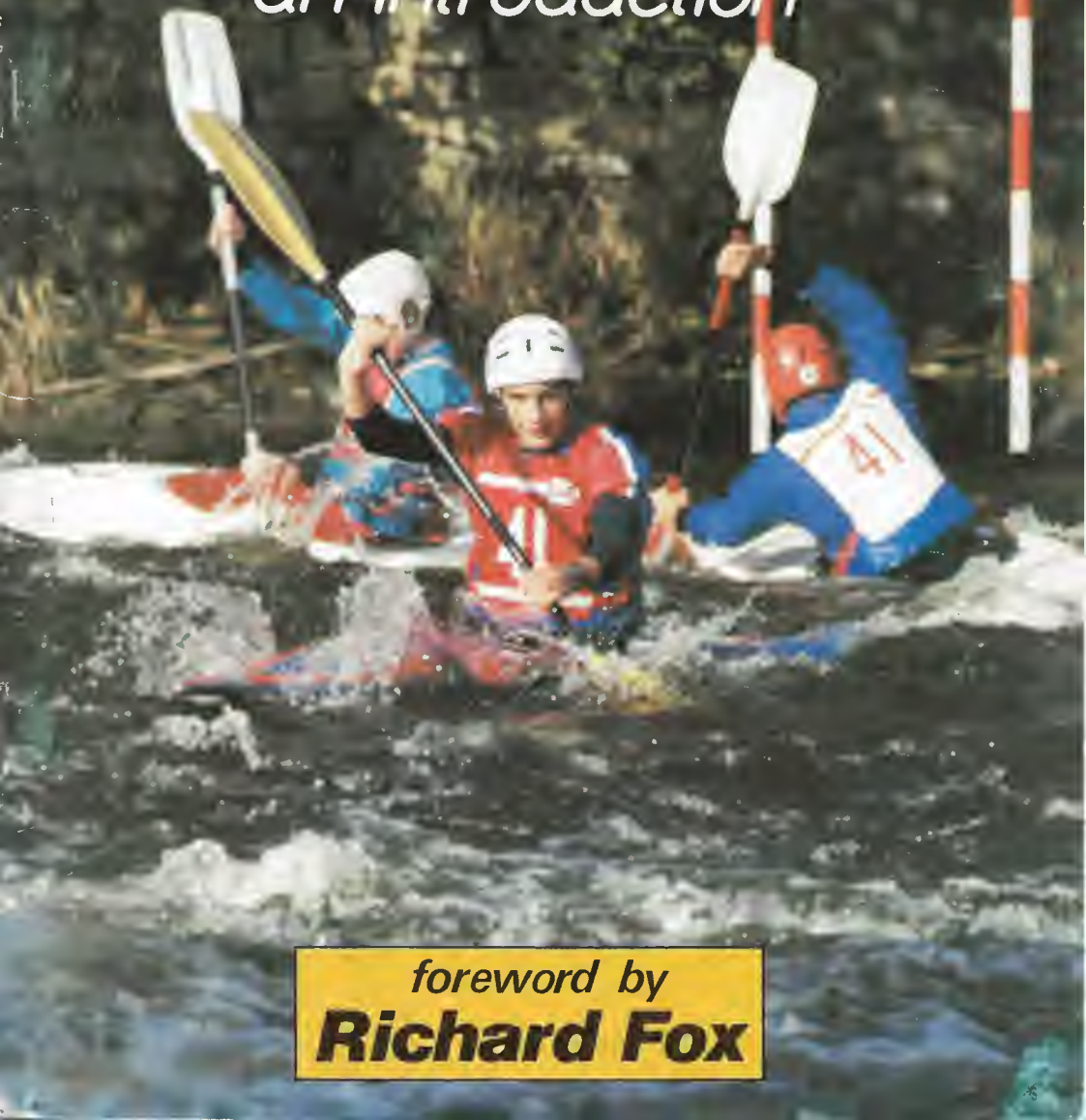


slalom 3 canoeing

— *an introduction* —



foreword by
Richard Fox

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slalom canoeing

— an introduction —

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This book is dedicated
to the memory of
Paul McConkey —
World Team Champion 1983

Acknowledgements.

Many people have contributed to this book with their comments, suggestions and criticisms. However, without the following the book may never have appeared at all.

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Published by the Slalom Committee of the BCU.

Garry D. Nevin
Editor



Foreword

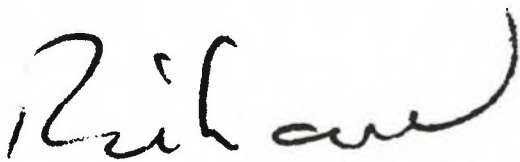
December 1986

Welcome to Slalom Canoeing!

It is a sport full of fun, excitement and challenge. I am sure that you will find the book 'Slalom Canoeing' a valuable guide to fast improvement. When I started paddling fifteen years ago I used to search the libraries for anything remotely connected with the sport. 'Slalom Canoeing' was exactly what I needed. It is full of practical advice based on the experiences and observations of those getting started in the sport and the technique section could not come from a more authoritative source than the National Slalom Coach, Alan Edge. The rest is up to you, so get paddling!

But before you start, one word of advice; develop a broad base of general paddling experience before you label yourself a slalom specialist. Learning skills takes time and what a World Champion does now on a slalom course started years ago when he was practising on slalom gates for the first time. You should have seen the poles swinging then!

Have fun and paddle hard,

A handwritten signature in black ink, appearing to read 'Richard Fox', written in a cursive style.

Richard Fox MBE
World Mens K1 Champion 1981, 1983, 1985

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Introduction

Now that you have taken up canoeing you will be aware that one of the main canoe sports is **CANOE SLALOM**. Not surprisingly you may want to know what this involves and how you might take part. The main competitions are known as **ranking slaloms**, so called because paddlers in the divisions above novice, that is Division 4 up to Premier, are listed at the end of the season in ranked order according to their performance during the season. There are also **mini-slaloms** which are usually organised as informal competition to introduce newcomers to the sport and the techniques required, as well as providing training for the more expert paddlers. Indoor or **pool slaloms** are held in swimming pools and provide opportunity for practice. There is a national pool slalom competition held each year.

These notes cover the main aspects of **ranking slalom** and slalom skills, so that you can learn something about the sport and, hopefully, enter a few events and become a competent slalom paddler yourself.

Paddlers of all ages can take part in slalom. It is not necessary for you to belong to a canoe club, or group, in order to enter slaloms, some people choose to enter as independents, but you must be a member of the British Canoe Union, and be an amateur sportsman. However, belonging to a club can have many advantages, and it is the recommended practice.

Canoe Slalom Magazine is a good way to keep up with what's happening in slalom and has lots of photographs and information in it. It is available by subscription or copies are often available at slaloms.

Canadian Slalom canoeing is not covered in Parts 1 and 2 but will soon be released as part 3 of the series in a book of its own.

Chapter 1

What is a Ranking Slalom?

A Ranking Slalom is an event organised by the Slalom Committee of the British Canoe Union or by a club registered with the Slalom Committee and authorised by them to run the event. Each event is directly related to the national ranking and divisional system.

THE OBJECT OF SLALOM

The **object** of a slalom competition is to negotiate a rapid river course, defined by gates, without fault, in the shortest possible time. Events are either 'down river' courses held on a suitable stretch of river or 'horseshoe' shaped courses held in the area immediately below a weir or sluice.

THE SLALOM YEARBOOK

The Slalom Yearbook is published each year in February by the Slalom Committee. It contains information relating to the ranking system, competition rules, regulations for competitors and for organisers, the calendar of events and the ranking lists. Some changes are made each year and so you must check the yearbook, for example before entering an event. A free yearbook is issued to competitors on the ranking list (i.e. Division 4 or higher) and on promotion from Novice to Division 4. Copies of the book may be purchased from the Slalom Administrator or from the British Canoe Union. (addresses at the end of this booklet).

THE SLALOM COURSE AND ITS RULES

Some of the rules may be difficult for you to understand at first but don't worry they'll soon become clear after an event or two; all you need to remember when starting is to try and pass through all the gates in numerical order and from the correct side without touching them! A brief guide follows; for all the rules see the Slalom Yearbook.

RESULTS

Results are expressed as the time of the run in seconds plus penalties incurred. Each paddler has 2 runs, the better of which is counted for the final result and in the event of a dead-heat the order is decided by comparing the other run of each of the competitors involved. **Prizes** are presented by the organising club, usually to the first 3 paddlers in each class, with additional awards for best junior paddlers, at the organisers discretion.

A Brief Guide to the Slalom Rules

Slalom is a test of a paddler's ability to control his craft on moving or turbulent water whilst negotiating a set course in the fastest possible time.

Numbered 'gates' mark the course

A gate consists of a pair of coloured poles suspended above the water

Two red and white poles mean that the gate must be negotiated in an upstream direction. Two green and white poles mean that the gate must be negotiated in a downstream direction

The gates must be attempted in numerical order

A team event comprises three boats, all of which must cross the team gate(s) and the finish line each within 15 seconds or incur a 50 second penalty.

The following time penalties may be incurred:

5 seconds- if one or both poles touched as gate is negotiated

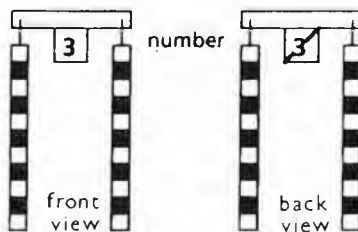
50 seconds- gate omitted

gate attempted from the wrong side

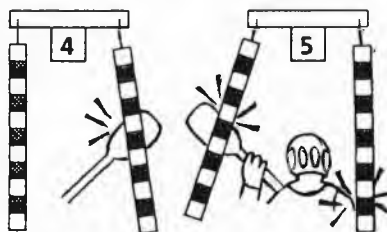
deliberately displacing the poles

(for C2s) one body only passing through the gate.

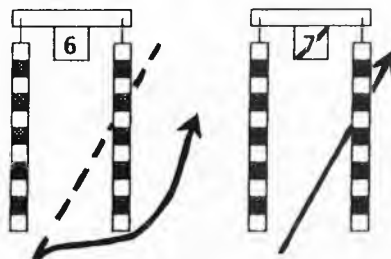
A paddler is disqualified if he bales out after a capsize but not if he rolls his canoe and continues the race.



+5 seconds:-



+50seconds:-



HOW PENALTIES ARE JUDGED

JUDGES will watch each gate and decide the penalties incurred. A judge can only award a penalty on what he actually sees. A judge must not be questioned or approached by a paddler, or anyone representing a paddler, in respect of any decision, as it can lead to **disqualification**. Judges are not allowed to assist a competitor during his run by drawing his attention to any penalties incurred.

A **PROTEST** may be made against the published score, time and/or penalty awarded, or against a decision of the organiser. The protest must be made by **the paddler himself**, who is required to fill in an official protest form correctly and lodge a deposit which will be returned if the protest is upheld. A protest must be lodged immediately after a paddler has taken his run and his scorecard is displayed.

A **JURY** of three consider protests. The Chairman and one other must not be members of the organising club, but the third member can be. As well as considering protests the Jury has to approve the course, and ensure that the event is run in accordance with BCU rules. The Jury's decision on protests is final.

CLASSES AND DIVISIONS

Newcomers to slalom compete in Novice events until they are promoted to Division 4. Many Novice events are combined with a Division 4 event, and novices compete in their own class, over the same course. Paddlers are grouped into classes for mens and ladies events, irrespective of age, according to the type of boat:

- KLM - single kayak for men
- KLL - single kayak for ladies
- C1 - single Canadian canoe
- C2 - double Canadian canoe

Kayaks are decked boats in which the competitor sits and uses double bladed paddles, and a **Canadian canoe** is a decked boat in which the competitor kneels and uses a single bladed paddle. As a novice in a kayak you would be either KLM or KLL. Canadian classes are not sub-divided into mens and ladies.

PROMOTION

Promotion in the mens and ladies kayak classes is by winning or being well placed in the results (at an appropriate ranking slalom). For novices 1 in 5, or part thereof, are promoted at each event, (eg if there are 84 starters in a KLMN event then the top 17 paddlers in the final results will be promoted). Novices are only promoted at events during the season and are not ranked at the end of the season. For promotion from Division 4 to Division 3 the ratio is 1 in 10 and for Division 3 to Division 2 it is 1 in 20.

Promotion (and demotion) can also occur at the end of each season for ranked paddlers (Division 4 and above) and is explained in the Slalom Yearbook.

Shortly after the event when you are promoted to Div 4 you should be sent a Slalom Yearbook by the appropriate Div 4 Mens or Ladies **Ranking List Compiler**. At the same time you will receive information on applying for your **BIB** which you are required to wear when competing in Div 4. Newly promoted paddlers are allowed to compete without bibs for two weekends immediately following promotion.

If you wish you may apply for your bib immediately after promotion in the following way;

SEND

- a. Your actual BCU card (not a photocopy)
- b. A strong, large (10 x 8) self-addressed envelope stamped for 150 grm.
- c. £5 bib deposit
- d. Your promotion certificate or state where promoted.

To the Bib Issuer at the appropriate address in the Yearbook (you may have to borrow a copy to do this!)

If you have any problems ask you club or phone or send a SAE to the Slalom Administrator (address at the end of this booklet).

If you have been ranked in any previous season but have not competed in slalom during the past year, and wish to start competing again, you must apply for ranking status. You cannot automatically start competing again as a novice.



Flatwater slalom conditions common to Britain.

Chapter 2

Equipment

GENERAL EQUIPMENT

You may be able to borrow equipment from the club or a friend for your first few weeks canoeing. If you intend to canoe regularly and enter slalom competitions you will need your own equipment. It is difficult to sort out what to get and where to get it - ask advice, from your club or at a slalom. Do not rush out and buy everything all in one day - shop around - decide what you want and need.

Can I buy secondhand or should I buy new? It depends upon how much you can afford and on what is available secondhand at the time you are looking around. Towards the end of the season some club members will be changing their canoes, or even giving up canoeing, so keep an eye on the club notice-board and ask around. There will also be a few canoes for sale at most of the Division 4/N events during the season, but ask the advice of a friend before you buy. Some of the canoes may be more suited to the experienced paddler rather than the beginner so be careful.

It is more likely that paddles, buoyancy aid, cagoule and spraydeck will have to be purchased new, for most paddlers continue to use these until they are worn out or damaged beyond repair. It is also essential that these items of equipment fit the paddler.

One of the difficulties faced by parents is the purchase of clothing for young children, with the temptation to buy larger size so allowing the child to grow into it. Purchase the correct size whenever possible because oversize clothing/equipment can be ineffective for the purpose for which it is designed, it will severely restrict a small paddler and cause discomfort. Worst of all it may be a hazard when a rescue is required because the rescuer will get hold of clothing/equipment which the paddler can slip out of or move too freely in, rather than being able to take a tight grip on the body or arms.

It is usually possible to find a secondhand buoyancy aid for the small child, but if you do purchase one new there will be someone looking to buy a secondhand one next year, so keep the receipt. However old buoyancy aids may no longer give the required support due to deterioration and may be unacceptable for use in competition (or even unsafe) so check before buying. One or two manufacturers/suppliers attend the Division 4/N events so go along to a local event to have a look at the different products and compare prices.

CANOES

The canoe is your personal choice but as a beginner you haven't committed yourself to the sport yet so don't go and spend over £300 on the finest lightweight kevlar hull. However, as you wish to enter slaloms it would be advisable if you purchased a low-line slalom canoe, although there are currently no restrictions on boat dimensions for paddlers under 13 years competing in the lower divisions. There are some good canoes for beginners well below £200, and some available secondhand at far lower prices. Don't rush out and choose a canoe by its looks, go along to your club and ask a few questions, try a few different ones, and see which one you like and can handle.

SPRAYDECKS

A spraydeck is worn around the waist and upper torso under the cagoule and buoyancy aid, and fits over the cockpit to prevent water splashing into the canoe. They are fitted with a release strap which must be securely fitted to the deck and left outside the boat when the deck is in place to aid quick release. As cockpits vary in size do make sure that the spraydeck fits your canoe and that you can release it in the event of a capsized. **Practice this before you take part in an event.**

PADDLES

Your paddles are even more personal than your canoe and must be of the right length*. The weight is also important so that you don't tire too quickly, and of course, the size of the grip. Paddles with a metal protection on the leading edge of the blades are suitable for beginners. Sometimes 'seconds' are available and can be good value, particularly as yours will be seconds after the first outing. Paddles can also be bought as a kit, and all you need is a tube of 2-part Araldite and 15 minutes effort, but make very sure that you set the blades for your control hand. The left handed paddler is opposite to the right handed person and the glue does not unstick! Look after your paddles, most paddlers will lend a canoe but not their paddles.

* Current paddle lengths range from 195cms for youngsters and some Ladies to 206cms for senior men. Don't buy your paddles too long and expect to grow into them - they will probably wear out first!

HELMETS

A helmet is compulsory in slalom competition for both practice and the timed runs. A good helmet is expensive but worth the money, you never know what is under the water when you capsize and even the gate poles can give you a nasty crack on the head.

BOUYANCY AIDS

The buoyancy aid must conform to the **BCU/BCMA standard** which requires all buoyancy aids to have 6kg minimum buoyancy, to be made of materials of an approved type and be constructed to meet the standard. Make sure that the buoyancy aid has a label attached to certify that it is made to this specification. There are waistcoat/zip up styles or the pullover type with elasticated sides. Both are as effective in the water, it is your preference but do make sure that it fits properly.

CAGOULES

You should also wear a cagoule, otherwise known as a wind-top, which is to keep the wind off rather than to keep you dry, for it is the effect of wind on a wet body that causes hypothermia. Thin ones of 2 oz nylon may be adequate for top paddlers, but they are often not thick enough for the less energetic. The 4 oz weight is satisfactory, and many paddlers prefer a wind-top with neoprene collar and cuffs. Do wear one that fits properly and under no circumstances should you wear an anorak. DO NOT wear a cagoule with a hood.

FOOTWEAR

It is advisable to wear something to protect your feet particularly whilst you are still prone to capsizes. Lace-up **plimsolls** are preferable to velcro fastening trainers which are prone to come undone and disappear in water. If you wish to keep your feet warm in the colder weather you can choose between **neoprene socks** which really need a larger plimsoll worn over them, or thin soled **neoprene boots**. Paddlers with large feet might find difficulty in getting into their canoe whilst wearing something on their feet because of the narrow dimensions of the front of the canoe, so do be very careful where you walk without footwear. Tuck some slip-ons or flip-flops under the seat for when you are getting out.

OTHER CLOTHING - see Chapter 5

ROOFRACKS

The canoe has to be transported as well, and so a **roofrack** is required. Whilst the normal roofrack can be adapted to take one canoe most people prefer the two-bar ladder rack, such as the Swedish load carrier. The bars can be padded with pipe-lagging foam or you may wish to buy the moulded rubber pads along with the roofrack kit. The basic rack can carry two canoes laid flat side by side, but if you wish to carry more you should consider fitting 'J' bars or uprights.

There is a statutory obligation on the driver to ensure that any load is secure and so canoes must be firmly fixed. Roofrack straps with spring camlocks are much better than the elastic luggage grips which can stretch under the forces of high speed driving and release the canoe. If you have a small car you must be within the law with respect to the overhang of your load. The permitted overhang without the necessity to carry flags or special markers is up to 0.035 metres on either side of the car with a maximum load width of .9 metres, and up to 1.83 metres forward and 1.07 metres rearward. Paddle grips to fit the bars are also available and most roofrack systems can be locked onto the car guttering with optional locking knobs. It is also worth having a 'Canoe Lock-It', a padlock with plastic coated steel cable which can lock the canoe and paddles to the roofrack. Your full or youth BCU membership includes insurance, but without this lock your canoe is not covered for theft.

Chapter 3

Entering a Slalom Competition

WHEN TO ENTER AN EVENT

Before you enter a Slalom you should have basic canoeing skills and in particular you must:-

- have learnt your capsizing drill and be able to get out of your boat;
- have some experience of moving water;
- be able to break in and break out on the right and left.

The Summer is the best time to enter an event although there are some mini slaloms held during the winter.

It is best to enter one or two mini slaloms before going in for a Novice event but this will depend on the area in which you live and how many events are held.

ENTERING YOUR FIRST SLALOM

Decide which event you will enter. Ask your club for advice. If you are not a club member write to the Slalom Administrator for information on entering slaloms, entry cards, programme of events and the name and addresses of the organisers. **Enclose a foolscap stamped address envelope.**

Before you can enter a Novice Slalom you must:-

- be a member of the British Canoe Union (see end of book)
- fill in an entry card and send it to the organiser of the event three weeks before the date of the event. (see page 10 for instructions)
- with the entry card you must include the entry fee and at least one 9" x 4" s.a.e.

SAFETY

When you compete in a slalom competition you must accept that in all cases, you do so at your own risk. Equipment must be up to standard. Neither the BCU nor the organisers can be held responsible for injuries to persons or equipment. However, there are very few injuries except for the odd cut, graze or bruise.

Provided that you follow the rules and are a reasonably competent paddler you will, without doubt, enjoy yourself just as much as thousands of other paddlers have done in the past and are doing now.

HOW TO ENTER AN EVENT?

You will need to complete an **entry card** correctly and send it to the organiser listed in the Slalom Yearbook, to arrive at least 15 days before the event, together with the correct **entry fee**. You must not crease or fold the card. It is important that **you fill in your entry card correctly and completely** so that your performance is properly recorded by the event organiser, and more important when you get to Division 4, by the ranking list compiler. Also, failure to provide post code can prevent receipt of your Year book. An organiser can refuse to accept an entry if the card is illegible, lacks the correct entry fee or arrives after any limit on the number of entries has been reached. **Late entries** may only be accepted at the organiser's discretion, on payment of double entry fee provided that there is space in the published timetable. Newly promoted paddlers, whose promotion has not occurred more than 3 weeks before the event, shall be accepted unless the specified limit on entries has been reached.

Some events are very popular and you will have to get your entry in much earlier than the required 15 days in order to secure an entry.

A separate entry card is required for the **team event** and you may as well enter a team with your club friends, or send in a scratch entry for the organiser to make up a team. Most people do as it gives extra practice runs on the course and there is always the chance of winning a prize.

Please see the examples of entry cards completed for i) a novice ii) when you gain promotion to Div 4 and iii) a scratch team entry.

Your **entry fee** should be sent in the form of a cheque, postal or money order and be made payable to the organising club. Post dated cheques are not acceptable.

Dishonoured cheques will lead to disqualification and possibly other disciplinary proceedings. Entry fees are not returnable unless you are promoted and, therefore, unable to take part in the event, provided that the organiser is notified at least 5 days before the event. If your eighteenth birthday falls after 1 January in the year of the competition you are classed as a '**junior**' and can claim the lower entry fee provided that you mark your entry card in the space provided and state your date of birth.

You must also include **one envelope**, 23cm x 10cm (9" x 4") stamped and self-addressed so that you receive the start list/event instructions before the event. If you wish to receive a copy of the results after the event you have to include a second stamped and self-addressed envelope of the same size.

Entry cards can usually be obtained from your Club's Slalom Secretary or larger quantities from the address given in the yearbook by sending a strong 23cm x 10cm (9" x 4") stamped and self-addressed envelope.

SLALOM ENTRY CARD	please use block letters	date of birth	SEPARATE CARDS PLEASE FOR INDIVIDUAL AND TEAM ENTRIES	surname
		17/6/74		DOBBS
	Best Score	I wish to enter <u>DUCK MILL</u> slalom on <u>14/15 MARCH 1987</u>		club
		in the following event DIV <u>N</u> (mens/ladies) <u>(K1) G1/G2</u> <u>(J) Y/Y</u> (delete as applicable) team/judge		forenames
No.	bib or ranking list No. <u>-</u>	or promoted at <u>-</u> slalom	Entry Fee £ <u>X - XX</u> enclosed	B.C.U. No. <u>Y008666</u>
	C2 partner/2nd team member name	3rd team member name	address	
	DIV B.C.U.No.	DIV B.C.U.No.	<u>7 COTTON ROAD,</u>	
	Team Name	Do Not Fold This Card	<u>BEDFORD MK41</u>	

Your entry as a Novice.

SLALOM ENTRY CARD	please use block letters	date of birth	SEPARATE CARDS PLEASE FOR INDIVIDUAL AND TEAM ENTRIES	surname
		17/6/74		DOBBS
	Best Score	I wish to enter <u>SHARNBROOK</u> slalom on <u>7/8 MAY 1987</u>		club
		in the following event DIV <u>4</u> (mens/ladies) <u>(K1) G1/G2</u> <u>(J) Y/Y</u> (delete as applicable) team/judge		forenames
No.	bib or ranking list No. <u>-</u>	or promoted at <u>DUCK MILL</u> slalom	Entry Fee £ <u>X - XX</u> enclosed	B.C.U. No. <u>Y008666</u>
	C2 partner/2nd team member name	3rd team member name	address	
	DIV B.C.U.No.	DIV B.C.U.No.	<u>7 COTTON ROAD,</u>	
	Team Name	Do Not Fold This Card	<u>BEDFORD MK41</u>	

Your entry card after gaining promotion during the season.

SLALOM ENTRY CARD	please use block letters	date of birth	SEPARATE CARDS PLEASE FOR INDIVIDUAL AND TEAM ENTRIES	surname
		17/6/74		DOBBS
	Best Score	I wish to enter <u>PETERBOROUGH</u> slalom on <u>27/28 JUNE 1987</u>		club
		in the following event DIV <u>4</u> mens/ladies <u>(K1) G1/G2</u> <u>(J) Y/Y</u> (delete as applicable) team/judge		forenames
No.	bib or ranking list No. <u>647</u>	or promoted at <u>-</u> slalom	Entry Fee £ <u>X - XX</u> enclosed	B.C.U. No. <u>Y008666</u>
	C2 partner/2nd team member name	3rd team member name	address	
	DIV B.C.U.No.	DIV B.C.U.No.	<u>7 COTTON ROAD,</u>	
	Team Name <u>SCRATCH</u>	Do Not Fold This Card	<u>BEDFORD MK 41</u>	

A scratch team entry.

ENTRY CARD CHECK LIST

BEST TOT.	START No.	POSIT.
NAME WILLIAM DOBBS		
RUN 1	Div.	RUN 2
1	N	1
2	class M/L	2
3		3
4	KI M	4
5	status (J/Y/S/V)	5
6		6
7	J.	7
8	RUN 1	8
9		9
10	pen.	10
11		11
12	time	12
13		13
14	total	14
15		15
16		16
17		17
18		18
19		19
20		20
21		21
22	RUN 2	22
23		23
24	pen.	24
25		25
26	time.	26
27		27
28	total	28
29		29
30		30

1. use the same name each time
2. use a permanent address **with post code**
3. state BCU number
4. give your date of birth if claiming lower entry fee for Junior
5. delete clearly so there is no mistaking the class entered
6. if Div 4 state bib number or if just promoted fill in where promoted
7. send correct entry fee
8. enclose at least one stamped/addressed envelope-9"x4"
9. post entry so that it arrives at least 15 days before the event
10. write clearly - print - and on the back of the entry card....
 - a Write your Div, class and status clearly
 - b If Div 4 put your bib number under 'start no'.

The reverse side of the entry card used for your slalom run scores.

Chapter 4

Going to an Event

So you have entered your first event on time and have now received the start list. What happens now? Your preparation starts here, at home, several days before the event. You have arranged the travelling within the family or with a club friend so let us look at what happens during the weekend, to come, so that you can get the best possible enjoyment out of your weekend.

PREPARATION OF EQUIPMENT

Make sure that your canoe is in good order with the buoyancy firmly fixed and maybe a sponge tied on a length of string to the seat and wedged under the seat so as to bail out the last of the water. Are the end loops/toggles sound?. You need a 230mm circle and 230mm square in white Fablon/Contac on the right front and rear left of the deck, these materials are available in small rolls in DIY shops. Affix your event number(s) before leaving home using black 12mm/18mm insulation tape, using computer style digits large enough to be read from a short distance. The circle bears your individual number and the square is for your team number. Organisers can refuse to start a paddler who does not comply with the equipment regulations particularly if your numbers are not clear. Have you marked your paddle shaft with some tape to show the most comfortable position for your hands?

If you are in Div 4 don't forget your Bib. If Novice take your **BCU card**.

CLOTHES

Underneath the specialist clothing you will need swim wear, old 'T' shirts and thin woollen pullovers. Later you may choose to get thin thermal wear such as Helly Hanson which dries quickly and is warm when damp (but not in wind).

You will require as many changes of clothing as you can find, as you may well capsize a few times in practice or during the event. Even if you don't you will still get wet whilst getting in and out of the canoe and it is not wise to stand around in wet clothing. Unfortunately many slaloms are held on days when the weather is not ideal for drying and having to put wet clothing back on is even less enjoyable than keeping it on. Also remember that wet clothing does not dry overnight after you have been on for an evening practice.

Even if you can dry some of your wet canoeing clothing you do need to keep it separate from your dry, clean ordinary clothes, and so at least two dustbin bags or, if possible, some stronger plastic bags, like fertiliser sacks, are ideal for carrying wet gear.

We must not forget night time for even in summer the nights can be very cold and so a thick pullover or two may be needed during the night. A lightweight cagoule, or even a rainwear suit, for the days when the rain falls all the time will be worth having when you want to wander around the site and do some spectating, or perhaps when you are judging. **KEEP WARM**

WET SUITS

A wet-suit is not essential unless you are going to be continuously capsizing or doing winter paddling. A wet-suit does keep you warm but you will find that it restricts your body movements when paddling hard. You may also find it difficult to get into some slalom canoes when wearing a wet-suit if you are big for your age. Wet-suits can be bought as a standard size or made to measure for a little extra, but can be an expensive buy for the rapidly growing smaller paddler, so defer purchase until you really need one.

A 'Forest of gates'. View looking up a slalom course.



SLALOM EVENT CHECK-LIST

Canoe	Tent
Paddle	Small mallet for pegs
Helmet	Sleeping bag
Buoyancy-aid	SLEEPING MAT
Spraydeck	Collapsible water container
BIB or BCU CARD	Warm jumpers(s)
Towels	Waterproof top
Number tape	Change of clothing
Canoe repair tape	Stove and gas
Footwear	Safety matches
Cagoule	Can opener
Changes of canoe clothing	Pot(s) and Pan(s)
Plastic bags for wet gear	Plates
	Mug
Optional (depending on weather and available space)	Knife, fork and spoon
Pogies (paddle mitts)	FOOD
Wet suit	Torch
Wellies	TOILET PAPER
Waterproof trousers	Washing kit
Umbrella	Salt, pepper, sugar and dish washing liquid in secure containers

This list is not definitive, you will add or subtract things from experience, but it will give you a place to start. If you are going in a group plan ahead so that some things can be shared to save space. Pack things in soft bags (eg. proofed nylon barrel bags) not in framed rucksacks or suitcases so that they can be squeezed into the limited space usually available.

YOUR BASE AT THE EVENT

If you are staying at the event throughout the weekend you will have a tent or caravan as your base. If you are travelling daily you will still need a base to leave your dry clothing and food and a place to have some rest and relax. If you haven't a car as a base do make arrangements with friends or club members before the event if you want to leave belongings somewhere. Don't just dump yourself on people as they may not have room, or are already looking after 3 other waifs and strays. There is also the question of food to be cooked, shared or purchased.

CAMPING

Apart from the canoeing equipment, it is probable that you will be **camping** at most events, most people do, unless the family has a caravan. You will need a tent, sleeping bag, sleeping mat, cooking equipment and a set of billies or saucepans, plastic plates, mug, knife, fork and spoon. If you are buying a tent especially to go off to slaloms it is worth getting a larger tent so that you will have a bit of room to move around, get the wet gear off and keep it away from your dry clothing, and keep your food in the dry. A washing line can be made from two tall tent poles with twin guy ropes at each end stretching a length of line between them. Otherwise you can drape the wet gear over the car roofrack. Do remember to take clothing and gear into the tent in the early evening or it will get wetter as the night draws in and will be very cold, or even rigid with frost, when you want to put it on in the morning. On cold nights a good sleeping bag, or two thin ones and good insulation **under** you is necessary to prevent you being rigid with frost as well!

GAS STOVES

These are an easy and convenient means of cooking and are safe if used correctly. Always ensure that the gas cylinder is secure before you try to light the stove. **NEVER** change cylinders in a tent or enclosed space **OR NEAR A NAKED FLAME** and **NEVER** use your stove in a tent or blocking the only exit from it.

FOOD

If you are going along for the weekend then you will need to take some food with you, and only you know what you like to eat and drink especially if you are in a tense mood. There is sometimes a limited range of refreshments available on site for part of the day (that means early morning and late evening there is nothing), but for the whole family it can come a little expensive over the two days. You will be able to go with friends into the nearby village/town on the Friday/Saturday evenings for fish and chips if you wish. You will need some food/hot drinks during the day and many people prepare their own. Slalom stew is the usual with a hotch potch of tinned food put into one billy. Soup is often a favourite, especially the thicker tinned soups which can be a meal in themselves. Don't forget that glass bottles and vacuum flasks do not have a place in a tent, maybe a caravan.

MEAL TIMES

It is up to you when you eat, and don't be suprised to find that your eating times change from normal because your activity/energy levels are a lot different to being at home/work or school. Do accept that you must not go in your canoe for practice or your timed runs with a full stomach. It is best to have your food at least an hour or more beforehand.

THE WEEKEND PROGRAMME

Let's consider the 3 days and see how we can best use the time.

1 **Friday** - If you can, travel to the event on the Friday evening. Pitch your tent away from the main thoroughfare so that you will not be disturbed so much by everyone coming past, especially in the early hours of the morning, but not so far that it makes carrying the canoe difficult. If you can leave unpacking and moving in for a while, it is worthwhile having a look at the course whilst it is still light, walking along the banks noting the breakouts, etc, and trying to see which might be the best way to turn out of gates ready to approach the next gate. Gates often come in groups, or sequences, of 3 or 4 which need to be practised together. Do look for and pay attention to these gate sequences. If possible find a more experienced paddler from your Club to point out some of the tricks in the course, and perhaps he/she will go on the water with you and take you round the course, before you attempt any full practice. If there is time to get on the water and have a few practice runs do so, for this is one of the few occasions during the weekend that there will be so few paddlers.

2 **Saturday** - Try to be up early ie: 6am and get straight onto the water for 30-45 minutes practice, and see if you can tidy up on the gates you found difficult last night. There should be other paddlers around at this time, but if you are the first **don't** get on until someone else comes along, in case you capsize and need help. If you find a sequence hard sit to one side out of the way and watch others trying out different approaches, and see how they use the current to their best advantage. Do talk to others and ask someone's advice, they can see you are a beginner novice and will usually give you a little of their time.

It is often best to practice the white water bits first and as others get onto the water and crowd those sections move off to other parts of the course. Remember the sequences that you spotted from the bank and others which you will now find from the water.

Don't practice for too long as you can over do it, get very tired and muscles will ache later in the day. Don't stay on the water once it starts to get crowded as you will not be able to do more than 2 or 3 gates as people queue up for the whitewater. You will not be able to put sequences together, you will be pushed out by the more confident paddlers/poseurs and you will get cold sitting and waiting.

Do bear in mind that on the majority of Div 4/N courses the whitewater is not necessarily the hard part of the course in terms of gate sequences. It will give a little excitement, a bit of hard paddling and a possible capsize, but do look at the rest of the course where the organisers will have laid out a few tight sections. These often occur around gates 3-7 and again towards the end of the course at gates 14-17. Whilst everyone likes to play on the whitewater, many paddlers are likely to pick up careless 5's, even a 50, on these sections.

Having had your short, early morning practice, come off the water and park your canoe and paddle **out of the way** so that others can get on and off the water. Then go and get changed into dry clothing, maybe the next change of canoeing gear ready for when you go on again. Now is the time to have some food and a hot drink, and it is very unlikely that you will find the refreshment tent open at 7 - 7.30 am.

Go over to the course and watch others practising and see if you can learn anything, maybe talk it over with someone. Go on again for your **official practice** at the time allocated, although this run is not compulsory it does give you a chance to do a complete run through the course. If you have entered a team, either scratch or a Club team do try to have at least one practice run together, after checking in with control at the scratch team meeting, taking care to work out your positions at the cross-overs and don't forget the finish line/ 'team gate'(s). Remember not to get too close to each other. Don't get uptight, you won't win, it is another chance to practice , with time and penalties assessed, and will give you a good indication of your weakness on part(s) of the course.

Control is where administration starts sometime during Saturday morning. The organisers **will want to see your BCU card** (or you might have to join at the event) before you start your second individual timed run on the Sunday. Let's get it over with as whilst everyone else is practising you can nip in quick. Better still leave it to an adult to stand in the queue, unless you are joining the BCU.

Following the afternoon team runs and Canadian classes there will usually be free practice till dark. Don't get on straight away. If you do wish to practice wait until later when many people will start to drift off for food etc, and the water is clear. Better still, don't practice but rest and relax and go off to the local village/town (if there is one!) for your fish and chips. If you are young go in a group - a strange town is no place to go alone. Early to bed is the best for youngsters, so don't be afraid to turn in at about 9 p.m.



Always make sure your spraydeck fits properly!

3 **Sunday** - Now you know why you went to bed early. The river conditions may have changed overnight, and there is a couple of hours free practice before the timed runs start at either 8 or 9 a.m. So up at 6 am or earlier, and go and have a look at the water. Yes, the poles are in the water due to overnight sag, but you can get in 30 - 45 mins useful practice before too many people wake up. Just a couple of complete runs to adjust to any changes in the water flow, and that is enough for now. Again, do not go on the water unless others are there, and don't go on at all if it's raging - there may have been overnight rain which changes the character of the event, and the organisers may have to make a few changes. Have regard for your own safety.

You have had a short practice, so off and get changed. You may well wish to have a hot drink and go back to bed. By all means do so, but do get yourself ready in plenty of time for your run.

Your Run - It is your first event, or you haven't done many or not competed at that venue before, so you may be a little worried. You are expected to be on the water a few minutes before your due start time and ready beside the starter when he calls your number or you may be disqualified. However, the event might be running a little early and whilst you need not be ready until the time allotted it would be nice to help the organiser keep the event running smoothly. More likely, the event will be running a little late, and so keep an eye open for the numbers lined up at the start, and listen for loudspeaker announcements. There is no point getting on too early, sitting there to get cold and cramped. **Don't be late** or you may miss your run.

In the couple of minutes before you start do a few warm up exercises with the paddles across the shoulders, behind the neck, arms outstretched and turn one way and then the other to bring the paddle along the centre line of the boat. Put your paddle across the cockpit and leave it, put your arms out and reach forward to touch your toes. There are several simple exercises that you will see people doing. Do warm up, without straining yourself, as sudden strenuous activity will damage muscles, especially on a cold day.

Your number is called, the starter wants you. It is your first event, you may be unsure and nervous, but the organiser wants you to enjoy it and go to other events. You may be a little slow and you don't want to be caught up so tell the starter - 'please give me extra time as this is my first event, I don't want to be caught up'. He will understand, it has been done for many others. This will save the organisers time in the end by avoiding re-runs so he will give you an extra 20-30 seconds. You are off, take it steady and think about the strokes and manoeuvres you are doing. Your aim is to complete the course without a 50 penalty on your card. Don't worry about the speed, that will come next year after the experience of several events.

Once you reach the finish line you are required to stay in your canoe and be prepared to rescue the next but one competitor unless the organiser has made other rescue arrangements. You should also be prepared to stop your run and help a capsized competitor who will be probably be in such a position as to interfere with your progress anyway. If you stop and help you should be given a re-run, and you can be disqualified if you don't.

If by chance you are caught up by the next paddler during your run the judge on that section is required to give repeated short blasts on a whistle, but it often tends to be a long, loud blast. If you hear it pull off to the side, out of the way of the next paddler and let him/her go through. Then you can carry on with your run, you have lost a lot of time but it is more important for you to get your run in.

We have a little point here as you may have delayed, or even been touched by, the next competitor. If so he will possibly be able to protest and try to get a re-run. Hint - you should go and look at his scorecard when it is displayed and see if he has collected any 50 penalties for missing gates higher up the course. If he has, he has caught you unfairly then the person entitled to the re-run is you, not him. Ask advice of a friend, it is worth a protest, you should get a re-run. If you do, take it, within your own time, which must fit in with the organiser's timetable. Have a word with the starter when he is not too busy, see when he can suggest you fit in again. Leave it for at least half an hour after your original run and try again. It is an extra practice and follow the same procedure as before, warm up, ask the starter for extra time and take it steady.

If you capsize, come out of your canoe and get hold of your canoe and paddles if you can. Certainly take hold of the canoe, put your arm over it for support, but don't try to climb onto it or turn it right way up. Float for a few seconds to calm yourself, then go to the end of your canoe and take the loop. If you can collect your paddle, get that into the hand with the loop and swim to the side. Hopefully another canoeist may come to your aid and will expect you to take hold of the end of his canoe so that he can pull you into the sides. Alternatively, a throw-line might be thrown from the adjoining bank. Take hold of it in your free hand and allow the rescuers to draw you into the bank.

Do not let go of your canoe and paddle unless someone who is helping you tells you to, as a second canoeist might be there to look after them. Get the boat out and empty it. **Go and get dry and changed**, and put an extra pullover or anorak on for a while. Have a hot drink and try and work out what you did wrong, plenty of people will want to tell you, but work it out from your own viewpoint and learn from the experience. Don't worry about having capsized - it has been said that if you don't capsize once in a while you aren't trying hard enough!

After your run always have a look at your scorecard, what penalties did you get, at which gates? You should give these some thought and try to work out how they occurred and see if you can learn from your efforts. Even with your limited experience/ability can you do it different next time? Well have a go.

And Dad, don't forget they are doing it for fun and enjoyment, they have had a go, we can all do better, it looks so easy - just try it! Whatever the beginners do they have done there best, and with the encouragement they will get better with a few more events. Most people do 5 - 10 novice events before gaining promotion to Div 4, above all let them enjoy it.

So that is the runs and the event is coming to the finish. Everything now has to be carried back to the car, please do leave your bit of the campsite tidy, take your rubbish with you or put it into the organiser's rubbish bins.

If you can stay for the prize giving, please do so, I am sure you would like other competitors to cheer you when you collect your first prize. Finally, if you have enjoyed yourself, give a word of thanks to the organisers.

Chapter 5

Care of Equipment

You should always make every effort to **take care of your equipment** and clothing so that it lasts, and, there is an increasing number of thefts of equipment from slalom sites and off the roofs of cars so use a thick water-proof marker to write your name or club on your gear, so that it can be seen when being worn or used, and don't leave it lying around. Canoes will become scratched but if the outside, or Gel coat, is damaged by a deep scratch which exposes the glass-fibre do cover it with some repair tape otherwise the water will get in and cause further damage. Once you have a number of deep scratches, or need to do a more major repair, you can mix up some Gel coat and apply it.

Paddles can soon become worn and frayed along the leading edge if they are not protected with a metal strip. Some paddlers bind the edges with wide repair tape when the paddles are new, and it is worth doing even if yours are secondhand and showing a little wear. It is possible for water to get in through the joint between the paddle and the shaft, and eventually a large quantity will affect your paddling. It is easily removed by drilling a small hole in each end of the shaft, but on opposite sides, just in from the joint, then purse your lips and blow through one hole to create enough pressure to force the water out of the other hole. Bind a layer of thin PVC insulating tape over the holes until next time.

Do look after your buoyancy aid and never use it as a cushion or pillow as this can damage the foam filling. It is worthwhile rinsing the buoyancy aid, cagoule, wetsuit, boots and spraydeck in water with a little mild disinfectant to remove the river nasties and make sure they are dry before storing them. Your other clothing should be given a thorough wash ready for next time, otherwise it will not smell too good, even if it is not muddy.

Chapter 6

British Canoe Union Code of Conduct

Access to rivers and other sites for competition is often influenced by outside events for which canoeists are not always responsible. When we run slalom competitions we virtually monopolise the section of river and its banks and can overload access roads for several days at a time.

It is essential, therefore, that we work towards obtaining the best possible relationships with the people in whose areas we compete, and having achieved them, maintain our standards. To this end we ask all members and friends to co-operate as follows:

1. Behave properly and decently at all times on the slalom site, campsite and in the surrounding area, avoid offence to other paddlers, spectators and residents.
2. Dress should be appropriate to the locale, e.g. do not go half-naked, or in wet canoeing gear, into shops, hotels, etc.
3. When you change into, or out of, canoeing gear do so unseen in private.
4. Do not park or spectate in places not specifically allowed for these purposes.
5. Do not imperil future events by camping without permission, or sleeping in your car on verges or short-term lay-bys near public highways, even to save money.
6. Do not create noise or nuisance, or cause any damage.
7. If judging, collect and remove any litter in your judging area.
8. Ensure when taking down courses that all lengths and oddments of non-rotting polypropylene, terylene, etc are removed from the river, the banks and the trees.
9. When clearing camp, remove all waste in your area, if possible leave the site cleaner than you found it.
10. Rivers and there surrounds give a great deal of pleasure to local people, visitors and canoeists. Help to preserve and improve that amenity by observing the Country Code.

REMEMBER WATER IS DANGEROUS NEVER CANOE ALONE.

Slaloms are attended by BCU members and their families and friends. We hope that everyone who sees an infringement of this Code will ask the person(s) involved to improve their behaviour and, if necessary, let an Organiser or Executive Member know of any offending incident.

Disciplinary proceedings may be taken against any competitor, official or supporter who indulges in conduct likely to bring the sport of canoeing into disrepute.



Chapter 7

A Basic Slalom Technique Manual

by Alan Edge
National Slalom Coach

A Guide to the Basic Slalom Strokes

It is impossible to talk about slalom technique without having a basic slalom stroke vocabulary to refer to. This section covers the fundamentals of stroke technique for slalom kayaks. The intention is not to cover the basics of starting canoeing. In the main these basics are the same whatever the canoeing discipline and for more detailed explanations and descriptions it is best to refer to the BCU handbook. (Available from BCU HQ) Its section on Basic Skills provides all the essential starting information and details on a wide range of useful techniques and how to develop them.

Slalom strokes can be split into 4 types:-

1 PULLING OR PUSHING STROKES

2 STEERING OR TURNING STROKES

3 SLICING OR COMBINATION STROKES

4 SUPPORT STROKES

This chapter examines the main strokes in each of these groups and highlights the important technique points to remember when learning them.

DRIVE FACE

- Throughout the chapter reference will be made to the DRIVE FACE of the paddle blade. This is the face of the blade that would pull against the water in normal forward motion. The other side is called the BACK of the paddle.

- On curved paddles the concave side is the DRIVE FACE and the convex side the BACK of the paddle. If you have flat paddles it is a good idea to paint the DRIVE FACE a different colour for easy identification.

BASIC SLALOM STROKES

1 PULLING OR PUSHING STROKES FOR POWER

These are the basic forward and reverse paddling strokes which follow as far as possible a line PARALLEL TO THE CENTRELINE OF THE BOAT. (fig 1) They are often called power strokes and their aim is forwards or backwards movement.

FORWARD POWER STROKE:

The key here is the path of the paddle. The most efficient forward power stroke must follow a line close to the side of the boat and as parallel as possible to the centreline.

There are three distinct phases:-

- **THE CATCH.** The blade is dropped cleanly into the water just out from the boat with the arm as straight as possible and the DRIVE FACE to the stern.
 - This catch point should be forward of the cockpit using a rotation of the runk rather than an excessive forward lean. (fig 2)
 - **THE PULL.** As the blade is pulled back parallel to the centreline the body is rotated at the waist thus using the strong back muscles to assist the arm. (fig 3)
 - **THE PUSH.** The other arm balances this pull by pushing forward at eye level ready for the next stroke.
 - The leg on the same side of the pulling arm will brace hard on the footrest in rhythm with the 'pull'.
 - As the top blade is returned loosen the top hand grip by extending the fingers. This helps relax the forearm muscles.
 - **THE LIFT.** When the elbow of the pulling arm reaches the hip, the blade is sliced out of the water away from the boat. (fig 4)
 - This lifting action with the elbow initiates the next 'catch'. of the next stroke.
- The forward paddling strokes will vary a great deal, especially between the racing disciplines and slalom. The following points should be noted:-
- a) The narrow width of the slalom gate (1.2 metres minimum) often leads to a higher top arm in the PUSH phase than in other disciplines.
 - b) The relatively slow forward speed of a slalom kayak can sometimes require a shorter, more 'arm-orientated' paddle action in some slalom situations.
 - c) The 'stop-go' nature of slalom means that the physical qualities of a paddler will be a decisive factor in the technique that is developed i.e. amount of strength; length of arms, length of paddle etc.

Fig. 1 Diagram showing 'Bow', 'Stern' 'Centreline' of the boat and the 'Drive Face' and 'Back' of the paddle.

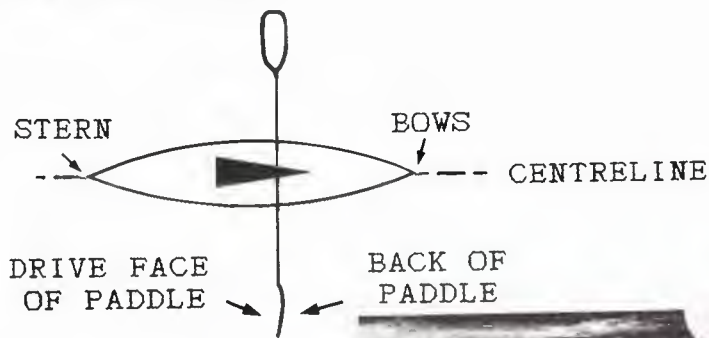


Fig. 3 The Forward Power Stroke during the 'Pull' phase. Note the vertical position of the paddle for maximum power.



Fig. 2 The Forward Power Stroke, just before the 'Catch'. Note the rotation of the shoulders putting the blade into the water well forward of the cockpit.

To Summarise:

1. The paddle must be fully in the water BEFORE the back muscles initiate the PULL phase.
2. The paddle should pull back parallel to the centreline of the boat.
3. The foot on the same side as the pulling arm should push against the footrest.
4. The bottom hand pulls, the top hand guides.
5. The head should be still.
6. The paddler should sit comfortably and leaning slightly forward.
7. The boat should be kept flat.

The particular problems of paddling a slalom boat in a straight line are covered in the section on 'THE STEERING SWEEP' later in this chapter.

REVERSE POWER STROKES/BACKWARDS PADDLING

With the advent of The New Rules, reverse moves have assumed more importance. Back Ferry Glides, and Back Off moves both rely on a good reverse paddling action. A lack of CONFIDENCE and FLEXIBILITY can drastically affect performance and time should be spent on back paddling in as many different situations as possible.

The important points to note here are:-

- Using the BACK of the blades to push parallel to the centreline.
- Twisting the trunk to 'plant' the blade efficiently. FIG
- Keep looking over one shoulder. This is usually on the downstream side. (fig 5) Beware of favouring one side all the time.
- Removing the blade approximately level with the knees.
- Avoiding excessive movement of the stern from side to side.



Fig. 4 The *Forward Power Stroke* during the 'Lift' phase. Note the white edge of the paddle slicing out of the water as it reaches the hips. The top arm is pushing forward at eye level.



Fig. 5 The *Reverse Power Stroke*. Note the strong trunk rotation and the vertical paddle shaft for maximum power.

2 STEERING OR TURNING STROKES

These by definition turn or steer the boat by varying degrees. In order to have this effect they will push away from, or towards, the centreline of the boat.

FORWARD SWEEP STROKE.

This is a very simple but highly efficient turning stroke. It is fundamental to sound, basic, slalom technique and often acts as the 'initiation' stroke in most technique models. The ease with which modern slalom boats turn can lead to the sweep stroke being only partially or poorly executed and constant revision of it is needed even by experienced slalomists.

Although it is often learnt in one arc from bow to stern it is very rarely used like this in slalom. It is normally split into two phases.

Phase 1) THE TURNING SWEEP

- Lean as far forward as is comfortably possible and rotate so as to insert the blade close to the boat, DRIVE FACE pointing away from the boat. (fig 6)

- The paddle arm should be extended but not stiff with the top arm in approximately the normal paddling position. If this arm is too low it makes the stroke slow to set up and reduces the leverage.

- The paddle is then swept round in an arc to a point just past the body. It will usually be followed by a bow rudder or a forward power stroke on the other side or sometimes another repeated forward sweep. (fig 7)

Common faults in the forward sweep stroke:-

- 1 Stroke not started far enough forward. (tape the deck as a visual marker)
- 2 Bottom arm too straight - Top arm too low.
- 3 Stroke taken too far back past the body.



Fig. 6 The start of the *'Turning Sweep Stroke'*. Note the good shoulder rotation and the forward entry position of the paddle.



Fig. 7 The finish of the *'Turning Sweep'*. Note the paddle is just past the body.

Phase ii) **THE STEERING OR STERN SWEEP**

- As you will soon realise, paddling slalom boats in a straight line is not easy. The key to doing it successfully lies in being able to perform a stroke from the body to the stern which is in effect the '2nd half' of a full forward sweep stroke.

- It pulls the DRIVE FACE from level with the body, round to the back of the boat by pushing the opposite arm across in front of the body. (fig 9)

- It is also possible to 'hang' on the end of this stroke for extra 'rudder' effect. (fig 10)

- This 'steering sweep' can then be included in the normal paddling style whenever needed. It combines forward propulsion and steering better than any other stroke.

- It is also very commonly used whenever there is a downstream move into an eddy and there is a need to steer, maintain speed and keep the bows up.

WATCH A GOOD SLALOMIST AND SEE HOW MUCH WORK HE DOES WITH THE PADDLE BEHIND THE BODY.

Both phases of the forward sweep stroke mentioned above should be practised separately and then combined with normal forward paddling as the situation requires.



Fig. 8 Another view of the 'Turning Sweep' just after the start. Note the top arm is at normal paddling level.



Fig. 9 The start of the *Steering / Stern Sweep*'. Note the paddle is level with the body.



Fig. 10 The finish or 'hang' of the *'Steering / Stern Sweep*'. Note the rudder effect of the blade which steers and maintains speed.

THE REVERSE SWEEP STROKE

The reverse sweep stroke uses the BACK of the blade to rotate the boat by pushing the stern away from the blade.

- The head and then the shoulders are rotated in order to place the paddle as close as possible to the stern. With the BACK of the blade leading, the paddle is then swept forwards in an arc to just past the body. (fig 13)

- This can be a very powerful stroke using strong muscle groups and having the paddlers weight directly over it.

- It is possible to sink the stern of a lowline slalom boat using this stroke by leaning back into the stroke. In some cases this may be desirable so as to perform a quicker, tighter turn. Normally it is faster and easier to keep the stern on the surface.

Some general points regarding the reverse sweep stroke:-

- Good body rotation is essential often with the shoulders parallel to the side of the boat at the start of the stroke.

- Decide beforehand how deep you want the stern to go and therefore how much to lean backwards.

- You should learn to 'feel' how much water there is on your back deck. Too much can lead to loss of momentum, stability and, ultimately, control.

- Try to avoid letting the leading edge of the stern 'dig in' to the water. This also sinks the stern and loses control.

- Experiment with the length of the sweep. Short, sharp strokes nearer to the body can be very effective for sudden changes of direction and for stopping if repeated on each side.

Although it is a very useful stroke it must be remembered that overuse of any reverse stroke will result in loss of boat speed and slower overall time. A more positive forward steering sweep on the other side is often faster.

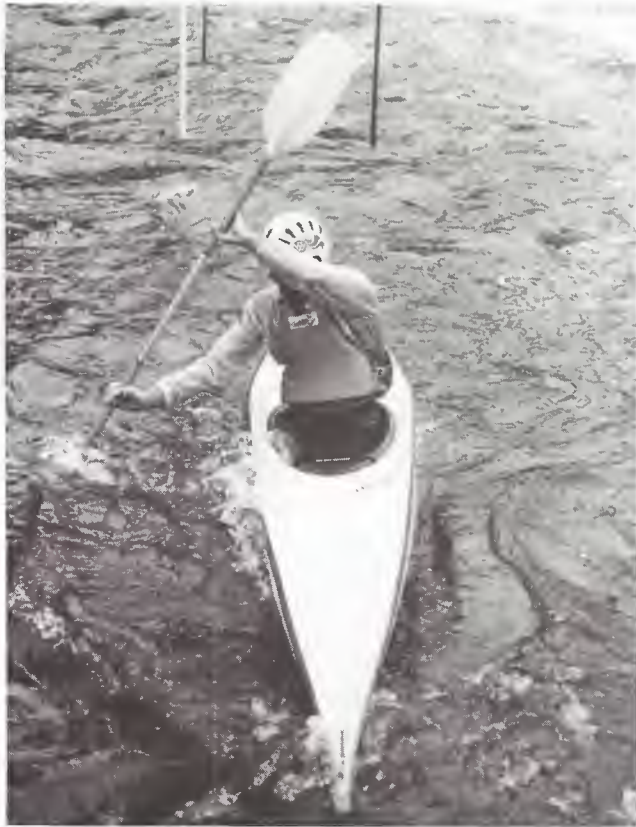


Fig.11 The **'Draw Stroke'**. Note how stable and balanced the boat is as the paddle is drawn towards the boat.

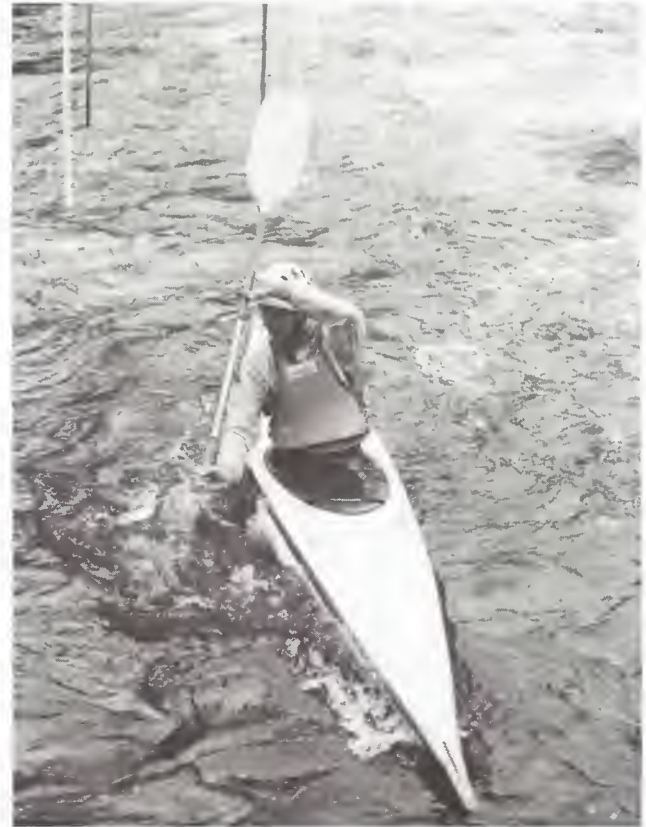


Fig.12 The **'Slice Return'** on the Draw Stroke. As the blade reaches the boat, rotate the 'drive face' towards the stern and slice the edge of the blade away from the boat to repeat the stroke. Maintain the position of the top arm.

THE DRAW STROKE

This stroke is used to move the boat sideways and often in a slalom situation, to stop sideways motion.

- It can be done with the boat moving or stationary.
 - It differs from the other strokes mentioned so far because the paddle is as vertical as possible. Time must be spent on perfecting the draw stroke as it is the starting point of the important Bow Rudder stroke (later section).
- 1 From the normal paddling position twist towards the side you wish to go. This brings the shoulders into position to plant the paddle.
 - 2 Reach out with the DRIVE FACE of the blade and place it in the water level with and facing the body. Keep the boat level (fig 11)
 - 3 The lower arm draws the blade towards the boat as the top arm resists by acting as a pivot. The top forearm should be just above the forehead. The boat moves sideways towards the paddle or, depending on the situation stops drifting away from it.
- It is vital that the top arm reaches far enough across for the paddle to be in a vertical and thus effective position.
 - Do not lean towards the stroke. With most lowline slalom boats, a slight lean 'away' from the paddle boat helps to prevent water piling up on the edge of the boat.
 - As the blade reaches the boat there are two choices:
 - i) Slicing the blade out of the water towards the stern and then repeating the sequence. This is useful when first learning the stroke but is slow and clumsy in a slalom situation.
 - ii) Twisting the blade through 90 degrees (drive face toward the stern) and slicing it back to the start position. This method should be adopted as soon as possible because it is the first introduction to the skill of slicing the blade sideways through the water. (fig 12)
 - A useful practice is to experiment with the position of the blade in relation to the body. Try drawing nearer to the bows or stern and see what happens.



Fig. 13 The 'Reverse Sweep Stroke.' The 'Back' of the blade is pushing in an arc from the stern to the bow. Note the good shoulder rotation.

THE BOW RUDDER/BOW DRAW

The Bow Rudder and Bow Draw strokes can be used in a variety of situations, from turning on flat water to entering or leaving the current on a river. Without doubt they are the most effective strokes for making a tight turn.

- The paddle position is virtually the same as for the draw stroke with the DRIVE FACE facing the boat. The main difference is that the wrist of the bottom hand is dropped so as to angle the leading edge of the blade away from the the boat.

- The starting position can vary from level with the body to within a foot of the bows. An 'Initiation' sweep stroke on the opposite side often precedes this stroke so as to assist the turning effect.

THE BOW RUDDER

In moving water conditions the angle of the working blade is determined by the tightness of the turn and boat speed required.

- For a wider turn that maintains more forward momentum the blade will be less angled and further forward. (fig 14) The aim is to 'plant' the stroke in the Eddy.

- For a tighter turn the blade angle will be angled further out from the boat and be further back towards the body.

- In most moving water/eddy situations the angle of the drive face must respond to the direction of flow going upstream in the eddy and therefore sometimes may be in a closed position in relation to the boat.



Fig. 14 The 'Bow Rudder'. Note the position of the top arm and the forward 'plant' of the blade reaching into the eddy.



Fig. 15 The 'Bow Draw'. Note the blade is planted wider from the boat and further back towards the body than in the bow rudder. This turns the boat faster especially on flat water moves.

THE BOW DRAW

- If the stroke is to be performed on flat water without any assistance from the current then the blade will be planted nearer to the body and the DRIVE FACE 'drawn' forwards towards the bows. (fig 15)

- This has the effect of spinning the boat on the spot and is commonly used to maintain or initiate rotation on breakouts and spin reverse moves. (See next chapter)

- The Bow Draw can put great strain on the shoulder and care should be taken to always precede it with the 'initiation' sweep stroke on the other side. This ensures that the bows are already turning in the required direction and reduces the amount of work required from the bow draw itself.

As with the reverse sweep it should be decided BEFOREHAND how much water is required on the stern.

It is very common for the Bow Rudder/Bow Draw to become 'hanging' or 'static'. Every effort should be made to maintain the 'pull' on the blade towards the boat and to complete each stroke with a strong forward power stroke so as to maintain or regain momentum in the new direction of travel.

3 SLICING OR COMBINATION STROKES

These are used to combine strokes without the paddle leaving the water. The edge of the blade is sliced through the water to the same or a different start position. In this way a stroke may be repeated or one of a different type added. The slicing action of the paddle can in some instances be positive and act as a type of moving draw or bow draw.

- This skill of working the blade under water and often out of sight is important and one which eventually can be done by 'feel' of boat and blade angle.

- They are very useful to slalomists especially if close to the slalom gate where any removal of the blade from the water could result in a penalty. (fig 16)

- Curved kayak blades do not readily slice. Great care must be taken to keep the top blade above the head in a vertical position otherwise the slice will not be controlled.

- Practise combining strokes without taking the paddle out of the water. Start to learn the 'feel' of the blade angle as opposed to seeing it.



Fig. 16 'Blade Slice' across the gateline. The wrist is dropped to slice the leading edge of the blade forwards between the poles.

4 SUPPORT STROKES AND RECOVERY STROKES

All the strokes mentioned so far in this chapter have been aimed specifically at steering or turning and pulling and pushing, forwards or backwards.

- Support and recovery strokes all contain some element of pushing or pulling DOWNWARDS, usually to prevent capsize. The main ones are high or low supports, sculling for support and of course in the extreme, eskimo rolling. As mentioned at the start of this chapter the intention is NOT to cover the basics of starting canoeing. Obviously staying upright is vital in any slalom situation and it would be sound advice to develop all the 3 types of support stroke. A swimming pool session over the winter is a comfortable and enjoyable way of doing this.

- The aim in slalom however is for the normal paddling and steering strokes to provide the support. As you develop a repertoire of strokes you will begin to feel how the water on the paddle provides the support whether you are pushing or pulling.(fig17)



Fig.17 Note how the paddle is being used for 'support and turning' during this 'breaking in' move.

THE ROLE OF THE HIPS AND THE IMPORTANCE OF GOOD FITTINGS

You will discover that the paddle is not the only reason that a recovery stroke works. The action of the hips in 'flicking' the boat upright is crucial in any support or recovery stroke.

- The principle is:- Let your hips bring the boat up and leave your paddles to bring the body up. The paddles provide a resistance for the hips to flick against before any stroke is performed.

- For the hips to flick effectively you must fit very securely in the boat. A good footrest, backstrap, seat-padding and knee-grips are essential and should enable you to 'put the boat on' as opposed to getting into it. Check with other more experienced paddlers to see how they fit their boat out. It is important not only to be secure but also to be able to get out quickly if necessary!

This chapter should have provided you with a bit more knowledge about how basic canoeing skills fit into the requirements of slalom. To improve your basic skills refer to the BCU Handbook or better still take one of the many proficiency schemes organised nationally by the BCU.

For more information contact:-

The Director of Coaching,
BCU HQ, Flexel House,
45-47 High Street,
ADDLESTONE,
Weybridge, Surrey. KT15 1JV

Now to slalom skills proper...

Chapter 8

Basic Slalom Technique

The diagrams in this chapter are CORRECT MODELS showing boat and paddle positions for the basic moves in slalom.

They are not a guide for every possible slalom situation. However they are invaluable in the initial introduction to stroke sequence and boat position and provide a correct starting point which can then be adapted to the requirements of most slalom situations.

Here are some terms that will help you use the following model diagrams.

GATELINE. - An imaginary line drawn across the water between the two poles.

ENTRY POLE. - The pole nearest to the boat on entry to a breakout.

BANK POLE. - The pole nearest the bank on a breakout.

APPROACH GATE. - The gate before the one(s) being attempted.

EXIT GATE. - The next gate in the sequence.

EXIT ANGLE. - The angle of the boat as it crosses the gateline on exit.

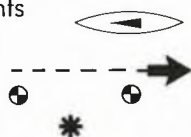
Key to model symbols

Canoe: arrow points
to bows

Direction of boat

Slalom gate

Cue or target point



Paddle strokes

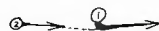
Number denotes position in sequence

Power stroke 

Sweep stroke 

Bow rudder 

Combination of two strokes
with a slicing of the blade.



NB

All model diagrams 'flow'
from the top of the page to
the bottom of the page

Slalom technique can be split into 3 areas:-

FORWARDS DOWNSTREAM TECHNIQUES

These gates will always have 2 green poles and be negotiated paddling forwards downstream. They can often be out of line in a zig-zag formation. These are called **STAGGERS OR OFFSET** gates.

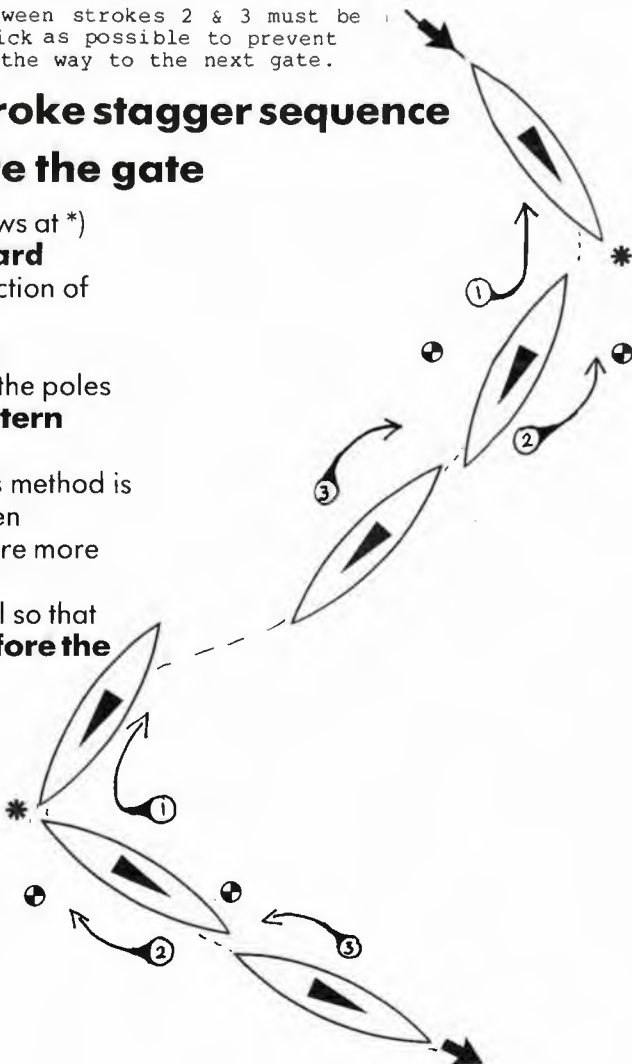
3 Stroke Stagger Method - The approach must be wide with the turn done **BEFORE** the gate.

- This method maintains the highest boat speed and is therefore best for wider and more open staggers.
- The transfers between strokes 2 & 3 must be as quick as possible to prevent over-rotation on the way to the next gate.

Model 1: 3 stroke stagger sequence

Turning before the gate

- ① **Bow rudder** (bows at *) followed by **forward power** in the direction of the next gate.
- ② **Forward sweep** reaching between the poles
- ③ Quick transfer to **stern sweep** to prevent over-rotation. This method is better for wide open staggers that require more boat speed. Wide approach essential so that the turn is done **before the gate**



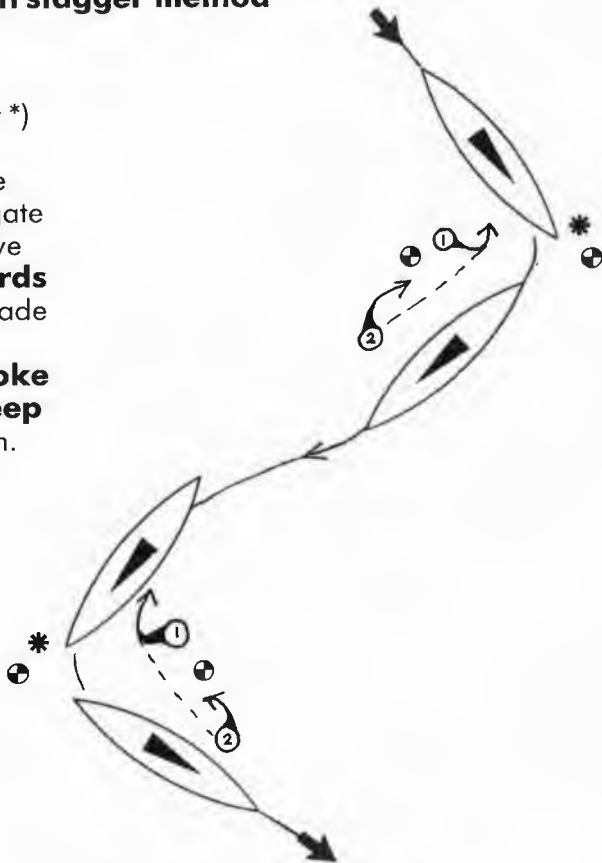
Slice Thru' Stagger Method - This involves much more turn **in the gateline** but care must be taken to leave room for the paddle blade to be sliced between pole and boat.

- This is the best method for tight, close staggers which require less boatspeed.
- It is also best for preventing over-rotation after the gate.

Model 2: Slice through stagger method

Turning in the gate

- ① **Bow rudder** (bows at *) putting bows on the gateline and turning the boat towards the next gate
Drop the wrist, turn the drive face of the blade **in towards the boat and** slice the blade across the gateline.
- ② **Forward power stroke** turning into **stern sweep** to prevent over-rotation.



To summarise on staggers:-

- **Make sure the turn is 'set-up' BEFORE each gate.**
- Try and anticipate where over-rotation may occur. Be ready for it!
- Aim to incorporate the strokes sequence into the **rhythm of forward paddling.**

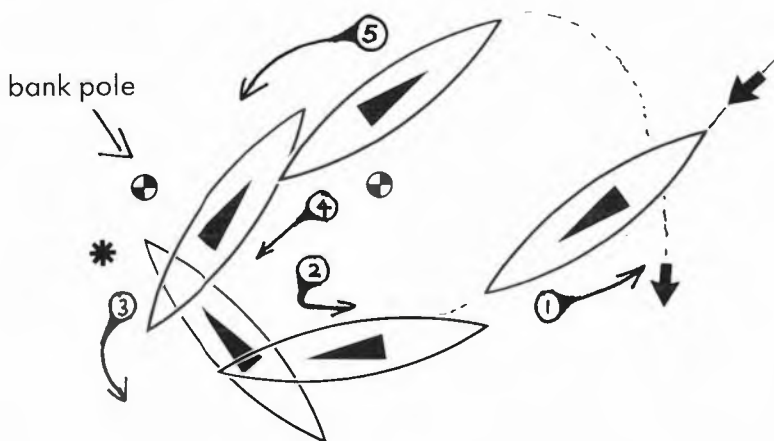
Forwards upstream moves

These gates will have 2 red poles and usually be situated in an eddy or slack water. They are normally passed in a forwards direction facing upstream and are called **BREAKOUT** or **UPSTREAM** gates.

5 Stroke Breakout - This is the best breakout for maintaining boatspeed and therefore physically easier to do so. (Especially for the Ladies and Juniors)

- As most of the turn is done before the gateline it is safer penalty-wise.
- This is the best breakout for maximum speed **out of the gate**.
- Make sure there is room to turn in the eddy below the gate.

Model 3: 5 Stroke breakout



① Early **forward sweep** as 'initiation stroke' the aim is to get behind the bank pole

② **Bow rudder/forward power** leaving bows short of the gateline at*

③ **Forward sweep** putting bows on the gateline.

④ **Forward power and exit angle adjustment**

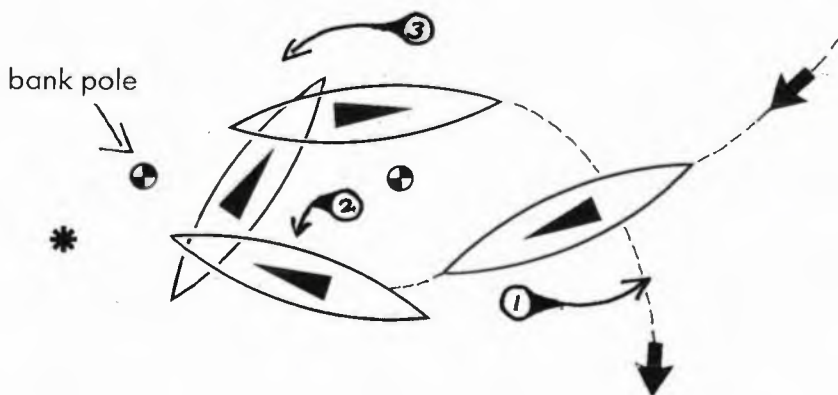
This adjustment will only be necessary if there has been no drive behind the bank pole on stroke 1

⑤ **Forward sweep** to exit, reaching across the gateline
The boat should be angled so that the next stroke can be a forward power taking the boat **downstream**

3 Stroke Breakout - This involves fewer strokes, a tighter turn and therefore more strength is required especially on the 2nd stroke.

- It is usually the **fastest breakout** on flat water.
- It also suits breakouts in strong, well-defined eddies, wide approaches and high entry poles.

Model 4: 3 Stroke breakout



- ① **Entry sweep stroke**
leaving bows pointing at *
- ② Strong **bow rudder or bow draw** (depending on the strength of the eddy) this puts the bows onto the gateline and sets up the exit angle. It may also pull the bows under the bank pole if necessary.

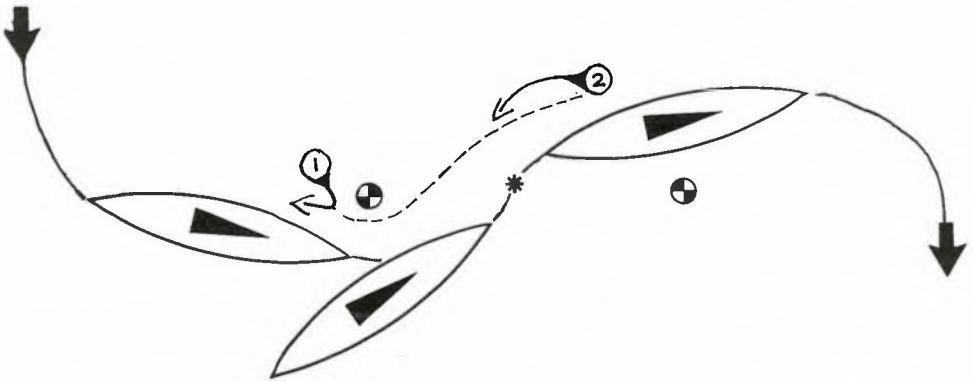
NB 'A double pump' (a second pull on the bow rudder/draw) can be useful if ground has been lost below the gate. This can retrieve a low breakout and set up the desired exit angle.

- ③ **Forward sweep**
reaching across the gateline to exit tightly There should be no more than 6 inches between shoulder and exit pole.

'S' GATES. These are upstream gates which involve an exit from the opposite side to the entry.

Slice Thru' 'S' Upstream - This is best used when the eddy is narrow and there is fast current close to the entry pole. It suits a tight approach gate.

Model 5: Slice through 'S' upstream



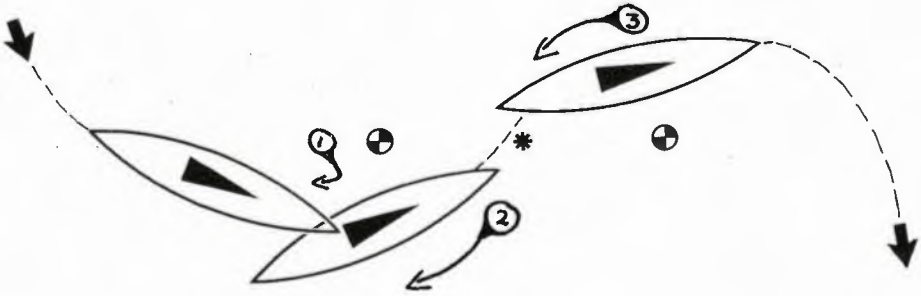
- ① Early **bow rudder** stroke. This puts the bows into the near half of the gateline (centrepoint*)

- ② **Stern sweep** with the same blade. This must be taken to the stern to maintain a good exit angle.

This is followed by a **very quick slicing forward of the blade** across the gateline. (Drive face to the boat)

3 stroke 'S' Upstream - This is best when the eddy is wide and there is some slack water by the entry pole. It suits a fast, wide approach and a gateline angled towards the exit side which 'S' gates often have.

Model 6 : 3 Stroke 'S' upstream



- ① **Early bow rudder** holding the bows around the entry pole and leaving them just short of the gateline.
- ② **Forward sweep** onto the near half of the gateline. (centreline*).
- ③ Reach through the gate for **stern sweep** to exit. This must travel well to the stern to maintain a good exit angle.

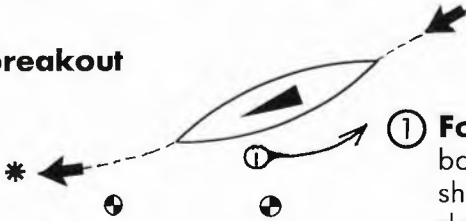
The switch between strokes 2 & 3 should be as fast as possible so as to prevent upstream presentation in the gate.

The aim on 'S' gates should be to stay as close as possible to the entry pole. Do not drive in behing the gate. This leads to a slow upstream-facing exit.

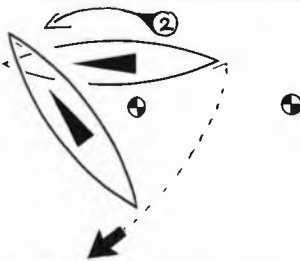
Merano Breakout - Always look for the space between the gate and the bank coupled with a difficult conventional breakout.

- A Merano will nearly always be physically easier to do.
- How fast it is depends on the severity of the normal breakout. Check the difference with a stopwatch.

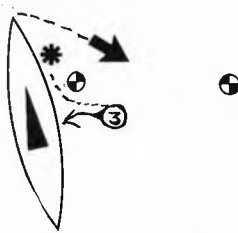
Model 7
Merano breakout



① **Forward sweep** leaving bows at * this may be shortened or omitted depending on the approach angle.

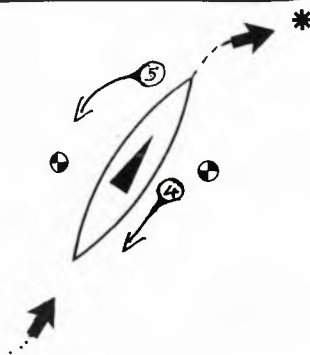


② **Reverse sweep** This puts the stern under the pole and initiates rotation. **Keep water off the stern during this stroke** as it prevents backwards travel and leads to loss of control.



From the end of the reverse sweep * **slice paddle backwards** between boat and pole (drive face to the boat)

③ **Bow draw** pulling the bows under the pole and onto the gateline.



④ The bow draw then becomes a **forward power** stroke up through the gate and setting the exit angle if necessary.

⑤ **Exit sweep stroke** reaching across the gateline.

Reverse downstream moves.

These moves will normally be used on downstream gates (2 green poles) in situations where a normal stagger sequence is impossible.

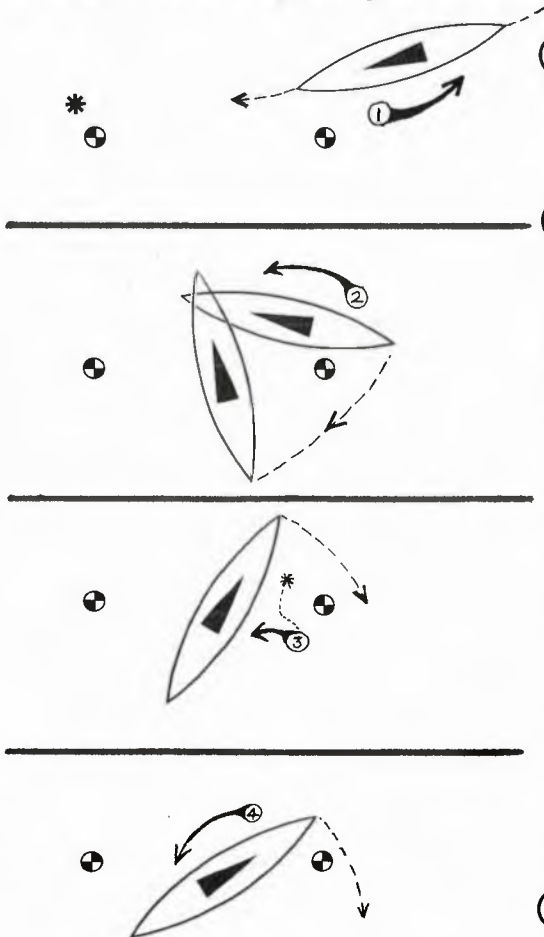
The main techniques are:-

--- 360 degree spin --- Reverse ferry glide --- Backing off ---

360 degree Spin Reverse

- This is often the best way to ensure MAXIMUM CONTROL. Decide in advance where you are going to spin. Do not put the stern under water as it can make passage through the gate difficult. Try to maintain rotation. Above all make sure you are **in control on the exit** otherwise it defeats the object of using a reverse move in the first place.

Model 8: 360 Degree spin reverse



① **Forward sweep** till bows point to *. This may be shortened or omitted depending on the approach angle.

② **Reverse sweep** putting stern under the near pole and initiating rotation .

NB do not lean back on this stroke. It can lead to water on the stern which slows rotation and causes loss of control. From the finish of the reverse sweep at * **the paddle is sliced backwards** across the gateline. (Drive face to the boat) this then becomes :-

③ **A bow draw** which pulls the bows into the required exit position.

NB This stroke can if need be pull the bows under the pole and out of the gate. This helps to slow the boat and gives more control for the next move.

④ **Exit sweep** This takes the bows under the exit pole with speed.

REVERSE FERRY GLIDE between 2 downstream gates.

This is a reverse move BETWEEN 2 downstream gates on moving water and therefore has not been included in the technique diagrams. It involves the use of the current to push the angled boat sideways across the river. No turn is involved and the boat remains pointing downstream at all times. (fig18) -Ferry gliding will be covered at greater length in the next chapter but the following points should be noted on the use of the reverse ferry between 2 downstream gates:-

- Full control of boat speed and angle is needed BEFORE the boat is started on the reverse ferry glide.
- An even, reverse paddling action should be used with the head always looking towards the next gate. There should be slight downstream lean on the boat to prevent water piling up on the upstream edge.
- This move is often physically easier than the direct route but it requires confidence and, therefore, practice.
- The reverse ferry is often used when the downstream gates are well out of the line and virtually level with each other.

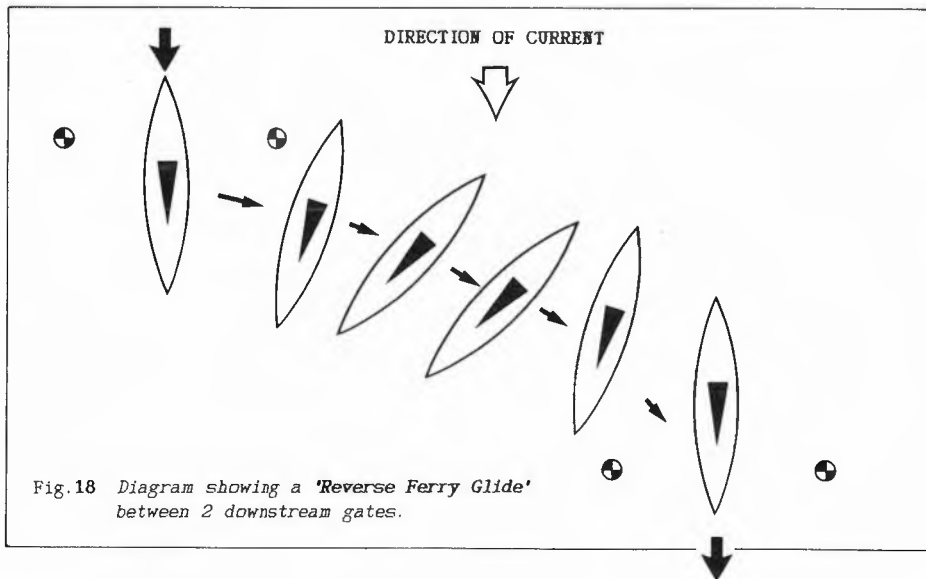


Fig.18 Diagram showing a 'Reverse Ferry Glide' between 2 downstream gates.

BACKING OFF between 2 downstream gates.

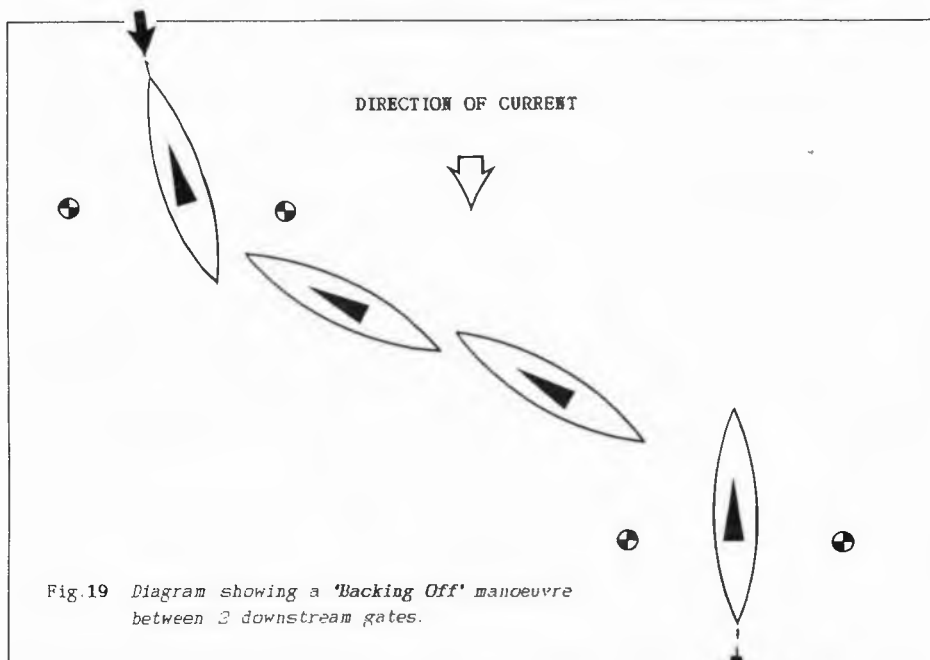
This again is a reverse move BETWEEN 2 downstream gates. The difference here is that the movement is backwards instead of sideways. (fig19)

- The 'back off' is most useful when the gates are tight but with no real current to ferry across.
- The second gate in the sequence is often passed either in reverse or sideways as the turn to downstream is completed.

Reverse Moves - General Points

Reverse move situations often provide you with several choices. You have to develop the skill of looking at a move and asking yourself:-

- Is it faster or slower? (in seconds)
- Is it longer or shorter? (in distance)
- Is it riskier or safer? (penalty-wise)
- Is it easier or harder? (skill-wise)
- What is it's position in the course? Will you have enough energy to do the move in question?
- Bear these points in mind when you are deciding on your route and it might become clearer about which method to use and why it is best for you.



Practising reverse moves on flat water.

On most flat water training sites it is hard to 'force' reverse moves because of the lack of current. In planning your training you need to be sure about when you are going to paddle **the fastest route** in those conditions OR when you are going to practise a particular move in **order to get better at that move.**

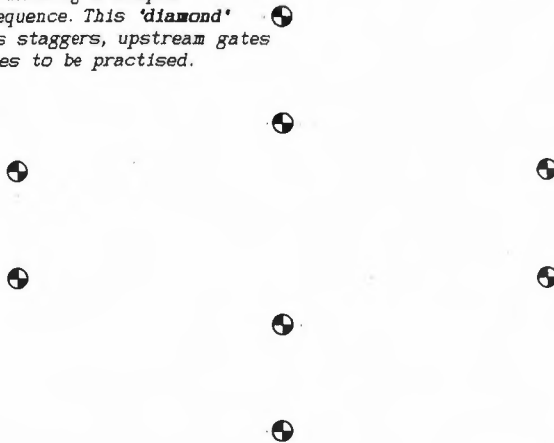
The following chapter gives you some general guidelines on learning and developing canoe slalom techniques.....

Chapter 9

Guidelines for Developing Slalom Technique

- To start slalom training an elaborate training course with a full course of gates is not necessary. Basic techniques can be developed on any piece of flat water where gates can be hung. All that is necessary is 4 gates hung in diamond formation with the wires about 2-3 boat lengths apart. (fig 20)
- Training gates should be easily adjustable for height and position from the water and are usually hung on wire, terylene or polypropylene baler twine.

Fig. 20 Diagram showing a simple training gate sequence. This 'diamond' formation allows staggers, upstream gates and reverse moves to be practised.



WARMING UP

Before you begin to train and practice your new slalom skills it is necessary to devise a warm up for use prior to training sessions or competition.

Why does the body need warming up before exercise?

- To protect against injury.
- To prepare the body so that it can perform more efficiently.
- To enable it to focus attention mentally on the aims and goals of the competition or training session.

What should be included in a warm up?

- (i) **Stretching exercises** to increase and maintain good range of movement. They stretch the muscles, tendons and ligaments that are about to be used. Every slalomist should have a flexibility routine that covers the whole body. Avoid the old method of bouncing into stretches; the best way is to contract a muscle and then stretch it slowly as you relax (for more information on stretching see Bob Anderson's book 'Stretching' available at BCU HQ).
- (ii) **Running** to raise the heart rate and stimulate the cardio-vascular system. Jogging easily for 5-10 minutes, interspersed with some short sprints will help prepare the heart and lungs for exercise.
- (iii) **General upper body exercise.** Press ups, pullups and sit-ups are typical examples. Also there are many active and stretching exercises that can be done with a paddle. Amounts will vary from person to person. Don't over do it and always leave plenty of rest between each set of exercises.
- (iv) **Paddling warm up in the boat** after a warm up on the bank specifically warms up the paddling muscles and joints. As with running this can vary from steady state paddling over a period of 5-10 minutes to short flat out sprints over 10-20 seconds. Always make sure that you rest for at least twice as long as you work.

Go through your repertoire of slalom strokes. This warms up and stretches your canoeing muscles in the most specific way possible.
- (v) **Mental rehearsal** of the 'plan' or strategy of what is about to be done. This 'minds eye' preparation helps concentration and prepares the whole body for action.

Warm down is also necessary for the body to cool gradually during rest periods and at the end of each training session. Gentle slow paddling during rest and for five minutes at the end will help your body to cool down and prevent stiffness later.

Points to note

A warm up should be suited to each individual and this can vary greatly from person to person. It should be suitable for any slalom site and it should not rely on there being slalom gates to use.

At a slalom competition don't be shy about warming up on the river bank. Those who don't bother may well be those you beat!

GOOD WARM-UPS SHOULD BE HABIT FORMING ----- YOU ALWAYS NEED THEM EVEN WHEN YOU THINK YOU DON'T

Below are some useful tips on how to learn and develop the models in this chapter. Remember these are only basic models that provide a correct sequence of strokes to WORK FROM. They give a starting point from which to tackle most common slalom situations.

1. It is a good idea to practice the sequence of strokes away from the gate to start with. This will help with the rhythm of the strokes and may highlight any problems with individual strokes. If this is the case always refer back to the basic stroke section and practise the strokes separately.

2. Gate techniques need to be practised slowly to start with and then gradually picking up the speed once the basic pattern is correct. Do not get bogged down taking too many times until the sequence has been mastered.

3. Always begin new techniques on flat water. However it must not be forgotten that slalom is a whitewater sport and every effort should be made to transfer these skills onto moving water as soon as possible.

4. Do not attempt to learn new techniques when tired or in an exhausted state. Only put them under realistic slalom pressure when they are mastered.

5. Always complete a sequence once it has been started. Do not keep stopping every time a mistake is made or it will be found difficult to learn the pattern.

6. It is very useful to seek visible cues or 'targets' to aim at. These are marked * on the model diagrams. They can be trees, rocks or even waves. They might even be just a mental marker like '3 feet from the bank pole' or '6 inches from entry pole' etc. They will help develop CONSISTENCY of repetition and are invaluable in PLANNING the course.

These points have been concerned with helping you learn the **'HOW' OF SLALOM TECHNIQUE**

Once the basic pattern of strokes has been mastered you can start to tackle the **'WHEN' OF SLALOM TECHNIQUE**

- It is vital to understand WHEN a particular stroke or boat position must be used. You have got to learn to recognise situations so that you can decide for yourself which techniques to use. In the lower divisions 'free practice' allows this to be done by trial and error. However, with progress up the divisions this is less and less possible and the skills of visual preparation from the bank must be developed.

- As already mentioned the models are not always used in their basic form. The following factors affect the choice of the model or any adaptations that you might make:-

a) **ENTRY and EXIT GATES.** The position of the gates BEFORE and AFTER greatly effects which technique will be used. Always look at the gates as part of a sequence or pattern not just as individual problems. In training keep changing the position of entry and exit gates so that the best technique is recognised without resorting to trial and error.

b) **GATELINE CONDITIONS OR RESTRICTIONS.** Each gate has its own particular problem. Are there boils or currents on the gateline? How deep is it? How close is the bank? How high are the poles? These all effect the choice of the technique to be used.

c) **YOUR OWN PHYSICAL LIMITATIONS.** Is it gate number 3 or 23? Will you have enough energy left to do the move you have chosen? Only you know your physical limitations and they must be taken into account in the choice of techniques.

Some General Points:-

i) **Remember that ultimately the position of the boat is more crucial than the actual strokes used.** Different strokes can be used to achieve the correct position and/or faster time. For instance if your first attempt at a sweep stroke did not have the desired effect, **REPEAT THE STROKE** and rejoin the sequence.

- In this way, a breakout may need 2 intial sweep strokes or 2 bow rudders(double-pump) to best cope with the conditions affecting it. Only you can make that decision and it may have to be taken on the spur of the moment as conditions dictate.

ii) **Try to see each move in your 'minds-eye' BEFORE you do it.** Start to see yourself going through the gates as you look at them. Eventually you will be able to do it without looking at the gates. **This is called mental rehearsal and helps you make a PLAN.**

iii) be meticulous about penalties, especially those that are repeated. Try to be certain about what happened, **BEFORE** you have another attempt.

The following section lists some common faults in slalom techniques and provides some reasons as to what might be causing them.....

IDENTIFYING FAULTS IN CANOE SLALOM TECHNIQUE

The following pointers may help you to identify faults from the bank or the boat. They may also be useful if you have access to video.

1. **Does the boat slow down?** Does it need to? Is the boat too close to the poles? Is there a lack of acceleration? **A WIDER ENTRY LINE OFTEN LEADS TO A TIGHTER, FASTER EXIT FROM THE GATE.**
2. Is there too much **boat lean or excessive rocking** on the 'catch' phase of each stroke? **POSSIBLE CAUSES ARE TOO MUCH EFFORT AND LEAN INTO THE STROKE OR PADDLE LENGTH TOO SHORT.**
3. **Are the exits from the gates tight enough?** Does over-rotation occur between stagger gates? **CAN THE BOAT BE TRAVELLING IN A STRAIGHTER LINE TOWARDS THE FINISH?**
4. **Has it been decided in advance what to aim at on the approach to a gate or sequence?** This is called a **TARGET OR CUE** and helps improve concentration and consistency.

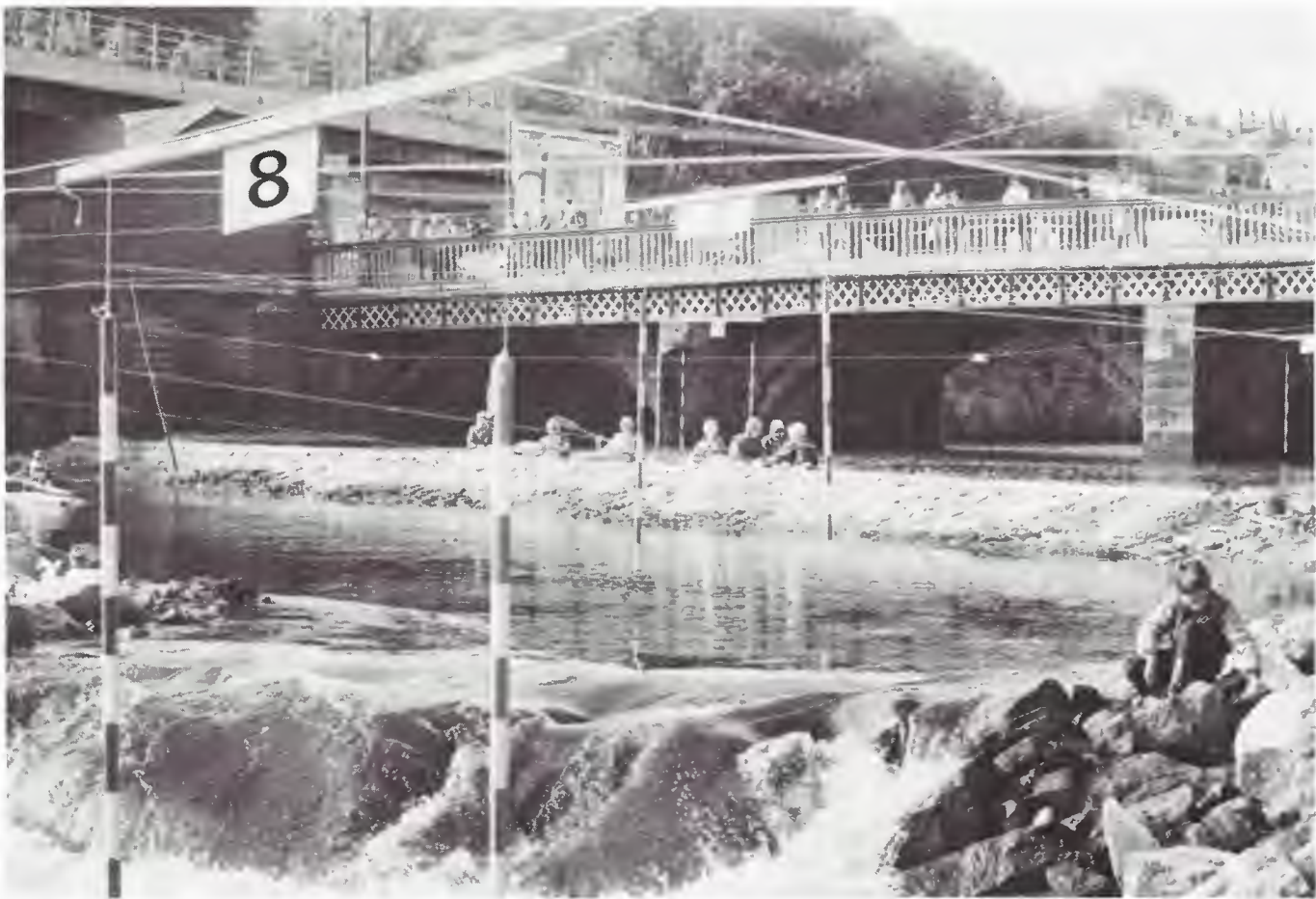
5. **What is the PATH OF THE BOWS?** What height are they? Are they safe? The majority of penalties are caused by the front of the boat.
6. Stroke choice. **IS IT THE RIGHT TYPE OF STROKE?**
7. Stroke length. Is it **too long or too short?** Where does the paddle enter the water? **TAPE ON THE DECK IS A USEFUL WAY TO CORRECT THIS PROBLEM.**
8. Is a **stroke positive or negative?** Does it **PUSH, PULL, STEER** or **SLOW** the boat? **EACH STROKE MUST HAVE A PURPOSE.**
9. Does the paddling show a **LACK OF RHYTHM?** Is it leading to **sloppy inconsistent technique?**
10. Is there a lack of confidence? **IS A STROKE BEING LEANT ON INSTEAD OF PULLED ON?** Can a **pushing, pulling or steering stroke** be used for **support** so as to **maintain momentum?**
11. Is the **SAFETY MARGIN** acceptable? Remember 'Just touched a pole' is as costly as 'Just got my head in the gate'.

- It is important to focus on things done well. If there was no definite plan then they may not be repeatable. A major part of being skilful is the understanding of why something works. Only with this understanding can skilful techniques become consistently repeatable.

Always ask yourself what caused the mistake.

WRONG CHOICE OF MOVE OR STROKE?.....

OR WAS IT THE RIGHT CHOICE DONE INCORRECTLY?



A typical lower division slalom course.

Chapter 10

Basic Moving Water Techniques for Canoe Slalom

This chapter is an introduction to the basic moving water techniques involved in canoe slalom. So far we have concentrated on the basics of stroke vocabulary and slalom gate technique on flat or slow moving water.

- Sooner or later you will find yourself on **moving whitewater** and will quickly realise that things are not that simple, especially in a lowline slalom boat!

Before looking at the techniques themselves it might be a good idea to look at some of the terms used to refer to a typical whitewater river situation. While reading the list it might help to refer to the diagram (overleaf). (fig 21) This illustrates a typical slalom situation and explains some of the terminology.

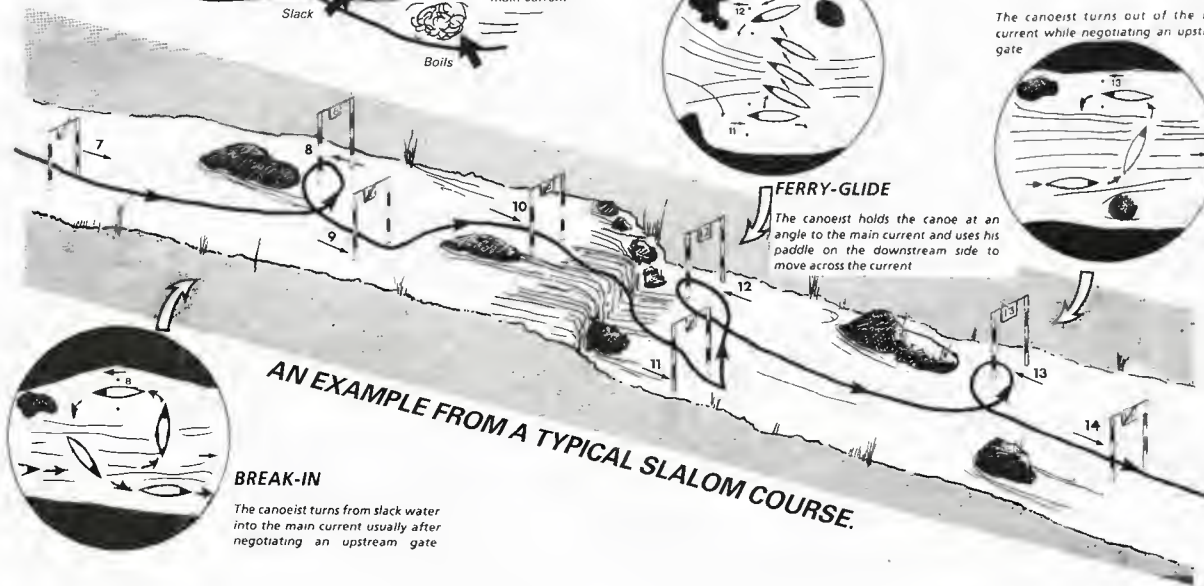
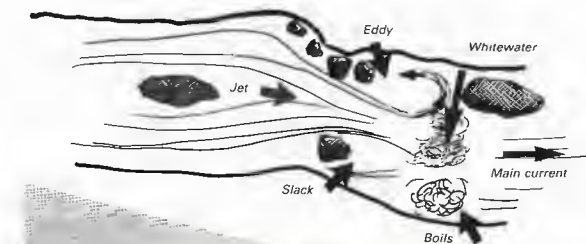
A WHITEWATER VOCABULARY

- CURRENT. --- The main flow of the river in a downstream direction.
- EDDY. --- The water to the side of the current or behind a rock. This water is often moving upstream and is sometimes called the 'slack'.
- EDDYLINE. --- This is the confused area where the current meets the eddy, often with water going in opposite directions. Boils are commonly found on or near eddylines. These are created by air surging to the surface and causing very unstable conditions.
- JET. --- The fast shoot of water created by a fall or constriction in the main current.
- WHITEWATER. --- This is usually formed at the bottom of the jet. The 'white' effect is air that has become trapped in the water as it falls down the rapid.
- STANDING WAVES
OR HAYSTACKS -- These are often created below a jet. These are waves of different shapes and sizes with troughs in between them. Most slalom moves take place in these areas below a jet.
- STOPPERS --- These occur below a weir or ledge where the water folds back on itself. They will hold a boat caught sideways in them and they must always be viewed with extreme caution. For further information read the section on safety in the BCU Handbook.

READING THE WATER IS IMPORTANT

The course designer studies the water before deciding where and how to site the 'gates'.

The canoeist studies the water and then decides how to use the currents and water flow to his advantage.



BREAK-IN

The canoeist turns from slack water into the main current usually after negotiating an upstream gate

HAVE A GO - WHY DON'T YOU READ THE WATER?

Look at the river. Notice where and how the main current moves. You will see waves of different sizes - some make 'white water'. You should be able to see the 'boils'.

Closer to the bank there is slack water and eddies - you can see the water actually flowing back up the river.

Notice how the gates are hung in relation to the flow of the river. The canoeist has to use different techniques in order to control his canoe in different situations, the good paddler, with good technique will save himself seconds by using the water to help him.

White water canoeing uses three classic techniques:-

Ferry glide, forward and reverse

Break-in to current and Break-out of current

BREAK-OUT

The canoeist turns out of the main current while negotiating an upstream gate

FERRY-GLIDE

The canoeist holds the canoe at an angle to the main current and uses his paddle on the downstream side to move across the current

AN EXAMPLE FROM A TYPICAL SLALOM COURSE.

- We are now going to concentrate on the three classical whitewater techniques used in Canoe Slalom. These are:-

----- **BREAKING OUT** from the current into an eddy.

----- **BREAKING IN** to the current from an eddy.

----- **FERRY-GLIDING**, forward and reverse, across the current.

These techniques are fundamental to correct watermanship, not only in Canoe Slalom but in all Whitewater Canoeing.

- Once you have mastered the basics of stroke work you will soon want to transfer them to a whitewater situation. To most successful slalomists, coping with moving water of any kind has become second nature, the skills being performed whilst concentrating almost entirely on the path to the next gate.

- You will notice that almost all the individual strokes mentioned in the following sections have been covered in the previous chapters. It's all just a matter of confidence and balance! From time to time you may wish to refer back to check on a definition or an explanation as they will not be repeated.

- **Leaning or tilting of the boat** will often be referred to concerning moving water techniques. This lean will always be in the direction that the water is flowing:-

----- **Downstream** in the main current ----- **Upstream** in an eddy -----

The reason for this leaning of the boat is to prevent water piling up on the deck and causing instability. As was seen in the Basic Skills chapter this requires good, secure fittings inside the boat so that the boat is gripped firmly - wear the boat rather than sit in it. This brings the HIPS into play and provides confidence to 'have a go' and support yourself on the paddle. (see page 38)



Fig. 21 *'Forward Sweep Stroke'* to initiate break out. The bows are being driven hard to the right of picture. The next stroke will be a bow rudder on the left.

BREAKING OUT from the current into an eddy.

This is the skill of leaving the current and entering the eddy and it is used in one of the most important areas of canoe slalom, the **UPSTREAM GATE**.

Upstream gates will usually be found in eddies where the current is travelling slightly upstream. This sudden passage from current going downstream to current going upstream requires the following pattern of action:-

1. Look ahead and select the 'target' below which you intend to finish, facing upstream. In a slalom situation this is usually the gate itself, however it can often be a tree or a rock on the bank upstream of the gate so as to allow for the drift of the boat in the current).
2. Start to angle the boat across the current aiming for the target.
3. As the bows cross the eddy line you should be almost broadside to the current. The stroke used to cross the eddyline will be a **TURNING SWEEP** on the downstream side. (fig 21)
4. As the eddyline is crossed the stroke is switched to a **BOW RUDDER** on the other side. At the same time the boat is **leant slightly upstream** to counteract the water travelling upstream in the eddy. (fig 22) Without this upstream lean, the water would pile onto the stern causing instability and slowing the turn.

- If the deeper penetration of the eddy is required this bow rudder is preceded by a **FORWARD POWER** stroke on the same side.

5. The Bow Rudder is usually **followed** by a **FORWARD POWER** stroke (without removing the blade from the water) on the same side to retain speed up the eddy or through the gate.



Fig.22 'Bow Rudder' stroke reaching into the eddy on a breakout. Note slight lean of the boat upstream and the forward reach of the paddle.

The exact strokes used in a breakout manoeuvre depend on the following:-

- **The angle of approach.**

A tight, downstream approach makes penetration of the eddyline more difficult and also involves turning the boat through more degrees.

- **The speed of approach.**

There should be enough speed to provide 'drive' into the eddy. Too fast however and the strokes can be late or ineffective, resulting in a low or missed breakout.

- **The size of the eddy.**

The size and shape of the eddy are very important. There may be (a) no width below the gate to allow the boat to turn, or (b) a definite 'pocket' of slack water well down from the gate. Both these will require different approach angles and therefore different stroke sequences. **Look very carefully at the water in a breakout to see how it can help you.**

- **The shape and strength of the eddyline.**

An eddyline is often the most unstable part of the river. The water is going in 2 different directions, often with swirls and boils providing unpredictable conditions for the unwary paddler. **Always try to cross it in a forward direction with speed. Try to avoid crossing it sideways or being stationary on top of it!**

- In the learning of the breakout the substitution of a reverse sweep (held statically level with the body for support as a bracing stroke) in place of the bow rudder is very common. Whilst feeling safer this in fact leads to poor penetration of the eddy and either a missed breakout or an unstable ride on the eddyline. A correctly placed bow rudder has the advantage of being able to reach into the slack water and pull the front of the boat upstream.



Fig. 23 'Breaking in' to the current using a 'Low Brace'. The 'Back' of the blade is being used level with the body for support.

Although the low brace may be used initially because of the increased support it provides, the bow rudder is by far the best stroke in a slalom situation and should be attempted as soon as possible.

BREAKING IN to the current from the eddy

This is the technique of entering the current from a position in an eddy or breakout and then proceeding **DOWNSTREAM**. This manoeuvre involves passing from water moving upstream in the eddy, to faster water moving downstream with the current.

The faster water suddenly hitting the side of the boat and tipping it over is the major problem to overcome on the break in to the current.

- **This is done by leaning AWAY FROM the current that is being entered so that the bottom of the boat is presented to the fast flowing water.**

This technique is very important with lowline slalom boats to prevent the sharp edges of the boats from 'burying' in fast moving water. This can result in loss of stability, speed and control and is a very common cause of capsize with beginners.

The sequence of moves for the **BREAK IN** is as follows:-

1. Facing upstream in the eddy, angle the boat so as to cross the eddyline at about 45 degrees to the current. **ACCELRATE** towards the current so that at least a third of the boat enters the fast water. The lean downstream must start as soon as the eddyline is entered.
2. As the boat enters the current, **THE DOWNSTREAM BLADE MUST BE IN THE WATER**. There are 2 choices of stroke at this point:-

Either -- a) **A LOW BRACE** held level with the body using the **BACK** of the blade. (fig 23) This is very similar to a static reverse sweep level with the body for support. Once the boat is facing downstream the lean is no longer required and this low brace can be changed into a forward power stroke on the same side.

or -- b) **A BOW RUDDER** This turns and supports more effectively than the low brace. (fig 24) Really try to keep the blade moving in a dynamic pulling position so that downstream momentum is maintained.



Fig. 24 'Breaking in' to the current using a 'Bow Rudder'. Note the lean of the boat to prevent the current piling up on the deck.

COMMON FAULTS WITH THE BREAK IN:-

- Not enough speed and 'attack' on entry to the current. This often results in the boat being spun round on the eddyline and no penetration of the current.
- Not enough lean downstream resulting in loss of stability or capsizes.
- Too much lean resulting in the paddle blade being used more for support than forward motion. However, initially it is safer and drier to have too much lean than too little!
- Too much static 'hanging' on the Bow Rudder resulting in slow acceleration downstream.

GENERAL POINTS:

Make sure that you practise 'Breaking In' on both sides and in a variety of different eddy situations. The timing of WHEN to switch to the lean and the downstream blade can only be mastered with practice and several capsizes!

With practice you will learn to 'feel' the right time to switch strokes and to lean the boat. Eventually you will start to use the power of the water to help you rather than fighting against it.

THE FERRY GLIDE

The third of the classic whitewater techniques is the Ferry Glide. This enables the canoe to cross the current without being carried downstream. It can be used for crossing between 2 gates, avoiding rocks or stoppers or just marking time to check on what lies ahead when touring a river.

Basically the angle of the canoe and the current are used to produce sideways movement. By maintaining sufficient angle and enough propulsion not to get swept downstream the canoe 'ferries' sideways across the current (fig 25)

The Ferry Glide can be done either forwards or in reverse. Lets look at the normal ferry that is done facing upstream and paddling forwards. This is the sequence of moves:-

1. Face upstream in the eddy and select the position you want to cross to on the other side of the current.
 2. **Setting the angle.** Obviously to allow for the current you have to aim some way upstream of the target. (fig 26) The angle depends very much on the strength of the current and the speed with which the 'ferry' is to be made. **Initially it is better to be pointing too much upstream.** You will have to work harder, but you will have more CONTROL of the sideways movement.
- Generally speaking the slower the current the more angle across the river will be needed. The faster the current, the more angle upstream will be needed.

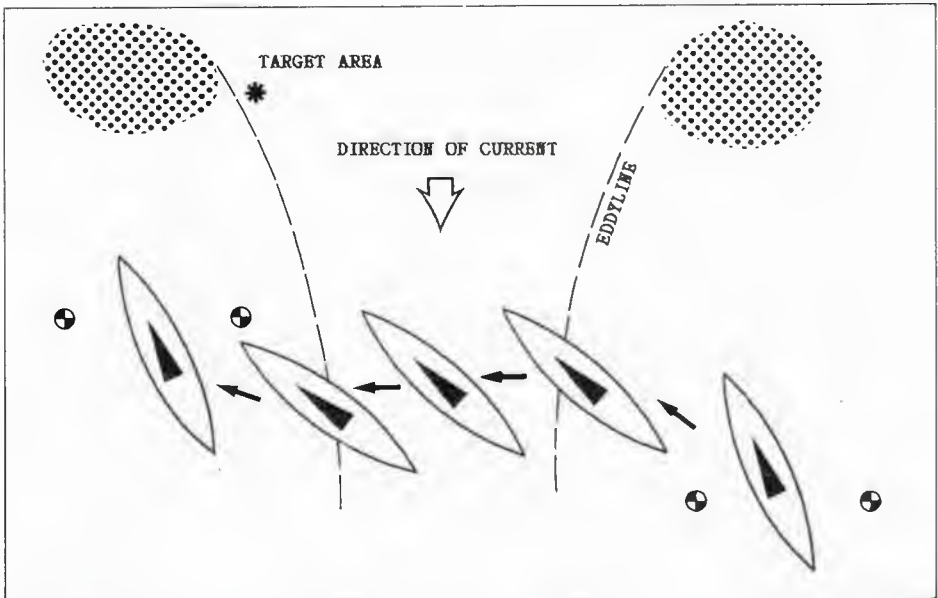


Fig.25 Diagram showing a 'Ferry Glide' between 2 upstream gates. The combination of downstream flow, boatspeed and angle produce sideways movement. Note target point * as the boat enters the current.



Fig.26 'Ferry Glide' across the flow to upstream gate on the far side of the river. Note that the bows are pointing well upstream of the target gate to allow for the strength of current. The current is flowing right to left of the picture.

The skill lies in recognising how much boat angle is required and it is very much a case of trial and error to start with. Too great an angle and the bows will be swept downstream as in a break in. Too little and the boat will 'stall' facing upstream and eventually move backwards downstream. With lots of practice you will develop a feel for the best angle.

3. A slight downstream lean of the boat might be needed if the water is moving fast so as to prevent the upstream edge from 'burying'.
4. Try to paddle on both sides during a ferry glide so as to cross smoothly and maintain good rhythm. However if angle correction is required then the downstream blade is best used from the body to the stern as in the **STEERING SWEEP**. This has the effect of pulling the stern downstream rather than trying to force the bows upstream against the current.

If ferrying across to another eddy beware of the angle you enter it. Try to increase the angle towards the bank with a **TURNING SWEEP** on the upstream side so as to pierce the eddyline and not 'wallow' into it sideways.

A very good way of practising the ferry glide is to paddle UP a rapid by ferrying across from eddy to eddy on alternate sides of the river. This also helps keep a good check on whether ground is being lost downstream during the manoeuvre.



Fig. 27 'Reverse Ferry Glide' between 2 downstream gates. Note angle of the boat allowing for strength of flow. Current is flowing top left to bottom right of picture.

THE REVERSE FERRY GLIDE

The reverse ferry glide is very likely to be used in a movement between 2 downstream stagger gates. Facing downstream, the boat is moved sideways using reverse strokes, to push the boat across the current. (fig 27) This ability to check forward speed and move accurately across the current is vital in any moving water situation, not just slalom.

Points to note:-

- Always **look over the downstream shoulder** at the gate you are ferrying towards.

- **Keep the reverse paddling as regular as possible**, with a reverse sweep on the downstream side to correct angle if required.

- **Some downstream lean of the boat will be necessary to prevent the stern from 'burying' in the current.** The lack of volume in the stern of most lowline slalom boats can make this a real problem when learning the manoeuvre.

- **Try to lose as much downstream speed as possible BEFORE starting the reverse ferry glide.** This is done with 2-3 hard reverse power strokes before the angle is put on the boat.

These 3 moving water techniques should be practised with and without slalom gates and in as many differing whitewater situations as possible. Only after many hours spent on rough water will they start to become second nature.

The 2 ingredients of successful Canoe Slalom are:-

- **Skilful and Accurate Gate Technique.**

allied with

- Confident and Aggressive Watermanship.

THESE ARE THE BASICS, GO FOR IT! AND ENJOY IT!

Chapter 11

A Brief History of Canoe Slalom

Canoe Slalom started in Great Britain in 1937. From 1946 the sport spread rapidly with the first World Championships in Switzerland in 1949. The real growth came in the mid 1960's when g.r.p. - glass re-inforced plastics began to be used for boats.

Britain's first medal was a gold by Paul Farrant in a folding kayak in 1959. Other medals followed in the 1960's and at every Worlds since 1977.

The sport has changed much in the last twenty years and is still developing but radical rule changes do not happen very often.

In Britain slalom competition is controlled by the Slalom Committee. The committee is based on slalom registered clubs who elect the Executive and officials each year. They set the rules and regulations, approve the calendar and look after the equipment, run the ranking lists, issue the bibs etc. They are all listed in the Slalom Yearbook.

The Slalom Committee is part of the British Canoe Union - the national governing body - which deals with membership, and national affairs. The BCU includes several other competitive disciplines like Wild Water Racing, Sprint Racing, Polo as well as Coaching and Access. There are nine regions in England which help with development and recruitment as well as the Welsh Canoeing Association, the Scottish Canoe Association and the Canoe Association of Northern Ireland.

The British Canoe Union is a member of the International Canoeing Federation which includes representatives from more than 30 countries. About 23 are interested in Canoe Slalom. The ICF controls International Competition Slalom which is not an Olympic Sport at present. It was in 1972 and might be again in 1992.

Roger Fox

Chapter 12

Useful Addresses

Please read this section carefully in order to receive the information you require.

All enquiries requiring a written reply must include a 9"x4" self-addressed stamped envelope.

BCU Membership enquiries and BCU Publications:

British Canoe Union,
Flexel House,
45/47 High Street,
Addlestone, Weybridge,
Surrey KT15 1JV.

Telephone
(0932) 41341

All Slalom enquiries:

Slalom Administrator,
Mrs Sue Wharton,
1 Barnacre View, High Street,
Garstang, Preston PR3 1EB.

Telephone
(09952) 4579
(including answer phone)

Slalom magazine enquiries:

Slalom Magazine
c/o Slalom Administrator (address above)

National Slalom Coach:

Alan Edge,
25 Crawshaw Avenue,
Pudsey,
West Yorkshire.
LS28 7BT

Telephone
(0532) 550054

Canoe Association of Northern Ireland (CANI)
Miss C L Medland,
114 Upper Lisburn Road,
Finaghy, Belfast NI BT10 0BD.

Scottish Canoe Association (SCA)
18 Ainslie Place,
Edinburgh EH3 6AU.
Telephone (031) 226 4401

Welsh Canoeing Association (WCA)
c/o Ben y Bont,
Corwen,
Clwyd LL21 0EL
Telephone (0490) 2345

Notes

Notes

Canolfan Tryweryn



The National Whitewater Centre, Bala

The River Tryweryn at Bala, North Wales is open for whitewater canoeing throughout the year, whenever water is being released by the Welsh Water Authority. Some training gates are available but you may need to take more of your own.

For details of water releases, courses and events contact:-

The Centre Manager - George Davis
Canolfan Tryweryn,
Bala,
Gwynedd.
North Wales.

24 hour Answerphone

0678 520 826

Holme Pierrepont, The Artificial Slalom Course, Nottingham



The Artificial Canoe Slalom Course on the River Trent, Holme Pierrepont, Nottingham was opened in September 1986.

It provides whitewater conditions for all levels of paddler and there is a full set of training gates available for use.

Contact the National Watersports Centre for details of water releases, costs, courses and equipment hire.

Holme Pierrepont
National Watersports Centre.
Adbolton Lane,
Nottingham
NG12 2LU

0602 821212

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