July 2020 Volume 42 Issue 7

The Binnacle

Victoria Model Shipbuilding Society
Victoria, B.C.

Ken Lockley on Fireboats.

Edward White on the Sinking of the Essex and on Whaleboats.

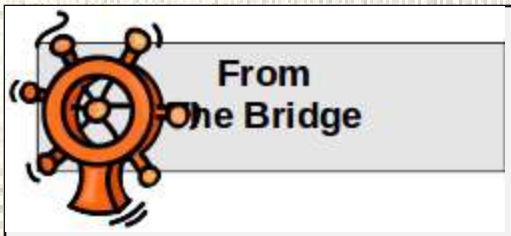
John Callin's Models

Plus

A freighter needs a home.

Two members who have stuff you need.

http://www.vmss.ca



Another month has passed and it has not been what I envisioned. We have passed 100 days of covid restrictions and things are supposed to be more relaxed.

The parking at Harrison Pond is a larger problem than we foresaw. The pressure is due to the loss of parking near the breakwater, increased residential parking restrictions, apartment tenants who use that space so they don't have to pay for parking, and now the homeless campers using the spaces. Mike Claxton has been talking to the city about getting the parking restriction and loading signs back. Unfortunately, there will not be enough parking in the neighbourhood for us to have an evening meeting at Harrison this summer.

We will not be holding a meeting at St Peter's hall this Thursday July 9. The church isn't open due to Covid-19. It may reopen on July 12, so we may be able to hold a meeting next week. However the church hasn't confirmed this, and our executive must decide if we want to have an indoor meeting in light of covid and the risks. I shall let you know.

I hope you are all getting some boat modeling in to take advantage of the free time we apparently have due to the covid restrictions.

Hope to see you soon.

Ron

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All above area code (250)

ON THE RADAR

Upcoming Events

Nothing planned as yet, but we are getting closer to the end of this lockdown. Look forward to giving you better news soon.

Meetings: Second Thursday 7:30-9:30
St. Peter's Anglican Church, Lakehill
3939 St. Peter's Road
Upcoming meeting: February 13th.

Sundays 9-11
Harrison Model Yacht Pond (HMYP)
Dallas Road at Government Street

LANGFORD LAKE
Wednesdays 9:30
Langford Lake, Leigh Rd. at Trillium

Looking for a Home

A fine old model of a freighter that needs a little TLC.

I have a model ship that is coming up to 80 years old. It was a present to my grandmother from the ships captain. Given its advanced age it is starting to fall apart and I'm wondering if there is a good home I could donate it to so that it sees another 80 years?

Douglas Westlake. email dougw393@gmail.com.

Ron Burchett is now producing prop shafts with oilers and bearings. Different lengths/sizes available. Contact him re pricing

Mike Creasy is also expanding the range of gadgets he is ready to sell to club members. For the latest, contact him or see him at the pond on a Sunday morning.

NEXT BUILD #34

by Ken Lockley July 2020

The last couple of Sunday Mornings at Harrison we have had two fireboats on the water. I'm not sure but I feel the operators were retired Fireman. We Canadians have a strong respect with all aspects of the Fire Fighting Service, whether domestic, forestry or marine.

During my 75 years of living in Victoria, I have wondered, would we as a city have the potential ability to fight or contain a marine blast.

The vessel below is "Firebrand", stationed at HMCS Dockyard and possibly this vessel could be called into action if needed. I suspect there must be some cooperation between this vessel, Dockyard Firefighters and the Victoria City Fire Department. I actually have no idea.

"Firebrand" was designed by Robert Allen Navel Designers, for the Dept of National Defense. Originally two were built in the 1970's, one for Halifax Navel Yard and one for Esquimalt. Several years ago the DND sold off the Halifax based boat, probably because the city had it's own marine fire fighting capability's.

The new Tugs under construction for Esquimalt Navel Base advertise fire fighting abilities and we might see some changes over the next few years with "Firebrand " being disposed of. She's 40 years plus now, and the Navy has a history of disposing of ships around the 40 year mark.

Because she's tucked away at the base, most of us don't have the opportunity to view and appreciate this vessel.

The picture above isn't a flattering shot of " Firebrand", but shows its a fairly shoal draught vessel, which of course is needed in a fire fighting situation. Below is a shot of "Firebrand" off Royal Roads. I was informed on Saturday, June 27/2020 that the folks along Esquimalt Lagoon had a display like what you see here.

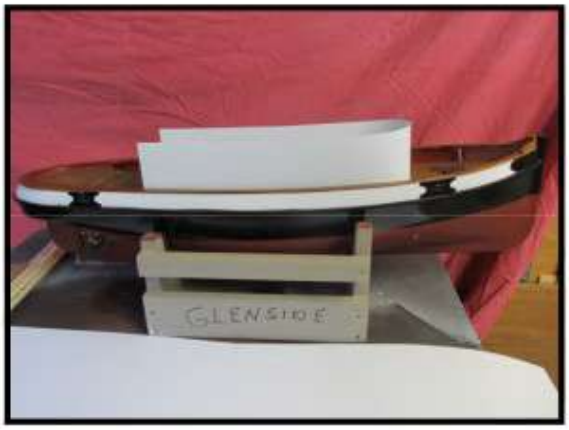
This month in the workshop

Left side Picture;
As you can see, the Pittman Motor is installed with a temporary coupling to the propeller shaft. I need to make the final cut on the brass shaft once initial sea trials are over. Also you will notice my lead ballast bars are in place. This hull requires about 5 lbs. of ballast material. The radio board is not shown but is installed and ready to go.

Middle Picture:
The servo you see here is the Control for the rudder movement.
Bottom left pictures :
This is my first experience using a 4 blade prop., purchased at "Harbour Models".
Bottom right picture:
Heavy duty masking getting ready to spray white on to the bulwarks. I painted the entire hull black to start by brushing on Trem Clad oil based paint.

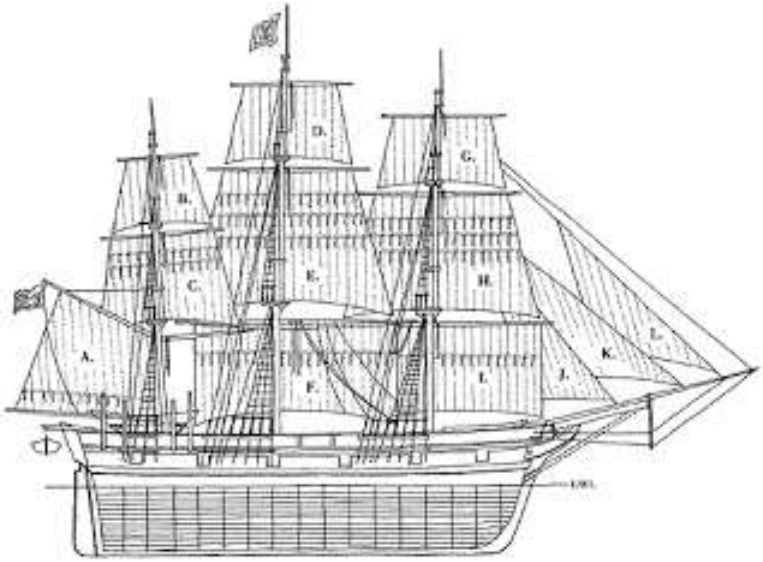
Sea trials: As you can see, she's moving along very well.

Making the House: This is not a hard job but requires several fittings to get the cabin to set correctly on the deck. Next is getting soom curve on the second deck.



Last month we featured the RCN's gate vessels and how much they were used as a training vessel. Below is the Port Dauphine, now in commercial use and based in Seattle. I didn't spend a lot of time trying to get any additional information but she looks business like and I suspect doing a good job for her current owners .

The Sinking of the Essex



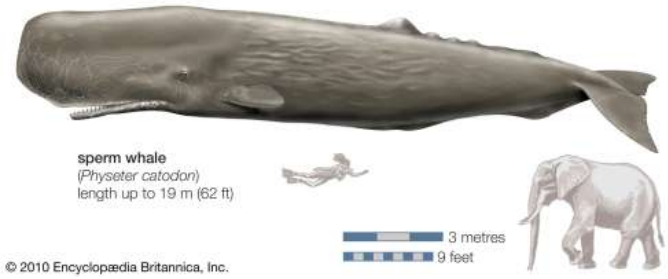
Everybody's heard of Moby Dick, right? Well, Herman Melville based his novel on the true story of the Nantucket whaler Essex. On the 20th. of November 1820, 1,500 nautical miles west of the Galapagos Islands and 40 miles south of the equator, Essex was twice rammed by a huge male sperm whale, and capsized.

Nantucket, an island twenty miles off the coast of Rhode Island State, was the home of the Wampanoag first nation. The first English settlers arrived there in 1659, intent on farming, since the Gulf Stream gives the Island an unusually long growing season.

The Gulf stream also brought, every winter, Right Whales, feeding on abundant krill, who stayed till early spring. The Wampanoag had long harvested those whales that washed ashore on the island.

By 1690, the farm land on the island was beginning to show signs of over-exploitation, and, on Eastern Long Island and on Cape Cod, other English settlers had started hunting the whales in the area for the oil rendered from their blubber. A Cape Codder, called Ichabod Paddock, was brought to the Island to teach them how to hunt whales. By 1700, the English settlers had instituted a system of debt servitude, providing them with cheap labour from the Wampanoag, and the whale hunt was typically conducted by boats between twenty and thirty feet long, crewed by five Wampanoag oarsmen with one English Nantucketer as steersman. When they killed a whale they would tow it to the beaches, there to cut it up and boil the blubber into oil.

Then, in 1712, a Captain Hussey, hunting right whales in his small boat, was caught in a northerly gale and blown many miles out to sea. There he spotted a group of different whales, and managed to kill one of them. It was a sperm whale, known from bodies that had washed ashore, and its oil, especially the spermaceti oil in a huge chamber in its head, burned brighter and more cleanly than right whale oil, and therefore commanded a premium price. Nantucketers took to the new hunt with enthusiasm, investing profits from the right whale fishery into larger whale ships that could venture further and exploit the sperm whales.



By 1760, the right whale population was almost gone, but by then Nantucket had a fleet of

whale ships that could process sperm whale carcases at sea and roam the far oceans in search of more whales to kill. When the American Revolution came in 1765, they were already roaming the entire Atlantic, from the Arctic to the Falkland Islands. The British navy harried the North American coast during the revolutionary war and the subsequent war of 1812, but this encouraged the Nantucket whalers to voyage further and stay away longer, and the Nantucket whaling industry continued to grow when others were destroyed.

In 1819, there was little or no farming left on Nantucket, the soil was exhausted. And there were very few Wampanoag, a plague in 1763 wiped out almost all of them. Quakerism had arrived on the island in 1702, and likely its tradition of hard work and thrift helped greatly in building the whaling industry and seeing it through the disturbances of war. So Nantucket was now about whaling, with a population of about 7,000 people. Thriving, although there was no other significant industry. There were seventy whale ships based on the island, and Essex, fifteen years old, 87 feet long and 238 tons, was one of the older and smaller of them.


model without sails

The actual killing of whales was still done from small boats, Essex was designed to carry five of them. Typically, a whaling voyage would last close to two years, ending when the full load of supplies that the ship started out with was replaced by full barrels of oil. The ship would then stay three months or so at Nantucket, re-fitting and re-supplying before the crew returned and started out again. There were twenty-one men in total, and when whales were sighted three boats would be launched, each carrying six men, a steersman, a harpooner, and four oarsmen. The other three crew stayed aboard the ship to keep it safe and to help returning boats. The crew were'nt paid wages of any kind, they signed on for a share of the revenue plus subsistence. And the whalers were notorious for keeping down the cost of that subsistence. The share was determined by the seniority of the man in terms of the whaling trade, and the Nantucketers among them could look forward to moving up the scale to become an officer when a couple of good voyages could set them up for life. Off-islanders weren't ever likely to get far.

Essex started her last voyage on the 12th. of August 1819. And three days later she was knocked down in a squall and lost two of her boats and damaged another. Not a good start. After the knockdown the crew morale sank, there was a feeling that the ship had lost her luck. If Captain Pollard, who had been the mate on the last voyage, decided to return to Nantucket, it was only too likely that several crew would desert. He made up his mind to press on and try to get more boats in the course of the voyage. He called in at the Azores to provision with fruits and vegetables, much cheaper than he could have got in Nantucket, and then cruised south to the Cape Verde Islands, where he bought another whaleboat from the wreck of the whaler Archimedes, of New York. It wasn't in the best of condition.

Their first whale sighting of the voyage was another setback. Three months after leaving home, in thirty degrees south, they finally spotted their first whale and launched boats to go after it. But as one boat got a harpoon into the whale, a second whale came to the surface underneath it,

flipped the boat with its tail flukes and stove in one side. They abandoned the hunt to rescue the crew and the wreck of the boat. They were to repair that boat but it had been weakened and the crew were again reminded that they needed spare boats in good condition, they were all too vulnerable.

They did catch and kill a single whale a couple of weeks later, but as they went on south towards the Falklands it seemed a very poor return for four months at sea. The crew tried to confront the Captain over the poor rations they were receiving, but the Captain rose to the occasion and showed some real strength and rage for the first time. The crew gained nothing in the way of food, but they did start to have more respect for the Captain, and there was no more confrontation. Just as well, because the passage around the Horn loomed ahead.

And it was a bad one. It was more than a month before they were safely up the western coast and spotted the island of St Mary's, a regular rendezvous for whalers in the Pacific. The word wasn't good, the last season had been a thin one off South Americas and there was talk of needing to find a new whaling ground. Essex started north, and spent a couple of fruitless months off the Chilean coast, but then in March and April she found whales off the Peruvian coast and started to fill her hold with around 450 barrels of oil from some eleven whales. It was only around a third of her capacity, but it was something.

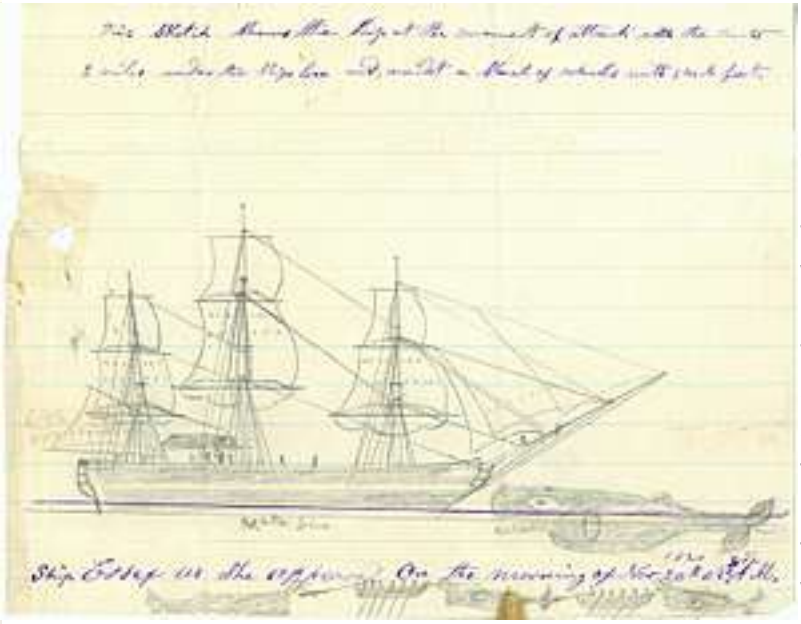
At the end of April Essex met with the Aurora, a new ship under the command of Daniel Russel. Russel had been Essex's captain on her previous four voyages, Pollard his mate. Russel told Pollard the latest news in the industry, of the discovery by the Nantucket whaler Globe of a new concentration of sperm whales more than a thousand miles off the coast, further than any Nantucket ship had ever been. Globe had found this treasure trove in November of 1818, and Pollard determined to try to rescue his voyage by cruising north up the coast for the summer, reprovisioning at Atacames and then calling at the Galapagos to capture giant tortoises for live meat, and then westward to these new grounds by November.

One member of the crew, the African-American Henry de Witt, deserted in Atacames. Essex was forced to sail on on her longest ever trip short one of her three shipkeepers and also one whaleboat. And that is how she came to her rendezvous with a huge, angry, bull sperm whale on November 20th.

It was about 8 in the morning when they spotted the pod. A clear day with only a slight breeze. They launched the three whaleboats, commanded by Pollard, the mate Chase, and Joy. It Chase's boat, he had swapped places with his harpooner, and Chase himself was in the bow when the boat was the first to reach the whales. Chase called the boat to close right in and harpooned the whale successfully, but so close was he that as the whale started to thrash and pull away, it's tail flukes holed the boat. Chase cut the harpoon line, had the crew stuff their jackets and shirts into the hole and bore away back to the Essex to haul the whaleboat in and repair it. By the time he got it aboard, both the other boats had harpooned whales and were being dragged by them away downwind.

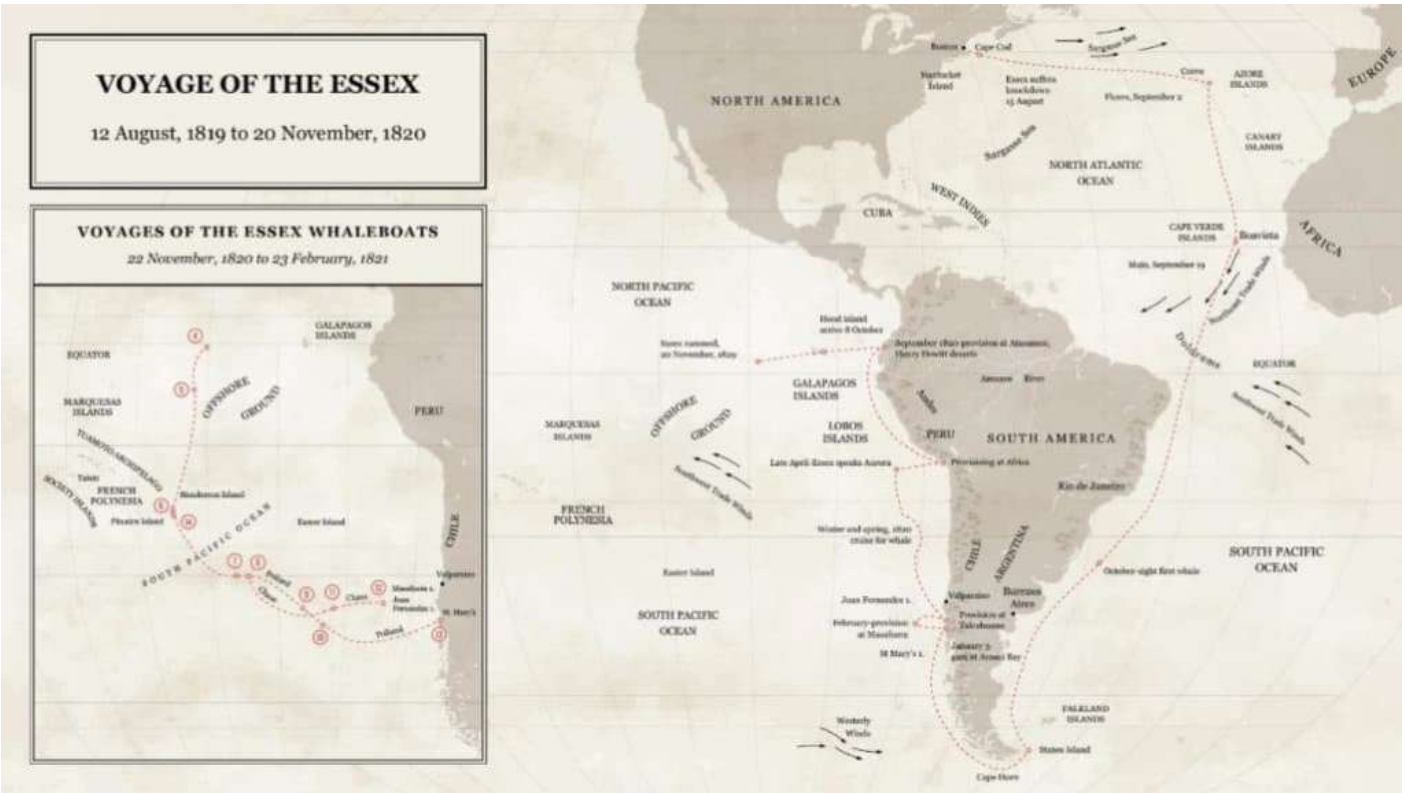
I should explain that the first harpoon almost never killed the whale. The idea was to fasten the boat to the whale and let out enough line for the whale to be forced to drag the whaleboat until it was

exhausted. Then the crew would pull themselves up to the whale with the harpoon line and stab into its vital organs with the killing lance, a petal shaped, not barbed, blade on a 12 foot shaft that could be used again and again until it "found the whale's life". If only one boat had fastened onto a whale, the other two would try to catch up and also harpoon the animal, the sooner to tire it. It was a cruel business.



On the Essex, as Chase struggled to repair his whaleboat with a canvas patch and get back into the hunt, he saw a huge bull acting strangely. It was only about 100 yards from the ship, not panicked but just watching. Then it sounded and came back up only 35 or so yards away and swimming fast towards the port bow of the ship. It struck hard, shaking the whole ship and sending men and tortoises skittering across the deck. The whale went under the ship, and resurfaced, apparently stunned, close by the starboard stern quarter. Chase debated whether to harpoon it, but decided it was too close and might damage the rudder as it thrashed away.

The whale recovered in less than a minute and swam away across the bow to surface several hundred yards away. Chase ordered the men to man the pumps, afraid that the collision might have



caused a leak. One of the men yelled a warning, and Chase turned to see the bull, on the surface, charging the ship again at full speed. It struck again on the port bow, much more violently, and stove the bow in, pushing the entire ship backwards so water surged up over the stern. It pulled itself from the hole and swam away, leaving the Essex taking water through the bow, and obviously going to sink. As it filled, the crew launched the spare whaleboat from the stern, the boat that had been bought from the wreck in the Cape Verdes, and the steward retrieved some of the navigation instruments and charts from the captains cabin.

The Essex listed over as she took on water, and capsized to port just as the crew got clear in the spare whaleboat. But in that wrecked state, she continued to float as Chase's crew watched her and the other two boats, who had seen the capsize and released their whales, rowed back to join them. They were astonished, no whale had ever been know to attack a ship, and they were in a terrible position, on their own in mid-Pacific, twenty men in three small boats, nearly as far from land as is possible on earth's surface.

But they were tenacious, and Pollard decided that if they cut away the masts, the ship might roll partially upright again and give them the chance of rescuing some food and equipment from the upper decks before she sank. Over the next two days they cut away some sails from the Essex and made masts and sails for the whaleboats, added cedar boards scavenged from the deck to give the whaleboats an extra six inches of freeboard, scavenged two casks of ship's biscuit which looked sound enough that they might still be waterproof, and even loaded the boats with as many as they dared of the live tortoises that remained. Then they debated what would be the best course for a chance of survival.

The nearest and easiest land was the Marquesas Islands, about 1200 miles away, but downwind in the south-east trade winds and down the generally western current in the area. But the Nantucket men were not well educated, and about all that they knew of these islands and the others in the South Pacific was the exaggerated rumours of cannibalism and hostility. They chose instead to try to sail south until they could pick up the edges of the westerlies that dominate the world's southern oceans. Then they would sail west to the familiar waters off the coast of South America, where they could hope for rescue by other whalers from home. This would mean a total distance of more than 3,000 miles, but they thought they might make about 60 miles a day, and they thought they had bread and water for 60 days. It seemed possible.

A month later, December 20th., they landed on Henderson Island, an uninhabited island in the Pitcairn group. They found a source of fresh water at low tide, and easy to catch birds as well as shellfish. But Henderson Island, then as now, was mostly barren, and in a week the twenty men had eaten or taken all that they could find. The coast of South America was now three thousand miles away, but they knew of Easter Island, about one third of the distance and close to their route, and

hoped to make another landfall there.

Ironically, they were only 120 miles north-east of Pitcairn Island itself, inhabited by the descendants of the Bounty mutineers. And Pitcairn had been re-discovered by another Nantucketer, Mayhew Folger, in command of a sealer in 1808. He met there the last survivor of the Bounty mutineers, John Adams, and was given the Bounty's compass and the K2 chronometer, the third copy of Harrison's original H4. But apparently, twelve years later, none of the Essex's crew knew of this. Yet they knew enough of the Pitcairn group to mistakenly identify Henderson Island as Ducie Island. It's a mystery.

Anyhow, three of the crew, the non-Nantucketers, decided to stay on Henderson Island and take their chances. This improved the prospects for the rest so they agreed and the remaining crew set out again for Easter Island on December 27th.

I am going to skip most of the account of the fate of the whaleboat crews. It is a dreadful story of descent into starvation and cannibalism. They missed Easter Island, one boat was lost entirely and the other two separated. Chase's boat, with Chase, Lawrence, and Nickerson, (the cabin boy) aboard was found by the British vessel Indian on February 18th. Pollard's, with only Pollard and Ramsden, by the Nantucket whaler Dauphin on February 23rd. The boat crews were re-united in Valparaiso, and there convalesced and told their story. They told of the three left behind on "Dulcie Island" and the authorities asked a British convict ship bound for Tahiti and Australia, the Surry, to look for them. The Surry rescued them on April 5th 1921.

References.

This article started from the book, "In the Heart of the Sea" by Nathaniel Philbrick" which was lent to me by an old friend. The book is excellently researched and compellingly written. I don't hesitate to recommend it's first half, but the second half, mainly an account of the ordeal in the whaleboats, is harrowing. The author brings in many other stories of cannibalism and ordeals at sea, much more than I ever wanted to know. If you, like me, much prefer happy endings, stop at page 100. Ron Howard made a movie from the book in 2015.

There's a huge coverage of this story on the internet. Lot's on Wikipedia, and following up on each of the names in the story with a search engine takes you to a host of other great stories. The connections, like that to the Bounty, spread endlessly and are all fascinating.

The Whaleboat.

I started to write the story of the Essex in the expectation that it could lead me quickly to a discussion of whaleboats and their suitability for models. But stories go where they want to, and I never got there. So I'll have to start again.

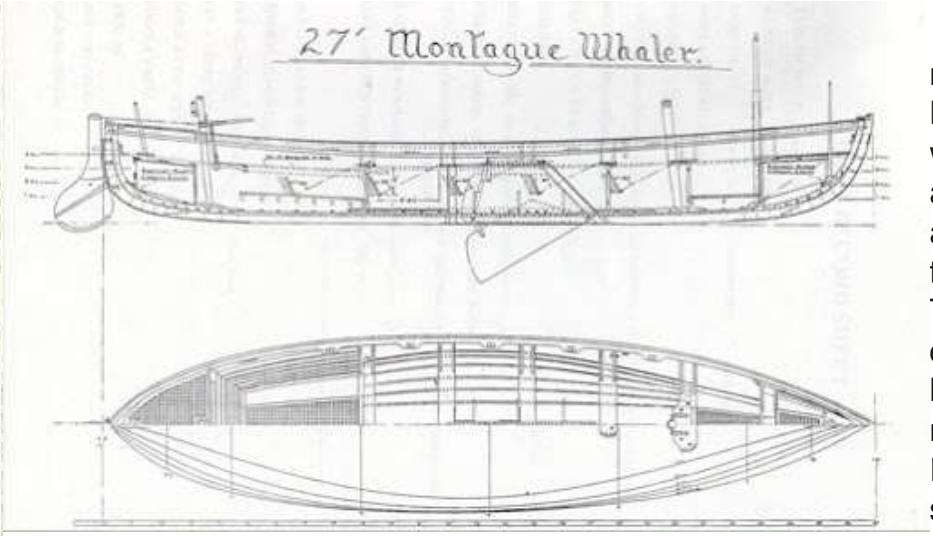
The whaleboat evolved under a number of constraints. The first was that it had to be fast under oars. A whale, idling along, will make two to four knots, regardless of wind, and a whaleboat, to catch up to them, must be capable of five or six. Using the formula 1.34 times the waterline length in feet, that means a boat at least 21 feet in length. If the power is limited to six men, which would be 1500 watts, or two horsepower, then it's going to need fine lines and as little weight as possible. But it will need to stand up to rough handling, beaching, hauling aboard ship, and towing a whale back to the mother ship or the beach. The boat should be quiet in the water, to avoid alarming the whales, and it's construction should allow for it to be dried out for long periods aboard ship, but still be watertight when launched. The ability to sail would be an asset, but during the hunt the extra clutter and weight of a sailing rig would be a major problem.

The result is a double-ended boat with a length to beam ratio of 5:1 or more, between 25 and

30 feet long, and weighing 1,000 lbs or less. It's lines are reflective of the the small clinker craft from which derived the longships, but the most refined of them would use clinker construction only well underwater, where it caused no extra noise. Above that they used flush, or carvel planking, but with a batten covering the inside joint between planks, so the joint would stay waterproof as the planks swelled or shrank with the change in moisture. They were built over moulds, and the fine lines and low central freeboard meant that the shaping of the planks was gentle. The frames were lightweight and set close, so they could be bent into place between the moulds and still provide stiffness. Fastenings were mostly bronze clench nails, which made for quick repairs.

Just about as attractive boat as you can imagine. And a wonderful subject for a static model, with all the gear to detail. As a working model on the water, there are challenges. A credible mechanism for the oars is difficult, and there's very few places to hide batteries and a motor. But for a sailing model, a false fin keel would not be difficult, and the sailing rig would be low in aspect ratio, so the result could be both stiff and fast. Some whaleboats had rudders, but many just carried an extra long steering oar, which may have added to their tracking ability at the very high speeds they would experience as a freshly harpooned whale pulled them.

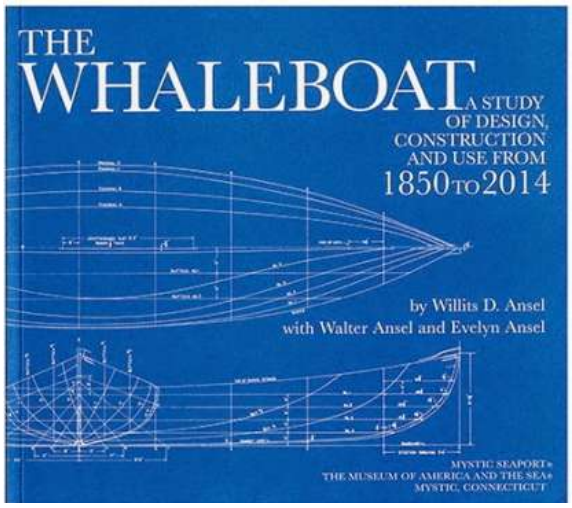
There's some diversity to look at. The Basque people, from the borders of France and Spain, were early whale hunters, and took whaling out into the Atlantic to the Azores and north west to the Newfoundland banks. Theirs was mostly conducted from beaches, so sail was a higher priority with longer distances to cover. But the boats developed along very similar lines, to the point that there is now a biennial contest between the Azores whaleboats and the New Bedford type held alternately in both places, with boats competing for both sail and oar prizes.

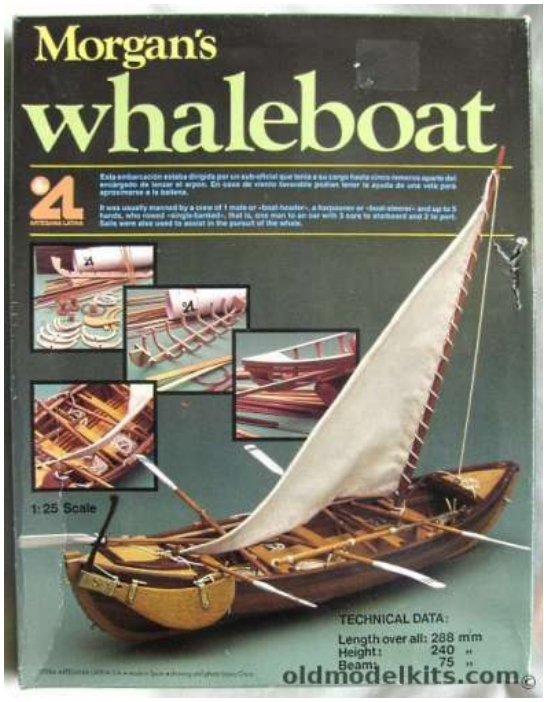


And the double-ended light rowboat became a favourite of the British Navy, where it is know as a whaler. It was standardized in 1890 as the Montagu whaler and served as ships boats with the Navy through to the late 1960's. Throughout that time it was used for competitions between ships in harbour, "pulling races" and no matter what the other merits, no Royal Navy ships could claim top status and bragging rights unless it had won the latest series of pulling races.

And of course there were Montagu whalers in the Canadian Navy, kept in the end as cadet training boats, and still in use as late as 2016. (Mark Norman's step-down)

There's lots of documentation for the modeller. Mystic Seaport sells the book "The Whaleboat- 1860 -2014" for $25 US, and there's lots of plans and line drawings all over the internet. There's also several kits available.





From John Callin

I thought you may be interested in my latest project.

First, my attempt at scale.

In 2006 I decided to get involved in building RC model boats. In the summer of that year I made contact with a modeler who passed a set of 1/48 scale GA drawings of a Prestonian frigate. My very large, very heavy model was an eleven month project which could be described as a steep learning curve in how NOT to build without a mentor. Once completed, my SCALE model of HMCS Beacon Hill was displayed at an outdoor event for three hours in the hot sun. After many hours I realized that the ABS deck was getting warm and decided to leave the club event. Once home I was shocked to see the deck buckled in many places. It proved to be a model with no repair possible. It was scrapped a week later after only one sailing (photo at Long lake) . The primary lesson learned was not so much choosing the correct choice of materials, it was my dislike building replicas (scale) I was not getting any satisfaction from building a model which was expected to be a replica. My creative ambitions would lead me to designing and building my own scratch built models. I have never returned to scale.

hmcs hill.jpg

My latest project

I purchased a 52in GRP Hull many years ago and it is currently a work in progress. In a matter of weeks this model will have a sound system installed which will give me the ability to purchase or download various sound effects, upload them to a MP3 player. Unlike a commercial

module which provides a diesel sound or a horn, my MP3 player has the ability to playback a much wider selection of sound effects, some of which I can create myself.

The model is fitted with a single 755/40 motor driving a 3 bladed brass prop. The battery is a

12V 5.4 ah SLA battery which supports the power for propulsion but also the 1.5 amps required to power the 20watt amplifier module. Running time is expected to be no less than 40 minutes.

The sound effects are held in a library on my PC, a total of four different sequences are available, most of a 20 minute duration. When I launch the model I turn the main power on as well as the sound system power switch. All my sound sequences start with a 60 second spacer of no sound which enables me to get the model to the normal sailing area on the lake. The amp is a very small component about 2.5in square and 1.5 in high. The speaker is a 12V auto speaker rated at 4ohms.

sound super layout.JPG

Before anyone sends me a nasty about a Coast guard cutter fitted with anti-ship missile launchers I would ask them to research the Hamilton class US Coast guard cutters a few years prior to the collapse of the Soviet Union. They were fitted with harpoons forward of the bridge for potential littoral combat. The naval threat was considered unlikely after 1991 and they were removed.

I would enjoy a chat over coffee sometime in the future. I know your club has many talented modelers and my sound system is not

to everyones taste but hopefully you found it an interesting diversion to our hobby.

Once the model is on the lake I will send you a few photos.

Cheers and best wishes

John

The Victoria Model Shipbuilding Society is a non-profit club, open to all, established in 1978 under the Societies Act of B.C.