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INFORMATION AND APPLICATION FORM FOR

THE 1986 A.S.K.C. SEA KAYAKING HOLIDAY

From Saturday 1st August through to and including Friday DATE: 8th August. VENUE: CAOLASNACON CARAVAN & CAMPING PARK, Kinlochleven, Argyllshire. DIRECTIONS TO From the M74 move on to the M8 and drive through Glasgow VENUE: on Motorway towards Greenock. Take cut off after Glasgow Airport for the Erskine Bridge. Cross the Erskine Bridge and take the signs to Loch Lomand and Crianlarich (A82) After Crianlarich the road splits at Tyndrum. Take the right hand fork and drive to Glen Coe At village of Glen Coe turn right. Three miles on the left is our site. COST: £5.00 per head plus site fees (in the region of £15.00 per week). Dependant on the weather to some extent. PROGRAMME: Day trips; an overnight two day trip; a night paddle; coaching; a Bar-b-que on Friday evening; talks; and whatever you want to do, flexibility being important. Bring your own and be prepared for our mini-expedition EQUIPMENT: and night paddles. If in doubt let me know. TO J. RAMWELL, 7, MILLER CLOSE, NEWPORT, ISLE OF WIGHT APPLICATION: PO30 5PS - as soon as possible, with £5.00 deposit.

APPLICATION FORM FOR 1986 ASKC SEA KAYAKING HOLIDAY

NAME:

ADDRESS AGE (IF UNDER 18)

.....POST CODE

I would like to attend the 1986 ASKC Sea Kayaking Holiday

I have (at least) basic competence in a kayak

I do not hold the organiser responsible for safety of life and equipment I enclose £5.00 deposit.

Signed

KAYAK KITE SAILING: GONE WITH THE WIND

by LeRoy Nordby

B ritish Columbia coastal sea kayaking is perhaps the finest in the world. Each year an ever increasing number of paddlers are finding this to be true. And it was in this beautiful environment that I got my idea for kite sailing. So today, whenever I stop by sea kayak stores and see parafoil kites hanging from the ceiling, I smile inwardly, knowing I had a hand in putting them there.

It all goes back to that day in August 1973 when I was leading a kayak trip in Alert Bay area. One member of the group, David Steele, was flying a small Scott Sled larger sizes being too unwieldy to manage from a kayak cockpit). I use several hundred feet of 150 to 200 pound-test braided nylon seine twine for the line along with a swivel on the end.

To launch the kite with the wind at your back, hold it up, one hand on each front corner, until filled by the wind. Then, let loose while grabbing the line with either hand to keep the line taut. You must be careful not get the bridle lines tangled, as the kite will not fly if this happens.

The kite line is then slowly let out to the desired height and eventually attached to the front of the cockpit by a looped cord or a cleat. Some people like to fly the kite

In a strong wind the kite will be zooming out ahead of the kayak and will be impossible to pull in by hand. Under these conditions...you should have a knife ready to cut the line if necessary.

kite for diversion as we paddled along. Being small, it couldn't provide any useful pull, but it got me thinking: Was there a kite that would pull strongly enough so I wouldn't have to paddle downwind? Up until that time, I hadn't heard of anyone else using kites for propulsion when sea kayaking. It simply wasn't being done.

Ideally, for kayaking, the kite should be free of supports. It should be made of saltwater-tolerant material, and should be easy to stow.

After looking at the various kites available and evaluating several, I found the Jalbert Parafoil met my requirements. This kite was developed by Domina Jalbert from an idea that popped into his mind while flying his private plane in 1963.

The parafoil is made entirely of multicolored rip-stop nylon or spinnaker-type sailcloth and, having no rigid members to break, rolls up compactly to fit into a small space. Its cross section resembles the shape of an airplane wing with the leading edge removed. There are six rib compartments (baffles) and the ram air pressure keeps the kite inflated to give it an air-foil shape, which provides great lift and pull.

For its size, the Jalbert Parafoil is one of the strongest pulling kites on the market. The kites are designated by the letter J and a number (e.g., J-7.5, J-15). J refers to the inventor and the number to the square footage.

By experimenting I've found that the J-15 is an ideal size kite for kayaking (the whereby the lines goes through a pulley arrangement at the bow of the kayak and attaches to the front of the cockpit as described. You should experiment to see which rigging works best.

Unlike a sail, the kite can be raised to any height to catch the optimum winds. More often than not, winds are stronger aloft than at the surface of the water. If the winds are gusty or intermittent, you must give an occasional pull on the line if the wind dies momentarily to keep the kite from collapsing.

The kite will generally fly at about a 60 degree angle to the horizontal. You can sail downwind in this fashion and up to about 30 degrees either side of downwind. Course corrections can be made by adjusting the rudder or if the kayak doesn't have one, using a paddle.

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Besides providing locomotion, the parafoil can serve as an attentiongetting device if help is needed. Since it has a high visibility factor, the kite can be seen at great distances. In a strong wind, the kite will be zooming out ahead of the kayak and will be impossible to pull in by hand. So, under conditions where the wind might shift and start pulling you off course, you should have a knife ready to cut the line if necessary. If so, the kite will simply go limp and fall into the water from where it can be retrieved, shaken out, and put aboard. Otherwise, as the crossing is completed, or the wind dies, or is blocked (as behind a point of land), the kite can be gradually lowered to the kayak without falling into the water.

Besides providing locomotion, the parafoil can serve as an attention-getting device if help is needed. Since it has a high visibility factor, the kite can be seen at great distances. Mylar or other reflective materials can be attached near the bridle to flash in the sunlight for improved visibility.

In case of rough seas and high wind, the parafoil can be used as a sea anchor to check drift and keep your kayak headed into waves.

Interestingly, Arnaud de Rosnay, the daring Frenchman who crossed the Bering Strait on a sailboard, used a Jalbert parafoil to help him make a similar crossing between the Marquesas and Taumotou Islands in September 1980—a distance of 750 miles in 13 days without assistance. In the evenings, he replaced the regular sail with the parafoil to allow fixed-course night-time cruising while sleeping. If necessary, Arnaud could make course corrections from his sleeping platform.

NASA has used the kite in various projects and, in its larger sizes, skydivers use it as a steerable parachute with a relatively high glide ratio.

One word about two other kites: the Sutton flow Form Soft Kite is a parafoil which has holes cut in it to spill air, thereby reducing pull. Hence, it isn't suitable for kayak sailing. Also, there are twin-lined Flexifoil kites available, but these are harder to fly and not recommended for the average person under high wind and rough sea conditions.

Parafoils may readify be obtained from or through you'r local kite shop or by writing directly to Jalbert at Jalbert Aerology Labroatory, Inc., Boca Raton, Florida, 33421.

If you're among the growing community of sea kayakers, you should experience the delightful change of pace that kite sailing allows. As you go surfing down wavefronts, pulled by your kite, you can look back and chuckle at your friends laboriously paddling along. Book Review:- Guide to Sea Kayaking by Derek Hutchinson

A new book from Derek Hutchinson will always be a welcome event in any canoeist's calendar, so I was delighted to receive his "Guide to Sea Kayaking" to review. It is produced in U.S.A. by Pacific Search Press in paper back format at \$12.95; size 215 x 240 mm. The type is clear and easy to read, the illustrations attractive, particularly those from Nansen's "The First Crossing of Greenland", and the line drawings clear and easily understood. Derek's style combines laconic good humour with clarity of expression, and is a pleasure to read. One is bound to compare his "Sea Canoeing" published by Black in this country with this new book, and what disappointed me was the lack of difference between the two. The surfing chapter has been left out of 'Sea Kayaking', and a welcome look at double Kayaks included. In addition a section on Hazardous Wildlife. reminds us that if we intend paddling outside U.K. waters there are creatures like snakes and grizzly bears which have to be taken into our planning equation. Plus ca change, plus le meme choses perhaps. Why, you might reasonably ask, should there be any change? My main reservations concern the sections on Deep Water rescues and Self Rescues. All the boats illustrated are of the sea kayak type, and as publication date is 1985, we ought to be able to assume that boats are fitted with water tight bulkheads, and that paddlers should be equipped with a good quality compass and paddles. How many of you would empty a Sea Kayak by the H I method? I don't know any, do you? One reason to avoid the H I is to avoid risk of damage to paddle loom and compass. The more important reason is that it is an unnecessary rescue. Derek fails to mention that in practice, when we raise the bow of an inverted sea kayak, most of the water will run straight out of the cockpit. Why not at that stage slip the boat upright and put the paddler back in? Then proceed to more store won't be any). On the subject of to be immediately behind the cockpit there won't be any). On the subject of mopping out, I must quote verbatim from the advice to one who has capsized. come out of the Kayak, re-entered and rolled, and is unfortunate enough to be without bulkheads, hatches or pump. ".... balance carefully and replace the spray cover. Open the waist elastic to gain access to the cockpit area, then start bailing. Support yourself by placing the paddle across the shoulder and sculling. This is hard work, but the larger the bailer the less time it takes". What utter tripe!! Later in the same section "In rough seas, the spray cover must be in place before emptying starts, otherwise the kayak will fill-up again as fast as you can get the water out. The spray cover must be large enough around the waist to allow the paddler to bail through it. This adaptation to the cover is one you may have to do yourself. You must be able to get the bailer down between your knees if you hope to get any water out, so don't make the bailer too large". Derek has designed several successful sea kayaks, among them the Baidarka, the Baidarka Explorer, Umnak, Ice Floe, and Fjord. Is he seriously suggesting that you can sit in one of those without the assistance of bulkheads and pump, in a rough sea, in a waterlogged state, sculling with one hand while sticking a bailer INSIDE THE WAISTBAND of your spraydeck, down between your legs to scoop up the water etc.? The last time I paddled an Explorer, and had to resort to my Five Pint bottle (not mentioned anywhere that I saw) it was as much as I could do to get the Five Pint bottle between my legs, let alone a bailer, and never mind inside the waistband of the spray deck. Advice to a solo paddler in similar predicament but equipped WITH bulkheads and pump is questionable in itself. Having re-enetered and rolled "balance carefully, replace the spray cover, and start pumping. You may have to rest the paddle across your shoulders and scull for support". Derek assumes rear deck mounted Chimp pump, which makes this strategy so difficult as to make it impracticable. He mentions the Lendal foot pump (low volume) but fails to mention the foot mounted Chimp (higher volume and frees both arms for support work).

> At Plas Menai' last year, during the Coaching Conference, we looked at various options for solo re-entry, and I got the impression that the majority of sea kayakists in attendance were unhappy with R & R as the favoured method of reentry, One good strategy for the solo paddler to empty his inverted sea kayak

is to sink the stern by sitting on it, thus emptying most water from the cockpit (all where bulkhead is fitted immediately behind cockpit) flipping the boat upright, and entering using one of several methods of balance. One of the most useful accessories seen at Plas Menai was an uninflated Beaufort life jacket, which folds completely flat, but which when inflated becomes a life jacket to B.S.I. standards. It can be used as a stabilising aid for re-entering a sea kayak unassisted, or as additional personal buoyancy in the extreme case of a paddler having to spend an extended period in the water.

In short, I think the Rescue chapters do not reflect the stage of the art in 1985/6, and should have been up-dated, if only to include the bow lift and stern sink strategies for sea kayaks without bulkheads. (And how many of us would advocate SEA KAYAKS WITHOUT BULKHEADS (OR PODS) ?)

From Colin J. Lilley, 127 Vaveney, Grove Hill, Hemel Hempstead, Herts.

Dear John,

I would be grateful for the inclusion of the following in your next A.S.K.C. Newsletter:

During this summer I am planning a 2 week Sea Kayaking trip to Norway and will be paddling between Stawinger and Bergen. If anyone is interested in accompanying me on this trip would they please write to me at the above address or phone me on (0442) 217777 immediately. Presently I am fairly flexible as regards dates, although August is ideal.

Thanks John.

Yours sincerely, Colin J. Lilley P.S. Brod Beech! Sorry mate I have mislaid your address and telephone no. Can you contact me?

From Trade Association of Sea Kayaking April 26, 1986

WEST COAST SEA KAYAKING SYMPOSIUM

The third annual West Coast Sea Kayaking Symposium will be held September 6, 7, 8, 1986 at Fort Worden State Park. Last year's symposium drew capacity crowds meeting and exchanging ideas with leaders in the sea kayaking world. Participants chose from dozens of seminars on all aspects of sea kayaking with an opportunity to inspect and try the latest in west coast kayak design. New this year is an exchange of used boats and gear.

Sponsor is the Trade Association of Sea Kayaking.

For more information, write to T.A.S.K., P.O. Box 84144, Seattle, Washington 98124, or call Judy Moyer at (206) 246-9385.

From Alan W. Byde, 5 Masterman Place, Middleton-in-Teesdale, Co. Durham. Tel: Teesdale 40686

7.5.1986

Dear John,

Pleased to hear that you have settled. Someone once calculated that if the whole population of the world stood shoulder to shoulder the Isle of Wight could accept them all.

About instructional qualifications. Writing as a male chauvenist porcine person I may state without equivocation that qualifications are like women, you cannot live with them and you cannot live without them.

Once I reached the level of Senior Coach, in the BCU. That was crowned with an Award of Merit. It is now the case that I no longer instruct canoeing in a formal way. I still enjoy occasional canoeing.

If this was a perfect world, and every person within it knew how to behave in a socially acceptable way, there would be pure anarchy, of the best sort. Every government is less than perfect, every "expert" open to attack. In this imperfect society, anarchy would mean bloody ruin.

Matt Brose knows what he is doing. John Dowd also. So do I, up to a point. The problem that the novice sea paddler has, is, how do I go afloat with a reasonable expectation of returning safely? In this issue on my desk now, of the ASKC Newsletter, Dick Richards has sent us a run-down of the canoeing call-outs that the Coastguards attended in 1985. Numerous times I have avoided being the subject of one of those reports only by the intervention of the greatest good fortune. There, but for the Grace of God, goes everyone.

The first draft of a Byde book on the subject of canoeing safety, with episodes culled from almost thirty years on the water is on my desk now. In it are odd events the like to which no practising instructor would dare confess. Each one underlines yet another weakness in all our practices.

If I were a novice paddler, and for some reason had decided that sea kayaking was what I wanted to do, and who should dissuade me? - then I would ask the person who sold me the equipment 'How do I learn how to handle it? That person should say, go and see so and so, he/she knows what to do. That usually entails joining a club.

The chain of events is as follows. The novice instructor teaches several people in an informal way, and does it well. Others notice this, and say to the novice paddler, go and see so and so, they will help you. Then so and so finds that numbers of novice paddlers are coming along at all hours, and so it is decided to have a course, where perhaps ten or twelve people will be dealt with at once, to save the bother of repeating the same instructions twelve separate times.

Courses imply responsibilities. The litigious American will say, fine, I like your course, but if anything goes wrong, whom do I sue?

The careful instructor says, you have a point there, and asks for insurance cover. The careful insurance agent, wishing to limit the liability of the insurance company imposes conditions. The first is, 'Who says you are a reliable instructor?'

If there is no organised body which establishes standards, then the insurance agent and the instructor strike a bargain as far as they can. Or not. The first aim of the insurance company is to make profits, the bigger the better. It is not to assure you of support.

Eventually a chain of demand leads to a chain of command, and we have the cadre of qualified instructors. The tail starts to wag the dog. What started as a response to public demand, there were more than twenty deaths a year in 1950s, becomes a business in itself. At my own reckoning, the BCU and its instructors reduced the death rate from canoeing accidents in the fifties to less than 1% of that today. Two lines to express a bookful of reckoning.

As soon as 'A' asks 'B' how to do this or that and 'B' says to 'A', to and see 'C', he knows, then you have all the necessary foundations for an instructional and qualifications system. "Matt Brose, meet King Knut."

Alan W. Byde

From: Alan W. Byde, 5, Masterman Place, Middleton-in-Teesdale, Co. Durham. Tel: Teesdale 40686.

16.4.1986

Dear John,

I am possessed by an idea. It is an old idea. Genesis 5 and 6 tells the story of the Ark. It is my habit to lie abed thinking for fifteen minutes before rising. It helps to sort out the day. In one of those sessions recently, whilst ruminating on the Irish curach and the dug out canoes and frame and skin boats, I wondered where I could find information on the earliest of boats. Came the answer, 'The Ark, of course'. So I read it up. Other notions associated with it came drifting in.

The rate of drift of a canoe on the open sea is about 2 mph. The width of the Atlantic is about 2,000 miles, and at that rate it would take forty days and nights, a very Biblical time, to traverse the Atlantic, given good weather. Those that survived told the tale, those that did not, have left no record. The winners write the histories.

Anyone adrift anywhere on the coasts of the North Atlantic would eventually arrive in Europe, as the set of winds is predominantly that way. Where would they come ashore? The westernmost parts of the coast of Europe are at the Blasket islands off the Dingle, and Ponto Razo, near Lisbon. Both are very close to the ten degree west Longitude.

Consider a tribe of hunter-gatherers on the coast of what we now call North America. They would move fairly often, not being tied to a piece of land. Coastal dwellers would use dug-outs and frame and skin boats, the umiak is one such. They could carry 30 men and women and their children and their animals. That strikes a parallel with the story of the Ark.

The scribes that first wrote down the folk tale of the Ark, crystallised in words what had come to them as an oral myth or legend. It was subject to distortions in the 5,000 years of its telling.

Accepting the story of the Ark is in truth of a series of voyages across wide waters with animals as well as humans aboard, the dimensions of the Ark are vast. 450 feet long, 75 feet wide, and 45 feet deep. It was a load carrier, so assuming a prismatic co-efficient of 0.85, and a draft of 35 feet, it would displace 28,000 tons. Even the tea and wool clippers of a century ago rarely carried more than 4,000 tons. Noah was ahead of his time.

Assuming that human nature (being what it is) exaggerated the dimensions of the Ark(s) by a factor of ten, then we have a set of parameters, 45 ft long. $7\frac{1}{2}$ feet beam and $4\frac{1}{2}$ feet deep. That is the outline of a umiak, rather long perhaps, or of a wide dug-out. Assuming a pc of 0.65, more suitable for a cance, and a waterline of 12 inches, then it would displace around 6 tons. The Brigg dug-out displaced $5\frac{1}{2}$ tons. It would indeed carry thirty men and women and their children and animals.

The Chief Archaeologist of the National Maritime Museum at Greenwich says that the notice is new to him, to link the Ark with the discovery of Europe by the 'Americans' around 7,000 years ago. The Bishop of Durham says much the same. I tried to obtain some theological guidance on the question but have far failed.

If one can accept this notion, and develop it, various profound thoughts received a new meaning. The Styx, or the Lethe. The boatman, Charon. The idea of going to a new place over waters. The Viking legends of Valhalla, a golden land to the west; Hy Brasil, the Celtic heaven, to the west. The idea of meeting loved ones again in 'Heaven' (various canoes drifted away at different times and were indeed re-united at last on the shores of Europe).

This has been bothering me now since the ASKC newsletter that told of landings in Europe around the time of the Romans, and since.

What thoughts from fellow readers? I know that some high power academics read the newslatter. How interesting to think that the history of the canoe starts from the Ark? It re-arranges the ideas of the settlement of Europe from the heart of Africa by way of the east end of the Mediterranean. Perhaps the eastward going tribes went so far east they appeared from the west, at last? Sincerely, Alan From: Paul Airey, Nelson Outdoor Education Centre, Plas Newydd, Llanfairpwll, Anglesey, Gwynedd, LL61 6DX. Telephone Llanfairpwll 714565. STD 0248

21.3.86.

Dear John,

I attended a meeting of RYA Club members/Straits sailors at Plas Menai this week and jotted down a few thoughts after Mike Gash (the NCC Officer) spoke. Please find attached said thoughts on Marine Nature Reserves, plus location map plus 1986/7 membership.

> Cheers, Paul.

MARINE NATURE RESERVES : PRESERVATION OR CONSERVATION ?

Sea canoeing has in recent years enjoyed a large increase in participation due, no doubt, to inland paddlers' increasing frustration with the lack of access to our white water rivers. It may well disturb some of the sea paddling fraternity to learn that if present proposals are realised then popular sea canoeing areas are likely to be subject to increased byelaws and restrictions for all sea based sporting activities.

The 1981 Wildlife and Conservation Act provides the framework for the designnation of MNRs (Marine Nature Reserves) and to date there are seven MNRs around the coast, namely Scilly Isles, Lundy, Skomer, Bardsey, Menai Straits, Loch Sween and t. Abbs. The Department of the Environment have set an eleven stage procedure called 'the formal non-statutory consultation stages' before an MNR can be designated: stage 10 being 'a resolution of problems' and stage 11 being presentation to the Secretary of State. The proposed reserves are at different stages of development, for instance, Bardsey is at Stage 2, being the 'broad identification of the nature and duration of restrictions required to achieve the objectives'. In contrast, Skomer and the Menai Straits are at stages 6, 7, and 8, which involve the thorough investigation of existing byelaws, possible shipping restrictions involving IMO (Intergovernmental Maritime Organisation) and the preparation of a full case.

Why is it deemed necessary to designate areas as NMRs? It may be pertinent to answer this from the NCCs point of view using the Menai Straits as an example.

The area is significant in its varied geology and the unique habitats it provides for flora and fauna facilitated by an unusually strong tidal flow in a constricted channel. A brief examination of points of interest may be followed on the map (attached) starting at the NE end of the area.

Red Wharf Bay (or Tracth Coch) provides a nursery ground for flat fish, Puffin Island and Penmon a rich limestone habitat underwater. Traeth Lavan is us by nationally significant numbers of waders, for example 1% of the British popula tion of redshank, oyster catcher, dunlin and curlew overwinter on the fine sediments exposed here. The section from Menai Bridge is considered unique because of the strength of current and the shallowness of the water. Since the 1950s a close monitoring of the Swellies has shown a decrease in the variety of the species. Bait digging without backfilling is thought to be damaging the populations of a giant ragworm; peeler or soft shell crab collection for bait involves turning stones some of which form fish traps or 'goradau' of archaeological significance dating back perhaps to the thirteenth or fourteenth centuries. The least disturbed by fishermen and most noticeable examples of these goradau to canoeists will be on either side of the island with the white house, Ynys Gorad Goch, near the Britannia Bridge. The Foryd Estuary south of Caernarfon is silting due to Townsend's Cordgrass or Spartina, an accidental hybrid originally colonising Poole Harbour. Most of Abermenai and Ynys Llanddwyn is already a terrestrial National Nature Reserve and supports from time to time breeding populations of terns, shags and seals.

The major concern seems to be the decline in water quality mainly for the following reasons:-

(i) It is already acknowledged that the Irish Sec is the most radio-active sea in the world.

(ii) Merseyside waste is dumped in Morecambe Bay resulting, for example, in high turbidity and a recent increase in mercury levels.

(iii) Local water authorities not only discharge sewage into the Straits but improve water courses that drain off local upland areas, 'improved' by the use of chemical fertilisers, a high proportion of which runs off into the drainage system.

(iv) Certain anti-fouling on boats and yachts contains TBT and can affect marine life (although this problem is envisaged solved at national level with .legislation to cover paint manufacture).

Combine these with the ponding effect of the Menai Straits in that one tide will not 'flush' the Straits, and the problems of pollution can be appreciated.

However, a number of questions are now pertinent. Namely, will the MNR if designated have the slightest fighting power against the major considered pollutants of the area? Will it have teeth to bite British Nuclear Fuels, the Welsh Water Authority (or its private successor), Merseyside Metropolitan Authority (or its successor), the EEC and Welsh Farming Policies? Rather unlikely, I feel, but it would have sufficient clout via the invoking of existing dormant byelaws or the creation of new byelaws to affect directly the small boat user, yachtsman, canoeist and fisherman. An examination of the Consultative Document (Third Draft) of the Proposed MNR together with an educated guess or two can point to areas likely to gain protective byelaws which may affect the canoeist.

> "It will be necessary to set aside specific parts of the foreshore as sanctuary zones so as to provide undisturbed habitats for ragworm and other vertebrates."

Given that the Swellies represents one of these areas and landing or embarking involves disturbance of the foreshore, draw your own conclusion.

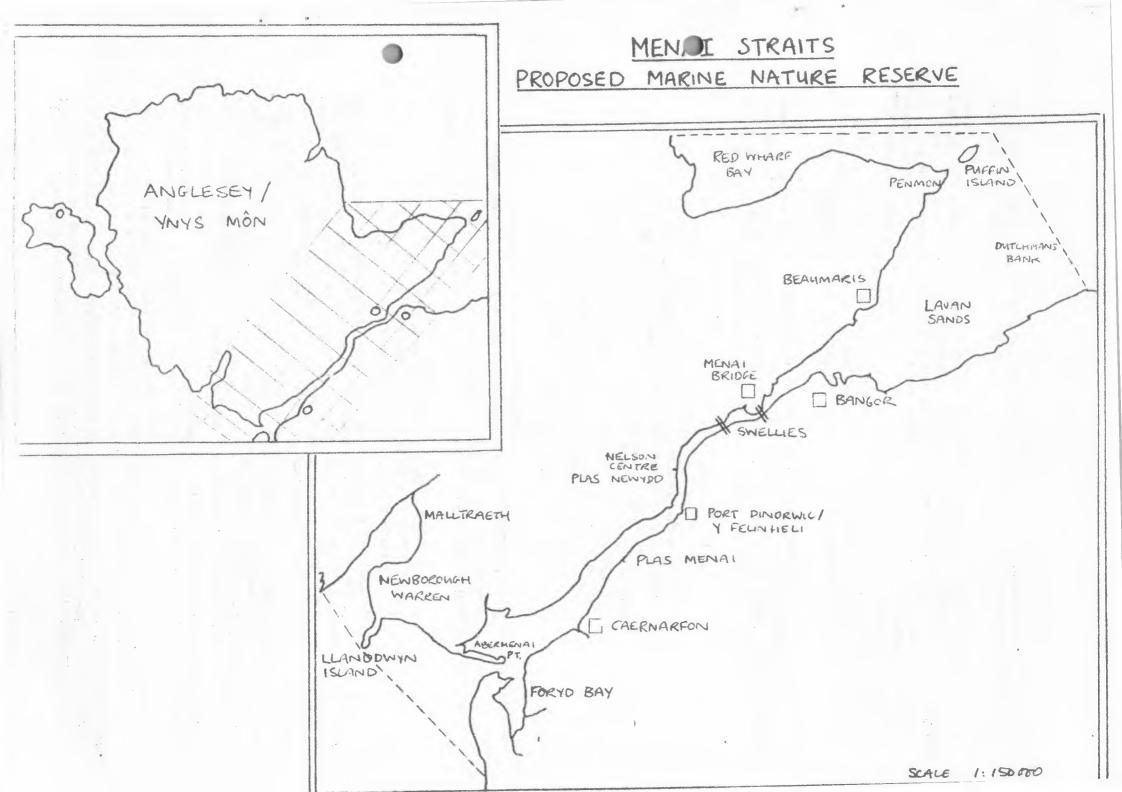
Some concern has already been expressed by canoeists' disturbance of seals on Puffin Island and of shags at Llanddwyn.

> "Disturbance to nesting cormorants and shags sometimes occurs when canoes and other small boats approach too close to the islets off Vnys Llanddwyn where these birds breed. To minimise disturbance to nesting seabirds off Ynys Llanddwyn a voluntary ban prohibiting canoes from approaching closer than 50 metres during the nesting season (January to May) is required. The co-operation of the BCU and of other small boat users is being sought. If this fails, it may be necessary to obtain a byelaw to achieve the same end."

The NCC seem determined to see the designation of MNRs in a relatively short time despite the established existence of at least six SSSIs in the Straits, for example. This may mean that if their present attempts are frustrated the Secretary of State may sanction less problematic (or democratic) stages for MNR designation.

As canoeists we must be seen as a body to be environmentally aware and sympathetic to the concerns of the NCC - this we may demonstrate by co-operating at Ynys Llnddwyn, for example. However, of paramount importance is the need for us to be well represented at each and every one of the consultation stages of all proposed reserves. We cannot leave our interests to be represented by other bodies such as the RYA, given that our needs in particular areas may not always be realised by others. Let us beware in case a reassurance, such as that provided at last October's Coaching Conference at Plas Menai by NCC's Mike Gash, that the MNR will have little effect on our sport, lulls us into a false sense of security.

Once the MNRs are designated it will be too late for complaint, consultation and change - get involved now if you live in any of the proposed areas.



From: SEA TIGER, Quarry House, Colwinston, Cowbridge, S.Glamorgan, CF7 7NL Tel: Bridgend (0656) 56580

4th March 1986

Dear John,

I wrote this a few days ago. Then I read your latest Newsletter for which many thanks again. I realised that half of the correspondence in it was devoted to the problems of rudders and then there was the article on the Sea Trek paddle support. It struck me that the enclosed was particularly pertinent to these particular subjects and also that I seem to remember some of the references made were published in past issues of the Newsletter. You would be welcome to publish it if you wish - it might prove interesting and give some food for thought.

With very best wishes for your move. Cheers and happy paddling around the Island,

Nick.

.....OF RUDDERS, SKEGS, SAFETY COCKPITS AND THINGS

Interesting, isn't it.

Some five years ago, or even less, the purists in the sea canoeing world, backed by the manufacturers, decried any consideration of the use of rudders on sea kayaks. Some folks designed and fitted their own and the clamour increased to the extent that the manufacturers decided it was a good idea and developed them for production. The sea canoeing press has been full of discussing them, their problems and complications. However, no self respecting small craft designer would use a rudder as the main element of directional control, particularly when either wind or manpower is the means of propulsion. This goes for dinghys, 12 metre yachs and, yes, kayaks. All a rudder does in any small craft is correct the deficiencies of the design of the craft by forcing it in a direction in which it does not wish to travel naturally by using the energy of the power source. It acts as a brake, introduces unwanted sideways drift and, in a kayak, it presents problems with control mechanisms and lines, is expensive, relatively difficult to fit and requires maintenance.

It was some ten years ago that I first used and started talking about adjustable skegs to simply overcome these directional problems. Nobody shared my conviction that it could be achieved. Today skegs are on many boats - but, oh, what a shambles they are. The idea of a skeg, like a dinghy centreboard, is to uramatically change the profile of the craft as presented to the elements in such a way as to make the draft perform in exactly the manner required in the prevailing conditions. I am not talking about the skeg up give manoeuvrability and down gives directional stability - anyone can do that and the basic degree of manoeuvrability depends on the hull shape (i.e. manoeuvrability is itself a relative term). What I am meaning is the complete simple setting of the required direction in whatever conditions by use of the skeg alone. To achieve this required a long painstaking development process to integrate the hull shape, the skeg shape, its size and position. All this control is obtained by the use of the elements alone and none of the paddlers effort. There is no braking effect, a reduction in sideways drift and with simplicity in design it should be operable by a single cord, easily removed, inexpensive and maintenance free. It has been cracked and is in production, but, there is only one kayak that is technically capable of providing this directional control facility since the basic design parameters of all others prevent it. The rudder in kayaks is already obsolete for many paddlers.

It was also ten years ago that I was talking about Safety Cockpits, or cockpit liners and pods. Alan Byde and myself have been told, both privately and publicly that the Safety Cockpit cannot be commercially produced, does not do what it sets out to do, would be too heavy, too costly and generally we were two old buffers going along the wrong track. In the meantime, the canoeing press has been full of techniques for overcoming rescue problems. The use of ropes, levers, pumps, paddles, life jackets, special paddle supports and their appropriate methods of storeage/fixing and use. All this is O.K. in theory, but, when the chips are down, conditions are difficult (not like practise conditions), time is short and speed is essential you can forget the lot. They are either too time consuming, difficult to get at or incapable of guaranteed satisfactory fast use. Until one has been in critical situations both with and without the advanced facilities of a Safety Cockpit it is not possible to appreciate how backward conventional methods and the gimmics are. Now it has been proved, as it had to be, that all these criticisms are without foundation and were probably made as a defence of the status quo - a port of do not rock the kayak syndrome.

To get top performance is not easy. It takes time, attention to detail, listening and acting on both criticism and suggestion. Anyone can make an aesthetically beautiful kayak and then as ideas and requirements develop dream up gimmics to overcome the problems. Clutter both fitted and carried, with all the inconvenience and weight problems is the result as the kayak grows like Topsy finishing up with more accessories than boat. Kayak manufacturers in the U.K., one in particular, have done an enormous amount of fantastic work for canoeing on a world-wide basis to an extent that their names and indelably written in canoeing history, and with every justification. But irrespective of how many of a particular boat have been produced, and over how long a period and what it has achieved in the words of the old Work Study exponents 'there is always a better way'. Yes, even the opinions of the most esteemed authorities can be wrong, sometimes very wrong. They can be wrong by accident, lack of understanding or by design, dependant on the underlying motives.

As many will already appreciate the kayak being talked about is the Sea Tiger. Its combined speed, performance, safety, rough water handling, unique features, stability, simplicity of design, internal capacity and accessibility, comfort, light weight, easy handling etc. and the value for money of this package are unparalleled. The only thing missing is the aesthetic look of the traditional raised bow and stern. Unfortunately, to include these would ruin the performance. I have no intention of discussing why this is here since it is fully discussed in the literature on the boat. However, the proof of what is being said comes in many forms of which here are but three. Firstly, those who have taken the plunge on such a radical new design agree with all that is said about it and the recommendation sales demonstrate it; secondly, traditional thinking on rudders, safety and rescue are ridiculed and rendered obsolete by the Sea Tiger's inbuilt facilities and, thirdly, it is surprising how the anti comment has died away on both the cockpit and the skeg in the configuration of the Sea Tiger since the boat was introduced on to the market. The expressed opinions of the pundits over the past ten years are being proved wrong all along the line.

Interesting, isn't it.

From Peter Lamont, Luing by Oban, Argyll

Dear John,

Please find enclosed for your information, an article on directional control of sea canoes and the rudder versus skeg argument.

My motive for seeking publication is that I am now convinced that the traditional concept that the ideal sea canoe should be a relatively long and elegant boat is a misleading myth which should be exposed as such.

Last year I was out with large groups in windy weather and it was apparent that many folk either found the conditions difficult or had to give up altogether. The reason was that they found directional control of their long 'sea' boats tiring or impossible. Given shorter cances skeg controlled, these same folk would find paddling easier in the same conditions - the range of weather conditions which they could comfortably handle would be increased and thus their enjoyment of the sport enriched.

Essentially the difference between variable skeg canoes and those without (ruddered or not) is, I believe a major one involving a difference in concept. This difference is between FIXED PROFILE designs eg. eskimo kayaks and most current conventional sea canoes and the VARIABLE PROFILE capability conferred by one or more adjustable skegs.

In practice a different paddling approach is required for each type. For fixed profile designs the paddler makes the cance go in the direction he requires by paddling effortor rudder. With a variable profile cance the paddler adjusts his cance so that the cance seeks to assume the bearing chosen ie. the cance is adjusted to be in directional equilibrium at that bearing for those conditions. At first with such a craft (I have had one for two years) it requires a conscious effort when paddling to disregard years of conditioning in normal craft where a bearing is maintained by differences in paddle pressure stroking on one side or the other. These corrective steering strokes are mostly unnecessary with a variable profile craft as it will always seek to return to the bearing to which it has been adjusted.

Using canoes like this, many folk, especially the less strong and/or less skilled could have a much more enjoyable time sea canoeing and not have to be restricted to flat calm conditions for trouble-free paddling. For this reason I would like to see the idea more widely understood - after all, some evidence indicates it is at least a few thousand years old!

Kind regards,

Yours sincerely, Peter Lamont

Variable profile hull - skeg.or variable geometry - rudder? INTRODUCTION

This item is about directional control and stability. It is assumed that the design objective is to extend the paddler's control of his cance into deteriorating weather conditions. This also implies extension of control for the less strong/less skilled paddlers in more moderate conditions.

LOUDE LE SE UTER HEUCE

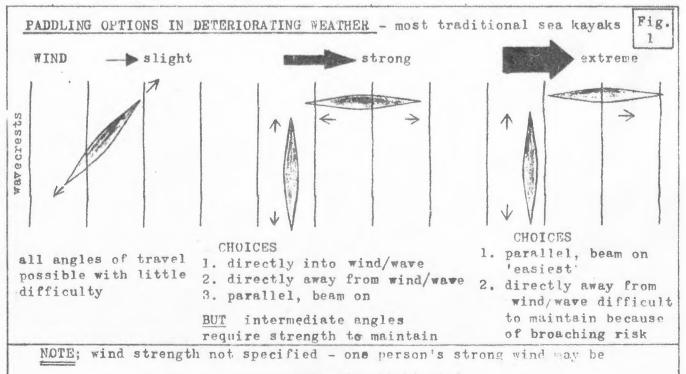
'Directional Balance' as used here is taken to mean that the cance will point, and remain pointing, into or away from the wind and water at whatever is the paddler's desired angle of travel. In other words the cance will remain orientated at angle X^0 to wind and water where X^0 is the paddler's selected angle to the weather, producing the desired course.

Every voyage is in some direction therefore directional control is essential. A longer hull broached by wind and wave is locked into the conditions Fig 1) until the paddler can find by chance a respite. The shorter craft can be turned and moved about beyond that time. A well-prepared paddler will retain control beyond the point where a less well-prepared paddler has lost it. The following argument is intended to illustrate the options to help the paddler to select or design a strategy for survival based on directional control. The argument is presented in the form of statements and phrases to achieve brevity and clarity.

BASIC PROBLEM

Usually there is a wind on open water Each canoe will assume oneangle to a wind/wave combination (angle specific to wind and wave strength) The assumed angle seldom coincides with the desired padding direction Sweep/steering strokes necessary to maintain course Most designs require upwind side sweep strokes Incessant sweep/steering strokes = pain inducing fatigue = reduced safety margin

CONCLUSION Directionally unbalanced craft = reduced safety margin

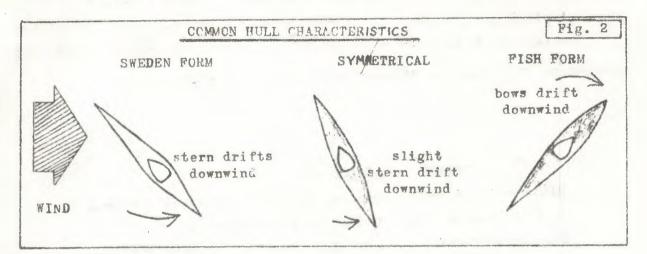


another's slight wind

1h

Sweden form (majority), wider aft of centre Symmetrical same fore and aft Fish form (minority), wider fore Sweden form tend to lie head to wind Symmetrical same to a lesser degree (Because paddler's body introduces asymmetry and acts as a wind vane aft) Fish form lies bows downwind No hull can be directionally balanced under all conditions

CONCLUSION A variable control device is required



SOME SOLUTIONS (Fig. 3)

Sweden form requires blade in water aft or

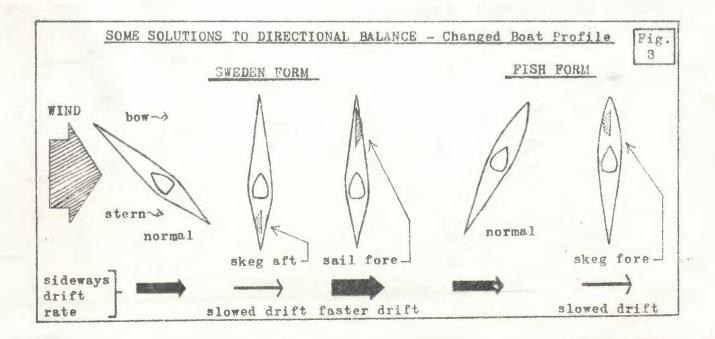
Sweden form requires sail in the air forward

High raking eskimo bow can be effective 'sail' forwards

Water blade aft slows drift sideways. Good.

Air sail forward speeds drift sideways. Bad. Air sail catches water in rough conditions. Bad. High raking eskimo bow unsatisfactory solution to problem

CONCLUSION Water blade aft (sweden form) or fore (fish form)



SEA CANOE DESIGN REQUIREMENTS

Sea paddlers require two boats in one - straight running + easy turning Impossible. Compromise essential.

Rockered hull can be made to go straight (with rudder or skeg) Hull without rocker cannot ever be made to turn easily. Turning ability (high rocker) reduces spaed through the water

CONCLUSION Moderate rocker is prime design requirement

Hold straight course on open water, yet turn easily Shorter craft turn more easily than longer Length waterline (lwl) is linked to speed, longer = faster Length overall (los) is linked to rate of turn, shorter = quicker turn Optimum performance when los = lwl ie., vertical bow and stern profile

CONCLUSION Experience dictates loa = 1wl = 4.57 m, 15 feet

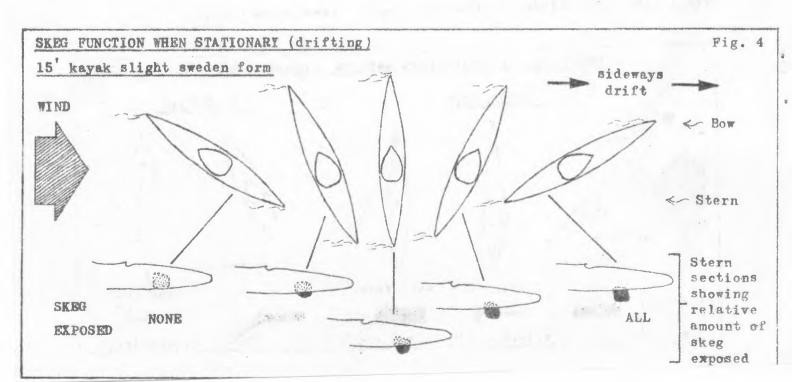
RUDDER / SKEG CHOICE

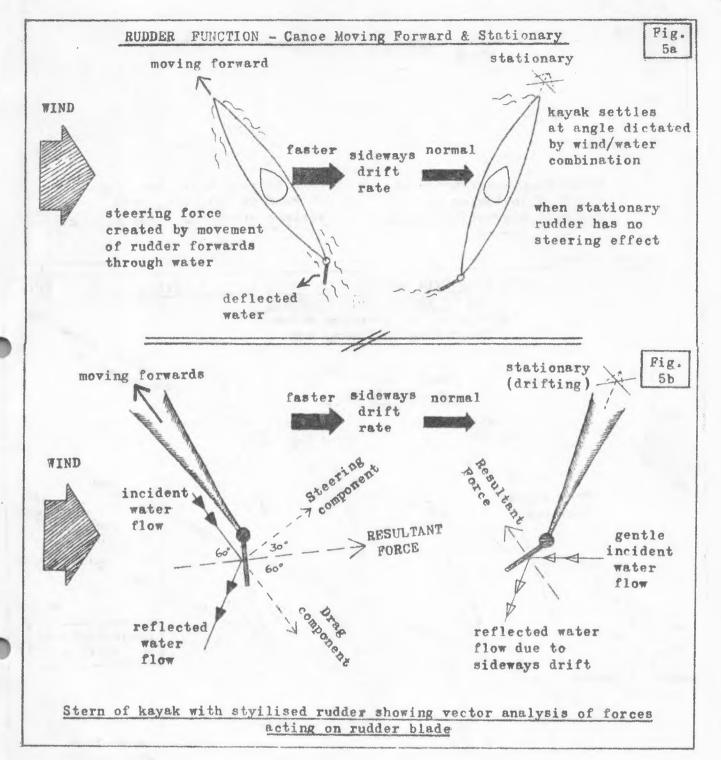
Blade acts as rudder when angled to moving water (optimum 30°) Without flow or angle rudder action mostly ceases (Fig. 5a) Skeg functions due to sideways drift not forward paddling (Fig. 4) Without sideways drift (windless conditions) skeg deployed promotes straight running

A fixed blade.down, slows rate of turn in restricted space Lifting blade essential

Angled rudder blade = drag(Fig 5b). Skeg always in line, minimum drag. Underhull rudder vulnerable. Skeg knocks up into skeg box. Alternative arrangement side hung rudder or skeg- knock up both ways

CONCLUSIONS Underhull knock-up skeg better, and simpler solution

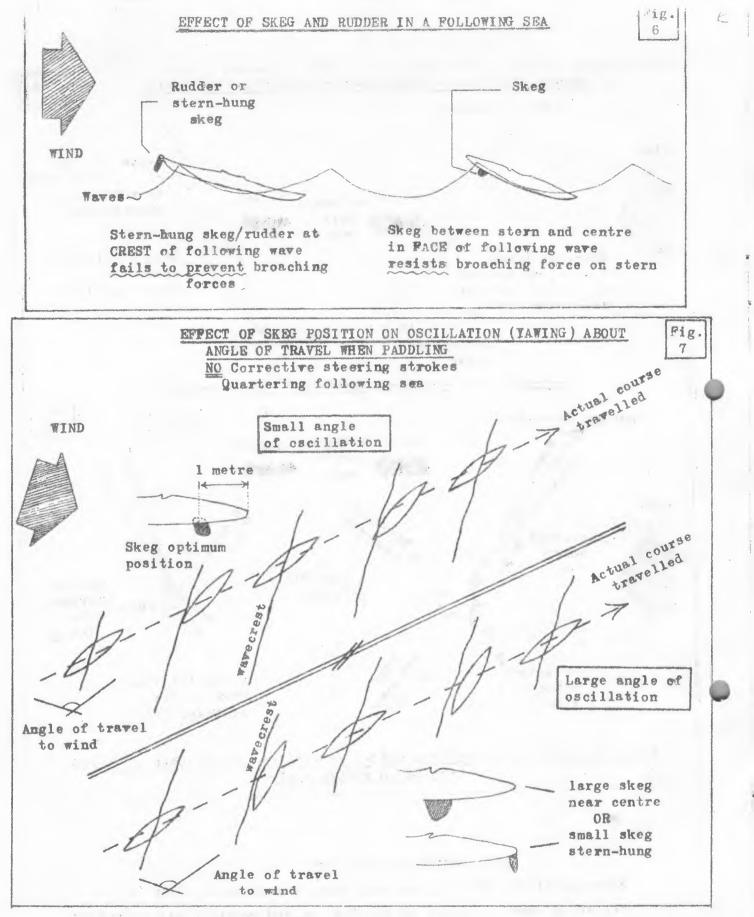




SKEG DESIGN REQUIREMENTS

Blade position. Sweden form aft, fish form forwards (Fig 3) Closer to centre, larger blade. Just behind cockpit less effective (Because greater oscillation, yawing, about selected angle of travel (Fig 7) Closer to stern, smaller blade but longer to reach water Stern-hung fails to prevent broaching in following sea Better position just aft of halfway between centre and stern (Fig 6) CONCLUSION Experience dictates, blade 1 m from stern, area 10 - 15 sq. ins.

D



If hull nearly balanced @ 90° to wind and water it needs less correction to orient to limits 0°(into wind) and 180° (downwind Less correction = smaller blade = less drag. Good. Sweden form requires most correction (aft) Symmetrical, small correction aft Fish form small correction fore

CONCLUSION In theory fastest combination = fish form hull, blade just in front of

feet

PRACTICAL CONSIDERATIONS - POSSIBLE SOLUTIONS Long control runs for blade vulnerable. Bad. Short runs good. Foot control, blade aft - long control run. Bad. Foot control, blade fore - short run. Good. Flexible lines can only pull. Must be paired in opposition for total

positive control.

Bowden cable works push-pull. Neat, must be corrosion proof

- subject to wear, can stiffen/loosen. Rod works push-pull. Short run good, long run bad.

- requires joints, waterproofing may be a problem. Hydraulic. Over-engineered. Catastrophic failure in wilderness. Single flexible line balanced by spring return - fail dangerous. Single flexible line gravity drop return - simplest solution, east to repair in wilderness.

GENERAL CONCLUSION

For years the eskimo kayak has been accepted as the essential sea going small boat. It is that shape because it satisfied the needs of seal hunters up to sixty years ago. These are not the same as present day recreational needs. Modern materials also free sea canoe design from the considerable restrictions imposed by seal skins, wood and bone.

It is the author's opinion that directional control of a short hull by variable skeg offers extension of the canoeist's control into a greater range of weather conditions for paddlers <u>at all levels of ability</u>. In short, skeg control (as described here) is a safer option than rudder control.

> Peter Lamont, Isle of Luing, Argyll, Scotland. 17.2.86.

F

From Nick Padwick, Guarry House, Cowbridge, S. Glamorgan.

Dear John,

Again, many thanks for the newsletter which either seem to come more regularly or time is passing faster. In newsletter No 45 Paul Coward asks the question, 'How can one allow for crosswinds in a kayak?' This has always been a subject which has fascinated me and I have recently written some notes in which you, and perhaps some others, may be interested. I enclose them herewith.

KAYAKS IN CROSSWINDS.

A question with which one is often faced is the old chestnut of what is the best way to account for sideways drift when navigating in a kayak in cross or quartering winds. It is one of those questions to which there is no single answer since it depends on many factors which are inter-related and can vary with the particular conditions being met at the time. Perhaps these few comments and thoughts may be useful when attempting to answer the problem

The three major factors which, in my opinion, contribute to an individual answer are:

- 1. The design of the kayak itself
- 2. The strength and direction of the particular wind in relation to the kayak under consideration. The same combination of windstrength and sea conditions can have very different effects on different kayaks.
- 3. The ability of the paddler to assess the conditions in relation to his parti- (cular kayak's characteristics.

I believe the first thing to appreciate is that there are two types of sea which I seperate out as a 'distant' and a 'local' sea. I define a 'distant' sea as one which was created by winds distant from the area being considered. It comes through as a swell and on its own account presents little problem to a kayak. A 'local' sea, on the other hand, is different altogether in that it is a sea state being created in the area of interest. The immediate surface of the sea is caused to move in the direction of the wind which is also creating waves. The strength of this surface water movement can be considerable and much greater than is generally appreciated. A kayak being an 'immediate surface' craft, catches all this movement and is not only made to drift by the wind but also by the much larger water momentum. If the stream is running with the local sea although the water will seem flatter this momentum will be enormous; if in opposition, the wind with the local sea will usually outweigh the effect of the tidestream. If the local sea is not running in the same direction as the distant sea then life can get nasty, particularly with a large swell and a good local blow! Combine the tidestream, the distant and local sea together with the wind strength, then superimpose the fact that all these can have different effects on different kayaks and one begins to realise the complexity of the problem. In reality, there is nothing like experience to correctly assess the situation.

The design of the kayak plays a very significant part in the equation. In side winds and local seas the side area of the kayak presented to the wind and water should be kept to a minimum. Equally important, if there is any large area it should be situated as near to the paddler as possible. This makes it less likely to be turned by the wind and sea and enables any correction in direction easier to achieve since the turning moment required from the paddler is less.

But, how often is one in the fortunate position of wishing to paddle in a direction at right angles to the prevailing wind? More often than not the wind and local sea are running from a quartering direction or behind. Immediately one gets into the argument of how easily does the kayak broach and how easily can the broached boat be returned and held on the required course? The more conventionally designed sea kayaks tend to be the wrong shape for these frequently met conditions. The bow and stern are high, large in area and have virtually no bouyancy for at least a foot from either end. In a following or quartering sea the bow tends to dig into the bottom of a trough, where it is protected from the local wind and water disturbance, whilst the stern sticks up catching all the wind and water has to throw at it. The bow acts as a pivot point and the boat broaches about it. Generally speaking, the kayak will tend to broach more easily:

a) if the bow area is large rendering the pivoting action more effective

- b) if the stern area is large less force per unit area is required
 - by the wind and water to turn the boat about the pivot, and:
- c) if the boat is long thereby giving the elements a longer lever on which to operate to greater detrimental effect.

Once sideways onto the waves the long keel makes it very difficult for the paddler to return the boat to the required course. Whilst on the wrong course the correcting effort can become very tiring on the one arm and progress is slow and in the wrong direction! A high bow and stern looks aesthetically great, a long keel increases speed (up to a point) and directional stability in some conditions but they play war in other more uncompromising situations.

So, along comes the rudder, which, after years of being decreed unnecessary by the purists and die-hards, is now being acclaimed as the greatest thing since sliced bread. But is it the real answer or is it another case of the kayak growing like Topsy? The rudder does not cure the root cause of the problem since it does not alter in any way the profile of the boat presented to the elements. The kayak still wants to behave in the same way as it did before. All the rudder does it to use the paddlers energy to correct the error. There is nothing more like a brake than a rudder - this should not be underestimated. The water deflected by the rudder has to provide the same turning moment as the paddler and the sideways drift caused by the rudder acting against the water is the same as that necessary for the boat to be turned by the paddler. The only advantage to be obtained is that the affort provided by the paddler is obtained from both arms, hence a greater speed can be maintained than with the one arm and it is therefore not so tiring. (The speed will be reduced below normal due to the braking action of the rudder and sideways drift due to correction will be present).

Now suppose that one reduces the length of the kayak by a foot at either end, reduce the area presented to the elements at these points and at the same time make the bow and stern more buoyant. Whoops' Up go the hands of the purists in horror. 'You lose speed due to the reduced waterline and directional stability', they say. The reduction in speed is negligible, particularly in sea conditions, and the reduction in directional stability is intended - at least at present. The advantages of doing this are that the bow does not dig insignificantly, the stern presents a small area to the elements, the pivoting lever is less and, hence, the craft does not broach as readily. Also, when broaching has occured it is much more easily corrected.

If one then fits an adjustable skeg to this craft in such a way that, unlike a rudder, it is always in the water, and assuming that it is in the right place and of the right size (!) it will use the water to precent broaching. This prevention is by lateral pressure on the skeg and does not absorb any power from the paddler, nor does it act as a brake. By adjusting the amount of skeg presented to the water the amount of sideways pressure can be varied so that the kayak can be tuned to suit the conditions at the time. This overcomes the directional stability problem. However, for this to work it does require the basic boat to be relatively manoevrable. What one is doing is to change the profile of the boat - a feature which cannot be achieved with a directionally stable boat of the design of a conventional sea kayak. In other words, the craft is made just as directionally stable as the conditions at the time demand and it is the natural forces of the elements which maintain the direction instead of the paddlers effort being used to correct the kayak's bad habits.

This is the basis of the design of the SEA TIGER and is one of several reasons why it out-performs other conventional sea kayaks. When in the company of other boats, if all are paddling as near as possible the same course, the SEA TIGER will be found to windward of the others even if they are fitted with rudders. What this means is that:- .

- 1. if the wind is on the bow quarter a conventional kayak will have to be paddled more into the wind to maintain the same actual course (as distinct from the paddled course) as that of the SEA TIGER. Hence, one has a greater tussle with the elements.
- 2. is the wind is from a stern quarter the conventional kayak has to be paddled more across the wind to maintain the same actual course. Hence there is a greater tendancy to broach.

As a result the SEA TIGER will be found to be very fast. The stronger the wind, the more it is quartering, the tougher the kayaking conditions, the more dramatic is the difference. However, the new feel and technique does take a little time to get used to.

No small craft has yet been designed which is good in all sea conditions. The arguments which rage over 12 metre yacht keels or dinghy hulls and centreboards highlight this. Kayaks are no exception. Those craft which come nearest to meeting most situations are the ones that have the facility to change their profile as presented to the elements and minimise the use of direct steerage techniques, such as rudderds. The theme is that it is better to prevent the error at source than to have to correct it later and use the forces of the elements to maintain your course.

As mentioned before, different kayaks will respond in different ways to the same sea conditions. In one set of conditions kayak 'A' will decide it wants to do it's own thing whereas kayak'B' behaves reasonably well. In slightly different conditions the reverse might be true. Being able to assess the conditions in relation to your own boat is very important; unless you can do this with reasonable accuracy errors in navigation are bound to result.

And so, how do you allow for sideways drift? The only method I have found is to experiment, over a period of years, in your boat using transits and a compass in as many varying conditions as possible in the same area. In this way you can get to know your boat's characteristics and your abilities and how to allow for these when setting your course. Having said that, the one tool to help speed up the process is to be able to keep the kayak on a given paddled course at all times, preferably by being able to tune it to the prevailing conditions and letting the elements do the work. Few, if any, situations should exist where the boat wants to do it's own thing. So, keep on your course at the expense of the elements when the going gets tough you may need your energy for more important things.

Nick Padwick.

From Alan Byde, Middleton in Teesdale, Co. Durham. Dear John.

Thanks for your latest newsletter. You ask several times for comments. Yur 'tis.

Sea Touring Maps. An exercise more of interest to the compiler than the purchaser. On the other hand I first met spring tides at St. Davids Head and the Ramsey Sound after consulting Bartholomews $\frac{1}{2}$ inch series and deciding that the Nor Bishop would be a handy trip on such a calm day. (It was the turn of the tide when we launched at Whitesands Bay). Further, I once held Admiralty charts in great respect, looking at them and feeling the surge of the sea as I imagined myself paddling the area. Now I have a lot of out of date charts and I never look at them. I. once loved 'reading' 1 inch O.S. maps of the Lake District, imagining views from peaks I never climbed. I think that was stoked up by Arthur Ransome. They have their place, these maps and guides. It may not be for you or me, but there are those who will enjoy reading them. So will our secret sport be revealed to the masses and our secrets be secrets no more. I suppose that Columbus 'discovered' America in the same way the Indians watched him do it.

Which brings me to another point. We are seekers after truth. In our love of the arcane we seek revelation whilst paddling unsuitable craft made to look something like an Eskimo hunter's boat. Their needs have naught to do with ours. The converse is true. Columbus sailed the Ocean blue in 14 hundred and 92. Well, about 500 years before that the Vikings went there first. They were level headed people and did not go on a whim. They KNEW there was land to the West. Why? Because the Irish had been there 500 years before that. They did it in craft we call curraghs and they call canoas. It is the original BRITISH ocean going canoe. We look slavishly to the North American continent for our inspiration. Why not seek our truths in the craft of the west coast of Ireland, where for me the Dingle canoe is the most beautiful shape on the water. The Aran craft is much the same. 19 feet by 3'6", it carries from 3 to 5 people, is rowed (ha'.), sailed, motored and paddled. Is it a canoe you may say. Well, I'd rather go round Ireland in one of those than an Anas Acuta.