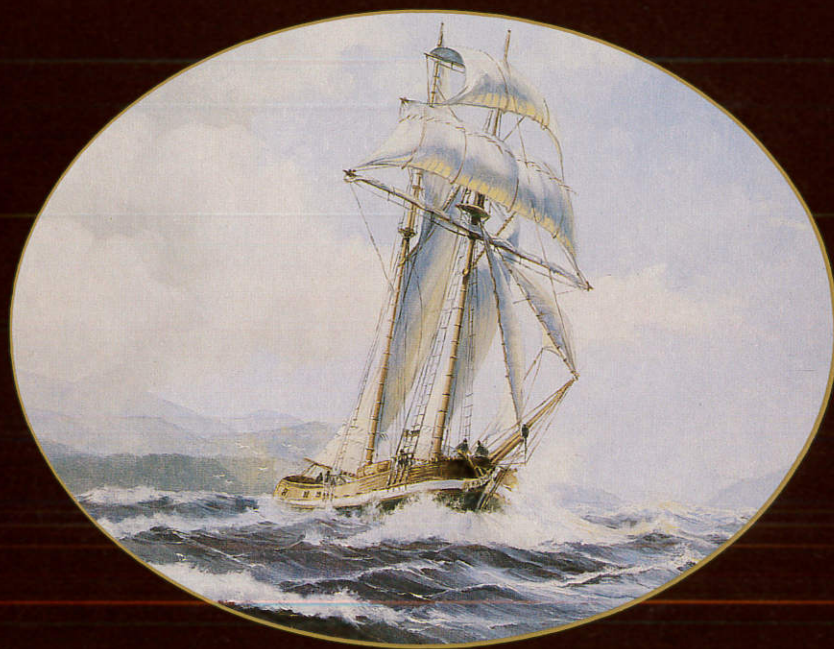


THE PACIFIC SWIFT



BUILDING AND SAILING A TRADITIONAL TALLSHIP
WITH THE SAIL AND LIFE TRAINING SOCIETY



The Sail and Life Training Society's logo shows the silhouette of a schooner sailing "wing and wing" with mainsail and foresail balancing each other. Old schoonermen called this "readin' both pages", a harmony of forces which symbolizes the necessity of developing both the spiritual and physical dimensions of one's life.

"SALTS vessels are the very same kind of craft which have played such an important role in the growth of Canada since colonial days. To help build and handle such ships under nearly the same terms as our shipwrights and seamen of the past, will be an eye-opening experience for those accustomed only to modern transportation."

— Dr. Wallace Eggert, Chairman,
SALTS Board of Directors

THE PACIFIC SWIFT

BUILDING AND SAILING A TRADITIONAL TALLSHIP
WITH THE SAIL AND LIFE TRAINING SOCIETY

Dedicated to the future mariners of the Pacific Swift . . .

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foreword

THE building of the *Pacific Swift* is the culmination of years of work and it brings with it a number of important benefits: it is the replication of an important part of Canada's maritime heritage reaching back 200 years; it provides an educational experience for literally millions of people visiting EXPO 86; but most important of all is that the *Swift* will furnish opportunities for young men and women to experience the challenge and adventure inherent in sailing offshore on a square-rigged sail training vessel. This experience will provide for a broader understanding of our world and its people and lead to growth, maturity and character development.

Many have been involved in this project but I must single out the driving force behind it, Martyn Clark, the Executive Director of the SALT Society. He is a mariner of broad experience who has brought common sense, clarity of purpose and sound knowledge of the sea and the ships that sail on it. He deserves to be proud of this lovely vessel.

I wish God speed to *Pacific Swift* and to those who sail in her. May she be a happy ship blessed with fair winds and precise landfalls.



Rear Admiral Michael A. Martin
Chairman, Canadian Sail Training Association

THE BOAT BUILDERS

*All winter long they work as one,
In this small, sun filled place,
And eagerness is in their hands
And love upon their face.
For in their souls they hear the surf,
And feel the singing spray,
And visions come of white capped waves,
That stretch dim miles away!*

*The boat they build seems empty quite
And quite as a boat should be —
But, oh, she holds the ocean's lure
The magic of the sea . . .
These keen young folk, who toil for love,
Have in their soul a gleam . . .
Of romance, while fingers shape
The semblance of a dream!*

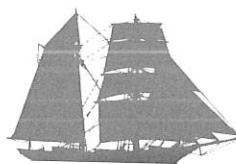
— after Margaret E. Sangster



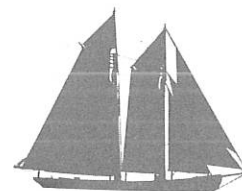
Brig
Original *Swift* of 1778



Square Topsail Schooner
Pacific Swift



Brigantine
Spirit of Chemainus



Grand Banks Fishing Schooner
Robertson II

LOOKING BACK

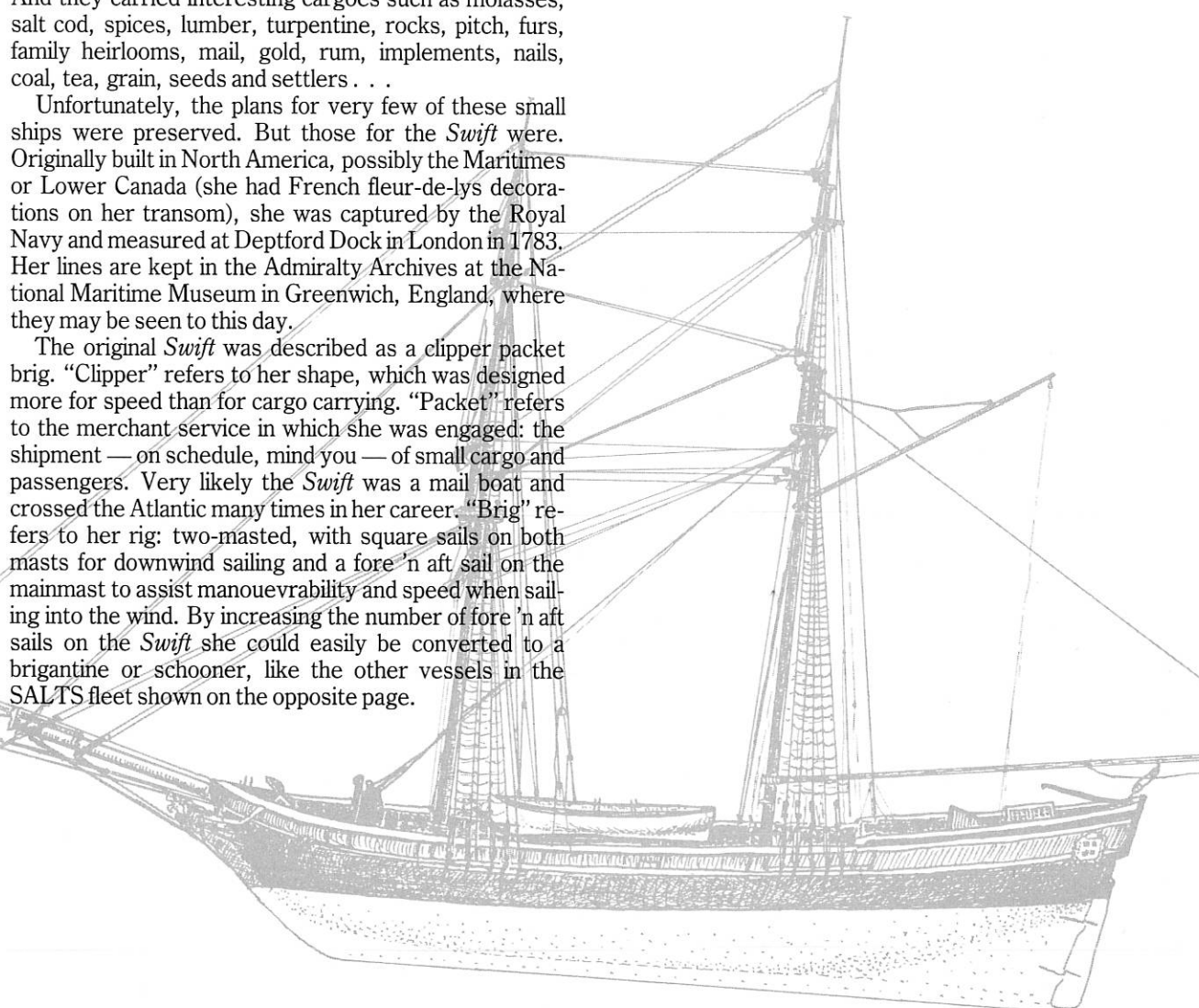
TWO hundred years ago, nicely sized, sweetly modeled, and cunningly crafted sailing ships were at the height of their development. Vessels — of which the *Swift* is an outstanding example — were being built of fragrant wooden timbers, hand hewn and sawn, by folk of great skill and ingenuity in most every little tickle, cove and creek along the eastern seaboard of North America and on the Great Lakes.

It was good work. It was not prohibitively expensive. It was a tradition reaching back thousands of years.

And these vessels — fashioned of wood, rope and canvas — sailed all over the seven seas. The fleets were vast beyond reckoning — many times more than today. And they carried interesting cargoes such as molasses, salt cod, spices, lumber, turpentine, rocks, pitch, furs, family heirlooms, mail, gold, rum, implements, nails, coal, tea, grain, seeds and settlers . . .

Unfortunately, the plans for very few of these small ships were preserved. But those for the *Swift* were. Originally built in North America, possibly the Maritimes or Lower Canada (she had French fleur-de-lys decorations on her transom), she was captured by the Royal Navy and measured at Deptford Dock in London in 1783. Her lines are kept in the Admiralty Archives at the National Maritime Museum in Greenwich, England, where they may be seen to this day.

The original *Swift* was described as a clipper packet brig. “Clipper” refers to her shape, which was designed more for speed than for cargo carrying. “Packet” refers to the merchant service in which she was engaged: the shipment — on schedule, mind you — of small cargo and passengers. Very likely the *Swift* was a mail boat and crossed the Atlantic many times in her career. “Brig” refers to her rig: two-masted, with square sails on both masts for downwind sailing and a fore’n aft sail on the mainmast to assist manoeuvrability and speed when sailing into the wind. By increasing the number of fore’n aft sails on the *Swift* she could easily be converted to a brigantine or schooner, like the other vessels in the SALTS fleet shown on the opposite page.



Brig Swift, built in North America in 1778. Her light displacement and rather ornate finish suggest she may have been intended for a mail packet (from H. Chapelle, The Search for Speed Under Sail).

first on our coast

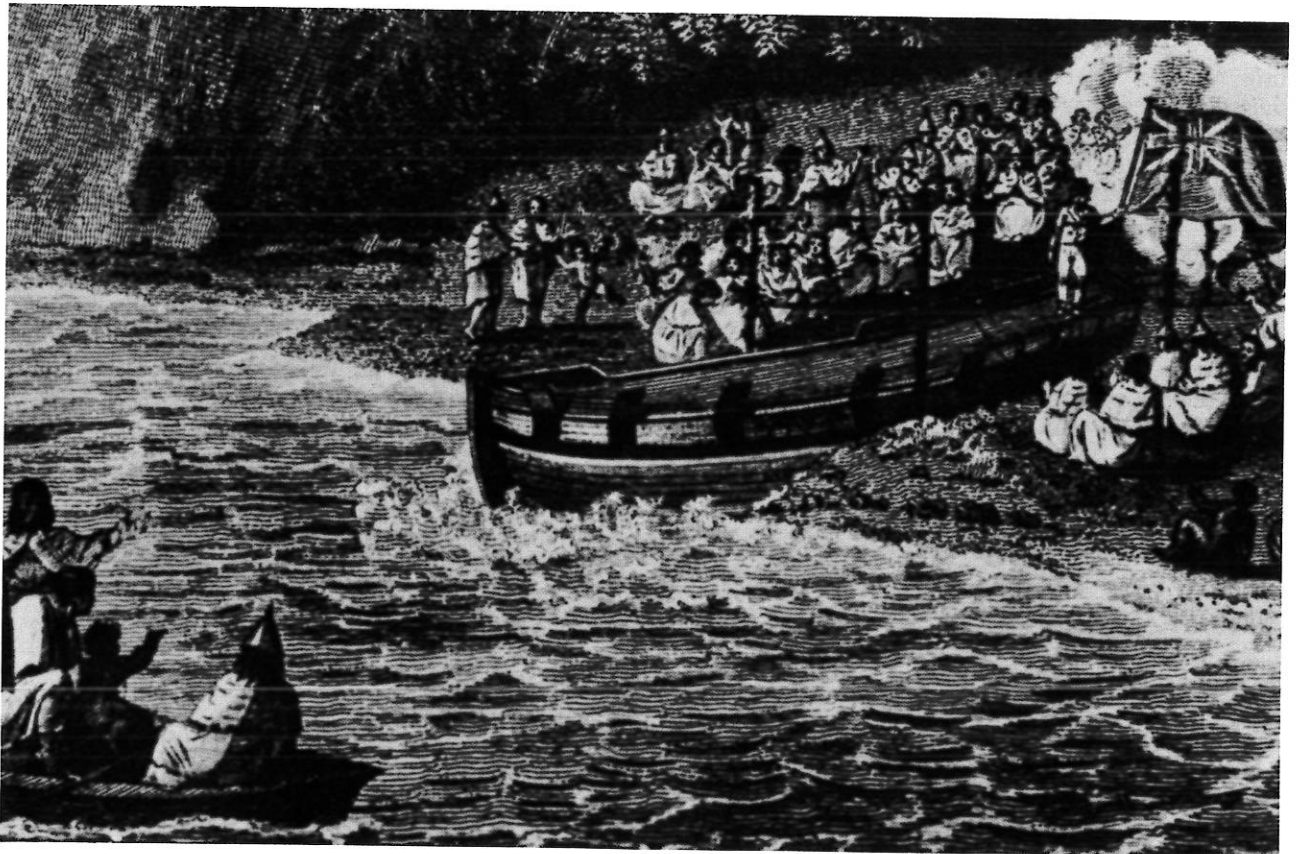
VESSELS of the *Swift*'s type and time were variously rigged as schooners, sloops, brigs, or even ships (with square sails on three masts). These were the first sailing craft to "discover" the northwest coast of North America. They came for two main purposes: to search for the Northwest Passage, and to trade for sea otter pelts which were sold in China.

It would even be safe to say that the first two sailing vessels built in what is now British Columbia were very similar to the *Swift*. The *North West America*, a 60 ton schooner, was the first to be built here and was launched

on the 20th of September, 1788, almost 200 years prior to the launching of our own *Pacific Swift*. She was built for British interests by 90 Chinese tradesmen in just seven months from the felling of the first timber at Friendly Cove in Nootka Sound on the west coast of Vancouver Island.

The second vessel, the *Adventure*, was launched a few years later at Meares Island, Clayoquot Sound by American fur traders, and she was remarkably like the *Swift*. The framework of the *Adventure* was shipped out in disassembled form from Boston, much as the frame of this new *Swift* was prefabricated on Galiano Island and shipped to Vancouver for finishing at EXPO 86.

"... the building of the Pacific Swift is a deliberate step reaching back 200 years to restore a symbol of Canadian maritime excellence. It was vessels like the Swift which carried Loyalists to the Maritimes and across the Great Lakes to settle Upper Canada. These tiny vessels also crossed oceans and rounded the Horn to pursue exploration and fur trading on this coast."



First sailing ship launched on the west coast, the North West America, almost 200 years ago.

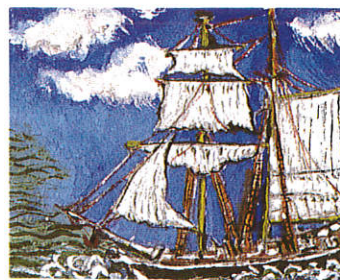
OUR *Swift* will be rigged as a square topsail schooner. This describes her as having two masts, with the foremast shorter than the mainmast. She will have fore'n aft gaff sails on both masts, but in addition she will have square sails (course and topsails) on the foremast for voyaging purposes. We know that this schooner rig works on this hull (originally a brig) because a slightly smaller version of the *Swift* was built in 1938 and rigged as a schooner. Based on reconstruction drawings by Howard Chapelle, eminent marine historian, the *Swift of Ipswich* has voyaged successfully for many years.

Why has the SALT Society decided to build this particular vessel? For several reasons. She dates from the period when sailing vessels of her type were first penetrating the rock-bound coves and inlets of British Columbia. At 78-feet on deck, she is a good size for a sail training programme — accommodating at least 30 trainees

a schooner for today

plus officers and watch leaders. As a light-displacement merchant schooner, she has reasonable capacity combined with a fair turn of speed and windward sailing ability. The *Swift* was actually a forerunner of the renowned Baltimore Clipper type.

Also, we can't help being struck by what an old-fashioned, graceful lady she is, with a touch of bygone romance in her figurehead, trailboards, carvings and stern windows. Wistfulness? Perhaps.



“ . . . this particular design was chosen both for its outstanding contribution in the history of transportation as well as its recommendation of reliability as a sail training vessel. The Swift combined a legacy of safety under sail with state-of-the-art speed potential, in a balance of the two qualities seldom equalled before or since in the design of merchant sailing craft.”



The figurehead for the Pacific Swift begins to take shape under the careful craftsmanship of Victoria woodcarver Jim Saull.

half a loaf

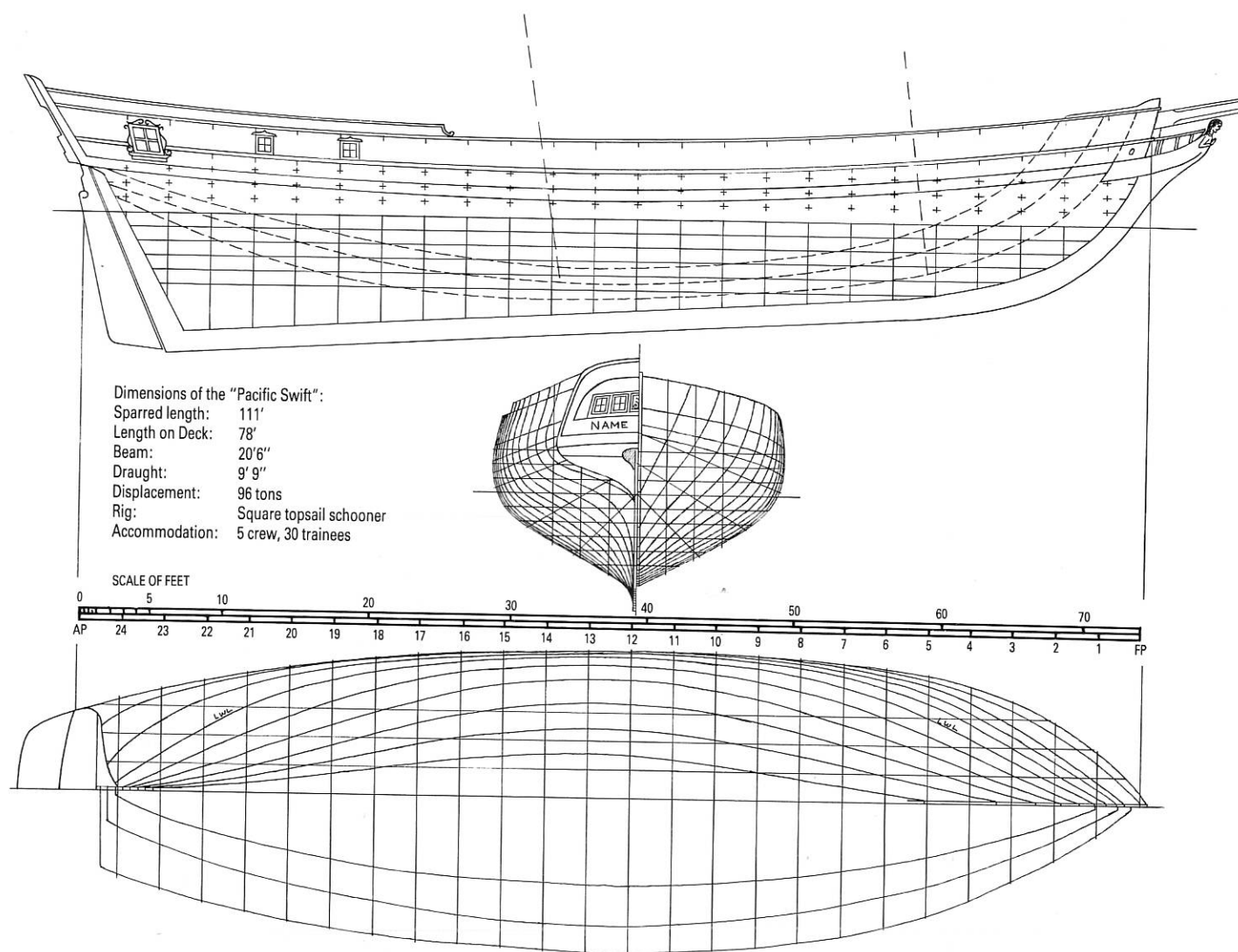
THE craft of sail is a technology which no longer “belongs” to our age. Although its roots go back to the earliest recorded times and its flowering continued even into the memory of people still living, this vast tradition has been set aside in a disconcertingly brief space of time.

Basil Greenhill, Director of Britain’s National Maritime Museum, has noted that “already the experience which illuminates has completely vanished from the study . . . of maritime history.” And writing closer to the disappearance, Sir Alan Moore, founder of the Society for Nautical Research, observed that “when the last bakers are growing old we may be content with half a loaf,

knowing that soon there will be no bread.”

The resurgence of sail training in traditional vessels is a good example of the “half a loaf” attempt to perpetuate this “ancient and honourable craft of mast and sail.” Officers and crew, builders and restorers, sailmakers and riggers — all perforce must become student historians in a school without walls or curriculum, piecing together the puzzle of how it used to be done.

This task is greatly aided when — as in the case of the *Swift* — the lines of an actual successful vessel have been preserved. They provide at least a proven recipe for others to follow — at the distance of two hundred years — who seek in this way to recapture even “half a loaf” of our distinguished maritime heritage.



Swift of 1778, Admiralty Archives, National Maritime Museum, Greenwich. Reconstruction by H. Chappelle, 1938 and G. Foster, 1985.
© SALTS and G. Foster 1986.

THE OLD SALTS SHIPYARD

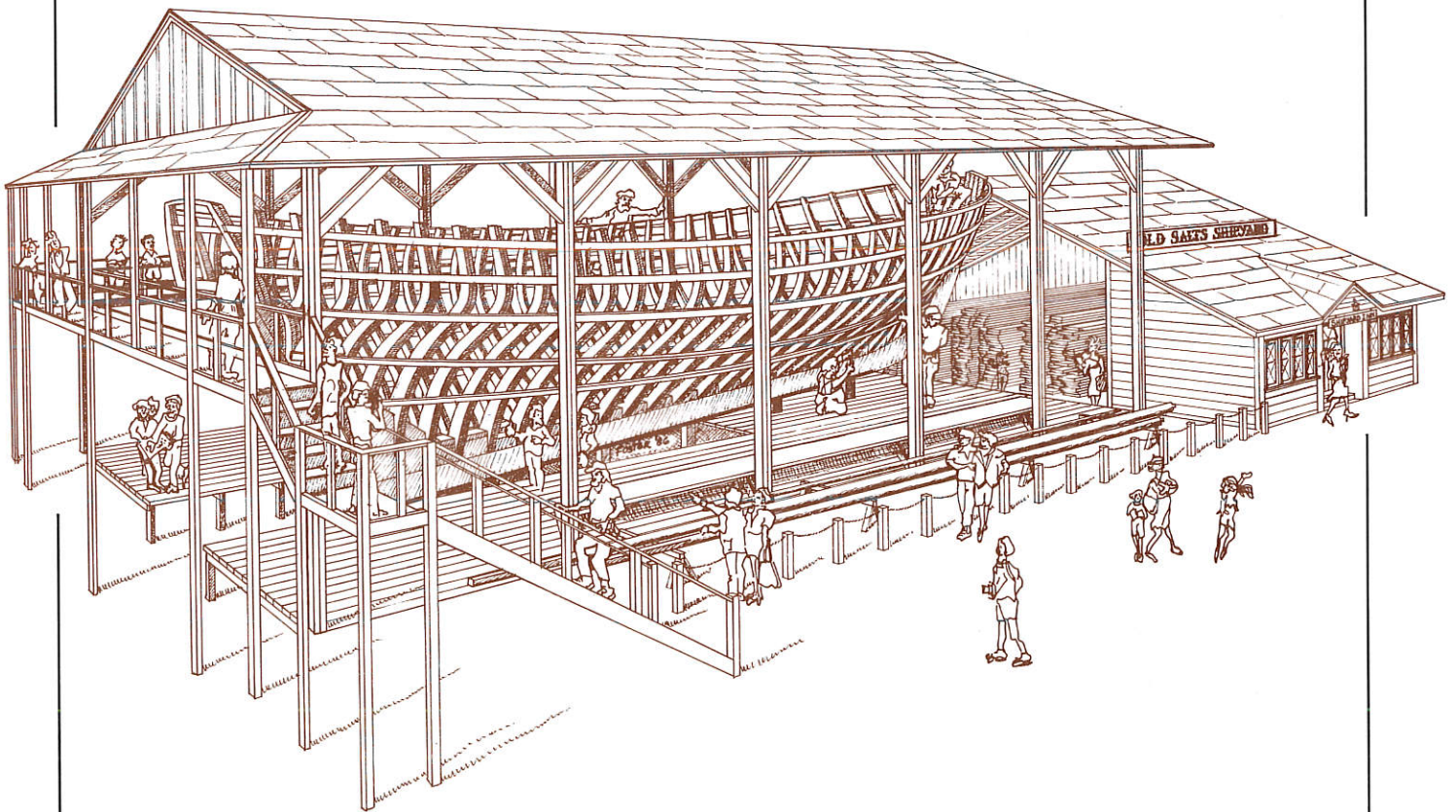
An old fashioned shipyard has been recreated on the north bank of False Creek, Vancouver. Shipwrights from the Sail and Life Training Society are creating Canada's newest tallship over a six month period — from keel laying to launching. This perspective view of the *Pacific Swift* shows her "in frame" at the opening of EXPO 86 in Vancouver on May 2, 1986.

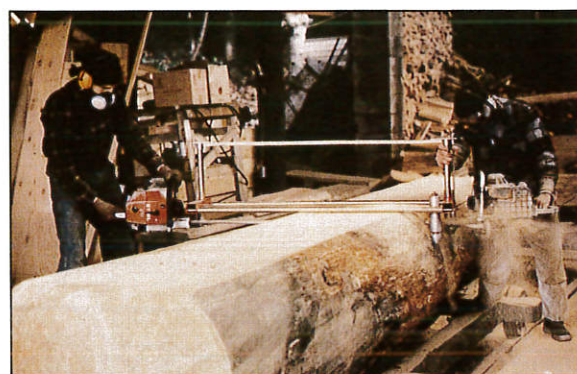
We want you to meet three special people — David, Meg and Sean — who have had a lot to do with the planning and building of the *Swift*. Possibly you have already met them on board the *Robertson II* during one of her summer training cruises.

For the past several years these three young folks — still in their teens — have been "learning the ropes" as bosun's mate, cook and watch leader on B.C.'s magnificent (and beloved) sail training schooner. Their only "pay" was tarry blistered hands, long sweaty hours in the galley, mustering at odd hours, repairing, splicing, mixing dough, encouraging & salting the lubberly . . . voluntary hard work.

*I'ze the b'y that builds the boat,
And I'ze the b'y that sails her,
I'ze the b'y that catches the fish
And brings 'em home to Liza.*

— Newfoundland Song





Log selection, sawing and shaping of timber are among the first steps in wooden boat building.

They loved every minute of it. Well . . . almost. You see, the salt air is in their blood, they love the old sea ways and white canvas wings, the surge and sway as the vessel heels to the wind — things that have appealed to young people down through the ages, the chance to go to sea. Not the most comfortable way to travel, nor the fastest — but a way to really live and learn as the sea miles pass astern.

More than the romance of a sailing ship upon the sea, however, these young seamen (and seawomen) are responding to an even more basic call — that of good work worth doing and the chance to be a positive influence in the lives of other young people. Also they are attracted to practical kinds of knowledge and the chance to help history come alive.

David, Meg, and Sean could well be future officers on board the *Swift*. If so, they will know every bone in her body — for they are learning not only how to sail such

vessels, but also how to build them. As the song from Newfoundland reminds us.

Meg helped plan the interior layout of the *Swift*. If the galley dishes up especially good food, it will be partly because she knows first hand what kind of "kitchen" the ship's cook needs to do her work properly . . . and lots of other little secrets of happy shipboard life. Meg also lofted many of the frames for the *Swift* — which means drawing them out full size — and cutting out the patterns.

As the construction proceeds, she can be found helping where most needed . . . like your mother, in important ways that often go unnoticed, but which keep the crew healthy and together.

David and Sean have been working on the *Swift* since the very start. If we follow their work, we will have a pretty complete picture of how an old fashioned schooner is built.

foundations

THE best methods for building a vessel like the *Swift* — at least the quickest, cheapest, and most enjoyable — have been worked out over hundreds (even thousands) of years by people whose lives depended on it. The whole recipe is based on three main ingredients: *good hard work, skillful handling of tools, wise use of trees.*

Along with their fellow shipwrights, David and Sean have deliberately taken the time to re-learn the old methods, becoming apprentices to the past. The SALT Society — builder and owner of the *Pacific Swift* — believes these traditions are too valuable to be set aside and forgotten, because they result not only in the building of good boats, but also in the building of good people. People with patience, skill, forethought, honest standards, consideration, respect for the past, and reverence for the balance of God's creation.

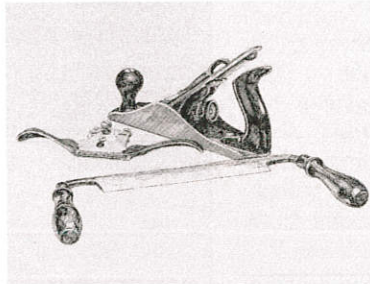
They may be high school graduates, but David and Sean are still "in school" with the *Swift*. And the curriculum includes History, Language, Mathematics, Science, Economics, Art and Physical Education. All of these subjects are an important part of the hands-on learning happening here. It is the counterpart of the school which they will be experiencing on board the *Swift*, learning to bring her safely through passages, despite fogs, currents, storms and darkness.

Cutting, shaping and fastening wood is the chief study in this school. Since lumber is so expensive, we started with the logs. Almost all the framework (back bone, ribs, beams) of the *Swift* is made out of yellow cedar. Except the keel, which is fir. Nearly one hundred logs have gone

into her frame, and each one was sawn into manageable boards or timbers with an "Alaska" chain saw mill.

Yellow cedar is especially suitable for frame members, since it has good resilient strength, holds fastenings tightly, and is very rot resistant. Wood craftsmen appreciate its fine working qualities and pungent fragrance.

David and Sean will tell you that there are fifty frames or ribs in the *Swift*, and each frame is made up of fifteen curved pieces — called futtocks. That's 750 pieces, and the boys know each one intimately because they carved the bevels on the inside and outside of every single futtock using a



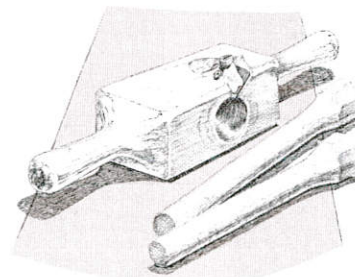
Plane, spokeshave and drawknife.

draw knife.

It took them a while to do this work — about two months in fact — and they learned a lot about working patiently, about yellow cedar, and about the use (and sharpening) of a drawknife, spokeshave and plane (three important handtools).

You've heard the expression, "Can't see the forest for the trees"? Well, Sean and David couldn't see the *Swift* for the futtocks, and were eager to fasten them together finally into finished frames, set them up at 18-inches apart on the keel, and see the overall shape of the *Swift* for the first time.

This is the stage that ship- and boat-builders most love . . . to see the frames all standing so orderly and shapely on the backbone of the keel, like the skeleton of some wonderfully graceful, legendary creature cast up from the ocean's timeless treasures.



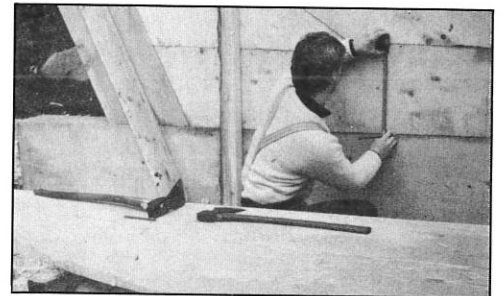
Trunnel turner and trunnels.

The Swift's frames, made of overlapping layers of futtocks, are fastened together with wooden trunnels (literally "treenails"). David and Sean made these too, out of the best of the scrap pieces left from the frame-making. They split them into sticks with a mallet and froe, carved them 8-sided on a shaving horse, and then "turned" them round with a curious old-fashioned tool made specially by shipwright-historian Chuck Merrill. Nearly 4,000 trunnels were made in this traditional way.

setting the keel

"The very first timbers to be shaped and set in place for a ship are those that make up its backbone: the keel, sternworks and stemworks . . . the setting of the keel timber marks the setting in motion of . . . one of the most fascinating processes ever to emerge from human inspiration and labour: shipbuilding."

— G. Putz



planking

WE find the *Swift* "in frame" at the opening of EXPO 86 in Vancouver in May 1986. Four more shipwrights join the crew at this time, bringing the total to ten.

Now the real work begins; to "clothe" the whole skeleton of the framework in planking. Douglas fir is chosen for this purpose, another of the choice ship-building species native to British Columbia — but nevertheless hard to come by. Locating suitable planking stock was the most troublesome aspect of the whole *Swift* project. Both the hull and decks are planked with fir a full two inches thick.

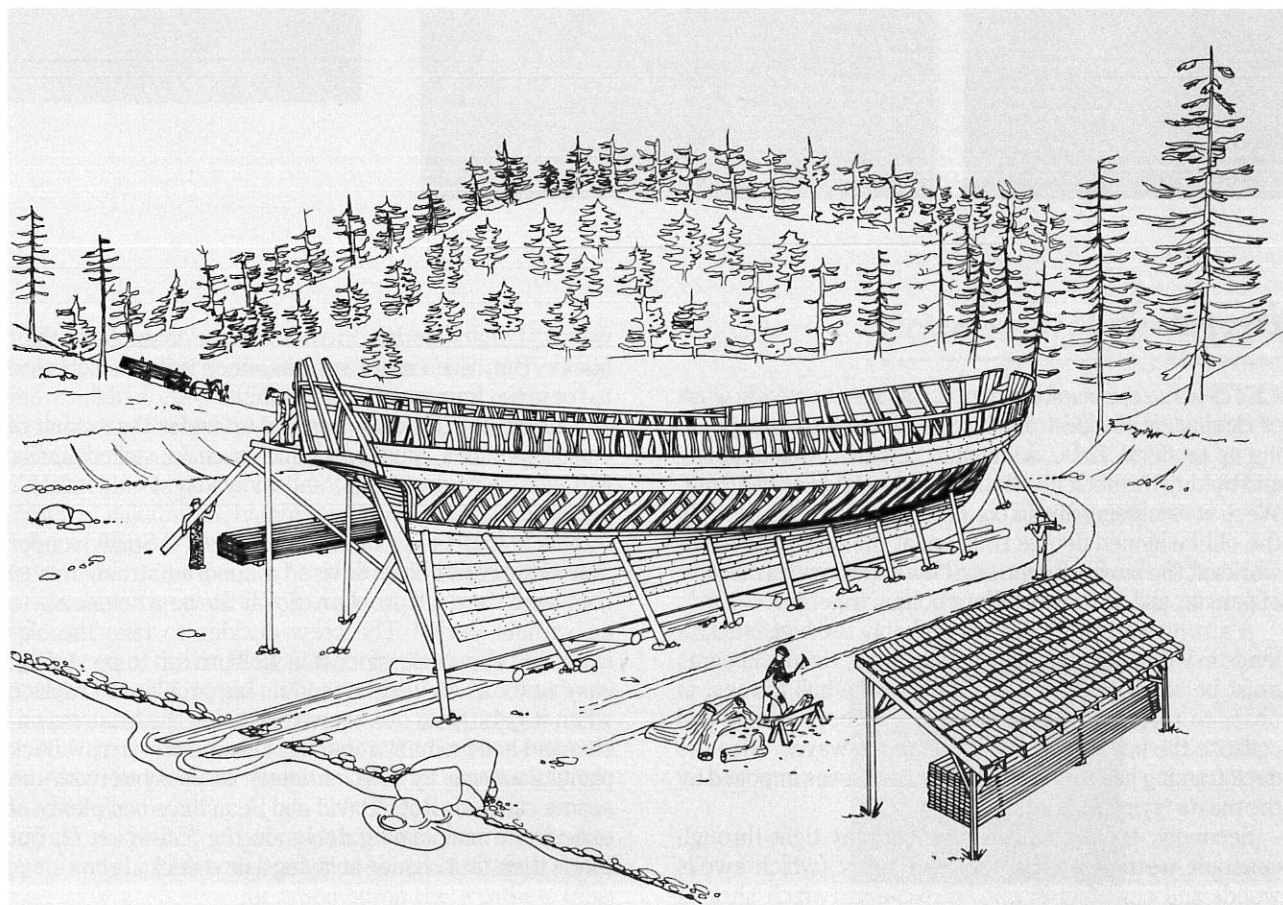
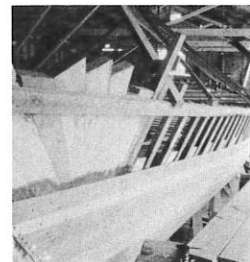
If the *Swift* were merely a box, this planking job would be quickly and simply done. Instead she is a shapely vessel, designed to slip through the water without fuss, which means that every board used to cover her framework must be shapely too. Like dressmaking, patterns have to be taken from the rounded shape which can be laid out flat on the actual material . . . in this case, lumber instead of cloth.

Before it is put onto the ship, therefore, each plank has a gentle curve and taper, which is not apparent once it is bent around the frames and fastened. Sometimes it is necessary to soften the planks by steaming in order to twist and work them into place.

Sean and David are members of the two planking gangs. Their job is to clamp each board in place and wedge it tightly against its neighbour, then drill pilot holes through the plank into each frame, and finally drive the ship spikes which fasten it permanently to the hull . . . about 8,000 spikes in the hull and nearly that many again in the deck. They are also keeping an eye on the smoothness of the hull, and planing down any ridges or bumps which appear.

When the planking reaches a certain height above the keel, a halt is called while the crew turns to the work of ballasting. It seems strange to weigh down something meant to float! But if you've ever built a model sailing boat (even for the bathtub) you will understand the need for ballast.

In this case, over thirty tons of lead and cement go into the bilges of the *Swift*. We don't want her to tip over, even in a hurricane.





decking

LET'S leave the planking crew to pursue its steady work of closing in the sides, and have a look at what's happening up on deck. Here, a smaller crew has been notching and bolting the deck beams, knees, bracing and blocking. Work is also going ahead on the intricate construction of the old-fashioned double transom at the stern and headworks at the bow. All joints are "buttered" with a mixture of pine tar and bees wax before bolting together.

A strong watertight deck is probably the biggest challenge in wooden boatbuilding. First of all, the deckbeams must be skookum and well-joined to the hull frames, in order to resist the forces which try to both spread and collapse the hull as it moves through the waves. Also the deck framing has to "distribute" the stresses imposed by the masts trying to pry the ship apart.

Secondly, the deck planking must stay tight through constant wetting by the rain and spray (which swells wood) and constant drying by the sun (which shrinks

wood). Otherwise the crew will have leaks over their bunks. But, even more serious, deck leaks usually lead to rot in the framing of wooden ships.

Thirdly, the deck has to stand up under the assault of countless shoes, mud, sand, anchor chain, spilled punch, fish guts, bird droppings, and (nowadays) industrial air pollution.

That's a lot to ask of a wooden "roof". Small wonder that shipwrights have devised a hundred stratagems to cope with the deck problem. So far the best solution is to do without decks! The crew decides to take the old-fashioned approach, since it is well proven to be strong, easy to fix when it leaks, and no big problem to replace when it gets worn . . . as well as being the least expensive and handsomest solution. This means narrow deck planks laid side by side as tightly as possible, with the seams caulked. Both David and Sean have had plenty of experience maintaining decks on the *Robertson II*, but this is their first chance at laying a new deck.



THE planking crews have now finished boarding in the hull and, with the end in sight, all hands turn to decking and caulking. All hull and deck seams are caulked by pounding cotton and oakum (tarred hemp) into them. Not quite so easy as it sounds.

Inch by inch, two strands of cotton and then a heavy strand of oakum, are hammered into the seams — tightening up the whole structure, making each seam water-tight. If this work were to be done by one caulking iron, it would have to crawl like an inch-worm over nearly 25 miles of seam!

The ring of the caulking mallets has always been considered a musical sound . . . especially by the builders, since it means launching day is not too far off.

With seams caulked and filled, paint brushes begin to appear. The pleasant smell of paint and pine tar and linseed oil fills the air.

Pine tar (real Stockholm tar) has been used on wooden boats and ships since at least the Viking days, and it is still a sensible protection for wood out in the weather. Pine

caulking & painting

tar is also used to preserve natural fibre ropes, to staunch wounds both in tree surgery and sheep shearing, and on the bottom of cross-country skis. Boat builders love it . . . the smell takes you right back to the days of sailing ships and tarred hemp rigging. It's why a sailor was called a "Jack Tar".

The decks and bulwarks on the *Swift* are all "tarred". Paint is used sparingly, mostly on the outside of the hull and underwater.



ready to launch

EVEN while the final tarring and painting are in process, finish joinery is progressing with the installation of deck houses with their sliding hatches and skylights, fiferails around the mast partners, and carvings which decorate both bow and stern.

The rudder is hung on its pintles and gudgeons, and iron work bolted to the hull for attaching mast shrouds and bowsprit stays. And finally — symbolizing the spirit of the ship — the carved figurehead is secured as the crowning glory of her clipper bow . . . a woman praying.

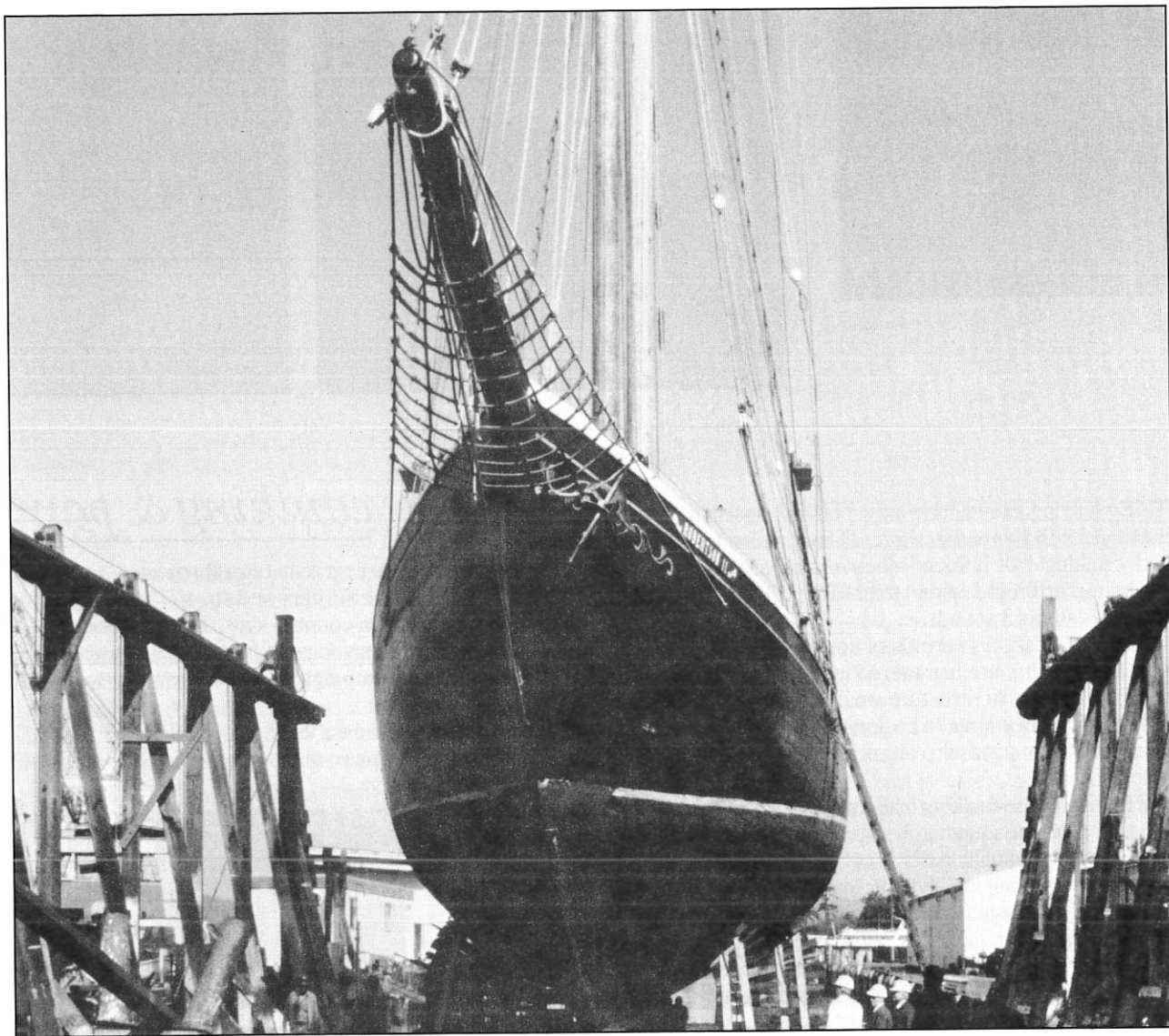
Prayer and good work have built the *Swift*, and prayers will accompany her voyages.

David, Sean, and Megan, who have been with our

Swift since her inception, have seen their ship grow futtock by futtock, trunnel by trunnel, plank by plank, spike by spike. Small wonder that their pride of accomplishment and sense of expectancy reach a high pitch as a wooden cradle is constructed under the *Swift* and she is rolled out of the shed into the light of day.

Launching Day is an unforgettable experience. Thousands of well-wishers, who have watched and contributed to her growth, now with song, prayer and cheers, see her borne into her new element. The child of the forested land is now a creature of the rolling sea.

Our three friends — no longer apprentices — are watching the *Swift* slip into the water, and the *Swift* is watching them. They are a part of her, and she is a part of them. And the question is: who built whom?



SAILING THE SWIFT

SLIP your feet into a pair of sea boots and picture yourself about to embark on your first sail training voyage aboard the *Swift*. You find yourself seated on a heavy piece of wooden railing, at the edge of the dock, gazing down at a maze of lines, wire rope, masts, booms, sails and everything else that can collectively be called a sailing ship. You, and about twenty-five other young people, ready and waiting to climb down a perpendicular ladder on to the decks of the *Swift*. There is excitement in the air, but of course you don't want every one else to know how much you've been looking forward to this day and how many weeks of planning have gone into your being there. You secretly thank Uncle Bill for lending you his old canvas duffle bag, so you don't look like a complete land lubber, and your mum for insisting you read the Sailor's Handbook the Society mailed out — at least you know the difference between the mainsail and foresail before you climb aboard.

“ . . . The experience of having to take responsibility as a vital crew member on an old fashioned sailing vessel, regardless of the hour or weather, can begin to shape qualities of courage, cooperation, good sense, self-confidence and personal discipline. Modern young men and women are as capable of developing these values as their parents and grandparents. Most of them are simply longing for the opportunity.”

— Dr. Wallace Eggert, Chairman,
SALTS Board of Directors





welcome aboard

SUDDENLY a curly head emerges from one of the deck hatches. The head is followed by a friendly face, a red beard, a blue sweater, grey slacks and deck shoes. The figure ascends the ladder to join the "trainees" (as your shipmates are called) and introduces himself as Peter, the mate of the *Swift*. Two other crew members appear and before long all the gear and your new shipmates are safely aboard.

You find yourself seated with the rest of the trainees, below decks, in a large cabin called the "hold". There are bunks around the sides and a long table and benches in the middle. A new and curious mixture of smells is one of the first things you notice — smells of varnish, tar, rope, coffee and fresh bread from the galley (the ship's kitchen) which is located at one end of the hold. There a cook and an assistant are busy preparing lunch, as well as keeping an eye on the rolls which are baking in the large oven. Everyone seems to be talking at once, some are making new friends, others renewing old acquaintances from

earlier voyages.

Finally the mate calls for silence and introduces the skipper. "Welcome aboard" are the first words of the captain, a jovial man in his late thirties with a bushy salt and pepper beard. He goes on to explain in some detail what is expected of a trainee aboard the *Swift*. Bow watch and stern watch positions, man overboard and emergency drills, the schedule of rotation known as the "watch system", procedures for first and second sittings at meals — all are covered. Even the use of the "heads", the ship's toilets, is described in detail because unlike the ones at home, the head is a complicated system of pumps, levers, valves and piping. At least that's the way it seems to you. "Pump plenty, and don't forget to put the lever in the 'off' position when you're finished," the skipper explains. "If you leave the lever on we could have an unwanted flood", he warns, and adds drily, "perhaps you guys on the lower bunks could sleep with one arm over the side. This way we'll get some warning if the water rises in the middle of the night!"



SOON everyone is divided into one of three watches, named "Fore", "Port" and "Starboard", and you gather on deck to take a tour around the ship with eight other members of your watch. Details are explained by your watch officer, a member of the crew who will run your watch under the overall supervision of the captain. Your watch officer is a tall, slim woman of twenty-one and she is assisted by a watch leader, a young university student who is a past trainee of the *Swift*, and who has volunteered some of his summer holidays to help with the program.

One by one the lines that control the sails are pointed out, the "halyards" that hoist the sails, the "sheets" that trim them. Words that you studied at home in the Sailor's Handbook are beginning to make a lot more sense. Soon you find yourself near the wheel and receiving instructions which will enable you to steer the



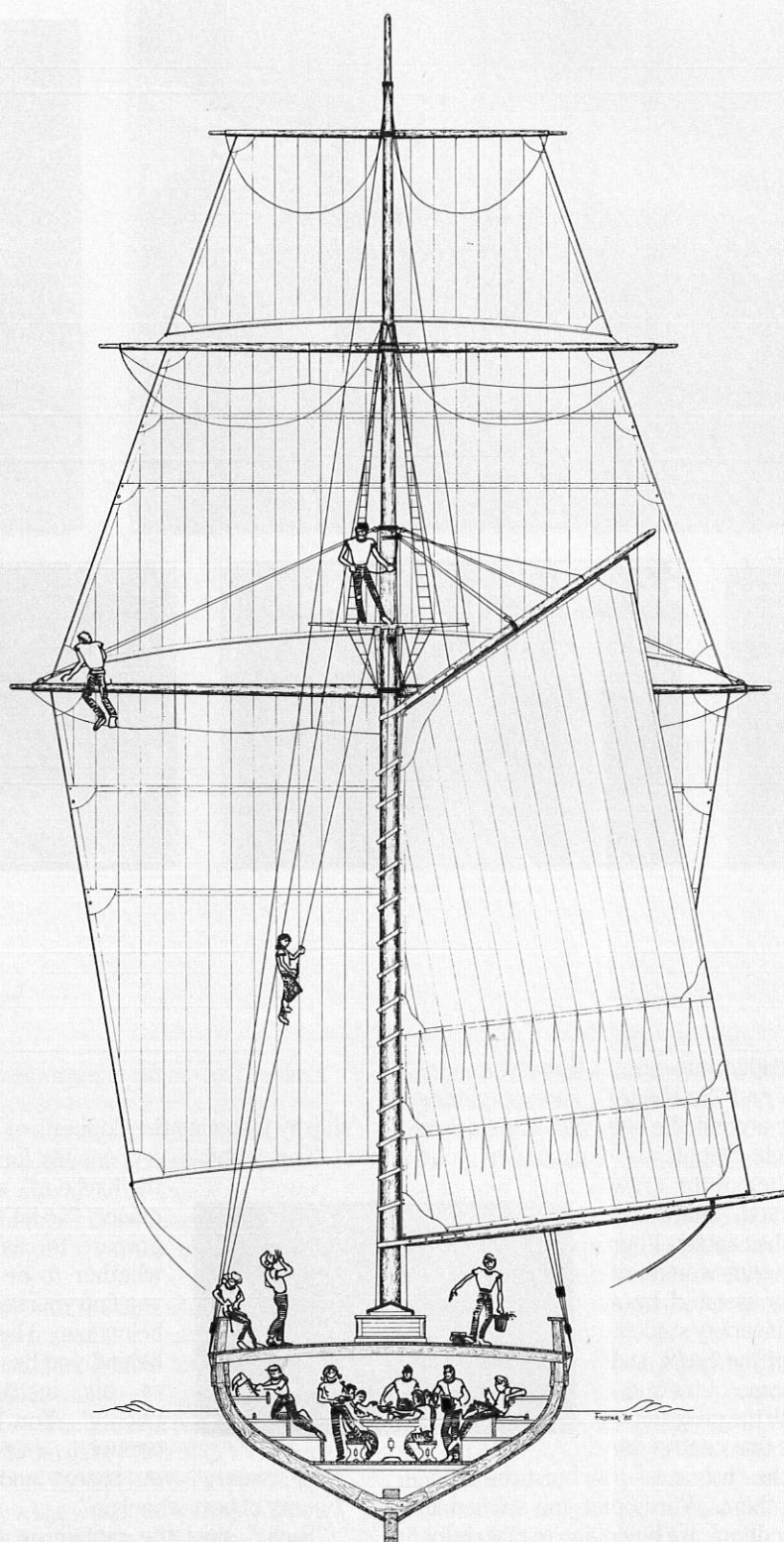
ship by following the skipper's or an officer's orders.

"Our watch is responsible for taking the *Swift* out of the harbour", says Jackie, your watch officer, "so let's go to our positions and prepare to cast off". You don't know whether to be flattered or afraid but you find yourself delegated to the job of helmsman. The skipper is standing just behind you beside the engine controls as his instruction comes: "Port twenty". You think quickly . . . port twenty . . . two full turns to the left.

"Port twenty" you repeat and spin the wheel . . . "twenty of port wheel on".

"Right" says the captain as slowly the ship moves ahead and out of the harbour.

watches



Cross-section through main hold looking forward to foremast.

making sail

THE ship now becomes alive with activity as all hands prepare to make sail and stow the visible reminders of her link with the land — fenders and mooring lines. You find yourself relieved from the wheel and ordered to take up a position at the throat halyard. There are about six trainees lined up along the rope (sailors call it a line) which will hoist the forward end of the gaff mainsail, the throat, and about four trainees on the peak halyard, attached to the after end of the gaff.

“Stand by to hoist” is the cry from the mate, and then with a signal from the captain it’s “haul away, Joe!”

Next the foresail, jibs and topsails are hoisted and with a word from the captain the engine is shut down. Everything on deck seems suddenly quiet except for the swish of the sea running along the hull and the creaking of the gaffs and yards.

It is as if the *Swift* has suddenly become a living thing responding to the power of wind and wave. Your ship-

mates sense it too as they take the position assigned to them and are watchful for any orders that may come from the stern.

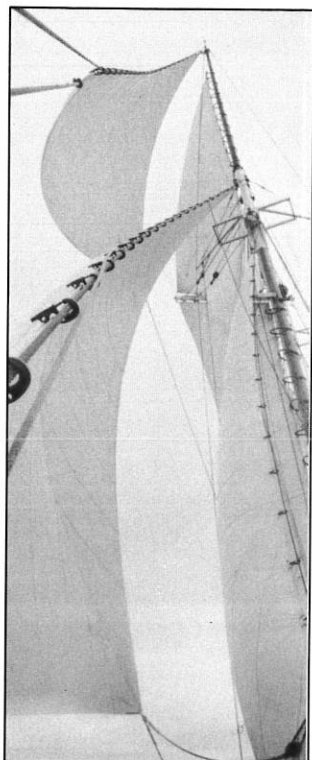
The ship is sailing well to windward with every sail sheeted in to take the greatest advantage of the wind’s direction. She is heeling over to one side as she feels the effect of the wind’s pressure on hundreds of square feet of sail.

You are now sailing in the wake of Captain Vancouver of H.M.S. *Discovery* and the Spanish Captains Galiano and Valdes, past islands named after them when they sailed these waters almost 200 years ago in vessels much like yours.



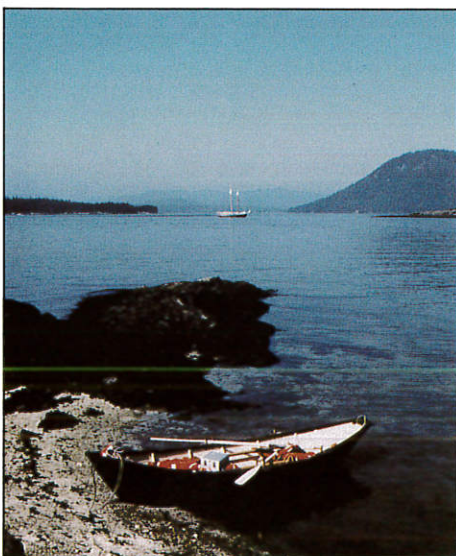
“ . . . the sea imparts many lessons . . . one learns respect for one’s fellow man, and for the elements . . . one is tested and stretched, often to the limits of endurance. One meets and learns to overcome fear. Sail training is the most effective character-building experience for youth available anywhere.”

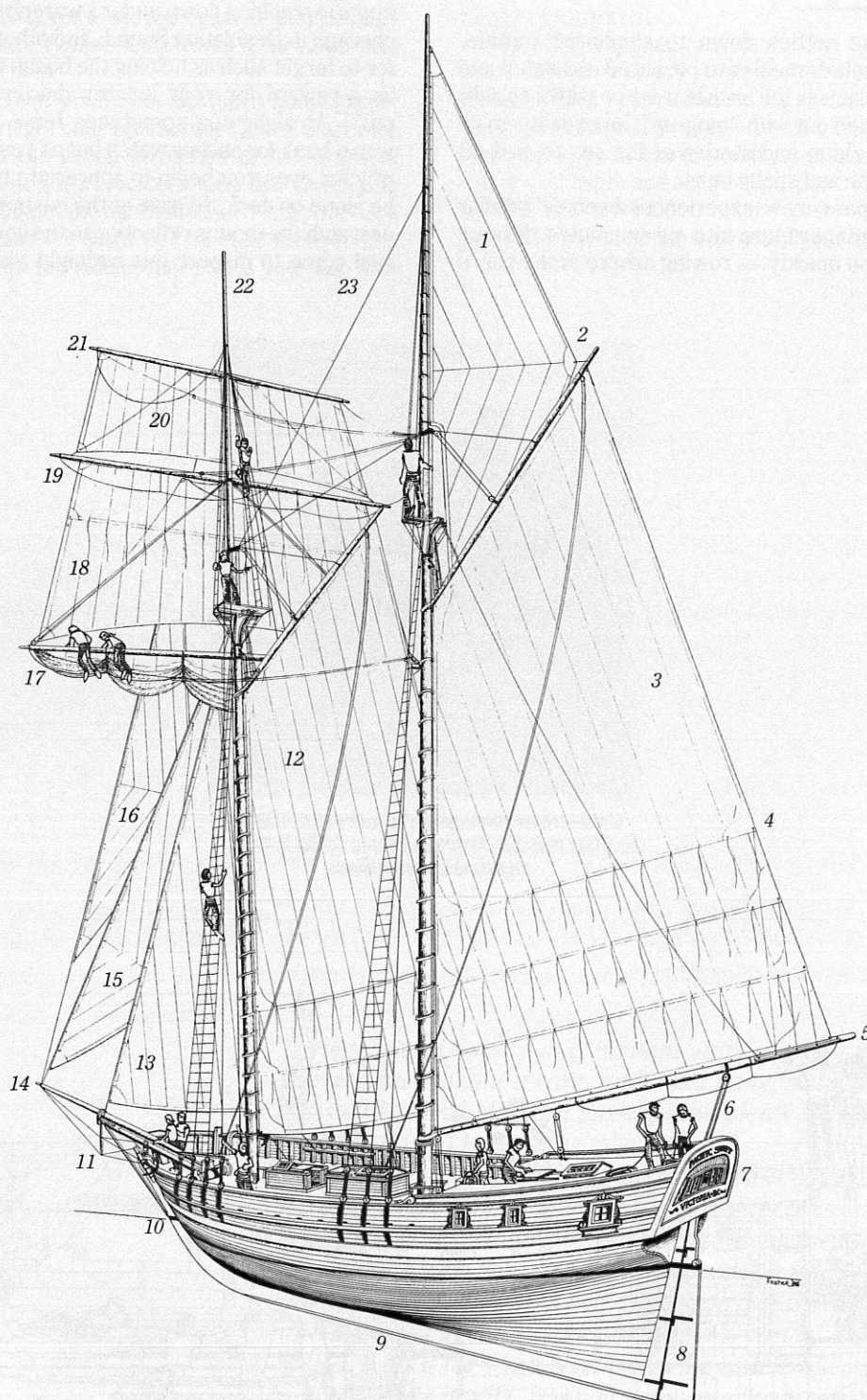
— Lt. Cdr. J. Gracie, H.M.C.S. Oriole



"The landsman might ponder, with profit, the sailor's refusal to give over his ancient knowledge of the sea to a machine. We on the land have embraced the new and thrown out the old with such abandon that many of us, disassociated from our past, face the future with foreboding. Social scientists talk of modern man's loss of identity, of selfhood, in a world dominated by the giant technological apparatus he has created yet finds alien; they find a bored, restless, aggressive, and frustrated public. For those on the land concerned with preventing such a consequence, there may be a lesson in the seaman's deliberate retention of an outmoded form of transport, . . . as a means of keeping alive his relationship with his past."

— W.P. Bradley,
They Live by the Wind





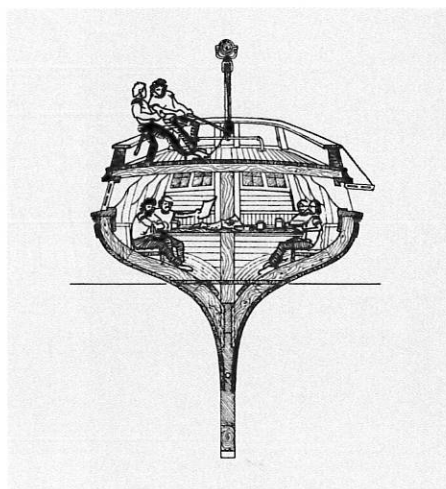
1. Main gaff topsail. 2. Gaff peak 3. Mainsail 4. Reefpoints 5. Main boom 6. Main sheets 7. Transom 8. Rudder 9. Keel 10. Waterline
 11. Dolphin striker 12. Foresail 13. Fore stays'l (jumbo) 14. Bowsprit 15. Jib 16. Jib tops'l 17. Forecourse (furled) 18. Lower foretopsail
 19. Footrope 20. Upper foretopsail 21. Upper foretopsail yard 22. Foretopmast 23. Main topmast stay

shipboard life

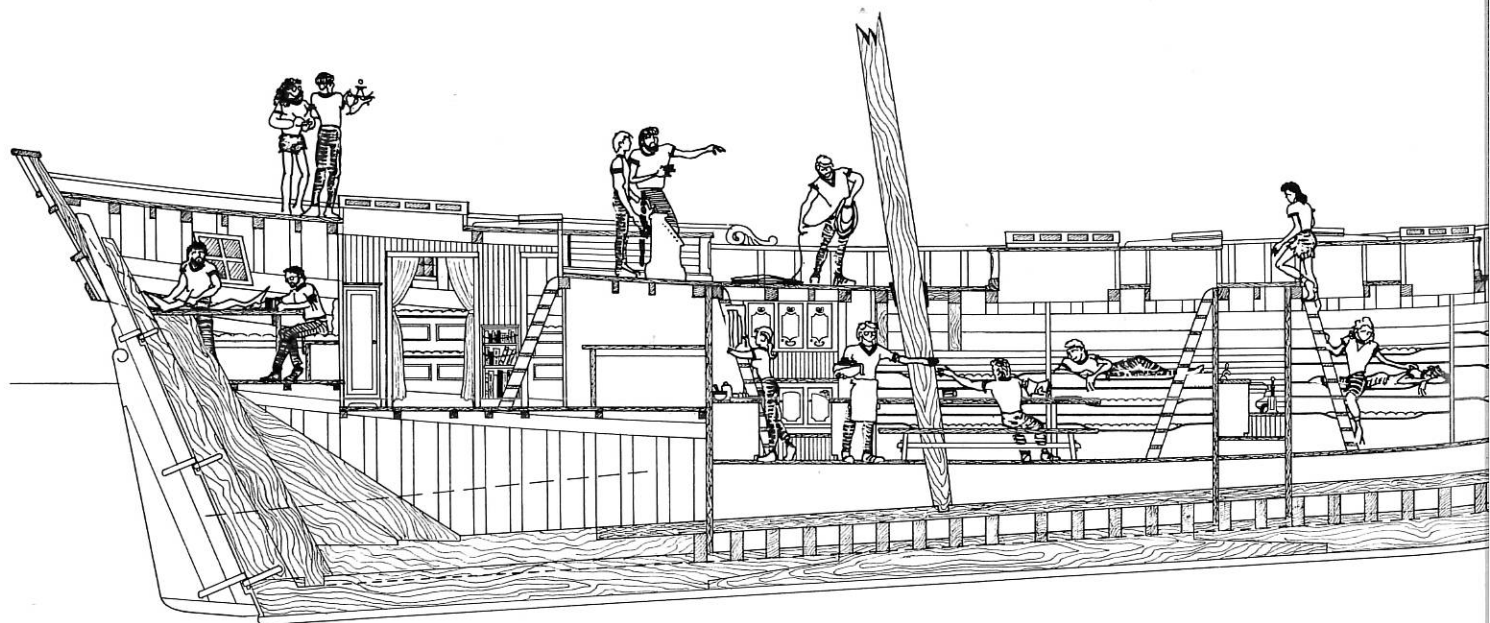
SOON everyone settles down to shipboard routine. Watches are rotated, meals are prepared and eaten and finally just after sunset the anchor is let go with a splash. The day is rounded out with "mug-up", an evening program of singing, skits, and stories of the sea topped off with hot chocolate and sticky buns.

As the days pass, new experiences become familiar pastimes and strangers turn into old shipmates. Events slip by almost too quickly — rowing ashore in the ship's

life boats, exploring tide pools, learning chartwork and knots, scrubbing down under a waterfall in a deserted anchorage in Desolation Sound; and others you would prefer to forget such as helping the bosun unplug the "head" as a reward for your lengthy discourses after "lights out"! At night you sometimes leave the comfort of a warm bunk for anchor watch but as you rub the sleep out of your eyes you begin to appreciate the opportunity to be alone on deck, to gaze at the vastness of the heavens or watch the moons reflection in the liquid black eyes of a seal come to inspect this midnight visitor. You are re-



*Cross-section through stern cabin at station 23
(see page 6). Trainees on quarterdeck are
hauling on mainsheet.*

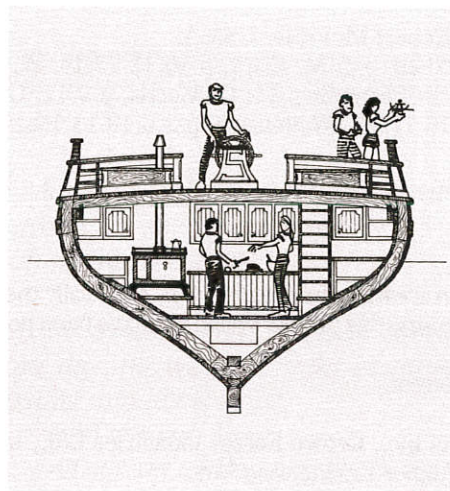


minded of the Psalm the skipper read at the Sunday service: *"They that go down to the sea in ships, that do business in great waters; These see the works of the Lord, and his wonders in the deep."*

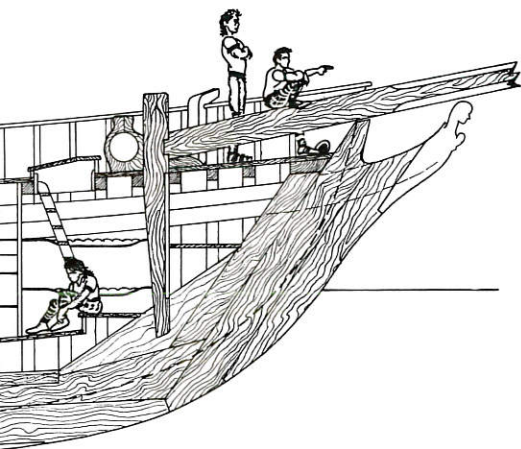
And then the *Swift* points her bowsprit homewards, there will be overnight passages across Queen Charlotte Sound and down the broad stretches of the Strait of Georgia where you get a chance to practice identifying flashing lights on buoys and lighthouses. At last your bags are packed again, as the *Swift* ties up once more to the city wharf. But you are taking more with you than you

brought aboard — new memories, new friends, and a lump in your throat.

The following year you join the *Swift* for an ocean voyage to the Orient and Australia. A year ago you would have doubted your readiness for such a voyage. But you have come to trust your new found skills, your new shipmates; and even more, you trust in this well-found ship and the strength and sense of purpose which you know is behind her, and indeed behind every worthwhile thing you will do throughout the rest of your life.



Cross-section through main hold at station 15, showing galley and trainees on deck steering and taking a sextant sight.



"Progress and science may perhaps enable untold millions to live and die without a care, without a pang, without an anxiety. They will have a pleasant passage and plenty of brilliant conversation. They will wonder that men ever believed at all in clanging fights and blazing towns and sinking ships and praying hands; and when they come to the end of their voyage, they will go their way, and the place thereof will know them no more. But it seems unlikely that they will have such knowledge of the great ocean on which they sail, with its storms and wrecks, its currents and icebergs, its huge waves and mighty winds, as those who battled with it for years together in the little craft, which if they had few other merits, brought them into the presence of time and eternity, their Maker and themselves, and forced them to have some definite view of their relations to them and to each other."

— Fitz-James Stephens
Essays by a Barrister London, 1862.

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THE PACIFIC SWIFT — A NEW BEGINNING

*I looked up with awe,
Saw the bones of the Swift, still silhouetted
against the star pricked night sky.*

To think!

*Some day those solid timbers will creak
and groan, as she strives mightily
with the restless deep.*

*Now, she grows in rigid majesty, silent,
but one day, the waves and the wind will
breathe into her a spirit,
and she will live.*

*Live, and spread white wings to the very
airs that gave her life.*

*Then, loving, learning hearts and hands
will bring forth the wild, winsome
vitality within her,
guiding her, as our Creator guides us,
through the trackless, transient sea.*

— Arwen Foster, Jan. 1986.
16 year old SALTS trainee

