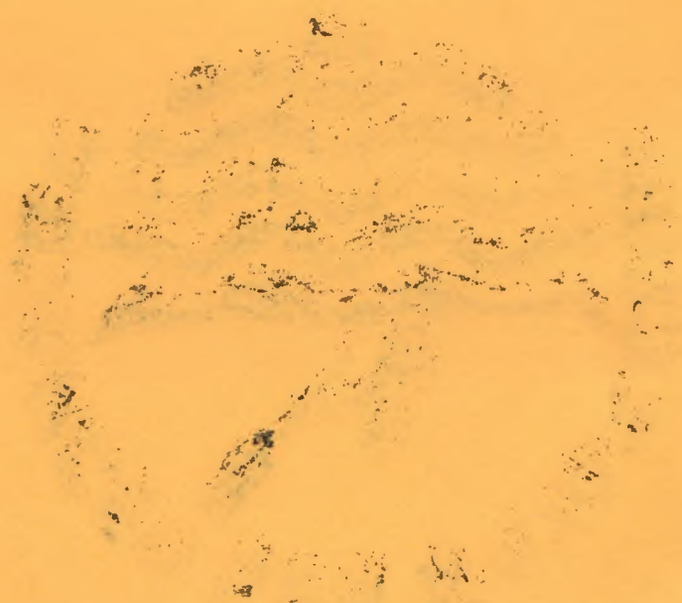
Advanced Sea Kayak Club

Newsletter

PUBLISHED EACH :—

JANUARY
MARCH
MAY
JULY
SEPTEMBER
NOVEMBER



DECEMBER 1979

ADVANCED SEA KAYAK CLUB

NEWSLETTER NO 16

J J Ramwell, BCU Coach
Secretary ASKC
32 Glebe Road
West Perry
Huntingdon
Cambs PE18 ODG

EDITORIAL

First may I wish you all a Happy Christmas and good canoeing in 1980. A lot of you will have most of your holidays already planned for next year - I have , and I am looking forward to some interesting sea canoeing expedition. The more interesting of my adventures (canoeing that is!) I shall write up in this Newsletter; remember to let me have yours reports as well for publication. I am hoping to include photographs with future editions so let me have copies of charts and photographs covering your activities.

The Sea Canoeing Conference scheduled for this month is fully subscribed which is very encouraging. It promises to be an interesting weekend. There will be a full report available early in the New Year. Details in the next edition of the ASKC Newsletter.

CORRECTION

I apologise for a small but fairly important mistake in Oliver's article on Newsletter 14. I omitted a minus sign. This comes where I quote the tidal difference between Shields Bar and Dover. Although explained in parenthesis immediately after the time difference given, that time difference should read "-4 hrs 35 mins".

THIS NEWSLETTER includes the following :-

1. An article on Sea Canoeing entitled "Sea Canoeing - a Last Freedom" by Brian Sheen.
2. A short report on Tom Daly's solo circumnavigation of Ireland.
3. A report by Alan Rees on his Bristol Channel crossing in September.
4. News of Paul Caffyn's book - "Obscured by Waves".
5. News of Derek Hutchinsons' new sea kayak, the UNMAK 'Ice Flow' made by P & H.
6. A supplement on EMPHEMERIS with Tidal Constants.
7. A technical information leaflet from Valley Canoe Products on repairs to glass fibre.
8. From H M Coastguards' Dept: A Seaway Code and the Coastguard Yacht & Boat Safety scheme.

.....AND ALL THIS FOR £1.50 a year!
so why not rejoin now. Application to renew ASKC subscription at foot of this page.

TO AUSTRALIAN MEMBERS

From this Newsletter onwards Peter Carter of 28 Rowells Road, Lockleys 5032, Australia, will be the Australian ASKC 'man on the spot'. I will send him sufficient copies of the Newsletters to distribute to all Australian ASKC members, and so may I suggest that you let Pete have all information, advertising, events, etc, etc, of local interest and continue to let me have all your reports and material of general interest.

EXPEDITION FIRST AID AND EMERGENCY TREATMENTS by BRIAN SHEEN

Almost a year ago, Brian sent me a copy of his booklet on the above subject with an invitation to review it. Its cost is 45p, and for this amount you cannot go far wrong. It is recommended whole-heartedly to all potential expedition leaders as it contains an excellent summary of basic expedition first aid. Copies are available from Brian at 92 Par Green, Par, Cornwall PL24 2AG.

FOR SALE

ASKC ties @ £2.00 inc P & P.
ASKC stickers @ 30p inc P & P.
ASKC letter headed paper at 5p per sheet (orders in multiples of tens only).

.....please tear off.....

1980 Subscription to Advanced Sea Kayak Club is now due - £1.50 cheques or postal orders made out to the Advanced Sea Kayak Club. Please send to J J Ramwell, 32 Glebe Road, West Perry, Huntingdon, Cambs PE18 ODG.

Name..... Sum enclosed £.....

Address..... Signed.....

..... Date.....

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SEND OFF NOW!

BRISTOL CHANNEL CROSSING, SEPTEMBER 9TH - 12TH by ALAN REES of Erkenwald Centre, Essex

We (Ted, Peter, Trevor and myself) set off for the Gower Peninsula with the intention of double crossing the Bristol Channel. Chartwork and navigation problems having been sorted out, we looked forward to a good expedition. On the Monday we launched at Caswell Bay at 0930 hours, having checked with the coastguards the previous day and also the weather report service. We reached Scarsweather Lightship in good time and, after a friendly chat with the crew, we continued towards Coombe Martin, our destination. We had some good surfe to help us on our way and the lack of shipping was remarkable, we never saw another vessel. With regular stops for food and drink at two hour intervals we made good time and completed the first leg of 24 nautical miles by 1645 hours. We landed spot on at Coombe Martin, again a very good piece of navigation.

We carried out canoes up the rock strewn beach and whilst I walked into the town to 'phone coastguards and loved ones, the others made camp. On my return we cooked and ate then, whilst the others journeyed to a hostelerie for refreshment, I stayed with the gear. It was a good job that I did, even though we had made camp above high water debris line, with the wind blowing hard from the West it forced the water even higher up the beach; although we were at Springs + 3 days, the water height increased instead of decreasing. This meant that at 2200 hours I was to be found carrying canoes up the lower rocks of the cliff and taking down tents, when the rest of the party returned. We settled down between the rocks and I set the alarm for 0130 hours. At 0315 hours we were packed ready and had carried the canoes down to the sea, no mean feat in the dark. At 0330 hours we launched into a westerly, force 4 - 5 wind with associated sea conditions. At 0630 hours Ted capsized, having been caught unawares by a big wave. We rescued him very quickly but, because of the cold and the increasing wind strength and lack of sleep the previous night, I decided to turn the party back to the Devon coast. No enviable decision for any leader to take and enforce. We landed at Lee Cove at 0930 hours and surfed into a "private" beach. We were well received by the authorities of Lee Abbey, in whose grounds we found ourselves.

Now the problem - How to get home with our transport at Caswell Bay, the wind strength increasing visibly and, therefore, no chance to canoe back the next day. Well, with my contacts all over the country I was able to call an old school friend who farmed near Barnstable. To our delight and amazement Jenny (his wife) lent us her car for the journey by road to pick up our own transport. To cut a long story short, I took Ted and Peter with me and left Trevor to guard the equipment. We left him at 1230 hours and eventually got back to him at 0930 hours the next day, having driven over 440 miles by road, to retrieve our transport. We then made the journey home. Many thanks to Jenny and Paul Staines of Huntshaw Barton Farm, without whom we would probably still be "on the road".

Alan.

SEA CANOEING - A LAST FREEDOM

PART 1 - EQUIPMENT

To challenge the sea in such tiny craft may seem almost impudent, but skilled canoeists, by planning and preparation, are able to achieve much. Nowadays a crossing of the English Channel hardly raises an eyebrow.

However, to get to the beginning, the choice of a canoe - for the most part canoeists in the SW start with a slalom canoe. This type of craft will do sea trips, surf and rock hop and the advanced paddler then graduates to a specialised canoe based on the Eskimo Kayak, of which more anon.

We are fortunate in the region in having a ready source of high quality canoes. In Cornwall Cornish Fibre Sports of St Day manufacture slaloms while in Devon the Canoe Centre of Crediton manufactures a vast range of canoes. For the Do It Yourself fanatic Strand Glass of Plymouth sell or hire moulds and all the materials to make your own canoe. If buying a second hand craft please check that it contains a large quantity of buoyancy, without it a fibreglass canoe will sink'. Fit toggles and decklines and you are ready to go.

Well almost, but no experienced person sets off in just his swimming trunks. The all-the-year round man will wear plimsolls, wet suit, maybe supplied by Gul Wet Suits of Bodmin, lifejacket and anorak. At once we run into the most controversial aspect of basic kit, lifejacket or buoyancy aid. The British Standard lifejacket is the only device that will, when inflated, turn a person onto his back and prevent him from drowning. However, England is a cold place and it is more likely that the danger comes from hyperthermia, even in summer. Therefore many small boat men choose a buoyancy aid. The recommended onces look like a waistcoat and have strips or slabs of closed cell PVC foam that completely enclose the trunk and keep the paddler warm. It is due to this problem that a combination garment is being developed. The expert canoeist will probably wear his red anorak over his buoyancy aid thus giving added warmth and access to the pocket of his anorak - a whistle is attached somewhere handy.

Equipped like this our sea paddler can go for trips of several miles without discomfort, although he will also be carrying a BCU survival kit. We paddled from Lands End to the Isles of Scilly with only a few additional refinements in 73.

Canoesport like all others does not stand still and great advances have been made since the advent of the fibreglass Eskimo Kayak. Just a few instances will demonstrate how the determined few have made life safer for all. Loaded kayaks are too heavy for the standard rescues of a capsized canoe to be carried out easily; nowadays the canoe is turned the right way up between its two companions and all three paddlers pump like mad using the bilge pumps fitted to each craft.

The need to carry camping kit led to watertight bulkheads being fitted fore and aft with access through high quality deck hatches. Flares must be accessible and kept dry; this contradiction in terms has resulted in the manufacture of plastic flare containers. It is difficult to get at food stores deep in the kayak while at sea so much of it is kept inside the cockpit. Special flexible bag for glucose saturated fruit juice has been developed that will button onto the anorak.

If overtaken by darkness the canoeist may either use a light weight potholer's headlamp, a light powered by a seawater battery or one of the chemical light sticks to read his chart. A tow rope, compass, spare paddles and survival bag will go some way towards fitting out today's Advanced Sea Paddler. If you happen to meet up with one of these rare people on a local beach more than likely he will be only too pleased to chat and explain all the paraphernalia he is carrying, unless he is hurrying to catch the tide.

PART 2 - PREPARING FOR A TRIP

A canoeist equipped as described may look very photogenic but unless he is competent in a number of skills he won't get as far as Plymouth Breakwater. He must be a good paddler and hold at least the Sea Proficiency Award or be a Senior Instructor in the BCU. He will be a member of a Club or team, three is the minimum for sea canoeing, and he will be knowledgeable in the behaviour of the sea.

Every leader of canoeing groups will make friends with his local Coastguard. These men, often sportsmen themselves, are responsible for organising any rescue attempts needed to be done by the lifeboat or helicopter. Over a period of time he will come to realise the abilities and limitations of his local club. If he suggests that a particular trip is not on it is because of a bad forecast and therefore better not to go.

The weather, in particular the wind, will have a decisive affect on any trip. A

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forecast 4 is the maximum for a trip of any distance; remember it is likely to increase rather than the reverse when you are out of sight of land. The tidal stream has a marked but unseen affect on the progress of a canoe, it may halve or double its speed. Therefore, all serious trips are planned to take advantage of its flow. Because Admiralty Tidal Stream Charts are not detailed enough for the canoeist, Michael Fennessey, a BCU Coach from Plymouth, has prepared and published a more detailed set for the South Devon Coast. Michael has also devised a Landfall Matrix, which is a method of defining by symbols, a great many details of beaches to be encountered while canoeing. The BCU Sea Touring Committee are classifying the whole coast of England and Wales in terms of its canoeability. The Scouts have a more detailed scheme prepared from the standpoint of all small boat users. The SW has a number of noteworthy headlands, each of which have unique characteristics. Hartland Point has a big tide race, Rame throws up big seas while the Lodman has heavy overfalls. Only a fool would tackle areas like those without a careful study and full appreciation of what to expect.

A coastal trip will be prepared from a Chart and 03 map; the former gives locations of underwater rocks etc while the latter will pinpoint bolt holes available to a paddler in trouble. Recourse to the relevant Admiralty Pilot Book will provide many useful details of the coast to be covered.

Because only a few good sea going groups of paddlers exist in the SW details of big trips are kept a close secret, especially if a new route is to be tired. Although "big ones" are planned months in advance due to the vagaries of the English weather the chosen date is often unsuitable. So it would prove rather galling to find that another group had just beaten you to it. Medium scale efforts like Lundy or Eddystone are more likely to be known about in London than in the next town.

Self rescue is vital, if anything goes wrong. The chances of the Rescue Services finding out about the problem in time depends on the chance siting of a flare. All sea canoeists practise a whole range of techniques at regular intervals prior to the trip. If one member comes to a halt the others must be able to tow him as far as necessary. Clearly a fit paddler can cover 10, 20 or 30 miles in a day (our Club record is 45 on two consecutive days) without undue difficulty, but why does he do it

PART 3 - SEA CANOEING PHILOSOPHY

A sea canoeist can paddle along the same bit of coast day by day and it will always be different. The rise and fall of the tide exposes different rocks, the seasons change and the birds and fish provide constant interest. No matter how often a trip is done the canoeist leaves no mark on the sea, unlike the rambler or rockclimber, to indicate his passing.

Sea trips fall into two types; long coastal cruises and major crossings, each with different attractions. The coastal cruise especially along the N Devon and Cornwall seaboard is characterised by spectacular scenery, exciting tide races and a multitude of rocks and islets to dodge. The wild life, sea birds, sharks and seals are unpredictable, one never knows what to expect around the next point. Caves can be explored which are out of bounds to normal boats, Lands End has a tunnel that is only accessible under very calm conditions. There is a cave/tunnel still to be done and very remote that is spoken of in whispers. The north coast has very few landing places and bolt holes - at the same time the attraction and the danger! For the proficient paddler the south coast is an easier playground, no surfs as such, many beaches and bays, a gentler place and altogether safer. However, it has its dangers too; the Lizard Manacles are not to be taken lightly.

When there is a major crossing to offshore islands, to the canoeists they are like mountains that have to be reached because they are there. Every crossing I have done has had its unexpected difficulties - fog, sea sickness, heavy seas. At St Austell Canoe Club we have done the Isles of Scilly, Lundy and Eddystone locally while as members of other groups have visitied other offshore parts of the U.K.

Sea Canoeists never like to paddle with unknown paddlers; big trips are done by close-knit teams with an equal high standard of strength and skill (ours includes John Kuyser PRO Sea Touring Committee; Ian Tatum, Irish Sea; Martin Compton, David and Nigel Braddon). The reason is clear - a dud member of the party risks the lives of the whole group.

The degree of commitment needed for an Eddystone is considerable. The paddler must be prepared to be at sea for five or more hours. A crossing of eight miles is worth double along the coast in terms of effort. Everyone is a little concerned as they clear the local headland and its attendant swells, set the compass and paddle towards a point they will not be able to see for several hours. After a while the inshore

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fishing boats are left behind, together with the seagulls and, apart from the passing cargo boat, you are on your own. On the average day it is not long before the canoes are alone in a grey circle. The seas wash the craft from end to end so that the paddler is like the conning tower of a submarine. A bigger wave causes the canoeist to brace to avoid being rolled and he may be pushed 30 yards sideways. In a heavy sea when all the canoeists are in troughs you may be lucky to see a paddle to tell you that your mates are still around, then up you all come to a quick head count. Out in the deep many good paddlers get sea sick, it is the steady swell, the reflections off the waves and staring at the compass. We are experimenting with travel pills to see which ones do not adversely affect individual people.

Why do we do it Partly because it is there - it is a challenge to our ability to get organised, and partly because we can say with Max Royce "I was there". Without a doubt the stresses of such trips have produced vast improvements in equipment. We use much the same gear as was used to round Cape Horn. This in turn is passed on via the Advanced Sea Kayak Club to the teenagers on their 5, 6 mile coastal hops, to help provide them with the safe but open-ended challenge so necessary for many of them.

The sea canoeists are chasing the climbers in terms of sophisticated equipment and degree of commitment; while we believe we have the safer sport, sea canoeing is not for the tyro or loner - it is essentially a team sport.

TOM DALY COMPLETES SOLO CIRCUMNAVIGATION

Irrepressible Kerryman Tom Daly arrived at Brandon Point, Co Kerry, on 21 July, 49 days after he set out from the same spot on 3 June. He covered an average 142 miles weekly on the 1,000 mile trip which is a staggering achievement in view of the fact that a three man team on the same journey last year took almost 9 weeks to complete the circumnavigation.

On arrival at Howth he grabbed a fair share of the headlines when he emerged from the sea with 500 miles behind him. The Irish Press featured a front page photo of Daly being embraced by the lovely Ann Sheehan on his arrival at the North County Dublin harbour, and also a feature article on his progress to that point. Regrettably all efforts of "The Paddler" to track down the elusive Kerryman were doomed to failure as on arrival at Howth our roving reporter, after spending a couple of hours trying to trace his whereabouts, discovered that he had already set off again to continue his journey a couple of hours previously, even though we had been informed that he was not due to leave for another day.

Having battled with rough seas off the West and Donegal coasts where at times he took a bit of a hammering off rocks the 24 year old P E teacher from Firies encountered more favourable weather on the latter half of his trip. Tom's voyage should merit him a place in the Guiness book of records and his own account of the journey should be well worth reading and we look forward to presenting this in a future issue. People may have diversified opinions on the various aspects of Tom Daly's mission but few could argue with the courage, self-discipline and application necessary to complete such a feat. We congratulate Tom on his completion of the trip which sets a new high in paddling endurance.

Report from "THE PADDLER"

OBSCURED BY WAVES - SOUTH ISLAND CANOE ODYSSEY by PAUL CAFFYN

In a world where there are few great challenges left for the adventurous, it is easy to understand how the hearts and imaginations of many New Zealanders were captured as they followed the progress of the lone canoeist during the first solo circumnavigation of the South Island by canoe. Paul Caffyn began his 1500 mile circumnavigation from Te WaeWae Bay in Southland (December 1977) and travelled up the West Coast and down the East Coast to arrive back at his embarkation point in April 1978. The author's account of his trip is told in a frank and honest style. The engrossing narrative is a blend of history, dry humour, exciting dramatic moments, and some terrible puns. The first half of the book describes the first successful two man expedition around Fiordland - the area which has unpredictable weather, the most spectacular scenery, and the roughest seas around New Zealand's coastline. Descriptions of the sounds, the crayfishermen at work and play, and the lighthouse-keepers add an insight to this least known part of New Zealand, not to mention the antics of the canoeist's support party. The remainder of the book concerns Paul's solo paddle around the South Island, highlighted by incidents with sharks, tide races, and killer whales. Paul Caffyn's story is one of great endurance and courage requiring the highest levels of seamanship and skill. As a journey it is unlikely ever to be repeated. Approx 200 pp, 35 black/white and 16 colour photographs 16 line drawings, 30 maps, 0 86868 002 8, appendix, index 245 x 180.

The Author - Paul Caffyn lives in Runanga on the West Coast of the South Island. He has been rock-climbing since the age of 17 and mountaineering in the Southern Alps since 1968. He has made two ascents of Mount Cook and a winter ascent of Mount Tasman. Active in caving he led the 1970/71 New Zealand Speleological Society expedition to Mt Arthur. He was geologist and photographer for the 1973 Papua-New Guinea Speleological Research expedition. Paul has had five years experience as a geologist and three years as a teacher. The author has been canoeing since he was 10 - his first canoe was a 17 ft long wood and canvas Canadian type. One year after his circumnavigation of the South Island Paul completed a successful solo canoe circumnavigation of the North Island and he intends to canoe around Stewart Island during August of this year.

For further information regarding availability of Paul's book contact me, or wait until the next edition of ASKC Newsletter.

UMNAK "ICE FLOE" FROM P & H - designed by Derek Hutchinson, the Ice Floe is a fast deep-sea long range expedition kayak, built to withstand the severe storm conditions which can be found on open waters. To cater for the devotee of the long, straight running kayaks, the stable mid-section of the Umnak has been coupled with an almost straight keel and a specially moulded stern to hold the boat on tract in a quartering sea. The Ice Floe has a high, powerful bow, and and almost straight stern similar to the hunting skin boats of Labrador and Greenland. The cockpit is roomy by Eskimo standards with enough space at either side of the boat for quite large items of equipment such as tent poles on one side and canopy on the other. The seat has been designed to give maximum support, cradling the occupant comfortably during prolonged open sea paddling and thus reducing the tendency to cramp and pins and needles. The after bulkhead is situated almost one foot to the rear of the seat, leaving another large space for items such as first aid and repair kits.

The Ice Floe has been paddled by some of the north of England's leading advanced sea canoeists and coaches and has received the highest praises, the general view being that the kayak will take its place among the very few top British Sea Kayaks. When the Ice Floe was paddled into a short steep sea during test in gale force conditions, the kayak tended to bridge the small troughs rather than plunging into them, making the Ice Floe a dry and comfortable boat to paddle. With a quartering sea aft, the most frustrating for any canoeist, the boat held its track well. In a beam wind of Force 8, turning was no problem. Also, an important safety factor is the kayak's high speed, enabling it to hold its own in fast tidal streams or to paddle out of danger in busy shipping lanes. The pronounced sheer on the fore deck gives the Ice Floe an appearance of grace, elegance, and power. Although the boat is designed to carry a load well in excess of 200 lbs the amount of freeboard is not excessive, giving beam winds very little to push against, while the combined shape of the forward and rear decks makes it one of the easiest of sea kayaks to roll - even when loaded with equipment.

The boat comes complete with recessed deck fittings to hold grab lines and shock-cord elastics. The special design of the rear deck incorporates an anchor moulding at the stern for tow line. The bilge-pump behind the cockpit has a suction hose long enough to reach into and pump out any other kayak which may come alongside and need assistance.

Full details of the Umnak Ice Floe and complete range of other kayaks and canoes from:

P & H Fibreglass Ltd, Old Stanley Colliery, Station Road, West Hallam, Ilkeston, Derby.

Telephone: Ilkeston 320155.

A.S.K.C. SUPPLEMENTARY

BRIEF EMPHEMERIS 1979 for Lat. 52°N

In planning outdoor activities it is necessary to know times and duration of daylight. The following table gives the times of sunrise and sunset for every Saturday for the rest of this year, and the duration of daylight (dates in between can be estimated). Twilight is approximately half hour before sunrise and after sunset. The emphemeris for 1980 will be issued with the December issue of "Outdoor Education". The phases of the moon are given to enable tides to be estimated. Spring tides occur a little after both New and Full Moon - about every fortnight. Neap tides occur halfway between each Spring tide - a little after the First and Last Quarters of the Moon.

The highest tides in the English Channel occur 1½ days after New and Full Moon. Greenwich Mean Time is in operation during the winter, British Summer Time which is one hour added to GMT lasts from 18 March to 28 October 1979.

Date	Sunrise	Sunset	Duration Daylight Sunrise to Sunset		Moon's Phases d.	h.	m.
AUTUMN EQUINOX 23 September 1979 - 1500 Autumn commences							
Sept 22	0645	1900	12h 15m	New	21	09	47
29	0656	1844	11h 48m	First ¼	29	04	20
Oct 6	0708	1828	11h 11m	Full	5	19	35
13	0721	1812	10h 51m	Last ¼	12	21	24
20	0732	1757	10h 25m	New	21	02	23
27	0748	1742	9h 57m	First	28	13	06
SUMMER TIME ENDS 28 OCTOBER 1979 - 0200 GMT - clocks go back 1 hour							
GMT							
Nov 3	0658	1629	9h 31m	Full	4	05	57
10	0710	1617	9h 07m	Last ¼	11	16	24
18	0722	1606	8h 44m	New	19	18	04
25	0735	1559	8h 24m	First	26	21	09
Dec 1	0745	1555	8h 08m	Full	3	18	08
8	0754	1549	7h 55m	Last ¼	11	13	59
15	0801	1548	7h 47m	New	19	08	23
WINTER SOLSTICE - Winter commences 20 December 1979 - 0500. Shortest day 20 December							
Dec 22	0805	1551	7h 45m	First ¼	26	05	11
29	0808	1555	7h 47m				

The times are correct for Lat.52°N and need to be corrected for other parts of the British Isles. N Scotland is at 58°N and there the winter day is about 1 hour shorter and the summer day 1½ hours longer. 52°N is about the latitude of Harwich and the figures close enough for all of S Britain up to the N Midlands.

Tidal Constants based on times at London Bridge

Aldeburgh	-3.06	Malden	-1.08	Ayr	-1.52
Berwick on Tweed	+0.55	Minehead	+4.40	Dumbarton	-1.13
Bognor Regis	+2.38	Newhaven	-2.57	Dundee	+1.10
Bosham	-2.16	Newquay	+3.33	Findhorn	-2.05
Bournemouth		Plymouth	+3.54	Gourock	-1.34
1st H.W. at Springs	-5.08	Poole Bridge		Kirkcaldy	+0.53
Brightlingsea	-1.46	1st H.W. at Springs	-4.43	Kirkcudbright	-2.23
Bude	+3.55	Portsmouth	-2.28	Montrose	+0.40
Burnham on Crough	-1.23	Ramsgate	-2.22	Oban	+4.13
Burnham on Sea	5.09	Salcombe	+4.05	Portree (Skye)	+5.15
Cowes		Southamptom		Queensferry	+1.01
1st H.W. at Springs	-2.28	1st H.W. at Springs	-2.55	Stonehaven	-0.10
Douglas (I.O.M.)	-2.42	Southen on Sea	-1.24	Stranraer	-1.52
Dover	-2.42	Southport	-2.50	Ullapool	+5.40
Eastbourne	-2.52	Swanage			
Exmouth	+4.50	1st H.W. at Springs	-5.18	WALES	
Falmouth	+3.30	Torquay	+4.35	Aberdovey	-5.54
Folkestone	-2.54	Tynemouth	+1.53	Barmouth	-5.47
Gt Yarmouth	-5.01	Wells (Norfolk)	+5.19	Cardiff	+5.17
Hastings	-2.47	Weymouth	+5.05	Colwyn Bay	-2.58
Hayling Island	-2.30	Whitby	+2.19	Holyhead	-3.32
Herne Bay	-1.22	Whitehaven	-2.36	Nevin	-4.50
Hoylake	-2.54	Yarmouth (I.O.W.)		New Quay	+6.06
Ilfracombe	+4.17	1st H.W.at Springs	-3.33	Pembroke	+4.42
Littlehampton	-2.38	SCOTLAND		Pwllheli	-5.56
Lymington		Aberdeen	-0.20		
1st H.W. at Springs	-3.23	Annan	-1.33		

VALLEY CANOE PRODUCTS LTD Technical Information Leaflet

REPAIRS TO GLASSFIBRE

Glass reinforced plastic (G.R.P.) cures over a period of several weeks. Repairs to cured resin are not always satisfactory unless care is taken. The following notes outline the necessary steps for making a satisfactory job.

1. DRYING OUT THE DAMAGED AREA

This is essential to a permanent repair. Unless the whole area of broken G.R.P. is thoroughly dired and cracks prised open to allow evaporation, the repair is always liable to open up again. Several days in a dry room, or several hours with a fan heater or similar, are required to dry out a canoe satisfactorily. Half an hour 'cooking' a boat over a primus stove is not usually satisfactory. If you have an accident and need to do a running repair on the river, bank or beach during a trip, it is best to strap up the canoe with P.V.C., tape, carpet tape or even masking tape and leave the permanent repair until you can thoroughly dry out the canoe.

2. PREPARATION OF DAMAGED AREA

Using a file or very coarse emery paper, clean down the whole area, even threading the emery paper through any cracks, until you have exposed the glass reinforcing and removed all trace of polished resin surface. (You cannot afford to skimp this stage).

3. APPLYING RESIN

If there is an actual hole in the skin of the canoe, stick some 2" wide P.V.C. tape over the hole on the outside to act as a barrier, then work from the inside of the boat. Cut pieces of chopped strand mat (C.S.M.) reinforcing, (1 oz or 300 gms/m^2), one piece the size of the hole plus 1" overlap all round, and others increasing in size by 1" all round. Three pieces will usually be enough. Add a piece of woven roving cloth if you wish, but don't use all w.r. cloth as it is too porous. Thoroughly wet out the area of the repair with resin, using a brush on the end of a stick if necessary. Wet out the smallest piece of C.S.M. with resin, by stippling it with the brush on a disposable 'wetting out board'. (A suitable piece of wood or cardboard). Use the brush to place the C.S.M. over the hole. Stipple! Repeat with the next larger piece of C.S.M. and so on. When the resin has set, remove the tape from the outside of the canoe. On an old boat, where surface finish is not important, it is enough to leave the repair at this stage.....a little cleaning up on the outside with file or emery will suffice.

4. REPAIRING THE GEL-COAT

If an 'invisible' repair is needed on the outside, it is necessary to proceed from stage three. First clean off the outside of the repair with a file, leaving the surface rough and lower than its surroundings. Cover the whole area with gel-coat. Gel-coat is an air-inhibited resin. This means that surfaces that cure exposed to air will remain sticky. It is necessary, therefore, to overfill with gel-coat and clean off when set, to remove the outer sticky surface. Another way, only suitable on small areas, is to fill the hole with gel and then stick adhesive tape over the repair. Often, when the tape is removed it will be seen that no further cleaning up is necessary as the finished surface will be as smooth as the underside of the tape. Small blemishes, such as air-bubbles under existing gel-coat, can be repaired in this way.

5. FINISHING THE REPAIR

Where the gel-coat repair has been left proud, reduce with a file and as the final shape is reached use wet and dry paper. Use it wet and wrap it around a cork rubber or small piece of wood. Start with a grit number of approx 80, and work through to a really fine grade, say 120, 280, 360, 600, 800, 1000, 1200. There is no substitute for this rather laborious process you'll be sorry to learn. However, a final finish to the surface with cutting paste (metal polish will do) will give you a perfect finish.

6. COLOUR MATCHING THE REPAIR

It is very difficult to match the colour of a repair to the job. Even if you get the pigment addition just right, the catalyst addition can sometimes affect the colour slightly. Judge as carefully as you can.

7. MAJOR REPAIRS

Occasionally the ends of a canoe are broken off completely or canoes are broken in half. Repairs are not always out of the question although they may take a long time. If the separate pieces appear to fit reasonably well, stick the edges together with P.V.C. tape. Impacted cracks can often be levered out with a screwdriver or chisel. When all is made as fair as possible, glass over on the inside as already described.