

# Canoeing

Price 1s.

VOL 4

NUMBER 8

JULY 1964



## SPECIAL FEATURES

THE NEW ZEALAND MAORI  
WAR CANOE

TWO THREE-LOCKS CANOE RACE

WATER OR BUOYANCY

WAITING TO START

Photo: J. Lewis



## MOONRAKER

### BRITISH RACING & TOURING CANOES

THE MOST SUCCESSFUL LONG DISTANCE CANOES. IN HASLER TROPHY RACES LAST SEASON MOONRAKER SUCCESSES TOTALLED MORE THAN THOSE OF ALL OTHER DESIGNS ADDED TOGETHER. MOONRAKER TOURING CANOES ARE JUST AS GOOD, & MOONRAKER CANOE BUILDING KITS SET A NEW STANDARD IN EASE & SPEED OF ASSEMBLY.

PLEASE SEND FOR FREE BOOK ABOUT CANOEING TO THE DESIGNERS

## JENKINS & LANCEFIELD

DEPT. 9. CORSHAM, WILTS.

SUPPLIERS TO H.M. SERVICES & EDUCATION AUTHORITIES

# THE 'SUPREME'

"SUPREME" The most successful Kayak in British 1963 Slalom and White Water racing. Nearly 75% of British Slaloms were won by competitors who used Supreme Kayaks, this amazing achievement is furthered by the fact that the Supreme has the finest White Water race record in Britain this season. Much credit is of course due to the smooth consistent handling of this very versatile canoe.



We proudly present a completely new Slalom Special glass-fibre Kayak for 1964, designed from experience gained from producing two outstandingly successful Slalom/White Water kayaks since our advent in canoe competition in mid 1962, this canoe model K.W.3. will be an addition to our range, featuring complete elliptical section, fully adjustable seat and footrest, knee-grips. Length 13ft.1½ins. Beam 23½ins. Weight 30lbs. A must for National and International events where the margin of manoeuvrability decides the result. (Price details available shortly).

Basic price of 'Supreme' model £38.5.0. Footrest, knee-grips, Spray-deck available extras. All models feature four layer woven cloth glass-fibre reinforcement.

Glass-fibre paddles (Slalom) £3.18.6.

*for further details write to:*

**STREAMLYTE MOULDINGS (Marine) LTD.**

**124 Brighton Road, Shoreham-by-Sea, Sussex**

Telephone: Southwick 3716

Contractors to: The Admiralty, Air Ministry, War Office, Education Authorities,  
Canoe and Youth Clubs, Exporters Civil and Military.

Keep dry this summer with one of our **ANORAKS**

Plastic 'Pakoraks'  
small, medium, large

£1 1 0

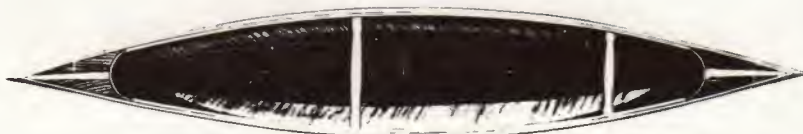
'Peter Storm' proof nylon  
small, medium, large

£3 8 0



## CANADIAN CANOES

(Made in Sweden)



### "TROUT"

PRICE £45 10 0

Length .....14 feet  
Width .....2 feet 6 ins.  
Depth amidship .....1 feet-1 in.  
Weight about .....48 lbs.

Skin  $\frac{1}{4}$  in. thick.  
Strong inner and outer gunwale.  
Varnished mahogany.



### "SALMON"

16 ft. model, beam 3 ft., weight 70 lbs.

PRICE £53 0 0

In these canoes three plies of gaboon mahogany are glued together under high pressure with synthetic resin glue. This strong, leakproof, seamless construction does away with ribs and internal bracing, giving a smooth, clean interior. The inner stem and keel are bonded to the hull. Outer stem and keel of ash. The hull is impregnated and varnished. Brass screws and spikes.

## TYNE FOLDING BOATS LTD.

206, AMYAND PARK ROAD  
ST. MARGARETS, TWICKENHAM  
MIDDLESEX

Telephone : POPesgrave 4033

Contractor to Government Departments and  
Education Authorities

# Canoeing

Volume 4

Number 8

July 1964

Editor: Brian Skilling    Treasurer: Maureen Dawson    Secretary: Marianne Tucker

Circulation Manager: Charles Ranshaw    Art Editor: Mike Clark

Editorial Office: 1 North Lodge, Ealing Green, London, W.5

## CONTENTS

The New Zealand Maori War Canoe	127	A Matter of Buoyancy Cambridge Greenland Expedition	133
Making Moulds for Casting in Resin/Glass Laminates Part 4	130	Letters	137
The Three-Lochs Canoe Race	132	Book Reviews	139
		News Flashes	141

## Editorially Speaking

Four years ago, when we first started talking about publishing a canoe magazine, one of the most compelling reasons put forward was that all over the country there were paddlers who in their own particular fields were acquiring specialist knowledge but who, for lack of a suitable vehicle, were unable to pass on this knowledge to fellow canoeists. In starting 'Canoeing' we hoped to break down this barrier and thus encourage the dissemination of knowledge and so benefit the whole sport.

Whatever have been the failures of our magazine, and there have been some, we feel that we have managed in some small measure to provide a link between canoeists not only in this country but from overseas as well. In this issue, for example, we have material from New Zealand, from Scotland, from the north and from the south of England, and last, but not least, news of a booklet on white water canoeing from Canada. We are particularly proud to be able to publish this latter which is the first post war publication in this country to be devoted exclusively to the skills of white water canoeing and we are certain it will have considerable appeal.

Canoeing is a sport which knows neither class nor racial barriers and the exchange of ideas and information in a magazine can only have beneficial results. We are grateful for the ever increasing number of readers who are willing to share their knowledge through the pages of 'Canoeing'.

# The New Zealand Maori War Canoe

BY ALAN PEARSON

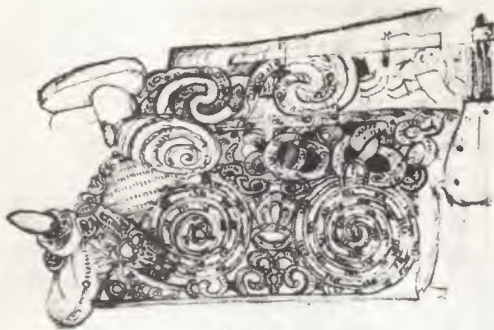
Mention canoeing to the average Kiwi and one is liable to be regaled with hazy prolonged reminiscing as boyhood adventures in the town ditch are relived, adventures probably in a tin craft bashed from a sheet of roofing iron. Only the old Maoris still cherish legends of the rolling sea roads for in song and story they have immortalized their fore-fathers who in the ancient migratory canoes, headed ever eastwards into the unknown red sunrise. Today, a half-rotted shell in the cow paddock (convenient for firewood), or a shape discernable only to an observant eye jutting from the river mud are all that remain to remind us nostalgically that, in trading a rich heritage for 'civilisation', tradition has proved no match for tinsel.

Distinctive from the work boats of the old-time Maori were the magnificent war canoes, craft created with meticulous outstanding workmanship and frequently ninety feet long with a seven or eight foot beam. The mystical nature of the Maori believed that the trees, as with any inanimate object, were the progeny of the Sky Father and the Earth Mother and elaborate ceremonies directed by the 'tohungas' or native priests were necessary to placate Tane the guardian of the forest before taking one of his charges.

The selected tree, frequently earmarked generations beforehand, was chosen absolutely regardless of location and relays of men with stone adzes bruised and tore at the fibres for days stretching into weeks felling an eight foot diameter giant - usually a tough pine. Once toppled, topping cleaned off the massive log and fern fronds were laid on the stump to prevent the log remounting overnight. Strictest tapu ensured that there was no clash between Tane and Tangaroa, the sea god, for any disharmony could cause the canoe to be overwhelmed at sea by gales. Even today, loggers and bushmen still occasionally stumble across partly completed craft, long abandoned through some breach of ritual. Workers were at all times of only the highest caste, and not allowed food on the long day's work.



Maori War Canoe. Waitangi Celebrations 1940



Prow of canoe "Hewakerei"  
Feb. 15th. 1843 John  
Wallis Barnicoat. Sketch

After placing the log so that any defect was not likely to affect the finished canoe, laborious chipping down the gunwale height gave the sheer line. On to this surface the outline of the outside shape was sketched. Workers charred and chipped at the inside and outside simultaneously and the massive top-sides and intricate carvings also progressed; the whole task was supervised by a master chief graduated in the high craft of canoe building. Ambition unlimited by material, sections were dovetailed on to give sufficient length, cunningly devised lashings ensured permanency. When the rough shape had been reached, leaving adequate timber for strength and wear, a great feast marked the readiness for the overland journey.

Backs strained and sinews cracked in unison to the traditional hauling chants as the great bulk surged forward on skids on an overland journey up to fifteen miles of gruelling travel traversing all kinds of terrain, generally bush clad mountains. At a work place by the sea the hull was finally adzed into the finished contours under the eye of experienced artisans. Fibre binds through adjacent holes secured the topsides giving a hull depth of about five feet. Elaborately carved stem and stern pieces, thwarts and gratings were also fastened by means of bindings. Solemn ceremony and incantation at a great feast marked the entry into the bosom of Tangaroa, a few last rites separating the ties with Tane. The canoe then became the responsibility of a chief of the tribe until his death when it would be cut, recarved and erected as his burial monument. With a full load carried at high speed the wake was observed and if the shape was considered inefficient the canoe was upturned in shallow water and the exposed hull was further chipped until a satisfactory contour was achieved. Although the interior of the hull was invariably left perfectly smooth, some builders believed that a natural adze finish on the hull leaving intervening ridges, prevented the water from clinging. Finally, pigments in shark oil gave the hull and carvings a reddish brown hue, detail being picked out with black trimmings. Tufts of white albatross were tied on as a final embellishment.

The stylised objective descriptions by the first explorers and missionaries, high on the poop of a man o' war, do not conceal their qualms at a fleet of fifty or more of these craft foaming along, two hundred paddlers giving the impression of a giant centipede. Impassioned rangitiras, usually three to a canoe,



Maori War Canoe. Waitangi Celebrations 1940

tried to outdo each other in exhorting with cries and exhortations the splendidly built and fiercely tattooed warriors who shouted out choruses as they strove to excel themselves. A chief with steering oar was positioned at the stern and bow where as grisly victory trophies the severed heads of enemies were sometimes impaled.

Long sea voyages were customary for both war, as well as trading. By quartering the heavy seas the canoes would ride well, adequate provision being made for baling with ornate scoops and if imminent capsizing threatened a concerted thrust of paddles pushed water under the hull on the side away from the water, flinging the craft back onto an even keel. In a gale she would be hove to by means of the anchor, a single stone or a basket of stones being lowered over the bows and the crew crouched huddled together in the stern.

The paddle, distinctive for its lack of ornamentation was lightly constructed about four feet long with a slender pointed oval blade, however steering paddles were larger and often decorated.

A canoeist today in admiring the last two fine examples of this art preserved cannot fail to experience a thrill of pride in the magnificent sweeping curves, and if a dreamer, even a momentary kinship with the voyagers of old.



# Making Moulds for Casting in Resin/Glass Laminates Part 4

BY ALAN BYDE

## STAGE SEVEN

When the plaster is really dry, it will look bright dusty white. If it is still damp, it will have a pinkish tint. It is useless to attempt to shape damp plaster as it clogs sandpaper, and rasps and sanding discs. A wide sharp chisel edge trims damp plaster quite well, but you run the risk of it digging in and spoiling the job. A spokeshave can be quite useful for roughing off the high spots. When it is truly dry, work on the model with care to obtain the final smooth finish.

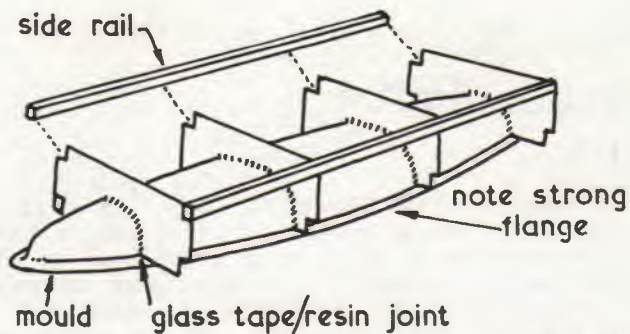
Note that sanded dry plaster sends up a choking cloud of dust which spreads everywhere. A face mask across nose and mouth is a wise precaution. When the hull is properly shaped, add skegs, and any bumps etc. that seem to be required. It is unwise to add underwater excrescences which add drag. It is better to design them into the hull from the very start. The gunwale edge should be carefully shaped, as it is easier to make a cast with a lip on it which may be trimmed off later. If the lip is not formed at the edge, the cast may be thin at the edges, because of the draining off of resin.

When the plaster model is entirely to your satisfaction, and only then, cover the job with a coat of thixotropic resin as a varnish coat. As explained earlier, wax polish on its own is a poor way in which to make the model impervious to resin. When the resin has been applied, the die is well and truly cast.

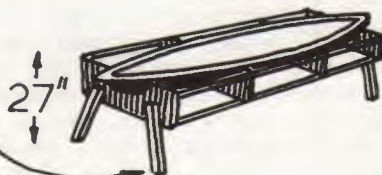
## STAGE EIGHT

Prepare to apply the resin and glass laminates. This has been dealt with by Bill Saunders in earlier articles. Lay on the gel coat, surfacing tissue, and two layers of 1½ oz, or 3 layers of 1 oz mat. If you want a really robust mould, make it thicker. Each layer adds about 6 lbs weight and about £4 to £5 to the cost. When this has cured, about 48 hours to a week later, it will be firmly adhering to the model. It may be freed by patiently pulling and prying at the edges, by thumping with fist or rubber mallet, and slowly the air will find its way between the mould and the model. This is easy to see, like air bubbles under thin ice. Separation will take a long time, perhaps an hour. Finally it will spring off quite suddenly. Resist the temptation to use a screwdriver, as this will mark the cast, and probably initiate delamination at the edges, that is where the resin and glass laminates start to separate. (Where this happens, it looks white and "hairy".) A thin slip of springy hard wood, used as a "slice" is about the best thing to separate the mould. Someone once had the idea of incorporating a car tyre valve into the centre of the cast, and blowing the lot off the model by air pressure. We did not try this, regarding it as somewhat fraught with dangers for the inexperienced.

STAGE NINE



fix legs for  
convenient  
working height



The mould has been removed from the model, and the model has (ideally) been taken away by Bill Smith, who is to build another mould from your model, and he has paid you a fat fee for the privilege. What remains, in fact, is the problem of where to put it. Getting it out of the workshop is not easy, and the rubble resulting from a breaking up is considerable. Clean up the workshop, as the finished mould, representing as it does weeks of spare time work, must be treated with care. Tidy up tools, especially sharp edged ones. Lay the mould open side down, on the clean building deck, and cut and fit at least four supporting sections. There should not be more than three feet between frames, two feet would be a better interval to adopt. The one that Bill and I made has four frames, arranged as shown in the drawing, and has stood up to hard use very well. Side rails are added, and the frames are stuck to the mould with resin and glass tape, or glass mat strips. These joints should be stronger than one would use in a canoe hull. Check the hull top for wind, and correct by adding suitable diagonal bracing if necessary. Finally, add legs so that the hull top is about 2 feet 3 inches above the floor.

You should have a blemish free mould, cleaned with soap and water, having a dull gleam on the inner surface. Slight surface irregularities may be rubbed out using wet "wet and dry" fine grade, and then polishing. The flange should be about  $1\frac{1}{2}$  inches wide, and about  $\frac{1}{4}$  inch thick. Any signs of surface bubbles must be broken out, as they usually hide their blemishes under a thin skin of resin. These faults must be filled with crumbled mat and resin, and rubbed down when cured. It is ready for use. Treat it with care, and use it. The mould is no use whatever unless it is turning out canoe hulls for canoeists to convert into canoes.

(Concluded)

# The Three-Lochs Canoe Race



The first weekend in May saw the initiation of a new long distance race organised by the Scottish Canoe Association. This was the Three-Lochs Doubles race held over the following course:

Start from Auchendennan Boathouse (Scottish Hostellers C.C.) on Loch Lomond, down the River Leven to Dumbarton and then down the river and estuary of the Clyde, through the Gareloch Narrows to Garelohead, portage over to Loch Long, paddle to Arrochar and camp over-night, portage to Loch Lomond and paddle down the Loch to Auchendennan. A total distance of 46 miles paddling on loch, river and estuary with two portages of two miles each one of them with a summit of 300 ft. Crews were allowed to start any time between 8 a.m. and 4 p.m. on the Saturday according to their estimate of the most advantageous tides.

On the Saturday of the race a strong wind was blowing which increased steadily throughout the day reaching its peak between 5 p.m. and 6 p.m. when the Glasgow Met. Office recorded an average wind force of 31 knots gusting to 50 knots. In the light of this it is not surprising that of the eight crews starting, seven retired within the first fourteen miles. The remaining crew, Duncan Winning and Joe Reid, went on to win in a time of 12 hours 40 minutes travelling time; the boat used was 'Canoeing's' Sea Touring Double designed by Winning.

In spite of its unfortunate beginnings, we predict that this race may become very popular with its varied water, portages, and the interest of an overnight camp. Perhaps, next year we shall see some Southern Challengers.

# A Matter of Buoyancy

BY BRIAN SKILLING

In the days when the folding canoe reigned supreme it was natural to think of providing buoyancy by means of inflatable air bags which could be deflated for transport. What is not natural, however, is that the use of inflated air bags, whether in the form of the proprietary type or beach ball type, should persist in these days when the rigid canoe is in the majority. The main advantage of the inflated air bag is that, like the folding canoe, it can be collapsed for ease of transport, but against this it is the fact that it needs constant attention and over a period of time the fabric may deteriorate or become punctured. In this article it is proposed to consider some of the alternatives which are more appropriate to providing buoyancy in the rigid canoe.

## WATERTIGHT BULKHEADS

If the canoe is of the plywood or glass fibre type then watertight bulkheads can be built-in during construction and provide a very cheap solution. Their disadvantage is that it is difficult to build a bulkhead which is completely watertight and which remains so. A slight leak in this type of construction may be very difficult to trace and almost impossible to empty so that it is essential to fit a drain plug. With plywood boats, water within an apparently airtight section will rapidly lead to rotting since the absence of circulating fresh air is an ideal condition in which rotting will take place.

## POLYSTYRENE FOAM

This lightweight plastic foam has a positive buoyancy of about 60 lbs. per cubic foot and is obtainable from some canoe manufacturers in slabs 1' x 3' x 4". One of these slabs, costing about 10s. 6d., provides sufficient buoyancy for a single-seater canoe and can be cut to shape to fit the ends of the boat. When sticking the foam in position, care should be exercised in the choice of adhesive as some adhesives dissolve the foam on contact. This type of buoyancy is particularly suited to fitting into canoes under construction when it can be most easily placed in the extreme ends.

## POLYURETHENE FOAM

Another lightweight plastic foam but with rather less positive buoyancy and requiring about 2 lbs per canoe. The foam comes as two liquids which must be mixed at the correct temperature, whisked up, and then as it begins to foam poured into a canoe stood on end. As the liquids react together they expand into a foam which takes the shape of the container into which they have been poured - in this case the bow or stern of the canoe. The foam adheres to any surfaces with which it comes in contact.

The advantages of this method are that it fills the unusable ends of the canoe most efficiently and can be readily fixed into a complete canoe. Against this, the mixing must be done with great care and the materials cost about 25s. per canoe.

## PLASTIC DETERGENT CONTAINERS

For anyone looking for buoyancy on the cheap, a method worth considering is the use of 'squeeze' containers of household liquids. These containers are light in weight and readily available and if a collection of empty ones is gathered together, checked to see that the caps are airtight, and then bundled into a net, then cheap and effective buoyancy is to hand. For the net, the type of nylon netting sold for garden use at about 1s. per square yard is probably the best type.

All the above types of buoyancy have the advantage that they are reliable, permanent, and need less attention than inflated air bags. They are also cheaper than canoe inflated bags with long air tubes although not so cheap as beach balls. However, for the few shillings involved it would seem better to be able to take the buoyancy of one's canoe for granted.

One final point before leaving this subject. When using air inflated bags then one can only block the ends of the canoe, but in terms of solid buoyancy, is the sealing of the end of the canoe making the best use of the buoyancy? For example, if the canoe is upright and water-logged, then surely the buoyancy would be better along the bottom of the canoe. On the other hand, if the canoe is upside down then the buoyancy would be more effective if it was placed in thin slabs under the deck - or even on top of the deck!

## IRISH CANOE RALLY

For any canoeists contemplating spending their holidays in Ireland - there is an opportunity to join the Monster Canoe Rally, to be held at CARRICK-ON-SHANNON - on the north Shannon under the auspices of the Irish Canoe Union, the Carrick Canoe club and the Shannon Festival committee on 28th 29th July next.

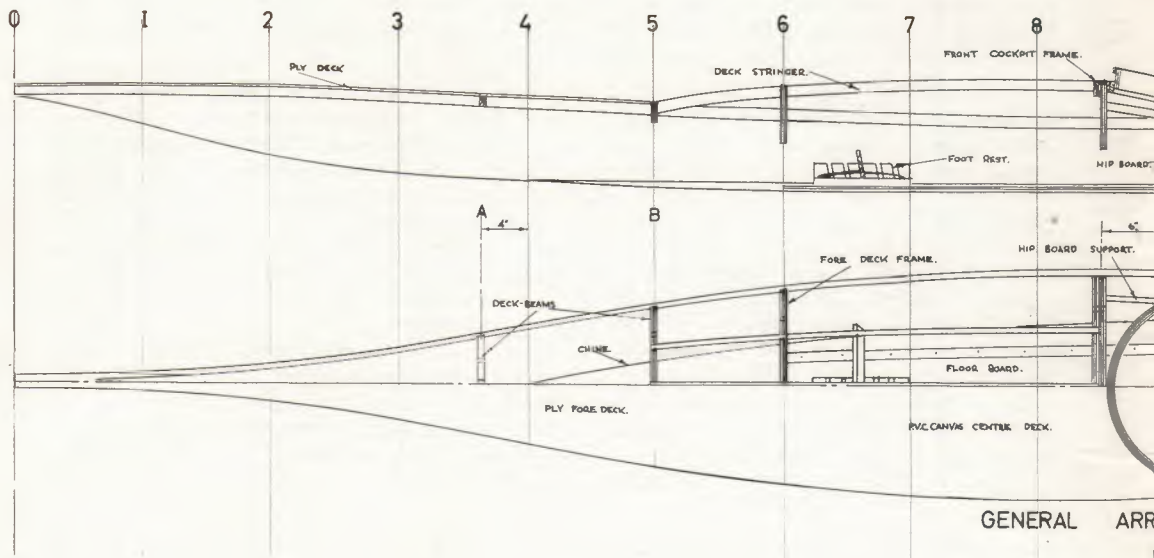
The rally is the opening attraction of the Shannon Festival fortnight of aquatic sports, Boat Rallies, yacht racing, dancing, Barbuquing etc. to be held at Carrick from 29th July to 9th August.

The Canoe Rally is being sponsored by Arthur Guinness and Company who are providing a magnificent trophy for the long distance race open to all canoeists. Several other events from 500 metres sprints to obstacle races have been arranged.

Those who can stay a few days can join in the annual Ireland Waterways Association Boat Rally which will have arrived at Carrick that week-end - and proceed up stream into beautiful Lough Key with its numerous wooded islands - old castles - and almost unexplored stretches of calm, white waterways and join in the Barbuquing camp fire folk singing etc.

Free camping sites on the Banks of the river in the centre of the town shall be available for anyone wishing to camp.

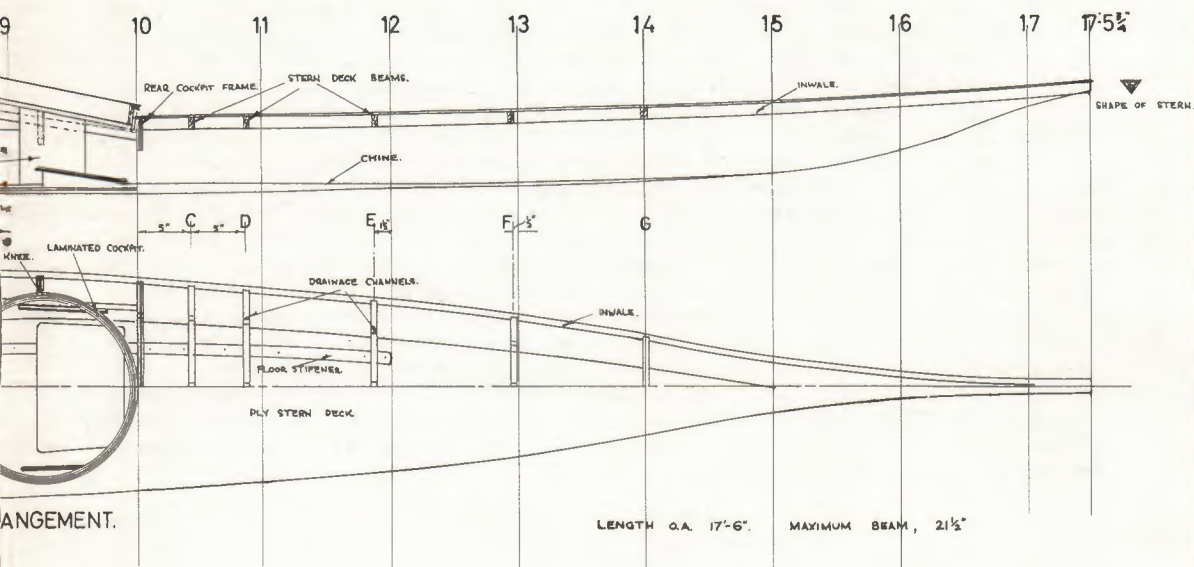
No entrance forms are required to enter the rally just come - if possible with your canoe and/or tent and you will be sure of a real Irish welcome. If you wish to contact the Carrick Canoe club for further information, just write to the Secretary, Carrick Canoe Club, CARRICK-ON-SHANNON, Co. Leitrim, Ireland.



## Cambridge Greenland

As readers of 'Canoeing' will know, the Cambridge University Expedition to Greenland in 1962 brought back a sealskin kayak which they had made for them in Isortoq. Subsequently this kayak passed into our hands for safekeeping and for loan to exhibitions and displays.

Earlier this year, Ronald Croad, a woodwork master at the Watford Technical High School, borrowed this kayak and made a replica using the Littleddyke method of plywood and glass fibre construction. His design incorporates a number of interesting features. For example, the after deck is of plywood as far as the rear of the cockpit as is the foredeck from the bow, but the centre portion is decked with PVC/canvas which gives a very smooth line



## Expedition Kayak

and makes for ease of construction. Also, the seat and adjustable footrest are built into one unit to ensure the paddler really fits the kayak. To make certain that the kayak is 'made-to-measure', the plans give alternative heights for the deckbeam in front of the cockpit, and the constructor chooses the most suitable, builds the canoe but before fitting the deck tries the kayak for size. If any adjustment is needed, then simple alterations can be made at this late stage to ensure the perfect fit.

Copies of the design for this kayak with full building instructions are available price 12s. 6d. (post free) from the Circulation Manager, Canoeing Publications, 6 The Mall, Brentford, Middlesex.

# Letters

Dear Sir,

## L.D. Racing and the Services

At the serious risk of bringing abuse upon myself I wonder whether the Services approach to competitive canoeing is directed entirely along the right lines. If not, what a waste of first class material and coaching. I am basing this thought on comparison of results between the Devizes - Westminster race and other L.D. races. No-one can deny the predominant success of Service crews in D/W - it having reached the stage where a separate Civilion Trophy is awarded.

However, this success does not seem so marked in other L.D. races. In both, obviously fitness and stamina are essential but it seems that canoeing technique can be a lost consideration for D.W. whereas it plays a considerable part in L.D. events. It does appear that the Services concentrate more on the Marathon aspect than the race calling for skill as well - and if this is so, is it not handicapping their crews who may wish to enter International Events. No-one would deny the physical fitness of the crews or their dedication to training but just how much faster would they be with development of technique. Having given your readers a subject to think on I would add in personal defence that I have taken part in both the D/W and L.D. races so have made these observations from experience.

Yours faithfully,  
Brian Webb,  
Hereford.

Dear Sir,

## Canoeing at Sea

May I make a point that I think is neglected when sea canoeing is mentioned. Most people who paddle around our coast or who want to do the same are at some time or other going to do it alone, so why when it comes to capsize drill etc. is the advantage of watertight bulkheads ignored so often? In May's issue of Canoeing you mention Capsize drill and I endorse what you have to say but why not have a more suitable canoe if one is to go to sea. The vessel should have a strong after deck and watertight bulkheads just before and behind the sitting position and the paddles should be connected by a fine nylon lanyard to the canoe. One can then get back aboard after a capsize by either climbing up on the stern or rolling completely over if the spray cover has come off, then baling out the centre portion. You might criticize this by combining of excessive weight and no stowage space, these problems can be overcome by using this plywood and fibreglass for the bulkheads and foam sealed deck hatches for the stowage problem. It seems to me that just hanging on to your inverted canoe is a very negative attitude so why not have the equipment (including life jacket) and save yourself!

Yours faithfully,  
G.L.A. Richardson,  
Dymchurch,  
Kent.



Dear Sir,

B.C.U. Approved Buoyancy Aid

It appears that, for the purpose of most inland British canoeists, the first stage of the Lifemaster jacket (The buoyancy aid part) is the more important. This is certainly true for a novice paddling gingerly around on the Thames. Also, the Lifemaster is far too expensive for most beginners.

In addition to the B.C.U. Approved Lifejacket (for use in all canoeing conditions) there should be a B.C.U. Approved Buoyancy Aid (for use in all conditions where heavy waves, a long swim or very cold water will not be encountered).

The buoyancy should be plastic foam, so that it cannot be let down, either accidentally or on purpose by naughty boys. It should be well designed and cheap.

Yours faithfully,  
R.K. Holdsworth,  
Oxford.

Dear Sir,

Tyne Folding Canoe Trophy

On information supplied by you we advertised that the Tyne Challenge Cup for the Devizes to Westminster Race was won this year by a Tyne Sports Two Seater. Since then we have received the official Result Sheet and notice that the Tyne Challenge Cup was not won by a Tyne Canoe and therefore the outstanding success of Tyne Sports Two Seaters remains that this trophy has been won 12 times in 13 years.

Yours faithfully,  
F.O.D. Hirschfeld,  
Tyne Folding Boats Ltd.

(We apologise for giving this wrong information which was based on both the duplicated list of entries given to the Press and the official programme where the winning crew Dunning and Hague were shown as paddling a Tyne canoe. The official result sheet showing that Hague and Denning had paddled a different make of canoe was not published until nearly two weeks after the race, by which time we had already gone to press. While not wishing to avoid taking responsibility in this matter, we wonder if there is any value in race organisers publishing a list of entrant's canoes beforehand if it cannot be relied upon. Ed.)

# Book Reviews

MODERN CANOEING by Charles Sutherland  
(Faber and Faber, 25s.)

At a price of twenty-five shillings, this is the most expensive British canoe book so far published, and readers will at once ask "What do we get for our money?" The answer is, "The most comprehensive book on our sport in the English language." This may seem rather a sweeping statement, but the very bulk of this book running to 272 pages of fairly close set type means that the author has been able to go into greater detail than other authors producing books at a lower price.

Quantity, however, in a book is of little value if not accompanied by quality and on this score the reader may have no fears. Charles Sutherland has toured widely at home and abroad, taken part in competitive canoeing, and is equally skilful with both single and double-bladed paddle. The result of all this experience is distilled in the pages of 'Modern canoeing'. All aspects of canoeing are covered with the exception of canoe building, and in addition there is a most useful chapter on the photography of canoes. The whole thing being well illustrated with diagrams and photographs.

Perhaps at this stage, I should declare my interest and state that I was privileged to read this book in the manuscript stage and was able to suggest one or two minor alterations. This first reading convinced me that the book represents a major contribution to the literature of canoeing and may be regarded as a statement of the present state of our knowledge. As such it stands together with such landmarks as Macgregor's '1,000 miles in the Rob Roy canoe', Baden-Powell's 'Canoe travelling', Bliss's 'Canoeing', and Raven Hart's 'Modern canoeing'. A second reading, several months later, has not caused me to revise this opinion.

Perhaps, the only unfortunate thing about this book is that the publishers chose to adopt the title 'Modern canoeing' which was used by Raven Hart in 1939 and by C.S. Arthur in 1963. A work of such distinction deserves a distinctive title.

PROJECTS ON WATER by Percy Blandford  
(Boy Scout Association, 5s.)

This little book is intended to provide Scouters with basic information on activities afloat, but school teachers and youth leaders will find it equally useful. The largest part of the book deals with canoeing, followed by a section on building rafts, and finally a section on inland cruising in general.

The information given is brief but well chosen to cover the most commonly asked questions by beginners, and the list of addresses will enable the reader to make the next move. Although there is no fresh material in this book, its importance lies in that it treats canoeing as a group activity and emphasises the particular points to be observed in leading a group of young people afloat. Particularly useful is the section on canoe cruising,

a subject which most canoeing books treat from the point of view of a small party of adults, whereas Percy Blandford treats it from the point of view of a troop, or patrol, and his advice will be appreciated by other youth leaders.

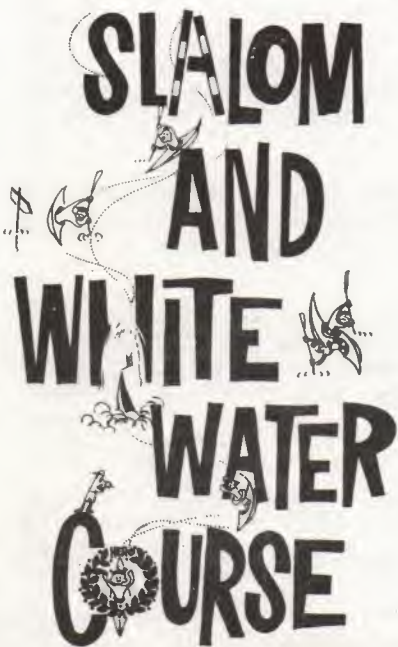
Although of limited appeal, those for whom it is intended will find this a worthwhile purchase.

**THE RIVER WEY:** Weybridge to Godalming  
(Inland Waterways Association, 3s. 6d.)

This is a most attractively produced booklet giving the practical sort of information which is needed when venturing on a strange waterway: pubs, boathouse, supply points, dimensions and diagrams of locks. Clearly it has been compiled by river users for river users. In addition there is a smattering of historical and architectural information about the landscape through which the river flows.

The publishers are the London and Home Counties Branch of the Inland Waterways Association and on the cover appear the words 'Waterways of the Home Counties'. If this is the first of a new series, then it is an auspicious start and while it is the owner of a cabin cruiser who will benefit most it is pleasing to see a page devoted to the canoeist and an awareness that the canoe can travel where no other craft can.

In case of difficulty, this guide is obtainable from D. Harman, 3b Drayton Road, Tonbridge, Kent, price 3s. 6d. plus postage.



# SLALOM AND WHITE WATER COURSE

## SLALOM AND WHITE WATER COURSE

Alongside, you see the cover design, a 'Canoeing's' latest venture, a booklet intended for all those who desire to improve their paddling skills and who are looking for a graduated approach. This 'Slalom and White Water Course' was prepared by the Ontario Voyageurs Kayak Club of Canada for the use of their members and we are sure it will be welcomed over here.

The booklet is primarily concerned with the acquisition of kayak handling skills, but we are certain that those who paddle Canadian canoes will find the sections on 'water reading' and 'slalom strategy and training' equally useful. A valuable part of the course is that at the end of each chapter, where appropriate, a series of assignments or exercises are given which will enable the reader to put the theory into practice.

The price of the booklet is 3s. 6d. (post free) from the Circulation Manager, Canoeing Publications, 6 The Mall, Brentford, Middlesex.

# News Flashes

## NEW CANOE REPAIR SERVICE

We learn from the Canoe Centre, Twickenham, that they are now able to undertake on the premises the replacement of decks of folding canoes. In the Autumn, when pressure of work eases off, the service will be extended to cover the complete replacement of both hulls and decks.

## A NEW LOOK CANADIAN CANOE

Ken Littledyke is at present testing the prototype of his latest multichine Canadian canoe. With a length of 17'6" and a beam of 27", the canoe is reported to be both fast and tippy. This design should do much to counteract the impression that Canadians are tubs suitable only for those who are too old to paddle a kayak.

## SLALOMISTS GOING TO CANADA

Charles Creaser, 1st Division slalomist, is emigrating to Canada in August and is heading for British Columbia the home of the sea-going dugout canoes. He tells us that he is not planning to abandon his kayak and might even succeed in converting the locals to taking up the double paddle. Going with Charles is Ursula Peyton, another well known slalomist, to whom he is shortly to be married.

## HOLIDAYS ARE HERE AGAIN

May we apologise in advance for any delays in correspondence during the months of July and August. Producing 'Canoeing' is a spare time occupation and when the staff take their holidays there is no-one to answer the mail. May we particularly appeal to competition secretaries to send in any results with prompting so that our results pages may be kept up-to-date.

## A GLASS OF MILK AND A ROLL

Worcester Canoe Club have been invited for the second successive year to put on a stunt canoe demonstration at the Tewkesbury Milk Carnvial.

## L.D. RACE FOR SLALOM CANOE

July 19th (Sunday) a race for slalom canoes from Twickenham Canoe Club, Eel Pie Island, to Putney Hard. Start from the Club slipway at 11.00 a.m., entrance fee 2/6 payable on the day or preferably before, to Stan Holtorp, 25, Summer Avenue, East Molesey, Surrey. Tel: Emberbrook 2274. Open to all canoes under 14ft 6in long.

## BRITAIN IN BERLIN ON 11/12th JULY

K.1. 1,000m. Men 4 entries. A.Wilson, P.Lawler, A.Edwards, G.Palmer.  
K.2. 1,000m. Men 3 entries. E.Cronk and R.Lowery, D.Maycock and J.Marshall, A.Edwards and G.Palmer. K.1. 500m. Women 1 entry. Marianne Tucker. K.4. 1,000m. Men 1 entry. A.Wilson, A.Edwards, G.Plamer and a.n. other.

LINCOLN CANOE CLUB - FOSSE RACE - 10th MAY, 1964.

Seniors 12 miles, Juniors 8 miles.

Class 1.

1. T. Sowman	R.L.S.C.C.	1.45.10.
2. B. Wade	Hatfield Y.C.	1.45.11.
3. S. Hollier	Hatfield Y.C.	1.46. 8.
Class 2A.		
1. P. Hastings	Camb. Univ. C.C.	1.57.20.
2. E. Kidd	R.L.S.C.C.	2.03. 6.
3. E. Owen	R.L.S.C.C.	2.07.
Class 2B.		
1. G. Lacey	R.L.S.C.C.	1.19.27
2. M. Onion	Galley C.C.	1.19.52
3. H. Robinson	R.L.S.C.C.	1.20.52
Class 3A.		
1. R. J. Humphrey	Camb. Univ. C.C.	2. 0. 5.
2. R. J. Lancefield	Breadford-on-Avon R.C.	2.03.30.
3. A. Stoneley	Camb. Univ. C.C.	2.01.30.
Class 3B.		
1. A. Baldwin	Hatfield Y.C.	1.17.15.
2. R. Freeman	Lincoln C.C.	1.17.20.
3. A. Laws	Lincoln C.C.	1.19.15.
Class 4A.		
1. S. Smith	Worcester C.C.	1.55.52.
2. J. Holmes	Lincoln C.C.	2.13. 2.
3. D. Squires	Coventry C.C.	2.43.42.
Class 4B.		
1. A. Miller	Harlow C.C.	1.16.56.
2. R. Orchard	Southampton C.C.	1.19.59.
3. M. Franklin	Harlow C.C.	1.21.10.

RESULTS - WILKESDEN REGATTA - WELSH HARP - 14th MAY, 1964

(Very strong head wind)

FINAL 1st M. Mean	Hatfield YC	5m-15.18.
2nd C. Evans	RCC	5m-16.58.
3rd B. Wade	Hatfield YC	5m-19.08.
FINAL 1st E. Cronk/R. Lowery	RCC	4m-31.39s.
2nd G. Palmer/A. Edwards	Woro. CC	4m-36.18s.
3rd R. O'Keefe/P. Lavier	Rich. CC	4m-38.06s.
Youth Kl. 500m.		
FINAL 1st M. Mean	Hatfield YC	2m-29.46s.
2nd R. Rowell	Kyle CC	2m-43.04s.
3rd T. Thomas	Hatfield YC.	2m-50.66s.
Junior Men Kl. 1,000m.		
FINAL 1st Birmingham K.R.C.		4m-58.46s.
(P. Turley/M. Bryan/B. Brookes/B. Morgan)		
2nd Richmond CC		4m-44.96s.
(A. Salter/R. Lavier/R. Stevens/P. Cavanagh)		

YOUTH 15 foot Mavels 500m.

FINAL 1st I. Grant	Lincoln CC	3m-08.16s.
2nd R. Rowell	Kyle CC	3m-11.46s.
3rd R. Orchard	Southampton	3m-13.06s.
Junior Men K2 1,000m.		
Final 1st S. Hollier/B. Wade	Hatfield YC	4m-16.06s.
2nd A. Salter/R. Lavier	Rich. CC	4m-54.96s.
3rd M. Parker/R. Lavier	Lincoln CC	4m-55.44s.
Women Kl. 500m. Handicap		
FINAL 1st S. Jackson	RCC	2m-49m. +10s. = 2m-59.06s.
2nd M. Tucker	Rich. CC	2m-52.26s. = 2m-52.26s.
Junior Men Kl. Relay 4 x 500m.		
FINAL 1st Royal YC (C. Evans/B. Vachary/W. Boshay/R. Perestre)		9m-19.66s.
2nd RUSCC 0. (V. Kidd/G. Lacey/L. Boland/D. Sims)		9m-59.26s.

CHESTER CANOE CLUB

CHESTER RIVER RACE MAY 24th, 1964

CLASSIFIED RESULTS

Pos.	Boat	TIME.
Class 6a Soft Skin Doubles (Seniors)		120% 2hr. 18.22
1st	Bayo/Ridyard	1hr. 55.10
2nd	Doakins/Smith	1hr. 03.50
3rd	Hitchell/Ayco	1hr. 03.59
Class 7b Hard Skin Singles (Juniors)		120% 1hr. 45.41
1st	R. Freeman	1hr. 28.4
2nd	A. Laws	1hr. 29.17
3rd	P. Hughes	1hr. 31.36
Class 4b Soft Skin Singles (Junior)		120% 1hr. 42.32
1st	P. Tigge	1hr. 37.47
2nd	R. Hood	1hr. 37.42
3rd	I. Salfour	1hr. 39.42
Class 5K2s (Open)		120% 2hr. 6.11
1st	Mechin/Morgan.	1hr. 45.09
2nd	Mopper/Harrison.	1hr. 54.41.
3rd	Rhodes/Blonley	1hr. 02.28
Class 6b Soft Skin Doubles (Juniors)		120% 1hr. 30.10
1st	Hodges/Huxtable	1hr. 21.48
2nd	Davis/Storer	1hr. 27.51
3rd	Froser/Chandler	1hr. 30.12
Class 7b Hard Skin Doubles (Juniors)		120% 1hr. 35.24
1st	Purches/Purches	1hr. 19.30
2nd	Jarson/Thomas	1hr. 19.57
3rd	Oniqe/Haughan	1hr. 22.44

TEAM TROPHY

1st	Lincoln Canoe Club	14 points.
2nd	Galley Canoe Club	12 "
3rd	Army App. Sch. Harrogate	

K.L. 10,000 METRES NATIONAL CHAMPIONSHIPS

WORCESTER, MAY 30th 1964

RESULTS

SENIORS:	POS.	NAME	CLUB	TIME
1st		P. Lawlor	Richmond	44mins. 16secs.
2nd		G. Palmer	Worcester	41 58
3rd		A. Eward	"	48 20
JUNIORS:				
1st		M. Mean	Hatfield	48mins. 40secs.
2nd		C. M. Evans	Barts Hosp.	49 66
3rd		T. Wado	Hatfield	50 1

MANCHESTER CANOE CLUB

Scrapnet's Tall Salmon, Macclesfield, 21st May 1964

FIRST DIVISION

(for the Martin Bonheider Trophy)

	1st Run	2nd Run	Pen. Time	Total	Ebr.	%
1. Dave Mitchell	10	231	241	228	228	76.3
2. Ken Langford	10	237	247	232	252	82.6
3. Keith White	30	247	277	240	250	83.4
4. Mandests	20	273	293	264	264	86.1
5. Julian Shaw	70	285	355	274	274	91.5

SECOND DIVISION

1. David Horton	80	247	237	237	286	73.7
2. Philip Sizemith	80	241	321	242	242	83.4
3. Bob Tucker	40	268	308	253	253	87.2
4. Gordon Swensen	80	250	330	247	257	88.6
5. Philip Brownhill	20	298	258	40	259	89.0

TAY CANOE CLUB - 3RD DIVISION SLALOM AT THISTLE BRIG

NAME	CLUB	FIRST RUN			SECOND RUN			Better	%
		Penalties	Time	Total	Penalties	Time	Total		
1 John D Roberts	Forth	70	213	283	260	199	459	283	67.4
2 George Adams	Carlisle	140	262	402	190	197	387	387	92.1
3 Brian Palmer	Forth	260	440	700	70	324	394	394	93.8

2.16. 6.  
2.18.25.  
2.39.00.  
2.1.21.  
2. 6.22.  
2. 5.26

FORTH CANOE CLUB - SLALOM AT GRANDTULLY

1st Division

NAME	CLUB	FIRST RUN			SECOND RUN			Better	%
		Penalties	Time	Total	Penalties	Time	Total		
1 Ken Langford	Manchester	210	396	606	10	326	336	336	60.3
2 Dave Mitchell	Chester	70	340	410	10	379	389	389	89.8
3 Glyn Davies	Chester	90	426	516	50	385	435	435	78.1

Galley C.C.  
Lincoln C.C.  
Nomads  
Hatfield Y.C.  
A.A.J.R.C.C.  
A.A.J.R.C.C.

2nd Division

1 Brian Cook	Carlisle	60	351	411	190	410	600	411	64.3
2 John D. Roberts	Forth	80	352	432	340	363	703	432	67.6
3 Ian Pendelton	Forth	220	358	578	150	394	544	544	85.1

3rd Division

1 Raymond Calverley	Manchester	110	202	312	100	216	316	312	92.0
2 Brian Palmer	Forth	100	263	363	90	223	313	313	92.3
3 John McLeod	Manchester	170	307	477	100	242	342	342	100.9

Team Event

1 Chester "A" Team	Davis, Mitchell, Woodhouse				130	453	583		
2 Worcester Team	Gray, Powell, Doncaster				470	626	1096		
3 Manchester "B" Team	Pendelton, Langford, Webb				720	500	1220		

Ladies

1 Heather Goodman	Lakeland	110	258	368	460	169	629	368	83.6
2 Jean Battersby	Manchester	220	237	457	90	289	379	379	86.1
3 Margaret Bellord	Chalfont	300	323	623	230	343	573	573	130.2

CLASS 7A. HARD SKIN DOUBLES  
1 Mackay/Morgan  
2 Parbury/Oliver  
3 Eloy/Webb  
CLASS 7B. HARD SKIN DOUBLES (JUNIORS)  
1 Thomas/Dunston  
2 Mallin  
3 Atkins/Darling

BEDFORD ST HEATHS CANOE RACE 1964 RESULT SHEET.

Class 1.

- 1. D. Sackland. 2 06.15.
- 2. A. O'Keefe. 2 07.0
- 3. D. Owen. 2 12.24.

Class 2.

- 1. P. Stenton. 2 13.46
- 2. F. Hastings 2 19.45
- 3. G. Oliver. 2 24.27

Class 3a.

- 1. S. Smith. 2 16.35.
- 2. R. P. Smyth. 2 21.45.
- 3. R. Langford. 2 25.15

Class 3b.

- 1. M. Henn. 1 06.03.
- 2. A. Holcwin. 1 11.45.
- 3. T. Thomas. 1 12.10.

Class 4a.

- 1. M. Parker. 2 20.35.
- 2. K. Pereira. 2 25.50.
- 3. P. Smith. 2 31.20.

Class 4b.

- 1. A. Miller. 1 10.45.
- 2. D. Jordan. 1 11.4
- 3. M. Franklin. 1 12.50

Class 5.

- 1. D. Haycock / J. Marshall. 1 55.45.
- 2. S. Bellor / S. Wade. 1 56.25.
- 3. G. West / R. Brown. 2 14.25

Class 6a.

- 1. B. W. Kings / C. Evans. 2 07.25
- 2. D. Bennett / M. Brooks. 2 16.16
- 3. J. Woolley / W. Dodd. 2 27.0

Class 6b.

- 1. R. S. Chandler. K. S. C. Junior Gds. 1 11.10.
- 2. P. Sommermann. A. Dummerman. Leamington O.C. 1 11.42.
- 3. D. Urnham / E. Denton. Hewell Grange. 1 21.50.

Class 7a.

- 1. Campbell / Pys. Royal L.C. 2 17.39.
- 2. Simmons / H. Hancy. E. Ness Mill 2 22.5
- 3. M. Orchard / R. Payton. South Hampden C.C. 2 30.45.

Class 7b.

- 1. M. Purches / D. Purchus. Leamington C.C. 1 06.15.
- 2. A. Allsopp / J. Wood. Hewell Grange. 1 10.45.
- 3. Pruser / Diggle. K. S. C. Junior Gds. 1 11.50.

WORCESTER L.D. RACE 1964 RESULT SHEET

P.S.	NAME	CLUB	TIME
CLASS 1. K.I. OPEN			
1	N. Dilley	Lincoln C.C.	2.30.52.
	H. Gledhill	Junior Leaders	Scratched
	B. Feeney	Seacur C.C.	Retired
CLASS 2A. M.C.K.I.			
1	M. Hove	Galley C.C.	2.24.52.
2	E. Hastings	Hambridge Univ. C.C.	2.24.55.
3	R. Owen	R. Leamington Spa C.C.	2.56.23.

WHITE WATER

Obtain your copy from R.V. & X.Crocket, 12 Bluecoat Walk, Harmans Water, Bracknell, Berks. Quarterly 10s. p.a. (post free). Back numbers and single copies 2s.6d. each. Also available WW supplement No.1. WIGGLE/WRIGGLE TESTS 6d. each, reductions for quantities. WW Supplement No.2 SPUHLERISED RULES - a 12 page booklet 1s.3d. each, reduction for quantities. -

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 2 and 3 available - price 20s. per volume (post free). Apply: Circulation Manager, 6 The Mall, Brentford, Middlesex.

D.W. RACE PHOTOGRAPHS WANTED

Dale Johnson, of 186 Balfour Road, Brighton 6, is anxious to contact anyone who took photographs of himself and John Gmach during the Devizes to Westminster Race this year. Would any reader who took any photographs or has seen any photographs of this crew in a Glass fibre Accord No. 117, please inform Dale Johnson direct.

FOR SALE:

N.C.K.1. Built to Plan and B.C.U. Specifications. Complete including paddles, trolley, rudder assembly etc. £16. 0. 0. Maidstone. Box No. NC.1.

FOR SALE:

Moonraker Fantastic, Spraycover. £27. P. Smith, "Wolverley", Evesham Road, Astwood Bank, Nr. Redditch, Worcs.

FOR SALE:

Tyne Ridged Greenland Kayak, tufskin hull. 16'4" x 20". Excellent condition - £15 o.n.o. Bulleid, Stogdons, Woodbury, Nr. Exeter. Phone Woodbury 285.

FOR SALE:

J.S. MkVI slalom canoe, spraydeck, buoyancy. Excellent condition. £20 o.n.o. Also P.B.K.13, plus paddle, craftsman built, little used. £15. D. Hutchins, 4 Trafalgar Road, Cambridge.

FOR SALE:

Rapide Class 3A. As new (April '64). Extra details and spraycover £30 o.n.o. Smith, "Wolverley", Evesham Road, Astwood Bank, Nr. Redditch, Worcs.

WANTED:

Struer Veneer K1 or touring single in good condition. Dale Johnson, 186 Balfour Road, Brighton 6, Sussex.

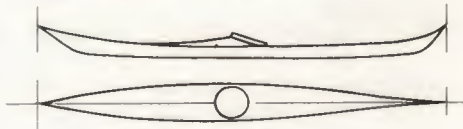
WANTED:

Back numbers of "Canoeing". Vol. 1 - Nos. 1, 5, 6 and 12. Vol. 2 - No. 6. Mitchell, 9 Firtree Close, Canterbury.

6, THE MALL, BRENTFORD, MIDDX.

### British Museum Greenland Kayak Mark I

Length 17'6 $\frac{3}{4}$ "    Beam 18 $\frac{1}{2}$ "  
Construction:    lath-and-canvas  
A reconstruction of a Greenland kayak  
in the British Museum collection  
adapted by John Brand. Suitable for  
paddlers up to 5'6" in height.  
Full building instructions:



Price 12s. 6d. (post free)

The above canoe is just one of the designs shown on our illustrated plans list which our Circulation Manager will send to you on receipt of a stamped addressed envelope.

#### Other publications:

1,000 miles in the Rob Roy canoe, J. MacGregor 10s.6d.  
(post free)  
Canoeists map of Ireland 3s.0d.  
(post free)

#### And of course

'Canoeing' the monthly magazine for canoeists: 15s. per annum  
Specimen copy 1s.3d.

#### THERE'S NONE SO BLIND AS THOSE THAT WON'T SEE

(Grandmothers' proverb)

We believe that our canoes are as good as any in the world and better than most.

That if you compare price with price you will get better quality. And if you compare quality with quality, you will get a better price.

It is as simple as that. Nor do we have to shout, Our hull design is known to be the best; Time has proved them so and the seal of approval given when Granta design was taken as the prototype for the Admiralty.

You can inspect these at all leading Sports Shops - Lilywhites and Gamages in London - Lewis Ltd. in the provinces etc. Or you are very welcome to call and see them here in Cottenham, and a car will meet you at Cambridge Station if you ask.

Illustrated catalogues are free.

GRANTA CANOES. COTTENHAM. CAMBRIDGE.

THE  
MOST  
LIVELY  
ORDER  
OF  
GAY  
SPARKS



61 Oxford Street,  
London, W.1.

SPORTSMEN PLEDGED TO AID RESEARCH INTO CRIPPLING

A donation of 20/-, or more, brings life membership  
and a SPARKS tie in silver and blue terylene





**NOW THE  
BRITISH CANOE UNION APPROVED LIFEJACKET**

The first and only lifejacket to receive the wholehearted support and approval of the B.C.U.

**£3. 16. 9.**

Special terms to B.C.U. Members, Clubs, Schools etc.

For full details, or for—

**Our FREE 32 page Illustrated Catalogue**

**PLEASE WRITE TO**

**OTTERSPO RTS LTD.**

**8-10 BROAD STREET, NORTHAMPTON Tel: 39405**

**GO WITH**

**WESSEX**

**Canoes**

**THE FAMOUS RANGE  
OF HIGH CLASS  
GLASS-FIBRE  
CRAFT**



Illustrated:  
The Record  
Breaking  
G/F ACCORD

For Racing, Touring or Pottering and as supplied to H.M. Forces. From 11 ft. to 21 ft. 6 in. Prices from **£24.**

**THESE SPEEDY DURABLE CRAFT** hold the A & B Class Records in the 1961 & 1962 DEVIZES - WEST-MINSTER RACE, took the first 12 places in the Junior'63 event and came 1st, 3rd, 5th and 8th in the Senior Detailed literature on these excellent craft from:

FULLY ILLUSTRATED  
BROCHURE FROM:

**J. L. GMACH & CO. LTD.**

FORDINGBRIDGE  
HANTS. Tel: 2422



## BCU Supplies

BCU Publications	s. d.
GUIDE TO THE WATERWAYS OF THE BRITISH ISLES	21 0
CANOING	
No. 1—Choosing your Canoe and its Equipment	3 0
No. 2—Canoe Handling and Management	3 0
No. 3—Canoe Camping	2 6
No. 4—The Eskimo Roll	3 0
No. 5—Canadian Canoeing	3 6
(Special prices to members of the B.C.U.)	
CANOING (P. W. Blandford)	4 0
STARTING CANOEING (M. Russell)	6 0
YOU AND YOUR CANOE (O. I. Cock)	10 6
TACKLE CANOEING THIS WAY (P. W. Blandford)	12 6
CANOING (B. Jagger)	12 6
CANOE-KAYAK EN FRANCE (J. de Liege)	12 6
THE CANOEING MANUAL (N. McNaught)	15 0
CANOING (American Red Cross)	15 0
WHITE WATER SPORT (P. D. Whitney)	35 0

### River Maps & Guides

Send s.a.e. for list of British and Foreign river maps and guides.

All prices are postfree. Please send remittance with order. Cheques, etc. should be made payable to  
"The British Canoe Union"

BCU SUPPLIES 147a Station Road London, E.4

We specialise in . . .

## PBK RIGID CANOES AND KAYEL KAYAKS KITS AND FINISHED CRAFT

PLANS, ALL MATERIALS & ACCESSORIES,  
CANVAS & PVC COVERING MATERIALS

### THE "TARKA" CANOE

finest value in Two-Seater canoes **£26.6.0**

### SAVE MONEY PADDLE KITS

Make your paddles from our kits  
S.A.E for details and samples

## H. W. PALSER

BOAT BUILDERS

LONDON LANE · UPTON-ON-SEVERN  
WORCS. Telephone: UPTON 324

SUPPLIERS TO:

H.M. FORCES, EDUCATIONAL AUTHORITIES, Etc.

## AVONCRAFT CANOES

*Racing and Touring Craft*

### "RAPIDE" MK. 3 SINGLE

Winner of over 80% class 3 racing during 1963

Designed and built in the Autumn of 1963 for class 7 racing and touring. Of the 6 remaining racing events the Hustler won 5.

Other Craft Include—

Rapide MK. 1 and MK. 2 Touring Singles

Hustler MK. 1 and MK. 2 Touring Doubles

Swordfish and Stiletto MK. 1

Plans Kits completed craft are available in marine plywood glassfibre lamination.

**R. H. VARDY**

30 CAVAN ROAD, REDBOURNE, HERTS.

Suppliers to H.M. Forces, Education Authorities, etc.

## PICK OF THE TOPS

*Mendesta*

**First at Hambleden Division L.  
Slalom,**

also taking 2nd, 3rd and 4th place

**There is room at the top for you too,  
with a MENDESTA**

Full details from:-

**JOHN CRITCHLEY**

4 COX'S AVENUE,  
GRANGE FARM,  
UPPER HALLIFORD  
SHEPPERTON-ON-THAMES,  
MIDDLESEX

Also available hand made spoon-bladed paddles,  
and Gillco crash hats.



## **SOLENT CANOE CENTRE**

166, BITTERNE ROAD, SOUTHAMPTON

Telephone: 49270

*for all Canoeing & Camping needs*

***STOP PRESS !***

***STOP PRESS !!***

***STOP PRESS !!!***

**THE SOLENT CANOE CENTRE  
166, BITTERNE ROAD, SOUTHAMPTON**

have been appointed Sole Agents for:-

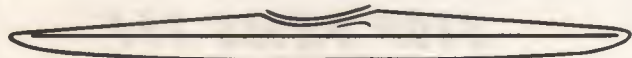
**AVONCRAFT PRODUCTS  
RAPIDE, HUSTLER, SWORDFISH & STILETTO CANOES**

**Book now for early delivery**



## KLEPPER JET 3

THIS OUTSTANDING NEW MODEL PROMISES TO BE THE SLALOM BOAT OF THE YEAR. EXTREMELY POPULAR WITH TOP CONTINENTAL PADDLERS, IT HAS ALREADY WON THE INTERNATIONAL SLALOM AT MONSCHAU WHERE SPEED WAS A DECISIVE FACTOR. IT IS ALSO EXTREMELY MANOEUVRABLE. SUPERB FOR ROLLING AND ALLOWS EXCELLENT RECOVERY. IT IS NOW IN PRODUCTION IN U.K. AND CAN BE SUPPLIED IN ANY COLOURS. WEIGHT: 331bs. PRICE: £38. COMPLETE WITH BUILT-IN FOAM BUOYANCY, ADJUSTABLE FOOTREST CHOICE OF KNEE-GRIPS AND FORWARD SEAT POSITION.



**THE CANOE CENTRE**

PORTABLE BOATS LTD

18, BEAUCHAMP RD., TWICKENHAM, MIDDX.

Tel POPesgrove 8979