The Boats of Swallows and Amazons



Amazon on Coniston

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Introduction

What exactly were the *Swallow* and the *Amazon* like, those famous sailboats of Arthur Ransome's books *Swallows and Amazons* and *Swallowdale*? Many readers would love to recreate the adventures of the Walker and Blackett children for themselves, or for their own children, and they want to learn more about the boats. The boats of these special stories were real boats, just as many of the locations in the stories are real places. This essay describes what we know of the *Swallow* and the *Amazon*.

In the summer of 1928, Ernest Altounyan, a friend of Arthur Ransome, came to Coniston Water with his family and soon thereafter bought two boats for his children. The children were Taqui (age

eleven), Susan (age nine), Titty (age eight), Roger (age six), and Bridgit (nearly three). The children became the models for characters in Arthur Ransome's books, and the boats became the *Swallow* and *Amazon*. Susan and Roger crewed the *Swallow*, while Taqui and Titty crewed the *Mavis*, which was the model for the *Amazon*. The *Mavis* (*Amazon*), may be seen today, in good order, at the Windermere Steamboat Museum near Lake Windermere. When the Altounyans later moved to Syria, they gave the *Swallow* to Arthur Ransome, who lived at Low Ludderburn near Lake Windermere.

The *Swallow* has vanished without a trace, but Arthur Ransome described a great many details about her in his books. Boats similar to her are still being made in Britain. We can infer a great deal about the *Swallow* through a kind of detective investigation, using Ransome's books and information about similar boats. Also we are privileged to have a letter from Mr. Roger Fothergill who owned the original *Swallow* after Ransome. The text of his letter is available elsewhere on this web site. All this information is enough to build a fair reproduction of the *Swallow*.

In the *Swallows and Amazons* books Arthur Ransome describes sailing in detail, and he uses proper boating terms where appropriate. He clearly valued good boat handling, and took such care in writing that reading the books is like watching someone learn sailing.

The Swallow

The Swallow was a sailing dinghy built for sailing on a shallow estuary

There was a real *Swallow* that Arthur Ransome and his friends used in the English Lake District. It is the boat described in *Swallows and Amazons*.

Roger Wardale, in his book *Nancy Blackett: Under Sail with Arthur Ransome* (Jonathan Cape, London, 1991), claims the *Swallow* was "built specially to navigate the treacherous and changing sands of the Kent Estuary near Arnside...." Arnside is some 15 miles southeast of Coniston Water, one of the original settings for *Swallows and Amazons*. Bought used in 1928, the *Swallow* cost 15 pounds, roughly 500 to 1000 pounds in today's currency, or \$750 to \$1500. One can buy a second-hand sailing dinghy similar to the *Swallow* for that much today as well.

The *Swallow* was an English sailing dinghy. She is of clinker construction, also termed lapstrake: the planks overlap to form ridges along the hull, outside and inside, which are obvious in some illustrations in *Swallows and Amazons*. These ridges are termed "laps", or "lands", and are fastened with <u>clinched</u> copper nails or rivets. Steam-bent ribs inside the planks, <u>thwarts</u>, a solid <u>keel</u>, a <u>stem</u>, and a <u>transom</u> provide the supporting framework. Clinker sailing dinghies were used in near-shore fishing and carrying, and were carried on ships for harbor-going boats. These strong and fairly simple boats had to be able to carry a load and to stand some rough conditions. The *Swallow* was based on the principle of the work boats, but probably was built for pleasure boating.

Clinker building was the most common technique for small boat construction on both sides of the Atlantic before plastic and metal boats took over. When wood and labor were cheap, metal expensive, and synthetic glues and plywood non-existent, clinker was the obvious way to build a good working boat. It was well established by the Viking age, and it has not been forgotten since. Boats like the *Swallow* are still being built in the British Isles and the U.S. For example, see the November-December 1995 issue of the magazine *The Boatman*. It has an article titled "Ladies of the Lake," featuring two new wooden sailing dinghies of traditional design on Coniston Water, followed by an

account of building a clinker sailing dinghy.

There are no existing measurements or construction plans of the *Swallow*, but Arthur Ransome includes a great many details about her in *Swallows and Amazons* and *Swallowdale*. Ransome twice describes her as fourteen feet long, and once as "between thirteen and fourteen feet long." She had two thwarts, used for seats, and sternbenches. She could carry four small children (ages six to twelve) and a good deal of camping gear, and sometimes she even added an adult to that crew. She had enough room forward of the mast for the "ship's boy," Roger, to stand while the boat was underway.

• The drawings by Ransome support many of his descriptions, and also show that *Swallow* had a wide, dark <u>sheerstrake</u> and the rubbing rail attached to its lower edge, a feature typical of English sailing dinghies. Dinghy rubbing <u>strakes</u>, or rails, are sometimes varnished mahogany and sometimes painted. Otherwise, the *Swallow* was painted white outside.

The *Swallow* carried ballast under the <u>bottom boards</u>, in the form of "six pigs of lead, five little ones and a big one." Each lead pig was easily carried by a child, so the total weight of ballast was roughly 100 pounds. The bottom boards inside could be removed, and the ballast was placed loosely under them. The hull was light enough for the children to turn over on the shore once the mast and ballast were out.

The really distinctive feature of the *Swallow* is the full length wooden keel, 6 inches deep. The use of this keel, rather than a <u>centerboard</u>, probably suited the sailing conditions where the *Swallow* was built. The keel and ballast allow sailing in shallow water. They avoid the complexity of the centerboard and its case and gear; and they provide more unobstructed room inside. Iain Oughtred, a noted Scottish boat designer, comments that "Deep external keels like the *Swallow* apparently had are very unusual in such boats. Most used galvanized steel centreplates 1/4" to 1/2" thick, hoisted with a drum winches. Extra ballast also is unusual, but sometimes used according to conditions."



Profile and sail plan of the *Swallow*, reconstructed from all characteristics of the *Swallow* described by Arthur Ransome, and from conventional clinker sailing dinghy design. This drawing is described as "exactly like her" by Mr. Roger Fothergill who owned the *Swallow* after Arthur Ransome.

(1) Stem (2) Halyard (3) Mast (4) Flag Halyard (5) Yard (6) Reef Points (7) Boom (8) Sheet (9) Boom Downhaul Tackle (10) Tiller (11) Rudder (12) Keel



A perspective sketch of a dinghy like the *Swallow*, with the bottom boards removed. Center thwart and stern benches are clear but the forward thwart is hidden.

Rowing the Swallow

The *Swallow* was a sailboat, but she could be rowed as well. Ransome said "*Swallow* was a hard boat to row, because of her keel and the ballast that made her so good a boat to sail." The *Swallow* had oarlocks for both the main and forward thwart, so she could be rowed by two persons, even using four oars, at least in principle. Sometimes Titty and Roger rowed one oar each from the center thwart. In *Swallows and Amazons, Swallow* carried only one pair of short brown oars. "Short" oars for a boat the *Swallow*'s size would be seven or more likely eight feet long. A British seaman accustomed to rowing every day would use oars ten feet long for her main thwart. She also has a notch for <u>sculling</u>, and Ransome describes sculling several times.

Rowing the *Swallow*, a deal of effort would be needed to get up to speed. Rowing this boat would be nothing like a canoe, nor a Thames skiff. On the other hand, once moving, she would keep on going, and tend to stay on course with no fussing. The distances rowed by the children in *Swallows and Amazons* are impressive if you have rowed a boat like the *Swallow*. No sissies, those kids.



Laurence Monkhouse's Hebe

Rigging the Swallow

The *Swallow*'s rig is described in some detail in *Swallows and Amazons*. She carried a lug sail, a trapezoidal-shaped sail on two <u>spars</u>, the upper <u>yard</u> and the lower <u>boom</u>. The sail was brown, termed "tanned" by boatmen (but not by Arthur Ransome) - so brown it was almost black when wet. The yard and boom were varnished, while the mast was finished with linseed oil. The boom had jaws that fitted round the mast (*Swallowdale*, chapter VII). The mast had no <u>stays</u>, but there was a flag <u>halyard</u>, run through a little ring at the masthead, to hoist a pennant on a stick or flagstaff. The mast "was a few inches shorter than the *Swallow* was long." In order to row with the mast down, the spars were offset from the center, necessitating their poking forward over the edge of the hull a bit. When stepped, the mast passed through a hole in the forward thwart, and its square foot fitted into a hole in the keel.

To get underway, you dropped in the solid wood mast, and then hoisted the sail. There were virtually no metal fittings. The halyard was made fast to cleats under the forward thwart, or tied to the middle thwart, so that the skipper or crew could <u>let go</u> in a hurry - this is a fine thing for mountain lake sailing where sudden strong gusts can strike from any direction with little warning. The "cleats" may be the brass belaying pins referred to elsewhere in the books. There was a small <u>tackle</u> connecting the boom near the mast to the keel to pull down the boom. The lead of the <u>sheet</u> is not described in the books; based on Ransome's drawings, it may have run directly from boom to hand, with no <u>traveler</u> or <u>blocks</u>. The sail had <u>reef</u> points, and it was <u>laced</u> to both the boom and the yard.

Some modern sailors might disregard the *Swallow*'s rig because it is not as fast as the rigs on modern racing boats. On the other hand, if you start rigging the *Swallow* at the same time they start rigging their boat, you will be sailing long before they do. What do you want, simplicity and time spent sailing or complexity and time spent fiddling around? Further, the *Swallow*'s rig can be let down with a run, the weight of the yard bringing down the sail; this is a good thing for a novice crew caught in a tight spot.

It's too bad that almost all sailboats today use complex rigging, making sailing more difficult and demanding than it need be. Many traditional rigs, such as the lug rig, are very simple, and quite satisfactory for pleasure sailing, if not for all-out racing boats. Lug rigs are still in use in the British Isles, and they are regaining popularity in the U.S. Some new boat designs even use lug rigs.

Unknown Details

Unfortunately, important information required to build an exact copy of the *Swallow* is missing. What was the exact length, the beam, transom shape, and <u>freeboard</u>, not to mention the actual hull shape?

The length must have been within a few inches of 13 feet 6 inches (4.12 m), based on Arthur Ransome's repeated statements; he also says she was the same length as the *Amazon*. Many similar-sized sailing dinghies from the period are all very much the same proportions and provide excellent guidance. From them, I estimated the beam was close to five feet, possibly more, but probably no more than five feet four inches. I estimate transom width at about 3 feet 4 inches, perhaps as wide as 3 feet 6 inches, and I estimate the minimum freeboard was close to 13 inches. The bow freeboard would have been about 20 inches and the stern freeboard 16 inches. (After making these estimates I discovered, to my pleasure, that Iain Oughtred's dinghy *Ptarmigan*, also based on traditional dinghies, has exactly these freeboard values.) The sail area probably was about 65 to 70 square feet. Don't forget that the mast is just short enough to lie inside the hull, about 12 and a half to 13 feet long. Given the known and inferred information, as well as general building practices for the type, a boat much like the *Swallow* could be built today.



The original Amazon (Mavis) on Coniston

The Amazon

The Amazon was a fine little ship, with varnished pine planking. She was a much newer boat than the Swallow, of the same length, but not quite so roomy.

The *Amazon*, originally named the *Mavis*, is now on loan to the to the Ruskin Museum in Coniston by the Altounyan family. The restoration of this boat in 1989 led to the creation of the Arthur Ransome Society.

The *Amazon* and *Swallow* were alike in many ways: the same lug rig, the same clinker construction, the same thwarts and stern benches. The chief differences between the *Swallow* and the *Amazon* are that the *Amazon* is about four feet in beam, rather than five feet, and the *Amazon* has a centerboard and the tackle to raise it and lower it. Centerboards are quite common in English clinker sailing dinghies. The *Amazon* could carry two or three children easily, or perhaps three adults.

Varnished pine planking was typical of fine boats - yacht tenders for example. Sometimes the pine came from America. Varnish is grand, but it is less durable than paint and requires more maintenance. At some point since the books were written, the *Amazon* was painted (if this boat were ever really varnished), and she is now white outside and gray inside with a green sheerstrake and white rubbing strakes.

One distinctive feature of the *Amazon* was her "small barrel of polished oak." This was used to carry fresh water, or supposedly rum, which proved to be lemonade. Hoisting the barrel out and carrying it suspended from an oar lent a very piratical air to the proceedings.

A <u>three-part</u> tackle is used to raise the centerboard (no wonder Roger wanted to know what that thing was in the center of the boat). There are stern benches and three thwarts in the existing boat, though the *Amazon* of Ransome's drawings has only two thwarts. She is fitted with three sets of rowlocks. The mast, a solid timber, is held against the forward edge of the forward thwart by a metal strap. There is much less room forward of the mast than in the *Swallow*.



A perspective sketch of the *Amazon*, formerly the *Mavis*, the boat that is the model for the *Amazon* of Arthur Ransome's stories.

~ Photo of the actual Mavis (Amazon) ~

Another photo of the Amazon under oars

And another under sail



An interior plan of a sailing dinghy like the *Swallow*, as described by Arthur Ransome.

(1) Stem (2)Forward Thwart (3) Middle Thwart (4) Stern Benches(5) Transom (6) Bottom Boards

The *Amazon* would have less initial stability than the *Swallow*, due to the narrower beam. For landsmen, I should note that "less initial stability" and a narrow beam does not mean that the *Amazon* is unsafe; these factors are associated with easier rowing and quicker handling under sail.

I hope the lines were taken off the *Amazon* at the time of restoration. ("Lines" are the curves used by naval architects to dscribe the sha[e pf a hull, and draw on paper.) If not, the Windermere Steamboat Museum could honor a request by a competent boat designer or builder to do so now. The Museum or the Arthur Ransome Society could sell detailed plans for the *Amazon*, which would be of interest to boatbuilders and Arthur Ransome fans around the world. The effort would be small for the value.

Resting quietly indoors, *Amazon* bears a sign that asks "This is a very old boat in peaceful retirement. Please do not disturb her." We all wish her a long and peaceful retirement, in good care.

Sailing Performance Assessments

"I do believe she's a wee bit better than Amazon in going to windward when there's a squall," said Nancy. "But when it comes to running, and we pick up our centre-board, Amazon simply slips away from her."

The *Swallow* was not like modern racing dinghies. Having a broad, stable hull, a full-length keel, the lug rig, and internal ballast, she was more a little ship than a racing dinghy. The *Swallow* was derived from boats of the age of working sail that was ending about the time when she was made. They were built to carry a useful load of crew and supplies, to be sailed, or rowed, by one man, and to stand up to some rough winds and waves. The *Swallow* was not a "performance" boat in the modern sense of being quick around buoys in a race. If you must sail as fast as possible, then the *Swallow* is not for you. However, modern racing sailboats don't have the "performance" of the *Swallow*, either. In strong winds they require full concentration to avoid trouble. They can't carry much in the way of supplies, and they are often somewhat uncomfortable. Sailing a dinghy like the *Swallow* gives pleasures

unknown to the perch-on-the-rail crowd - greater comfort, for one. If well-designed and well-built, they can also be fine sailers, rewarding the skilled helmsman.

Though the *Swallow* was comparatively comfortable and stable, she, and sailing dinghies like her, are no tubs. Ransome's description of sailing *Swallow* under strong and gusty winds in *Swallowdale*, just before John has an unexpected jibe, is one anyone who has sailed in similar conditions in a good small boat will recognize. The ballast and comparatively wide beam and flat floors amidships would make a stiff or initially stable craft, one that could stand up to a breeze, as demonstrated in the boat race in *Swallowdale*. The long keel would help keep the boat on course. This has the advantage of avoiding a helm that requires very careful minding, a good thing for those learning to sail, or for those distracted by children, siblings, or even parrots in cages. The long keel and generous weight means coming about requires more time and a different technique than in a racing dinghy: you sail *through* the wind after getting up a good way, coming around handsomely, rather than just shoving the <u>tiller</u> over.

The drawback of the long keel is that boats like the *Swallow* may not be able to sail as close to the wind as boats with centerboards, such as the *Amazon*. Ransome defends the *Swallow*'s windward ability several times, and he gives a description of <u>tacking</u> the *Swallow* by compass at night in *Swallows and Amazons* (Chapter XXI) saying she <u>tacked</u> between south-east and south-west, "or perhaps a bit better." That is to say she tacked through 90 degrees, which is quite satisfactory for any sailboat not designed for racing - so good that some sailors may be skeptical of the claim. Ransome did not mention the <u>leeway</u> made by *Swallow*.

Seeking to go beyond Ransome's descriptions, the question of how well the *Swallow* sailed can be addressed by the experience of other dinghy sailors. Valuable testimony comes from Roger Fothergill, who bought "Swallow" after Ransome owned her, and sailed her three or four seasons. A letter from him may be found <u>here.</u>

Accounts of sailors with sailing dinghies like the *Swallow* or *Amazon* can be read <u>here</u> Reading these accounts we see that a boat like the Swallow is very satisfactory even today. From this experience some basic dinghy design ideas emerge:

Design Recommendations for new Swallows

When designing or selecting a sailing dinghy to serve as your *Swallow*, make sure the mast is far enough forward to give good helm balance, or use a jib. You do not want too much weather helm - a tendency to try to turn into the wind while sailing a straight course. (Nor do you want any lee helm at all; trying to turn the other way). At least my new Swallow-equivalent has a balanced helm - she will stay on whatever course is set with no hand on the tiller! Some sailors think a little weather helm is a good thing.

A boat with a single lug sail (in the proper location) is easier to manage than two sails. For beginners I recommend the single sail. You can use any of the simple traditional rigs - lug sail, sprit sail, or even gunter or Bermudan, though I think lug or sprit is simplest and best for beginners. A sprit rig has no boom to knock your head, too. And lug rigs sometimes have no boom. Take your choice.

The Swallow laced the sail to the boom. The universal opinion now is that a free foot on the sail is best (and simpler). The Swallow had yaws holding the boom to the mast; a "balanced" lug rig with a boom extending forward of the mast and no yaws is simpler and probably better. The Swallow had a square foot to the mast. A round foot and a mast that can rotate in place a little is probably a little

better.

You may choose to use a centerboard in place of the long keel. The only advantage to the long keel is that you don't have to bother raising or lowering the centerboard. The disadvantage of the long keel is harder tacking and probably not being able to sail quite so close to the wind. It also makes beaching the boat a little awkward - you ground out in a foot or more of water. The long keel adds some drag in rowing. All modern sailing dinghies have centerboards, even those of strictly traditional desing. Even when made, the Swallow's keel was rather unusual. But if you have or obtain a dinghy with no centerboard you can use it that way. Adding a plank keel is much easier than adding a centerboard and its trunk. If you add a long keel follow Lionel Hill's advice and taper the keel pretty strongly from the bow to aft of the mast at least. Your helm balance will depend on the design of centerboard or keel; this is a complex issue best addressed by moving the mast location if the helm balance is way off.

You should add flotation. Foam "swimming pool noodles" can be shoved under the seats for lack of something better. Ballast is not desired; in fact, dangerous. You can use heavy bottom boards to serve as some ballast without making the boat sink if swamped. My oak bottom boards weigh 60 pounds total, but add a little flotation.

None of these changes make any significant alteration in the appearence or value of the boat from the original Swallow; and improve performance and safety. All this describes many modern sailing dinghies of traditional design with lug or sprit rigs. You can retain all other features of the Swallow, such as the hull shape, seats, etc., with no changess. A very fine example of such a design is Paul Gartside's <u>*Skylark*</u>.

The Nancy Blackett and the Goblin

There are yet *other* boats of Arthur Ransome that survive! Ransome's dinghy Coch y Bonddhu, recently restored, which appears as Scarab in the books, is owned by <u>The Arthur Ransome Society</u> (<u>TARS</u>).

The *Goblin* of his novel *We Didn't Mean to go to Sea* is based closely on his own 28 foot cutter *Nancy Blackett* which he bought with earnings from *Swallows and Amazons*. Ransome sailed in her to Holland, the basis for *We Didn't Mean to go to Sea*. The *Nancy Blackett* recently was throughly restored to good sailing order and as close as possible to the condition known by Arthur Ransome. She is owned, maintained and sailed by the Nancy Blackett Trust. You can join the trust, help work on her, and even, with a little luck, go sailing on her.

The mission statement of the Nancy Blackett Trust is "to preserve Arthur Ransome's Nancy Blackett, the boat he used as the original for the Goblin in "We Didn't Mean To Go To Sea". Nancy is a 28ft cutter-rigged sloop built by Hillyards of Littlehampton in 1931, and recently restored after being found derelict in Scarborough Harbour in 1988. The Trust was formed in 1997 and aims to exhibit Nancy as a memorial to Ransome, and eventually use her to help young people discover the joys of sailing."



Laurence Monkhouse's Hebe in Wildcat Island harbour

New Boats Like Swallow and Amazon

The Best Boat?

Was the *Swallow* "the best little boat that was ever built" as Ransome describes her? For the times, for where she was used, and for the children and adults who used her, it seemed so. For these purposes, the *Swallow* was very good - a stable boat of considerable capacity that could be rowed and sailed safely by children, and was a good boat for learning sound sailing skills. The *Swallow* was easy to rig and exciting to sail. The *Swallow* would be fine now too, for learning sailing and for small craft work,

such as pleasure sailing, fishing, and generally getting about on lakes, rivers, or inshore.

The *Swallow*'s characteristics -- stability, capacity, comfort, ability to row, scull, and sail easily, and good sailing performance -- make an ideal boat to learn sailing and boatmanship of all kinds. They also make a very useful boat, pleasant to use, safe, and good for many purposes, a boat fun for children and a useful and satisfying boat for adults.

If you must sail as fast as possible you won't be interested in a boat like the *Swallow*. If you want to sail well and do other things too and have a pleasant time, these kind of boats may be what you want.

Too many sailboats today can only do one thing - sail fast. They are not comfortable, stable, adapted for carrying much other than the crew, or suitable for any purpose other than winning races. Unfortunately racing boats are so common that many people, even sailors, do not know that good boats can be made that are not only fun to sail but also are suitable for rowing and fishing and carrying supplies, and that are much easier to rig and handle than racing boats. *Swallow*-type boats can do more with less complexity and trouble. They can carry several several people in comfort rather than two wet racers perched on the rail.

Nowadays some characteristics of the *Swallow* will not appeal to everyone. Having no centerboard opens up the interior, but with a likely loss in windward sailing ability, and reduces speed and maneuverability, compared to a similar hull with a centerboard. If beached or run aground, the keel will get in the way. Some effort is needed to get the *Swallow* going under oars, but she would go straight and carry her way better for that long keel and weight. Clinker built boats are hard to keep clean and painted, and they may end up leaking a little. A ballasted boat without flotation can actually sink if capsized or holed, something most sailors today have never seen. (So put in air bags under the seats, if you are worried.) Whether these are serious flaws depends entirely on the owner and how a boat will be used.

A copy of the *Swallow*, or a boat of similar design and intention, would be a good boat for beginners or for those who want a capacious boat that is comfortable and easy to sail. The rig could not be simpler; it is easy to set up and use. One can row whenever needed or desired. Capsizing is unlikely in this comfortable, forgiving, boat. This is the ideal boat for gunkholing, exploring the shoreline or islands, carrying supplies and getting around harbor, and fishing. Races between Swallow-type boats are perfectly possible and just as valid a test of sailing skill as in the faster class.

Some improvements to *Swallow*'s sailing characteristics could be made, by small changes to the rig and perhaps the keel.

Traditional clinker boats are expensive due to material costs and building skill, but they are more attractive than fiberglass boats or ones made of simple techniques such as large plywood panels on frames. You can take great pride in a handsome wood boat, far more appealing than a functional plastic object.

Building a boat like the Swallow in clinker (lapstrake).



Mike Field's Aileen Louisa

What if you want to build a close copy of the *Swallow* yourself? It can be done, even by the amateur boat builder. Clinker building, however, is a complex project for the first-timer to do alone as there are some tricky parts to construction. You ought to attend a one or two-week class in clinker boat building first if you can.

For the first-time builder, there are also good books on clinker construction, books that experienced builders value as well. Two British works are *Clinker BoatBuilding*, by John Leather (Adlard Coles Nautical, London, 1973, in its eighth printing), and *Clenched Lap or Clinker*, by Eric McKee (National Maritime Museum, 1974). See also the article "Cost-Conscious Clinker" by Tony Haslett in the Nov/Dec 1995 issue of *The Boatman*(now out of print but back issues are available in some libraries). These works describe construction techniques like those used to make the original *Swallow*. McKee's book gives a fine description of the overall process of clinker building and the illustrations are very good, but there are no actual detailed instructions or plans or measurements for building a boat. John Leather's book is best for actual building instructions. American builders might consult the several books by John Gardner on boatbuilding which include lapstrake and other methods.

Another useful book is Eric McKee's *Working Boats of Britain* (Conway Maritime Press, 1983). McKee's drawings and diagrams are superb. In this book the boat most like the *Swallow* is the *Rose* on page 186 (length 14' 3", beam 5' 2", transom width 3' 0", minimum freeboard 16"). This book has very detailed diagrams but no building instructions.

Building a Boat like the Swallow with Glued Lapstrake Plywood

If traditional clinker building sounds like a bit much, but you still want to build a boat similar to the *Swallow*, there is a slightly easier way: glued lapstrake plywood. This technique has several advantages: it is easier to build; it is usually cheaper; the boat is easier to clean and maintain; and it stands being out of water and traveling on a trailer better. A glued lapstrake plywood hull can be kept on a trailer. Clinker boats built of natural timber are better if kept in water, except for winter storage.

There are several glued plywood boat designs like the *Swallow* and *Amazon*. They all have centerboards, so they are like the *Amazon* in that regard.

If you live in Britain, you might order plans for the *Grebe* from Iain Oughtred (UK); and get his new book on glued plywood builidng, too. Oughtred is one of the master designers and builders in this technique. The *Grebe* is narrower than the *Swallow*, and wider than the *Amazon*, but otherwise she is much like them both in size, style, and behavior. Call it an average of the *Swallow* and the *Amazon*.

If you live in North America you might order plans for the *Penobscot 14* by Arch Davis (Arch Davis Design, P.O. Box 119, Morrill, Maine 04952; telephone (207)-342-4055). Building the Penobscot 14 is illustrated in WoodenBoat magazine, numbers 138 through 140. She is the same length as the *Swallow*, and is similar in shape, rig, and appearance. The building method is "suitable for the average home builder." Davis sells plans, kits, and complete hulls. Two photos of this new design appear in the December 1996 issue of *WoodenBoat*, and there are ads in e very recent issue.

Another smaller boat is the *Ptarmigan* (11' 6" long, 4' 5" beam) designed by Iain Oughtred and described in an article in *The Boatman* magazine in the December 1995 issue. Oughtred also has the *Robin* (10' 3" by 4'). His *Egret* (11' 10" by 4' 11") and *Gannet* (14' 5" by 5' 8") are glued lapstrake dinghies, more modern in hull form than the *Swallow* or *Amazon*. They would be faster but have less initial stability. All of Oughtred's plans are provided with detailed building instructions.

Another British glued lapstrake design is the *Mallard* (12' long, 5' beam), designed by Andrew Wolstenholm, who also sells the plans . Building her was described in issues 17 through 23 of *The Boatman*, a British magazine no longer published. The *Mallard* is very close, too, except for being a foot or two shorter than the Ransome boats.

Glued lapstrake plywood can produce beautiful planking and a good rounded hull form. The results really are similar to the old solid wood clinker boats. If you build in plywood lapstrake, use the *best marine plywood available*. Ordinary construction plywood and ordinary (Douglas fir) marine plywood cannot take the demands of this building technique, nor hold up where so many edges are exposed. You don't want to see your boat with splintering edges because you used the wrong plywood.

Oughtred estimates building the *Grebe* will take about 220 hours - that's for a somewhat experienced wood worker - and cost roughly 1100 pounds sterling (about US\$1600). The building time does not include gathering materials or setting up your workshop. I imagine a very careful first-time boat builder might spend more time. The same figure or more would apply to making a traditional solid wood clinker-built boat. Still, these are not prohibitive figures, and you will end up with a better boat than you can usually buy for the same money.

Other Building Methods

There are much simpler building methods than glued plywood lapstrake that can make a boat with performance characteristics similar to Swallow's, if not the same appearence.

A good design that would serve the role of the Swallow is Doug Hylan's 15 foot 4 inch Chesapeake Bay sailing skiff. If you don't want to go to the trouble of building a lapstrake dinghy, but want to build your own boat, it would be hard to do a lot better than this. See the review in WoodenBoat #157, pages 74-75. "It's simple and inexpensive, but it is not cheap." Plans \$60 from Doug Hylan and Associates, PO Box 58, Brooklin Maine 04616. Phone (206) 359-9807.

Another boat that is about as close to the Swallow as an plywood a boat can be is the *Scruffie*. This is an Australian kit plywood boat that appears to be easy to build. It has hard chines (flat panel sides and

bottom panels), a lug rig, and amazingly enough for a modern design, lead ballast and a long keel like the Swallow rather than a centerboard. It is 16 feet long. The photos look like a good boat. I have no idea how good a boat it really is but it certainly merits investigation if this package appeals to you. They make a similar "Shimmy" (12 feet), and the remarkable "Stornaway" a two masted lug-rigged open ketch 18 feet long, a really nice looking boat. They have sold over 100 boats and there are Scruffie races in Australia. there is a UK contact. Boats can be obtained ready made as well as in kit form.

Acknowledgments

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Stuart's Boat Soup

"Boat Soup" is a finish for unpainted wood on boats, such as the interior of sailing dinghies. It looks fine but is much easier to apply and maintain than varnish. It is not maintenance free; the only finish for wooden boats that is low-maintenance is a quality application of primer and paint.

My boat soup when applied looks much like oiled wood, with a bit of gloss on some woods such as pine. It has the advantages of not cracking like varnish. It is simply applied with a rag. Abraded spots are easily repaired, and it's not very expensive. You can renew it at any time (except in rain) by wiping on more. You never need sand!

This boat soup has the disadvantage of not looking so glorious as gloss varnish, but it is a decent seamanlike finish made of materials available for the past two hundred years and hence suitable for traditional wooden boats. It is not a thick top surface like varnish, and since it soaks into the wood better than varnish it is a good coating for the wood, if maintained. It will not last a long time in sun and rain; don't depend on this protecting wood that is constantly exposed to the weather constantly unless it is renewed. If you renew it, it will do find for a summer mooring.

The recipe is one part by volume good traditional resin varnish (any traditional marine "spar" or "captains" varnish – preferably not polyurethane varnish), two parts linseed oil, and three parts real turpentine. Mix and apply with clean cloth.

Put on two or three coats to start with, letting each layer dry well before applying the next. Drying may take from 3 hours to three days, depending on the wood and the weather. Repair faded or worn spots by rubbing on more boat soup as required. Remember the drying boat soup is sticky so don't expect your best friend to sit on it 3 hours after you apply it! Generally once the base coats are establised any spot of repair will be ready in a day or two. Adding "a dash of Japan driers" is specified in some boat soup recipes and that may speed the drying. I have not tried it.

There are other boat soup recipes that include pine tar, a black gooey substance. They are good too, maybe more long lasting, but not so attractive for pleasure craft. They are typically used for outside hull surfaces you don't walk or sit on.

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