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# Canoeing

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## Editorially Speaking

At this time of the year when club programmes are being made up and plans are being made for the forthcoming season, we make a special appeal to all club secretaries and organisers to check that the Editor's name is on your mailing list. The more news that comes into the Editorial office the better we are able to serve our readers. Even if the information being circulated is of a purely local nature we would like to receive a copy since this helps us to gain a clearer picture of what canoeists are doing.

A side benefit of receiving this information is that we are now receiving an increasing number of general enquiries, and if we know that a group in the north-east is experimenting with, for example, glass fibre slalom Canadian canoes we can direct a schoolmaster in the southwest who is thinking of starting a similar project to this source. Thus we are able, in a small way, to help people to benefit from the research and experiments of others. All too often in the past much valuable knowledge has been wasted because it has not been adequately publicised.

'Canoeing' was started because we felt there was a need for all canoeists to know what was going on outside their own parish boundaries, but we can only do this if individuals and clubs keep us in the picture. So, please, put us on your mailing list straightaway, and help us to do a better job.

# Single Bladed Splodge

NARRATED BY ALAN BYDE



Splodge reports back after a summer spent in wetly paddling the Northern Waters. One supposes that almost everyone has had the same summer, wet. In any case, canoeists who take their canoeing seriously are usually a pretty wet lot.

Note the drawing. Splodge is dressed in swimming trunks and a life jacket, he wears also an air of faint wonder and a Canadian Canoe. He is distressed. One notes that he looks to his right in a yearning manner, whilst travelling smartly to the left in a series of ever decreasing circles. He is just off shore from the landing stage, and the rest of the course has tumbled headlong toward the dining hall where char and wads await the early canoeist. The coach has promised dire horrors for he who transfers his paddle from one side to the other to maintain straight line travel. Splodge prefers not to test this promise.

Splodge was on a course for the beginner on Windermere this September. He tried draw strokes and support strokes, embryo low telemarks, and a little bit of wiggling, all in kayak type floaters. Now along comes the coach, produces this open thing, and says to have a go. Off with clothes, and on with the minimum for decency, plus a lifejacket. Splodge confidently expects a wetting. Kneeling in what he guessed to be an attitude of prayer, clutching the mutilated paddle, (one end missing) he cast off: He wobbled greatly until told to place his backside on the bracket, i.e. the thwart, when he dithered less.

Prodding the water tentatively, he found the canoe spun round but moved forward little. Using a natty draw stroke, which seemed much easier in the Canadian, his paddle being upright, he moved away from the landing and the imminent danger of striking and sinking it. The landing, that is. He tried again. Again the spin. Reminded of the rudder stroke, he dropped his left wrist at the end of the drive, turning his blade in the water so that it acted as a rudder. Grunt from the coach. "Wrist OVER, Splodge", said he. (I should explain that Splodge is a right side Canadian paddler). Lo and behold, movement forward, the spin controlled in a fashion by an awkward braking action caused by the wrongly held paddle. Again he tried, for Splodge is nothing if not a sticker. "OVER BLAST YOU" roared the coach. Splodge on the point of an obedient

capsize realised that it was the wrist that had to turn OVER the paddle shaft. That is the top wrist. The wrist where there should have been another paddle blade. However, there was one twice the size at the other end, thought Splodge. Blade, that is.

He tried again. It worked, the J stroke no less. The ripple played pretty tunes in clear lake water, he could even see old baling cans ten feet down. Ten feet! Ye Gods and little fishes, he was indeed moving, and quite fast too. He weaved away, and overcorrecting swung to the right, the side he was paddling on. He tried a straight drive, but found little left turn, because the thing was broaching to on its own tail wave. So he swept his paddle out wide, with little more effect. He swept again, and remembering the coach's remark that the maximum turn was at the end of the stroke, as it "stroked" the canoe, he hit it a resounding thump on the tail. This worked. The coach wept silently for his boat and paddle. Splodge turned mightily to the left, and as the swing started again, nearly disembarked. Bang went the support stroke. Joy! His kayak training was useful after all. So Splodge wobbled and wobbled, but stayed afloat, and learned to balance his effort so that each stroke became an automatic correction for the one before. This Canadian is very like the slalom canoe in its behaviour, and Splodge being by now able to distinguish between the different types of canoe and kayak, found pleasure in this knowledge. Of course, Canadians vary, as the coach pointed out, and many slalom strokes developed from Canadian handling. Very good initial training for the slalom canoeist is this Canadian lark.

Later, when in tandem with another member of the course, Splodge had cause to remonstrate with him, as the man was obviously half witted. The canoe swung this way and that, and do what he could in the bow, Splodge could not control the weaving produced by the lunatic in the stern. A few short words, and they changed places, having first of all taken the precaution of coming ashore. Off they went again, and the weaving about started again. Just as bad. The words became shorter and more to the point, as follows "Look, mate, you paddle your blasted end any way you like, and I'll paddle my end, but belt up, do, there's a good fellow". They got on well after that. Remarkable how one could paddle at one's own rate without upsetting the other fellow by a swift clip over the ear'ole with a misdirected paddle, as in a double with double ended paddles. Best of course to lean forward, dip and drive in time with the other man, than to potter along in one's own clumsy way, but the results of lack of synchronisation were less damaging.

So this is the story of Splodge's initiation to the strange art of Canadian paddling, but it is all a matter of what one is accustomed to. If everyone used Canadians, kayaks would appear strange. I would suggest that one examines the following evidence of the charm that Canadians have (the canoes I mean).

Film "Canadian Canoe Demonstration" on 16mm sound only, on hire from the British Film Institute.

BCU booklet, "Canadian Canoeing" 3/6d, 3/- to BCU members. American Red Cross book, "Canoeing" 18/6d. This is excellent.

Finally, join the Canadian Canoe Association of Great Britain, 10/6d. annually, write to A.W.Avery, Esq., 160 Exmouth Road, Ruislip, Middlesex.

# Hints on Reading Fast Water

The beauty of the waves and swirling waters of river rapids is known to few persons and to even fewer with the artistic ability to reveal them to others. This aspect is a matter for you and your soul. But I would like to tell you some facts about water flow which I have extracted from a dull hydraulics text because of their interest and importance to canoeists. I hope to provide you with a rational basis for choosing your course in dangerous waters so that you and your soul may have a greater opportunity to contemplate the beauty of rushing water.

Perhaps the most important thing about moving water is its tremendous power. You are used to driving at high speed so that coasting through a river rapid at ten miles an hour may seem deceptively tame. While this point is often investigated experimentally, I think you will find the analytical method less destructive. Suppose our canoe rolls over and is pinned against a rock so that it is perpendicular to the current. The force of the water on the canoe can be found like this: multiply the area the canoe presents to the current by the square of the current velocity in miles per hour and by the constant, 2.8. Since this canoe is fifteen feet long and has an average width of two feet, the area is 30 square feet. The current velocity is ten miles an hour so the force is  $30 \times 100 \times 2.8$  equals 8400 pounds! That is the weight of three automobiles! "Oh well," you say, "the water is shallow, only up to my thighs." My little formula says the force on your legs is over 300 pounds and if this bowls you over you can calculate the new force for yourself. Now you understand why the white water canoeist must learn to make the current work for him.

"Still waters run deep." And conversely, fast waters run shallow. These are corollaries of a simple and fundamental bit of common sense. Consider two places on the same river: where the river is deep and wide the current is slow; and where it is shallow and narrow the current must run much faster to pass the same amount of water. Once you have the feel of a stream on a particular day, you can deduce the depth of rapids from your observations of width and velocity.

The water velocity is not constant across the river. Friction along the bottom and shores slows the water. So it flows fastest on the surface in midstream and slowest near the bottom and along the shore. You must back ashore when landing or this current differential will turn your canoe around. And if you are compelled to swim in rapids you not only keep on your back with feet downstream but you also keep your feet at the surface so the current differential does not topple you end over end. There are also pockets of slow-moving or still water in the eddies behind rocks. Your bowman must be careful not to put his end in them when the stern is still in fast water, but they can be welcome havens for those who are tired or in trouble.



## CONTINUITY

VELOCITY X FLOW AREA = CONSTANT  
(DEPTH X WIDTH)

THE SAME VOLUME OF WATER FLOWS  
THROUGH EACH PART OF A GIVEN  
RIVER ON A GIVEN DAY



IF IT IS FAST AND WIDE IT IS SURELY TOO  
SHALLOW



IF IT IS SLOW IT MUST BE DEEP



IF IT IS FAST, YET NARROW THERE  
MAY BE ENOUGH DEPTH



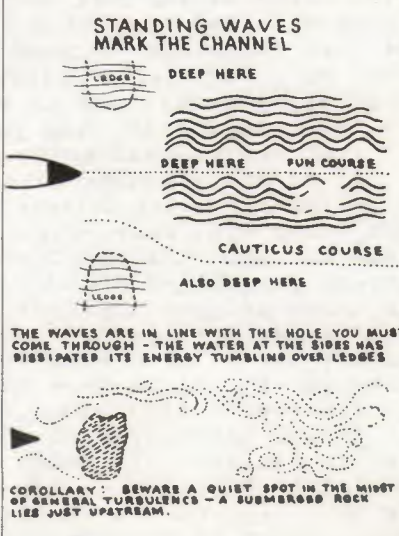
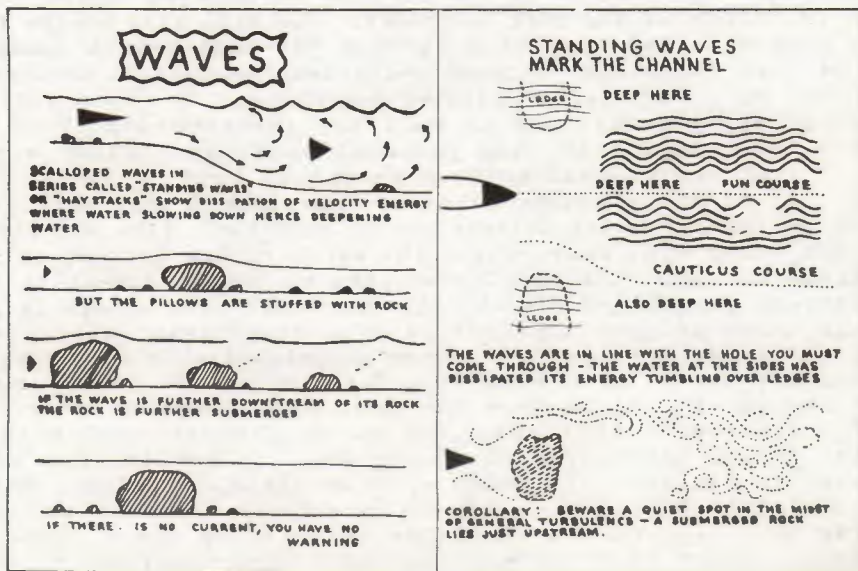
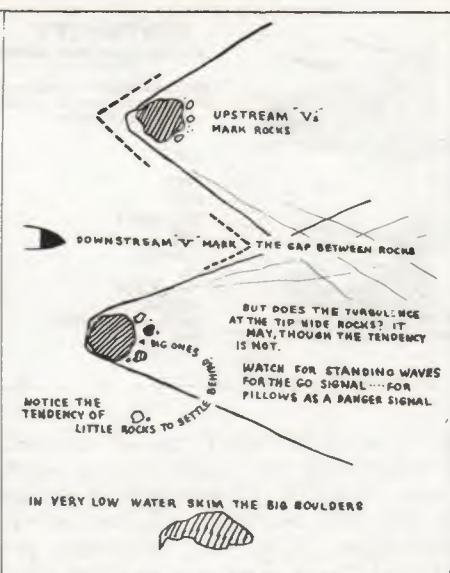
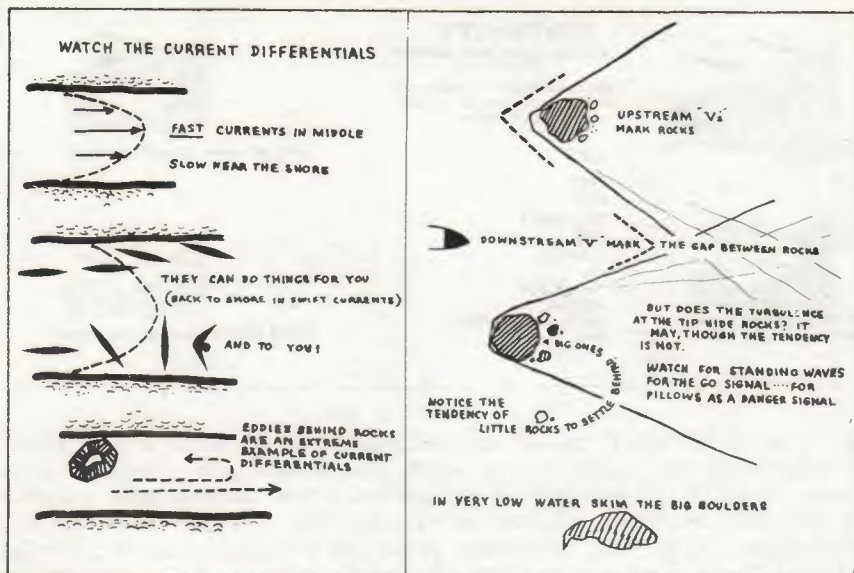
IF IT IS FAST IT MAY BE SHALLOW

AND

EACH  
DAY  
YOU MUST  
GET  
"THE FEEL"  
OF  
THAT RIVER  
BEFORE  
THESE DEDUCTIONS  
CAN  
BE USED

You will want to spot those hidden rocks. In still water there will be no signs on the surface to mark the submerged rock, but in a current the rocks will be marked by waves. The faster the current and the closer the rock is to the surface, the bigger will be the wave. Oftentimes in a fast current your canoe can bounce through "rock waves" without even touching the rock. This is a matter of judgement. "Good judgement comes from experience; experience comes from poor judgement." You will notice that the wave is right at the rock when the rock is at the surface but appears further downstream as the depth of the rock increases. You will also notice that there is a rock in the apex of a surface "V" that points upstream, and that when there are two such obstacles the channel between them is marked by a surface "V" pointed downstream. But note well that the "V" pointing downstream is only the intersecting "V's" from the rocks on either side, and you must look for further signs to be sure that the channel between is indeed free of rocks.

It is the standing waves or "haystacks" that mark deep water and are the greatest delight of the canoeist. Like all river waves, these stand stationary while the water rushes through on its downstream course. They may be spotted by their characteristic shape and long length and also by the fact that they appear in groups, a half dozen or more together at even downstream intervals. These waves are a vibration phenomenon associated with the dissipation of velocity energy when a shallow, fast current reaches a deeper place in the river. These waves therefore mark deepening water downstream of a clear path that lets the water through the rapid without dissipating its energy on the rocks. So get in line with these waves to traverse the ledge or rock field. Continue through the waves if they are not so big as to swamp you, otherwise draw to one side when free of the obstacles and hit the waves where they are small. There is an interesting and useful corollary to this rule. When you are in rough and turbulent water and spot a nice quiet area avoid it like the plague. As you shoot past, sneak a look back and you will probably see that a hidden rock with water pouring over it protects the quiet area.



be laid. My first hulls were laid with two laminations plus strengthening strips seemed a little "floppy"; later attempts with

Before I close my hydraulics book, let me warn you about "secondary flows." As a rule the current runs parallel to the banks and it is fairly easy to tell where it is carrying you. But in the sharp bends the fast water on the surface all goes to the outside of the bend. There it goes down and across the bottom toward the inside of the bend, leaving room for more surface water on the extreme outside. All too frequently there are large waves or windfalls on the outside and the canoeist is swept into them to his amazement and consternation. Only the boundary layer on the inside shore does not end up at the outside, so hug this shore all the way around. Otherwise when you see the obstacle it may already be too late.

There are other lesser points that you will pick up later. In the meantime use these rules with discretion. Scout the rapids from shore when possible, for dangers that are hidden from upstream are often readily seen from below and it is wise to practice these rules before you stake your life on them.

If you would be a keen observer of waterflow, if you would practice the safety rules that have been evolved from experience, then a new world of fabulous beauty can open before the bow of your canoe.

(Reprinted by courtesy of "The American Canoeist")

## Canoeing on Ice



The sight of their favourite stretch of water may deter many of our readers, but not Duncan Winning. This photograph shows him going 'afloat' on Loch Lomond in the plywood chine kayak which he built to his own design. Sets of building plans for this kayak which is 16' long and 24½" beam are available from the Circulation Manager, Canoeing Publications, 6 The Mall, Brentford, Middlesex, price 12s. 6d. (post free).

# Test Report

BY W. T. HALL (WOOLWICH CANOE CLUB)

## Glass-Fibre Slalom Paddle

This paddle, supplied by Streamlyte Mouldings, consisted of an alloy shaft with two flat blades made of glass fibre moulded round a soft wood peg which secured the blades to the shaft. The blades are of ample size and already cut to shape but the manufacturers suggest that both the size and shape of the blade can be altered by the purchaser to suit individual requirements.

As supplied by Streamlyte Mouldings the trimmed edge is unsealed and in view of my past experience with this material I felt that some test for delamination due to prolonged submersion was necessary. My first test, therefore, was to mark a spot on the extreme edge of one of the blades and, by using a micrometer, to measure the thickness of the blade at that spot. The blade was then immersed in water for three weeks.

After one week of continuous immersion no swelling of the blade had taken place, but after two weeks the thickness of the blade had increased by .003". At the end of three weeks an increase of .009" was registered. It would appear from these results that the blade would deteriorate through water absorption over long periods, but although the point was proved I felt that as the test had covered over 500 hours continuous immersion the increase in thickness was negligible.

The paddle was then added to the Club's equipment, and a careful check on its popularity made. Without exception, the paddle was used on all Cruises and all Training Sessions at the local Baths. When faced with a choice of three or four paddles, most Members chose the paddle on test. The reasons for this were as follows:-

1. The paddle is smart in appearance.
2. Having flat blades it can be used with left or right hand control.

The combination of alloy shaft and centre-ribbed glass fibre blades, gives exceptional strength and practically eliminates the possibility of paddle breakage through normal use, although the blade edges are prone to chip exposing the glass reinforcement.

The finish of the blades is very good, but this could be improved if the fault alongside the centre rib of the manufacturers' moulds is corrected.

When using this paddle one does not get that "too-heavy" feeling which is sometimes experienced with some other types of paddle.

At £3.18.6d. the initial price is a little high when compared with other British made paddles, but its extreme toughness would offset this over a period of time. In the hands of the more experienced paddler this product should give years of satisfactory service.

# The Cambridge Greenland Expedition Kayak, 1962.

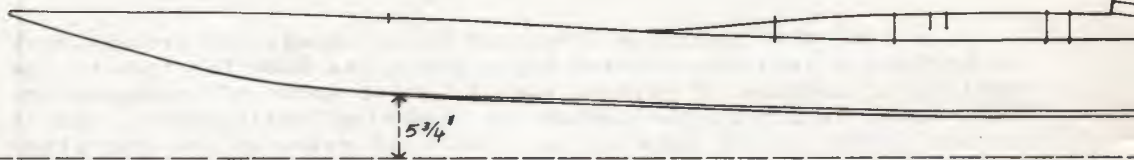
In 1962 the Cambridge Greenland Kayak Expedition brought back to England a sealskin covered kayak which was made for them by the natives of Isortoq, a village some 80 miles south of Angmagssalik. This kayak is now in the custody of 'Canoeing Publications', and it is our intention to make it available to canoe clubs and other groups for displays and exhibitions. In the meantime, we have measured this kayak and prepared a very full scale drawing of it for inclusion in our 'Project Eskimo' series. The price of the drawing is 3s. (post free). On the following pages is an outline drawing of the kayak from which for the sake of clarity the constructional details have been omitted.

## Construction of the Kayak

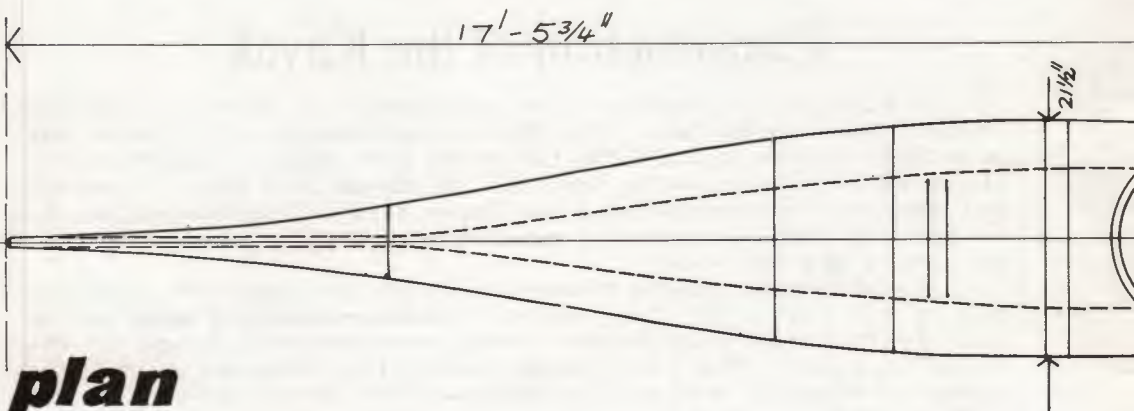
A kayak was built for the expedition in Isortoq, and was brought back to England. The whole construction of the kayak was carefully observed and detailed notes were made. Unfortunately there is not the space to set out all the details here. However, all accurate measurements of the kayak form and dimensions may be scaled off the line drawing precisely. A short sketch of construction now follows.

Construction of the frame began with the gunwales, consisting of two ( $2\frac{1}{2}$ " x  $\frac{3}{4}$ " ) long spars. Fourteen mortices were cut in each to take the deck beams; these governed the shape of the kayak in plan. The deck beams were then secured by nylon, threaded through them to the gunwale; the three forward of the cockpit being curved upward to allow leg-room.

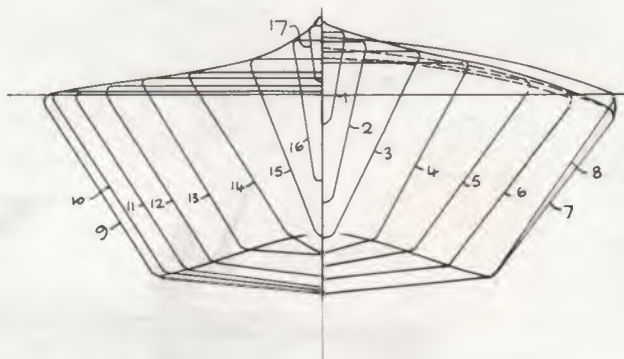




**side view**

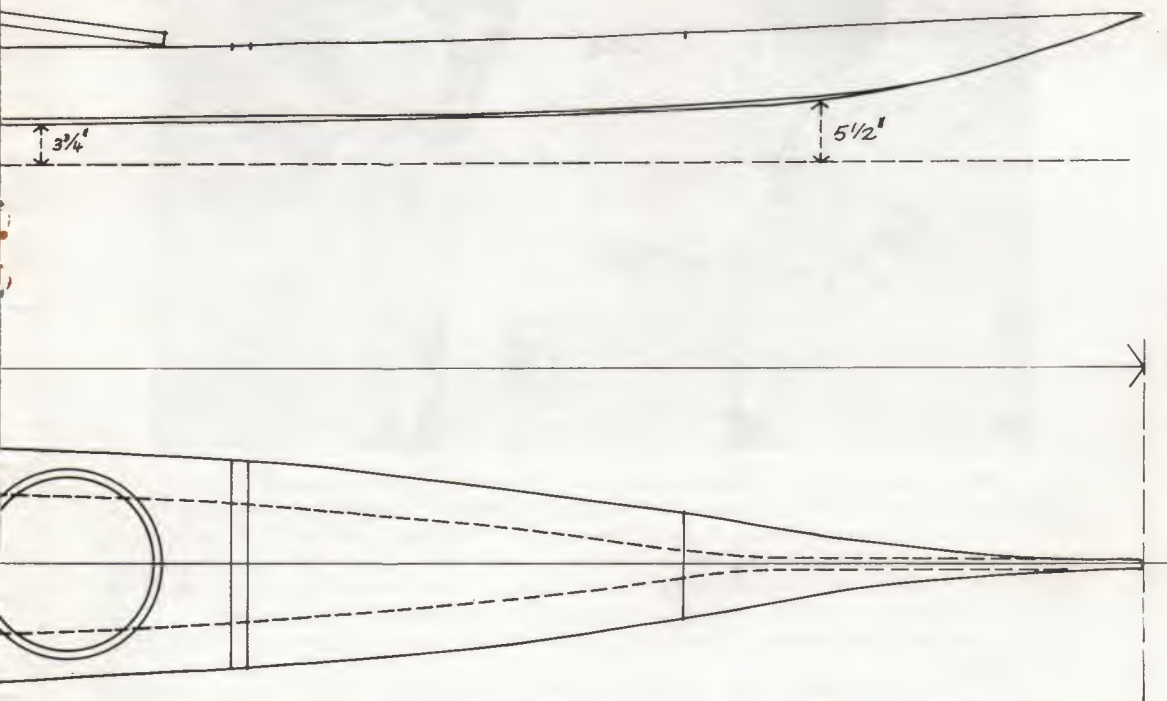


**plan**



**CAN**

Maximum depth between deck and keel -  $9\frac{1}{2}''$ .



**DEING'S GREENLAND KAYAK**  
***made in 1962 at Isortoq***



The bent hull frames ( $1\frac{1}{4}$ " x  $\frac{1}{2}$ " ash) having been soaked in boiling water, were then fitted in mortices carved in the underside of the gunwales. The frame, now having too much curvature due to the twisting of the gunwales, was then left upside down and weighted with rocks. This new shape was maintained by the addition of the keel, two stringers, stem and stern posts. The keel, gunwales, stem and stern posts were all cunningly shaped to fit together.

Three fore and aft slats were fitted over the three curved deck frames, being dove-tailed into the heavy frame nearest the cockpit. Two ( $3$ " x  $\frac{3}{8}$ " x  $4$ ') bottomboards were then bound to the bent frames. This completed the frame.

Apart from a drill, most of the tools used were 'traditional' - the 'Ulimaut' (a sort of chopper), a home-designed coping-saw, and various knives and chisels. The paddle was carved out of a solid length of wood.

Once the framework completed, the skinning took little time. Having 'shaved' two large sealskins they were soaked in water to become pliant. The panels of skin, stretched round the framework so as to have the minimum number of seams below the waterline, were fastened across the deck with nylon, by means of which the tension in the hull could be applied. All joints were overlapped, and each stitch was taken through only half the skin thickness. The skin was pulled up through the cockpit ring to peg onto headless nails in the wood. Finally seal-skin thonging, to secure the hunting equipment was fastened across the deck through holes in the skin.

Two hunters took five days, taking things fairly leisurely, to complete the frame; and five women took five to six hours to skin the kayak. (from the Report of the Expedition)



# Canoe Building in Glass-Fibre/Resin - Part 3

BY BILL SAUNDERS, C.C.P.R. SENIOR TECHNICAL REPRESENTATIVE

## 2. Application of Gel Coat

The gel coat is the first layer of resin applied to the mould. Its purpose is to provide a good finish to the outside surface of the shell and hide the fibre pattern of the underlying glass. It should be just sufficiently thick to serve this purpose - if the gel coat is too thick, crazing will occur more easily when the shell is brought into use and it may also cause warping in the laminations during curing. For a normal single seater hull shell, 3 lbs. of resin should be ample. Since near vertical surfaces are involved, the use of thixotropic resin is essential to overcome resin drainage down the sides of the mould. This means mixing thixotropic type resin with general purpose type, the amount of the former being kept to a minimum - normally a mixture of 1 part thixotropic to 5 parts G.P. will be found to be satisfactory.

Pour the measured amount of resins into a mixing tin. Unless the tins are all the same size it is a good idea to keep one tin for measuring - alternatively a calibrated metal pouring jug is useful.

If the hull is to be coloured, paste pigment (up to 5% depending on the depth of colour required) is added and mixed. All mixing should be done thoroughly but without excessively robust stirring since this introduces air bubbles into the mix. The correct amount of catalyst (seek guidance from the supplier but in most cases it will be 2%) is added and mixed-in sufficient catalyst prevents complete polymerisation of the resin which gives a 'tacky' result that never completely "sets". Next, using another measure, the correct amount of accelerator is added and mixed, the amount used depends on its type, working temperature and the working time decided upon. Higher temperatures and longer working time means the use of less accelerator, though 1% - 4% is normal. With most types of additives, 2% catalyst will give 8 hours life and 2% accelerator reduces this to 30 mins., at 60° F. With the gel coat the mix can be made a little "strong" since it should not take as long to apply as the "lam" coats; with beginners, however, it is better to allow a little extra time in which case there may have to be a time lag after the application of the gel coat before proceeding with the rest of the work - the former should still be 'green' but gelling should be sufficiently far advanced to prevent the intrusion of rough fibres into what will be the exterior surface of the hull.

When mixed, the activated resin is split into 2 or more tins depending on the size of the working party. It is then applied on to the inside of the prepared mould with a normal brush. Starting about mid-ships, it is best to do a section at a time, working from the gunwale down to the keel. The gel coat should be applied evenly, but not too thickly, and should not be "brushed out" too much or the release agent may be stripped from the mould which will lead to damage when the shell and mould are separated. Surface mat is then cut into easily managed lengths and carefully laid on to the resin. It is better to start in the centre and work towards the stem and stern using pieces of about 2' - 3' wide and over-

lapping joints 1" - 2". The excess on the surface mat width of 36" is cut off about 1" above the mould edge and the remaining pieces can be used near the bow and stern. The mat is then stippled gently but firmly (the longer-haired brushes are probably safer at this stage) particular attention being paid to the awkward corners at bow and stern and to the mould edges. As the resin starts to "cure" it becomes tacky and the brushes may "pull" or "fluff" the top - either waiting a little and then carefully pressing the top down rather than "stippling" or applying a little more resin will overcome this difficulty, though the use of a little more resin mix may be necessary. The mix should be carefully watched for signs of "gelling". This is first noticeable in the tin when the resin starts to become stringy and forms clots of jelly-like blobs, although an increase of fume concentration in the mould is also an indication that it is about to happen. Once this occurs the mix is useless at this stage since it cannot be thinly applied and should be discarded; at a later stage it can be used if desired for stern and stem blocks provided the gelling is not too far advanced.

### 3. Laying the Main Laminations

Resin should be mixed as before though thixotropic additive should not be required. Amounts will vary with the size and experience of the group, but 6 lbs. is a convenient amount with most. Meanwhile pieces of chopped strand mat 2' - 2' 6" long are cut ready, gunwale stiffeners 3" - 4" wide and keel stiffeners some 1½" - 2" and some 2½" - 3" wide are also cut and put to one side. The resin is then applied carefully but generously as in step 2 and the pieces of mat laid on. Next the resin is brought up to the surface of the layer of mat by a vigorously stippling action preferably with the short-bristled brushes. Pieces should overlap by at least 1" and it is easier to lay the underneath portion first before laying on the overlap. Again, careful attention should be paid to the narrow corners of the mould and also to work at the mould edge. Some people prefer to lay the upstanding mat outwards to decrease the chance of it being accidentally pushed inwards and thus causing voids at the gunwale edge. Others prefer to leave it upstanding because of the possibility of voids developing unless the outward laying is done very carefully. Either way, voids at the mould edges must not be allowed to form.

Resin should not be over-applied - excess resin means a more costly job as well as one unnecessarily overweight. Patches which remain white without taking on a glossy appearance mean that those parts are not "wetted out" - this calls for either more "stippling" and/or a little more resin - more "stippling" is harder but more efficient.

As soon as the action is sufficiently advanced, i.e. the surface not too tacky, the mat is thoroughly rolled, getting rid of all the air pockets, ensuring complete "wetting out" and flattening out the mat well. Particular attention must be given to the gunwale edges, and where the keel and the gunwale lines meet.

The strengthening strips (one at the gunwales and two at the keel) are laid in a similar manner. A second lamination can then

a second lamination for 6' - 9' around midships was a successful compromise for some requirements. Obviously the number of laminations must depend on the design used, what aspect of canoeing the hull is to be used for, who is to use it, and so on. If desired, a further surface mat can be laid. This gives a smoother, "kinder" finish and decreases the possibility of subsequent water infiltration, and alternatively, a thin coat of resin applied after gelling is recommended.

#### 4. Trimming

The mould should be so designed that surplus material protruding above the gunwale line can be conveniently trimmed off. If practicable, the work should be examined at short intervals and if it can be caught when the gelling stage is well but not too far advanced, (i.e. at the "green" stage when a sharp knife will cut the laminations without tearing up the glass fibres) the edge can be quickly and efficiently trimmed. A Stanley - type trimming knife can be pushed from the inside through the laminations and drawn backwards with a shearing action, the mould edge guiding the blade. If the job has to be left for some time a sharp knife, tapped along the mould edge will remove the surplus material and the hull edge can be cleaned off with a surform tool or file. This latter method, however, is much harder work, takes much longer and never gives such a good finish to the edge and there is usually some chipping of the gel coat with a resultant rough edge, rather than a smooth, "closed" finish.

#### 5. Cleaning Up

All equipment should be cleaned immediately after use in a cleaning agent such as acetone. It may be necessary to clean some tools, e.g. brushes rollers, between stages. Thorough cleaning in acetone should be followed by as many washings in hot water, with soap or detergent, as required and the whole well dried. Unless tins are in short supply, it is not worthwhile cleaning them for re-use.

(To be continued)



Wherever you may send your contributions - articles, letters, photographs, cartoons, to the Editor, 1 North Lodge, The Green, Ealing. W.5.

# Letters

Dear Sir,

A satisfied customer

As result of an advert in your paper I purchased a custom built Sirocco Slalom suit last May. I did not wear it much during the summer, but in October at Bulth had to retire as the arm sleeves proved too tight when racing.

I wrote to Sirocco's about this and without any charge at all, they remade the sleeves and returned the suit to me within a week. If this isn't first class after sales service I don't know what is!

Yours faithfully,  
Brian Johnson  
Twickenham Canoe Club.

Dear Sir,

A satisfied reader

Please find enclosed my subscription for 'Canoeing' for the forthcoming year.

May I add that your magazine gives me many hours of excellent reading as well as keeping me informed of up to the minute news of both the sport and the B.C.U.

Keep up the good work.

Yours faithfully,  
Tony Ford (Sgt.)  
Allied Staff, Berlin,  
B.F.P.O. 45.

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## Book Reviews

CANOEIST'S MAP OF THE RIVER SEVERN by Percy Blandford  
(Percy Blandford, 3s.6d.)

Compared with canoeists on the Continent, the British paddler has been poorly served in the way of river maps and, therefore, Percy Blandford's Map of the Severn is to be welcomed. Drawn to a scale of 1 inch to the mile, the map covers the river from Welshpool to Gloucester, a distance of 133 miles, and shows all the essential information required by the canoeist. e.g. locks, rapids, ferries, inns and so on. The map is produced by a plan printing machine from a master tracing, and in this way it is economic to produce a few copies of the map at a time and to incorporate amendments into the master, enabling the compiler to claim "that each one we sell is as up-to-date as it can be". This is an excellent idea, but for it to be fully effective we would like to see a note on the map of the date up to which it has been corrected.

This is an effective if not very beautiful map, and we can commend it to those venture on Severn waters.

GUIDE-BOAT DAYS AND WAYS gathered and edited by Kenneth Durant  
(Adirondack Museum, Blue Mountain Lake, New York, \$5.25)

The story of the guide-boat of the Adirondacks is one of the most fascinating and little-known chapters in the history of small boats and the curators of the Adirondack Museum are to be congratulated on this anthology of writings on the building and use of the guide-boat.

For the technical minded, the guide-boat was not unlike a Canadian-canoe in shape being constructed of wood planks, double-ended, but it was propelled with oars. Lest anyone think that these craft were cumbersome it must be stressed that lightness in weight was one of the aims of the builder in order that the boats could be easily carried on long portages, and typical specification for a 16ft. guide-boat with three cane seats, one cane backrest, one pair of eight foot oars, paddle, carrying yoke, the whole with three coats of varnish would weigh about 70 lbs. A triumph of construction indeed. Such a boat would carry three people and their duffel.

It seems likely that these craft developed as the birchbark disappeared, and now with the development of marine ply and out-boards they too are becoming a curio. Why these craft never spread beyond the Adirondacks is hard to say: possibly their development in the latter part of the 19th century came too late; possibly, the skill required in their construction was too great for most craftsmen.

If your interest in light craft extends beyond the canoe, you will find this an irresistible anthology.

CANOEING IN BRITAIN December 1963 (B.C.U. free to members).

'Canoeing in Britain', the quarterly bulletin of the B.C.U., was founded in 1961 by Hein Thelen and continued for twelve years until the pressure of other canoeing activities forced Hein to resign from the Editorship. Now after a gap of nearly a year 'Canoeing in Britain' has reappeared under the Editorship of Jack Levison of Durham.

The change of Editor has brought a change of format and a change in the concept of the function of the B.C.U. quarterly; in the past it set out to be, and was very successfully, a bulletin of events with the emphasis on news, while the new 'Canoeing in Britain' will not only carry news but also articles of a general nature and thus become more of a magazine.

With its glossy two colour cover, increased number of illustrations it is clear that the new magazine is operating on a much increased budget than in the past and we wish it every success. It is vital to the success of the new membership scheme of the B.C.U. that members are kept informed of what their national body is doing, and a lively magazine is the most successful way of doing this.

# News Flashes

## 2nd SCOTTISH OPEN AIR & HOLIDAY SHOW

The above show will be held in the Waverley Market, Edinburgh, from the 11th to the 22nd February. We understand that the amount of space devoted to camping has been considerably increased this year, and that there will be some canoes also on show.

## A TRAINING TANK IN CONCRETE

Reader K. Rishton has sent us a news cutting featuring a training tank which has just been built for Emmanuel School by the Modular Concrete Company. We are still waiting to hear of the first British canoe training tank.

## A POLYTHENE BOAT BUILDING SHELTER

The 8th Ruislip Scout group won a dinghy kit in a newspaper competition but had nowhere under cover in which to assemble it. They solved the problem by building a temporary structure of rough timber covered with 0.005" gauge polythene.

## WHITE WATER MAGAZINE

We learn that Ron and Xenia Crockett have resigned as distributors and treasurers of "White Water". Editor Chris Sutton is now helped by Dave Hutchins and Chris Webb. Chris McAllister is responsible for circulation and Bob Thacker is to look after the printing. Future issues will contain many more 'How to do it' articles than formerly.

## A LIFEJACKET FOR CANOEISTS

The lifejacket for canoeists which Surgeon Lt. Cdr. Fraser Davidson described in the July issue of 'Canoeing' is now in production and the first samples are being circulated for testing. We plan to report in detail very shortly.

## NEW EDITOR FOR THE 'CANOE CAMPER'

The 'Canoe Camper' the quarterly magazine of the Canoe Camping Club will be edited by John Leech in future. Kathleen Toothill the previous editor is retiring after twelve years service. Since the 'Canoe Camper' was first published there has only been one other editor, Capt. S.J.C. Russell the founder of the magazine in 1937.

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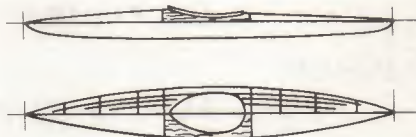
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#### CANOE INSURANCE

B.C.U. Canoe Insurance. Cheapest Rates. For proposal form write to the B.C.U., 36 King Edwards Grove, Teddington, Middlesex.

#### FOR SALE

Back numbers of 'Canoeing' price 1s.3d. each (incl. postage), 6 or more copies 1s. each (post free). Bound copies of both Volumes 1, 2 and 3 available - price 20s. per volume (post free). Apply: Circulation Manager, 6 The Mall, Brentford, Middlesex.

#### FOR SALE

J.S. Mk. VI £28. Details on Application. C. McAllister. St. John Bosco School, Leeds 6.

#### WHITE WATER

The magazine for the rough water canoeist. Now available 10s. p.a. post free from; White Water Magazine, 7 Kelso Gardens, Leeds 2.

#### WANTED

Second Hand Canadian Canoe. Offers to J.C. France, The Outpost, Hopton, Mirfield.

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