time of her loss.

At Quiberon Bay in 1756, Admiral Sir Edward Hawke took her into battle off Belle Isle and blockaded the French fleet at Brest and forestalled the plan to invade England. In that battle, the French lost 7 battleships, including the Superbe and the Soleil Royal. Over 2500 men were killed or drowned, ending the invasion, and at the same time destroying the French fleet, all during a raging storm with high winds and seas.

In 1782 the Royal George under Rear Admiral R. Kempenfelt, returned to Spithead to undergo repairs. Upon putting in to port, they discovered that all that needed repair was a pipe which was used to draw in water for washing the decks. It was merely a leak in the pipe, and they needed to pull it out and replace it. To do so, they 'keeled' the ship over to one side to reach the pipe. This entailed running out the guns on the larboard (left) side on both upper and lower decks as far as they would go. The starboard guns were drawn amidship and secured. Unfortunately, they left open the lower portholes, which were just clear of the waterline at the start of the operation. Water began pouring in through the portholes, so the bosun piped the 1200 sailors and their families incorrectly to the larboard side to counterbalance the ship. They should have been ordered to the starboard side. The ship turned fully on her side with the mast flat on the water, and she sank, taking with her 1000 souls, including the Admiral himself.

The model: Built from Admiralty plans from the Maritime Museum at Greenwich, England. These were copies of the original ship scaled down to 1/8th inch per foot. Ed Marple converted this scale to 3/16s of an inch per foot for this next model, using what is called 'proportional dividers.' Ed made one additional alteration to the original plans, which was to increase the original 'station lines' to 36 frames in order to obtain a smooth appearance to the planking applied to the frames.

Below the waterline, the planking is made of white holly. At the waterline, Ed used cherry, and the wales are formed from ebony. The decks are made from boxwood, laid side by side with black photographic paper laid in between, thus leaving the tarred effect of the ship's decks.



The figurehead is a two-headed horse with a centurion balanced on each stirrup.

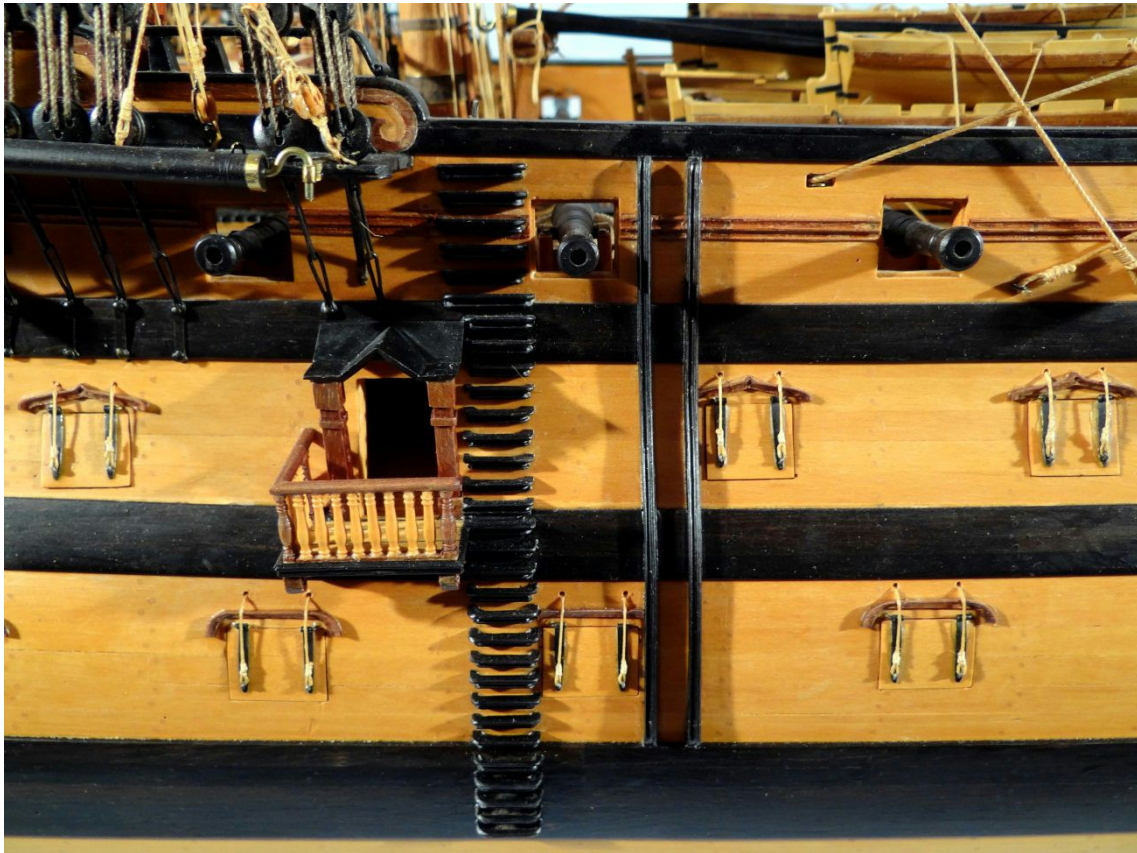
In the center of the two heads, and below them is King George's shield. Above is a lion's mane, topped by King George's crown. Poised above each centurion is a cherub holding crowns. At the heels of each horse are sea serpents reaching for the centurions. This figurehead is one solid piece of boxwood carved completely by hand. It took Ed Marple 500 hours to perfect it. The centurions' swords are crafted from metal.



The stern galley has many carvings. All balustrades are made individually and are fitted top and bottom in the railings.

As in the previous model, the upper deck edging is again lined with handmade fire buckets that held sand for putting out fires. All of the gratings [hatch covers] are handmade. The small life boats are double hand-planked inside and outside and completely fitted with oars and stern rudders for steering.

Ed counted the number of wooden dowels he used in planking the Royal George. He used 8,000 dowels, or 'tree nails.'



7. The S.S. Robert E. Lee: The hull of this steamship was designed by Ed Witt Hill and built by his company, Hill, Roberts and Co., New Albany, IN in 1866 for Captain John Cannon at a cost of \$200,000. It was built to run between Vicksburg, MS and New Orleans, LA on the Mississippi River. It was designed to carry 6,000 bales of cotton without interfering with the view for the boiler deck's passengers.

On 30 June 1870, the steamship New Natchez (Capt. Thomas P. Leathers) and the S.S. Robert E. Lee were both bound for St. Louis, MO. They left within 4 minutes of each other, with the Robert E. Lee in the lead. She arrived in St. Louis 6 hours and 33 minutes ahead of the New Natchez, on the 4th of July. The time span was 3 days, 18 hours and 14 minutes, a record time up to that date, and never surpassed since, by steamships.

In 1876 she was dismantled at Howard Shipyard in Jeffersonville, IN, and much of her outfit and equipment were used in building a new and bigger Robert E. Lee. Her only mishap was a collision with the steamer Potomas at New Orleans, but she was quickly raised from the depths and put back into service.



The model: A riverboat, more than any other ship model, has to be built from the inside out and bottom to top, making sure that all the center work is completed before beginning work on the sides. In addition, the modeler must keep a record of where all the remaining connections must go and must plan for the space for them.

Ed Marple made the engines, just to see if he could, yet knowing they would not be visible for viewing. The engines were made of ebony and brass. The Pitman drive shafts lead from the engines to the paddle wheel. Each engine drove one paddle individually, and had to be constructed this way. They have connecting rods into the engines which hook onto the Pitman shafts, and then into the crank shafts on the paddle wheels. All Ed needed to add for the paddle wheels to move, was the steam, however, they will move by hand without the steam.

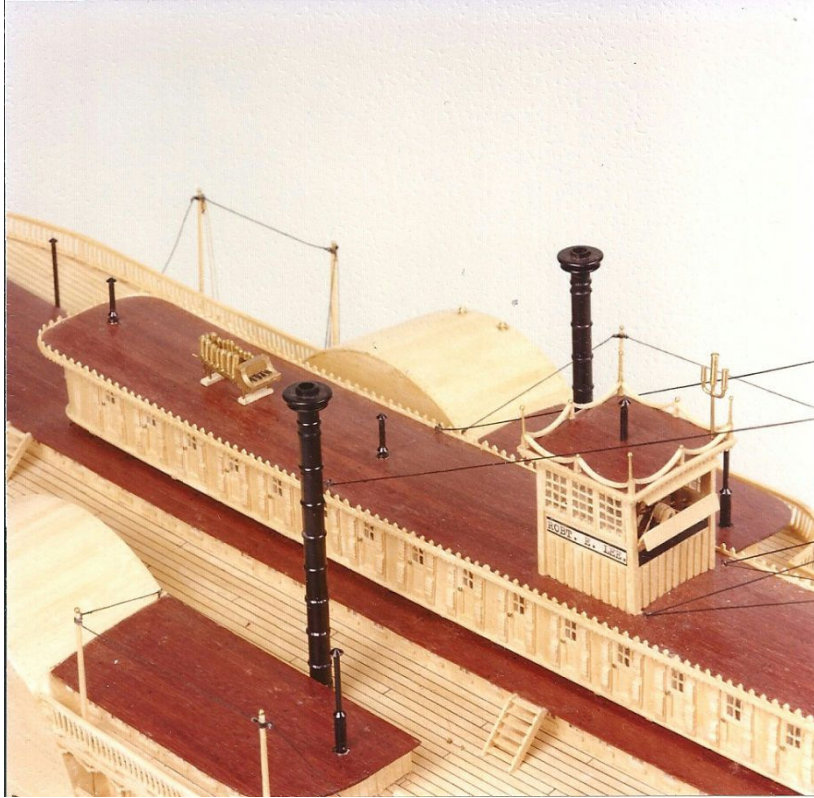
The boilers were made of 8 round ebony rods fastened to the face of the boiler. Below each boiler is a door that can be opened to fire up the steam. Around all of this a shield was built to protect the wooden boat from the heat. Steam pipes of brass tubing, blackened, ran the steam into the two engines. A U-shaped flue runs up to the smoke stacks. There is even space for wood storage with kindling and wood for the engines.

The paddle wheels are complete with 5 paddles, each with a copper band joined to make 10 paddles of 5 paddles on each wheel and will turn either by moving the engine on the inside or by touching the wheel itself to give it movement.

The stabilizing lines on the foredeck have turn buckles on each, which can be tightened and loosened.

The hull of the Robert E. Lee was made of white holly. The stern was tapered to a flat, square and narrow edge to allow a small flat rudder to fit snugly against the stern, just clearing the lowest part of the ship, giving enough clearance for sandbars. It was tightly fit to the stern of the ship with strap hinges made of copper and cut to scale, to prevent driftwood from jamming beneath the rudder and the riverboat. The main deck is planked in teak.

The upper deck is planked with amaryth (also known as 'purple heart' wood) for the color. Here, you can see the calliope, made of different sizes of brass tubing, from the smallest that Ed could find to the largest he could use. Each one is capped with a small brass cap, soldered into place. He used ebony for the black keys, and each key had a wire to send steam to each of the upright brass tubes. To finish off, there is a shutoff valve at the back so the steam could be turned off and on.



(See steam calliope on upper deck, to the left.)



The grand staircase in the front has a mailroom at one side and a storage room at the other side. It is lit by two floodlights, and leads to the grand ballroom. The model has 40 rice grain lights with each one made so that they can be changed if they ever burn out.

Each cabin door has a window in the door and a transom above the door, plus another transom next to the door to light the interior of the cabins. The bell on the skylight roof is in a brass holder and the bell was turned of brass. It will actually swing and has a clapper in it.

There are 3 lifeboats, two set in the main deck on each side, ready to be pushed over the side. These were not enough to hold all the people onboard, but the shore was never far away, and these few were considered to be enough to get the non-swimmers ashore.

8. The Royal Katherine: She was a 2nd rate, 84-gun (or 86, depending upon the source) ship, built in Woolrich, England by Christopher Pett (son of Phineas Pett, who built the Sovereign of the Seas. See his biography in the Harry Nelson Library at the C. I. Maritime Museum). In the 2nd Dutch War of 1664, she lost her masts and sails in a storm off the coast of England, in sight of Dutch Men-O'-War [who themselves were having their own difficulties), yet she survived. Later, in a raid on Medway, she was sunk to avoid being lost to the Dutch but when the tides of water and battle turned, she was raised and returned to service. She was named after the consort of Charles, the 2nd (Catherine of Braganza, Portugal.)



The model: The carvings on the sides, of drums, shields and arms, were first inlaid with redwood and boxwood, then carved and cut out, then overlaid onto the English hare [wood]. Also notice the lion's head on the cat heads. Also see the carved staircases from the 2nd deck down to the lower decks.



The lower hull is made from white holly and the upper hull from English hare. All of Ed Marple's (made from) scratch ships are doweled with handmade dowels (tree nails) just as the original full-scale ships were made, and all are done with the same wood as the planking.

Look for the many carvings along the outside rails. On this model you can see the gun carriages and how they are assembled. Along with the coiled lines, that are placed in the manner used by the sailors.

The figurehead of the man on horseback (next page), has wooden stirrups and reins.



On the stern, the 3 back lanterns are made of Plexiglass, and the metal encasing the lanterns is



secured at the top by screwing the top on each lantern. Ed used a jeweler's tap and die set, and these small crowns actually hold all of the metalwork and the lantern, in place.

The entries are all carved and the white feathers at the top of the quarter galleries are of a special blue-white holly that he had saved for many years. (The quarter galleries are the bulbous-looking windows at each side of the stern.)

9. Sovereign of the Seas: was a 1st rate, 100-gun ship, built in Woolrich, England in 1637 under Charles the 1st. The ship initially cost 6,800 pounds when commissioned, but Charles decided it must be the finest ship afloat, and after the carvers and gilders added their handiwork, to cost multiplied by a factor of 10, resulting in an end cost of 65,586 pounds. Charles the 1st had the infamous distinction of becoming the only English King who was beheaded. His extravagant spending broke the British treasury. His son, Bonny Prince Charlie, was sent north to Scotland for his safety, as the Reformation swept England, under the guidance of Oliver Cromwell.

The Sovereign of the Seas was the largest and most ornate ship to travel the seas for a good many years. She was built by Phineas Pett (his biography is available in our library), and the ship is considered by many, to have been 150 years ahead of her time. The piece of timber that composed her keelson was so heavy that it required 28 oxen and 4 horses to pull it overland. Only black paint and real gold could be seen above the water, and she was nicknamed the 'Golden Devil' by the Dutch. She burned to the waterline on 27 Jan. 1696, set afire by a forgotten candle in one of the cabins, a hanging offense for any sailor or officer.



The model: Below the waterline the wood is white holly, and above, the wood is Swiss pear up to the main deck, with the double wales in ebony. The black you see is not paint, it is ebony wood. Each carving on her is handmade of boxwood, then gilded in gold-leaf, and then put in place upon her. The cannons, while generally black, were made of brass on the original ship, and later gilded, thus the model's cannon are also gilded.



The figurehead carved from boxwood, is of King Edgar the Peaceful, on horseback, trampling the Seven Kings who formerly ruled England. King Edgar is dressed in clothing of the period, complete with riding coat with oversized sleeves. On his head is a brimmed hat of the kind features so prominently in books featuring costumes of the 10th and 11th centuries. He sits astride his rearing horse with his enemies laying below him either dead or in the throes of death. 'Peaceful' would hardly describe the figurehead!

Notice the offset forward bowsprit that hung low over the water. At that time, the ship architects felt that the forward mast had to be very near the aft ship, and these two would intersect each other, so that the bowsprit was offset, to let it bypass under deck, the forward mast.



Each cathead is held up by a centaur (upper portion of the stern), the half-man, half-horse figure of Greek mythology. The end of each cathead is decorated with a carved lion's head. A cherub on a lion's back sits directly above the stem post. The sides' frieze are decorated with the coins of the Roman empire, signs of the zodiac, and with the drums, shields and cannon, carved in boxwood. Notice the oversize lantern. 12 men could stand in it.

The beak bulkhead with the gun ports (lower portion of the stern) are each embellished with a lion's head. Notice the starboard cathead with its supporting figure.

10.HMS Prince: Neither Ed Marple nor his wife Dorothy left any notes concerning the history of the original ship nor concerning the construction of the model.



Source notes paraphrased from a letter written by Dorothy Marple which she wrote to Gary Farr 20 Feb. 1991, two years prior to Ed's death.



In memoriam: Ed Marple at his workbench, producing his masterpieces.