The following text was written by David Keane (Past DW Chairman) sometime around 1960. It has been transcribed using voice recognition and thus may contain errors. It is an historical document. While it paints a picture of the event in the early years some of the suggestions are no longer appropriate, others would lead to disqualification. It includes references to crews shooting weirs (prohibited in 1951) taking sleeping pills and the taking of Benzodrine as a stimulant (banned). For the younger competitors it was a different time just after the 2nd world war in which many of those who competed would have fought (including David) or been witness too. Health and safety were unheard of. Suggestions for competing in flood conditions are included for circumstances that would almost certainly lead to cancelation today. It claims that the first two glass fibre canoes were designed and built in the UK for and because of the DW and hints at its importance for canoeing today. It makes clear the dilapidated state of the Kennet and Avon canal and the hazards posed by its condition. It makes clear that singles and triples were among the first boats to take part. There is mention of a special award for a paddler after competing in the race for the 6th time for his consistent support of the race, although I can only find 3 completions. It makes clear that first and foremost the event was a challenge. It must be remembered that at the time this was written no bank support was permitted. All the food for the event was to be carried by the crew in the boat with them.

The Devices to Westminster Canoe Race

From studying the results of the race over the years it would appear that the chances of a crew who are new to the race completing the course are about 4 to one against and the chances of an experienced crew are about 3 to one in favour; the object of this booklet is to help improve these odds

History of the Race

The origin of the Devices to Westminster Canoe Race dates back to the Easter of 1948 when Rover Scouts of a Devizes crew made the journey with the idea of raising funds by taking up a challenge to reach Westminster by canoe in under 100 hours. As a result two 2 man crews succeeded in covering the 125 mile course as a fast canoe camping tour in a time of 87 hours 50 minutes. The following Whitsun 2 crews from the Chippenham Sea Cadet Unit took up a similar challenge also as a fundraising activity and succeeded in bettering the Rovers time by 11 hours. These first 2 ventures had been fully publicised in the Daily Press and drew an unexpected amount of interest in what could be described as the birth of a new sport. During the remainder of 1948 various other crews tried their hand at the journey but the canal was the only victor. During the Easter of 1949 a total of about 17 crews, mostly previously unknown to each other set out from devices with the idea of bettering the cadets time, resulting in the lowering of the record by 2 crews from the Richmond Canoe Club to 49 hours 32 minutes.

At this stage in the race's evolution there were no rules as yet drawn up causing a number of variations in what they should be. For example single, double and 3 man canoes all took part carrying varying amounts of camping and food. Some crews relied on purchasing a proportion of their supplies along the route, some crews travelled independently whilst others kept in Groups.

1950 saw the first organised race with rules, timekeepers and a Cup presented by Albert Weibel resulting in the first nonstop journey over the course without an overnight stop lowering the record this time to 36 hours 15 minutes. The presentation of the Cup was back dated to include the fastest crew in 1949, an excellent idea had it only gone back a further year to include the Scouts and Sea Cadets.

As early as 1951 the record was lowered to 24 hours 20 minutes, a record which was to stand for 8 years and reduced the time taken for the journey from roughly 4 days down to one day only 3 years after the Rovers journey. The introduction in 1953 of the junior class allowed younger competitors to take part with the inclusion of 3 compulsory overnight stops along the route.

Despite the rapid improvement in the standard of performances and equipment in the early years of the race it was not until 1957 that the first K2 successfully covered the course and even then it took several more years before the K2 became generally adopted amongst the faster crew. The delay was probably due to the unfortunate experiences or some of the first boats of this type to be used. The understandable mistake was made of using old boats, one of these K2's hit a rock and split clean in half from stem to stern another K type craft broke in half transversely with the same dampening effect on its crew

The number of senior crews entering the race each year remained below 30 until 1958 when the entries jumped to nearly 50 crews marking the beginning of a rapid growth in the popularity of the race. Until this time the 19:51 record had stood unbroken and the standard of the winning times remained at much the same level after the respective racing conditions had been taken into consideration

With the increasing numbers of entries and the appearance of more K2's the 1951 record was finally cracked in 1959, since when it has been repeatedly lowered almost on each successive year. Entries have now grown to such an extent that in 1962 a total of 176 Senior and Junior crews took part lowering the Senior record to an amazingly fast time of 20 and a half hours.

The course

The 125 miles course of the race starts at Devizes in Wiltshire and follows the now derelict Kennett and Avon canal through Hungerford and Newbury to Reading where the canal joins the Thames. From Reading the course follows the Thames through Henley, Stains and Teddington and then down the tidal stretch to Westminster .

The earliest stretches of the canal have little to offer but semi stagnant shallow water covered with varying amounts of floating weed. Shortly after completing the first 14 and a half miles of the course to the first lock the canal passes through the 600 yards long Savernake tunnel at the highest level of the canal . The novelty of paddling through the tunnel is heightened by the increase in the quality and quantity of the floating weed, which gets thrown up by the canoeists paddles introducing them to the pleasures of receiving large dollops of cold slime down their necks.

The tunnel is followed by a 4 mile stretch near Crofton containing as many as 12 locks, a reminder to competitors that the paddling is only a part of the task before them. By this time they will also fully appreciate the desirability of light weight equipment.

The canal beyond Newbury continually leaves and rejoins the river Kennett whose current can usually be counted to give some very welcome assistance. From this point the crew will find their knowledge of the course useful as it is not always clear which fork of the waterway should be followed. By the time a crew have reached Reading they will have Portaged 57 locks and paddled the 54 most soul destroying miles of the course. Despite this achievement, they will still be faced with a further 20 locks and 71 miles of the Thames. The assistance offered by the current on the Thames naturally varies depending on the amount of recent rainfall, but competitors should not count on much assistance from this source, as the current seldom exceeds half a mile per hour

By the scale of this race the last 14 miles from Teddington to Westminster over the tidal portion of the course represents the final sprint down the home straight . A special feature of the race is the necessity for crews to select their starting times such that they reach Teddington out about high tide, to enable them to take advantage of the current of the ebbing tide on their way down to Westminster.

Training

In a race of this nature the importance of adequate training will probably not require stressing. Without training of any sort a crew will be doing well to reach Newbury, about a quarter of the total course

It will be a great advantage if the crew can do their training on the course itself and preferably over the stretches they intend to subsequently race over at night. This should be the Thames , as it is a further advantage to race over the canal in daylight and so utilise the daylight for Portaging in the 57 canal locks.

The ideal arrangement for training is to have a vehicle and driver to take the crew and boat to a different starting point for each training run and to pick them up again downstream on completion of each stint. This will allow the crew to familiarise themselves with more of the course and the lock Portage. Each of the Thames locks should be reconnoitered to discover the best Portage routes which thereafter should be practiced to a drill with the same enthusiasm as the actual paddling. It will be realised that a minute saved at each Portage will amount to a gain of one and a quarter hours over the whole course.

A crew should also aquaint themselves within 20 miles of the canal between Newbury and Reading prior to the race as this length contains a number of misleading forks. The nine Croften locks represent a special problem where some locks are as little as 100 yards apart. The best solution for getting along these short pounds is to line the canoe from the bank. Lining is as simple as it sounds but it will require some practice as the position of the line fastened to the canoe is fairly critical. The average clothes line is suitable for the job.

There is of course no substitute for training. Jumping up and down in front of an open window will do little more than scare the crows. There are few activities that do help but in all cases the time taken up in pursuing these would be better spent in a canoe.

To complete a full training programme a crew will need to train throughout the year and on no account should they allow themselves to be put off by bad weather. The only thing that should prevent a training run is frozen water.

As far as possible training runs should simulate actual racing conditions. For instance the canoe should be loaded to carry the same weight as it will during the race . The food and drink taken on the training runs should be at the same type and packed in the same way as it will be for the race. It will be a help to do a few training runs at night particularly if these can be done over the stretches of the river that will be raced over at night

Assuming a crew are prepared to train for 6 months they should start in a modest way getting used to the boat by doing a few 15 mile runs. When the distance has been covered 4 or 5 times it should be stepped up to 20 miles and repeated in the until the crew find they are quite happy with the distance. The training distance should be stepped up in this way each few weeks until about 14 weeks the crews should be doing over 30 miles

From this point on opinions differ, one school believes in increasing the training distance by further increments of 5 miles while another school believes in sticking to 30 miles and just hammering away at it trying to improve on their journey time . Others stick at the 30 mile training runs and step up the number of runs. Provided it is still possible to continue improving on the paddling times this latter method is probably the best bet

A crew who are new to the race and have trained for 3 months and fined they are able to do a 25 mile training run on the Thames in 5 hours should be able to cover the course in about 40 hours.

Should the same crew have trained for 6 months before their first race and can cover a 25 mile training run on the Thames in 4 and a quarter hours could expect to do the course in something like 28 hours. A reasonable promising crew who trained for 6 months, again for their second attempt and find they are able to cover a 25 mile training run in 4 hours could expect to manage a time of about 24 hours.

Should this crew go on to train for a further 6 months for their third attempt and find they are now able to cover a 30 mile training run in 4 and half hours, they would stand an excellent chance of gaining a place.

To help a crew gauge their progress in training the following table is an actual record of 12 successive weekly training runs made by what would represent a fairly average crew starting from scratch. The canoe was a Handshine

The fall-off of performance after about 6 weeks is fairly typical for a crew starting from scratch

Windsor to Walton on Thames 15 miles 3 and half hours
Malow to Windsor 15 miles 3 and a half hours
Windsor to Walton 15 miles 3 hours
Windsor to Walton 15 miles 2 and a half hours
Windsor to Hampton Court 20 miles 3 and a half hours
Maidenhead to Shepperton 20 miles 3 and a quarter hours
Marlow to Bell Weir lock 20 miles 3 hours 40 minutes
Datchet to Kingston 20 miles 3 hours 50 minutes
Aston ferry to Windsor 20 miles 3 hours 30 minutes
Maidenhead to Shepperton 20 miles 3 hours 15 minutes
Marlow to Chertsey 25 miles 4 hours
Windsor to Walton 15 miles - iced up (Christmas Eve)

Weather

It is seldom realised the extremes of weather that an English Easter can offer, extremes that should be borne in mind when choosing clothing and equipment for the venture.

Heat In 1949 a crew were taken to hospital in Reading suffering with heat stroke. That year the sun Shone continuously all day and the combined effect of its direct rays and their reflection from the surface of the water gave a heat more in keeping with the equator than 51 degrees north. One effective way of keeping cool is to pull the occasional hat full of water over oneself.

Cold It is not uncommon for the nights to be so cold that the spray thrown out by the paddles freezes when it falls on the deck of the canoe making it necessary for them to stop from time to time to deice. In 1958 a competitor had to have his hands treated for mild frostbite after the race. To help overcome the cold crews should wear light weather leather gloves that have been well done

dubbined. It is a mistake to bandage their hands as this tends to stop the circulation. In 1959 crews experienced a full blooded blizzard with a good 4 inches of snow driven by North East Gale. It is these sorts of conditions that rule out the shorts, singlet and plimsolls approach to the race at least for the senior crews.

Wind Strength It has been known for the wind to be sufficiently strong in gusts to blow the paddles from the hands of canoeists.

Flood In 1951 the Thames was in full flood overflowing its banks in many places making it impossible at times to pick out the course of the river at night. One crew was surprised to find themselves paddling between the goal posts of a football pitch. The serious side of flood conditions is that Crews should make doubly sure of steering clear of all weir's. The possibility of flood conditions should be borne in mind when a crew choose their Portage routes around the Thames locks as flooding can make normally safe routes impossible.

Rain Rain is not such a hazard at as might be expected, provided a crew are able to keep warm the fact that they are wet though need not bother them. The most unsuitable sort of weather for the race is a strong cold easterly wind this is when it becomes necessary to use feathered paddles.

Night canoeing Competitors will be surprised by the ease with which their eyes become adjusted to the dark and following the course of the river at night is usually quite easy providing they steer towards the gap in the trees being silhouetted against the night Sky. A reasonably full moon can usually be counted on for at least part of the night at Easter and will give more than ample illumination for Portage in the locks.

Mist and Fog Only a thorough knowledge of the course will help the crew maintain their speed in a fog.

Canoes

The Devizes to Westminster Canoe Race is one of the few races were the canoe designer is allowed a free hand and is not tied down by any restrictions. This fact coupled with a shortage of suitable and inexpensive canoes on the market offers great scope and incentive to the amateur design enthusiast. Canoes specifically designed for the DW race have brought about and speeded up the development of new ideas in the construction of all classes of canoes since the early days of the race.

As early as 1951 canoes specifically specially designed for the race started making their appearance. The forerunners of a steady flow of original designs which have since become a feature of the race. Two of these early designs were of particular interest and illustrate the rapid improvement in the standards of the race in its early days. One boat was 20 foot long built with a light frame and stringers and was covered with 1/32 inch plywood and propelled with 12 foot long paddle. Another boat 21 foot 6 inches long was built with light plywood frames and tubular aluminium alloy stringers and covered with balloon fabric producing a double canoe weighing only 35 pounds including the seats; possibly the lightest double canoe to be built of that length up to that time.

in 1952 Mike Wilkins designed and built the first hard chine double in which he and Henry Ross won that year. The first two fiberglass canoes built in this country were both designed and built to compete in the DW. Neither builder knew of the other's efforts yet both canoes were completed on the Thursday before Easter 1955 and were first used when they started out from Devizes the following morning.

One of these craft was 23 feet 6 inches long; more than 2 feet longer than a K2. Doctor C.N. Davis the designer of the other fiberglass canoe changed from glass the following year when he produced a canoe built from a very novel method of conic development. The boat was built from 3 mm waterproof plywood to form a whole approximating closely to a fully moulded boat. Unfortunately this very promising system of design does not seem to have been followed up or applied to other types of canoe. Another type of craft worthy of development is the moulded sheet alloy type. The only canoes of this sort to be used in the race so far have been a heavy military types and most unsuitable for the job. That these massive contractions were successfully paddled over the course reflects much credit to their crews.

Weight Probably the most important single factor in judging the suitability of a boat for the DW is its weight. The lighter the better certainly never more than 56 pounds. Every effort should be made to reduce the weight of even a light canoe. Even if the crew are fully satisfied with the weight of their kayak before setting out from Devizes it is certain they will have changed their minds before reaching Westminster.

Length The speed of a boat varies as the square root of its length so within reason the longer a canoe the faster it will be. But an increase in length means an increase in wetted area and difficulty in Portaging. The suggested minimum length would be 20 foot but for those wishing to better 24 hours nothing shorter than a K2 (IE 21 foot 4 inches) should be considered. A maximum length would be about 25 feet.

Beam as one might expect the slimness of a boat contributes to its speed but at the expense of the stability so necessary to the inexperienced crews. Instability due to excessive narrowness can be compensated for to some extent by an increase in length and a flatter bottom. Suggested limits for the beam of a canoe would be a minimum of 20 inches and a maximum of 25 inches. The canoe with a narrow beam (under 22 inches) should have a length of at least 21 foot.

Cross sectional shape below waterline The theoretical ideal shape of a boats cross section below waterline is semi circular to give the least wetted area for the displacement. Unfortunately the semi circle gives no stability whatsoever making it necessary to broaden the beam to form an ellipse or some approximation to it. The cross section of the K2 is further distorted to give a narrow waterline with yet still maintain the minimum being dimension at the gunwales. Naturally the smoother and more highly polished the Hall is the more efficiently it will pass through the water.

Draught The shallower the draft of a canoe for this race the better. Quite a length of the canal is very shallow and a boat of shallow draft is not slowed up so much in shallow water. It is better to increase the length of the design to reduce its draught rather than increased its beam.

Plan view shape of Hull A finally tapered stern is more important than a sharp bow making a fish form hull the favourite, with its widest section forward of the midpoint.

Stem post This stem post should be raked back well so that the canoe can ride the floating weeds on the canal without them building up to slow the canoe down. The leading edge of the Bow should be sheathed with metal to help it stand up to the repeated knocks and sharpened to an edge to improve its efficiency in cutting through the water.

Rudder All boats used for this race should be fitted with rudders to allow the crews to paddle continuously on both sides without the distraction of steering with the paddles. The rudder must be able to withstand the canoe being dropped on it. There are two solutions to this problem, either a

light flexible retractable rather or a very strong and rigid tide. The rudder should be operated from the bow cockpit as only the bow man will have adequate vision at night.

Rudder cables Rudder cables should be several times stronger than apparently necessary, in fact they should be capable of withstanding a pull of about 2 cwts . The ideal material is flexable stainless steel cable between one 16th and 1/8th inch diameter. Piano wire is fair but it is difficult to connect and seems to rust in the wrong places at the wrong time. It is also very difficult to make temporary repair in piano wire. Rope cord and brass are worse than useless due to the lack of reliability. A simple system of cable adjustment should be incorporated in the line such as a chain and hook .

Constructional material of canoe Canoes in the DW race have to withstand more treatment in one race than most canoes meet in a lifetime. For rigidity lightweight and resistance to minor knocks there is nothing to match plywood for all round suitability. Fibre glass has rigidity and resistance to damage what is appreciatively heavy as employment skin covered and folding canoes lack the necessary rigidity and are to susceptible to damage to be recommended for this race Despite this quite a fair proportion of the canoes used in the race are still skin covered. Duralumin or other light alloy would make a suitable material for constructing canoes for this race but will require further develop.

Colour of the canoe It is a great advantage for the canoe paddles for painters et cetera to be painted white to simplify the handling of the canoe at night.

Seats When choosing seats for the canoe it must be remembered that they will be sat on continuously for probably over 24 hours. Anyone who's ever had the pleasure of doing a long journey in the old continental trains with wooden seats will appreciate the necessity of comfortable seating. There is only one answer to this problem; moulded tractor type seats made from plywood fiberglass or thermoplastic. Foam rubber seats are too hot during the short time they remain dry and when they become wet the added weight is a considerable disadvantage not to mention the accompanying discomfort. Seats should be set as high as possible consistent with stability. In a narrow boat this height will not be much above the waterline outside the canoe.

Cockpit's Cockpit's should be spaced well apart to avoid clashing of the paddles and to spread the load in the canoe. A cockpit should have ample length to allow fast and easy embarking and disembarking, IE about 40 inches. The cockpit combing should not protrude above the deck by more than one and a half inches. Spray covers of the type that can be quickly adjusted should be fitted. The covers will serve the dual purpose of keeping the canoe dry and more importantly warm at night.

Deck Provision should be made for loading equipment into the canoe. It may be necessary to provide hatches in the deck.

Backrests Back rests are a matter of taste but in general those who hope to do better than 24 hours will not bother with them. To the average crew a backrest will be an advantage. The stern cockpit should be fitted with a foot brace

Carrying handles For quick and easy portaging stout carrying handles should be fitted at bow and stern. The handle grip should be between one and a half inches and one inch diameter anything smaller will cut into the hand.

Painters Painters should be about 9 foot long and thick enough to give sufficient grip to lift the canoe easily when the painter is wet and handled with wet leather gloves. That is one and a half inches circumference Manila rope or quarter inch or 8 inch webbing strap.

Wheels Crews hoping to do better than about 26 hours will probably find no advantage in using wheels for the portages. Every conceivable type of wheel and method of fitting them has been tried to assist crews around the 77 locks. Retractable wheels mounted on the rear deck, wheels rigidly mounted on the rear deck with the disadvantage of loose items of equipment getting tipped out when the canoe is turned over for portaging. Detachable cycle wheels plugged into a tubular Axel running through the hole amidships above the waterline. When not in use the wheels were carried on the deck. While this method gives the best possible land speed a lot of the advantages lost in the time taken fitting the wheels not to mention the air ease with which the wheels get lost. Some crews prefer a plane stern skid. It is possible that the ideal assistance for portaging would be achieved from a single wheel come rudder fitted to serve both purposes of rudder and wheel. A problem easily sold by stealing the front half of a childs tricycle

Choice of canoe

The moulded plywood K2 has all the necessary major advantages including lightness of weight and will be the first choice of the experience competitors who can afford one. The only real disadvantage of the K2 is its lack of stability which makes it an unsuitable craft for beginners. The rudder of a K2 will require modification as the type usually found on a K2 is too easily damaged. There may be an unexpected disadvantage with a K2 by virtue of its very high quality. After spending so much on a sleek and attractive new craft it is a great temptation for the group to treat it to carefully and cause them to lose valuable time at the portages. Although the plywood K2 has been proved the fastest kayak for the job to date it is of course well within the realms of possibility that the faster moulded plywood kayak will be developed by taking full advantage of the free and allowed to designer's of kayaks this race. The second choice of canoe will be a fibre glass K2 the only disadvantage over the plywood counterpart is there extra weight. Fibre glass has been found to stand up well to the battering the canoes get. The third choice of canoe will be a hand chime made from 3 mm plywood. These can be easily home built for less than 20 pounds with the same added length and slimness of the standard dimensions of the K2. To compensate for the disadvantage of the chine's canoes this type can be built that are capable of giving a K2 a fair run for its money. The additional stability of the hand chime canoe is naturally an advantage to those new to racing craft. The aim of those who choose to design their own hand chime canoe should be to either provide a large number of chimes so the finished hull approximates to a fully moulded one or provide the minimum number of chines to arrange their longer chine lines to follow as nearly as possible the flow line of the water passing the hole. The fourth choice of canoe is the wooden frame and skin covered type the big disadvantages of these boats is their susceptibility to damage and their lack of longitudinal rigidity in boats with sufficient length for this race. Folding boats have done amazingly well in the past but the credit was probably knew more due to their crews. The lack of rigidity has been known to be so great that the canoes this type live up to their name during portages.

Skin covered canoes should be avoided by those wishing to do Better than 30 hours. Canadian canoes while being excellent for fast portaging are too heavy, too short and too broad for fast times. It may well be worth developing further into something to suit the requirements of this race.

Temporary repairs of canoes

Given sufficient Bostic, string, patches and wire there are very few damaged canoes that are beyond a temporary repair. An excellent idea for speeding up the drying out of the damaged areas of a hole

is to wipe the area over with methylated spirit. The more devilish characters prefer to set light to the maths, which on some occasions may speed up their repair. A punch hole in a plywood whole can be repaired simply in the same way as with the canvas covered canoe but longer chinal splits in plywood present a special difficulty as ordinary Bostic patches are not enough to prevent a split from spreading. The answer here is to sew the two sides of split together with copper and brass wire. Canoes with splits up to 4 foot long have been repaired temporarily in this way to see their crews through to Westminster.

Most repairs call for a degree of improvisation. In the case of a crew who were only 50% successful in shooting a weir the patching material was obtained by opening up their waterproof food bags fortunately made from rubberised cotton. The whole sealing properties of a pair of socks are of course valuable dependent on the identity of the owner and the number of weeks he has worn them. In the case of the canoe that sank just after crossing the finishing line the socks sealing a hole in the canoe must have worked loose for the excellence of their sealing properties was beyond all doubt.

Paddles Lightweight racing pedals are not really necessary unless the crew are thinking of bettering about 26 hours otherwise the ordinary type of touring paddles with plywood blades will be found suitable for the job. Most crews carry a spare paddle. The plug half of a pair together with a spare socket (Farrell) in case of breakage. Feathering of paddle blades ie setting the blades at right angles actually is not as important as is generally believed but will be necessary for those hoping of bettering about 26 hours. In past years crews who have trained insufficiently in feathering had been forced to retire with swollen wrist so feathering should not be attempted by crews who have not covered about 250 miles in training with feathered paddles. Paddle should be screwed permanently into their design position and no other patent ideas should be relied on for holding the path. The most common cause of damage to a paddle is by the crew treading on them during a portage. The answer is simply fixing clips or the like attached to the deck of the canoe for holding the panels during portages. The clips offer a further advantage in giving the crew 2 free hands for handling the boat. Paddles with an aluminium shelf should be avoided as these conduct heat away from the hands and in a temperature below freezing the effect is unhelpful to say the Least.

Food

The type and quantity of food a crew will require during the race depends on the time they are planning to take over the journey. Those aiming at making a continuous non stop run will find after about 4 hours of uninterrupted paddling the physical exertion required will very nearly rob them of any appetite. After this stage the crew will find there are sometimes only able to eat chocolate, glucose and the like. Sometimes the limited intake of food causes competitors to suffer from acid guts but nothing that cannot be put right with a little carbonate of soda or similar old English powerful squill. Slower Crews will find they are able to put away reasonably substantial meals. Dehydrated food rather than tin food should be taken. Horlicks manufacture a very good range of dehydrated food packs. The only tinned stuff a crews should bother with are tins of self heating soup of the type sold by Heinz. Here the tins are only worth their weight by virtue of the psychological value of their contents rather than their food value. The winners of the junior class in 1960 made their excellent win on the unusual diet of the occasional handful of raw rolled oats stirred up in cold water. While this diet no doubt contributed much at Bannockburn, for the average crew from South of the Border the race will offer ample hardships without any additions new. It is hoped this rugged crew were able to carry through their diet to its logical conclusion and celebrate their win on a freshly trapped giant haggis.

All food should be packed in waterproof bags or containers of some kind in its individual meal lots. Polythene bags or Tupperware air type plastic containers are ideal for the job. Those who overlooked the precaution of waterproof packaging for their food can look forward to the doubtful pleasure of mud flavoured meals. The packed food lots should be attached to the underside of the canoe deck with looped elastic bands. In the case of the emergency ration glucose or sugar is the best for the purpose rather than other alternatives listed in the rules as these are liable to cause sickness if taken in sorted circumstances under which the ration is likely to be used. The tendency is for crews to take too much food with them rather than too little. It is of course heart breaking to have a dump good grub although some managed to overcome their natural instinct to consider food more easily than others there is seldom complete agreement between the members of the crew as to the amount and the point where surplus food should be dumped. In fact it has been known for a crew to be pressing on down the river trailing awake of food. Food that one of the crew was looking forward to eating at the next opportunity.

Water There are only a few points along the course where drinking water can be obtained so it is an advantage to carry chlorine water sterilising tablets to make the river water for water drinkable. Even when using sterilising tablets it is not advisable to drink the canal water before reaching the running water of the Kennet before Newbury. Those with sufficient time may prefer to boil the water. In the event of the rare hot Easter when crews will drink a lot of water it may be necessary to take small amounts of small salt with water. Salt tablets are sold separate specially for this purpose and are obtainable from most chemists. It is said to be a simple matter to gauge the correct amount of salt to take but only if you are fully qualified physician, statistician or mathematician all rolled into one. The easiest made mistake is to take too much salt particularly as salt water taste like sweet rich gravy after 100 miles of paddling.

Clothing

The outer clothing competitors wear should not be of the rubberised 100% waterproof type which has the disadvantage of causing perspiration to condense on the inside of the garment and destroy its expected advantage. Clothing that can breath is the best compromise, a compromise because contrary to the manufacturers claims it is never fully waterproof. The canoeist must therefore resign himself to getting wet which need not bother him provided he keeps warm. The proved gabardine on island anorak trousers seem to be popular types of outer clothing. Silicon proofing agents probably help. Trousers are used by some. An additional covering over the shoulders helps to keep out the wet and the warmth in. Extra clothing for the night can be drawn from the stock of compulsory spare gear. Whatever footwear competitors use they are bound to get wet feet so here again the aim is to keep the feet warm at night despite the wet. Heavy shoes or boots should be worn rather than light canvas shoes something that will grip the slippery bank. Effective ways of keeping the seat warm are to wear 2 pairs of trousers or where sea boot socks covered with polythene bag. Spray covers help to keep the feet warm to a fair extent. Those who are not accustomed to manual work will be wise to wear dubbin and soft leather gloves which In addition to protecting the hands from blisters will keep them warm at night. A very necessary item of equipment often overlooked is a pair of sunglasses. It can be murder to have to look for hours on end into the sun plus it reflected glare from the surface of the water. Some waterproof form of headgear is a useful item

Equipment

Here again weight is the major consideration with the equipment but newcomers are warned against allowing themselves to use equipment that is equipment in name only. From the results of the race in 1961 when the B class of the senior race was introduced, allowing crews to travel without equipment it was calculated that 1 pound weight of equipment added 2 minutes to journey time. At first glance this does not seem to amount to much but when it is considered many crews travel at

least 30 pounds overweight it can be seen that they are imposing an entirely unnecessary one hours handicap on themselves. All equipment should be first packed in waterproof bags. 0.005 inches thick polythene bags are the answer, the usual politic bags are 0 .002 inches thick and are too easily punched. The bundles should be distributed in the canoe to make the weight at each carrying handle the same and tired security to the bottom of the boat.

Tent Plastic Tents although cheap light and waterproof have the unfortunate disadvantage of condensation forming on the inside particularly in the sort of weather normally encountered at Easter. Ground Sheet 0.005 inches thick polythene is the ideal material for the Ground sheet.

Water Container the type of water bottle used by cyclists made from either plastic or aluminium is ideal and should be used with its fixing cage attached to the underside of the deck
Torches Torches will be necessary at the portages during the night after the moon has set. To allow the canoeist both hands free for handling the boat. In addition to the paddle clips the torches should be rigged up like a miner's lamp attached to the forehead. Both members of the crew should carry a lamp and it is wise to carry a third spare lamp in case of breakage. Torches should be used as little as possible so as to allow the eyes to become accustomed to the dark for normal travelling at night

Repair Kit The repair kit should not only contain Bostic and patching material, needle, thread et cetera but tools for repairing the rudder and rudder cables such as pliers screwdriver wire drill et cetera.
Matches Matches should be packed in small lots of about 5 in sealed polythene packets together with some striking strip
Map of the course. Some form of map of the course this showing the distances and reminders of Portage routes at the Thames locks is an advantage on the journey the schedule time a crews expects to reach the main landmarks along the course should be shown against the corresponding points on the map to help them keep track of their progress. The map can be read easily if it is stuck on, in strips to the deck of the canoe either side of the cockpits or rigged up in a small waterproof box with a transparent top and the map passed from one role to another in much the same way as the film in a camera.
Watch A reliable watch is a necessity; the average waterproof watch is not so this should be removed from the wrist and sealed in a transparent waterproof container and lid and attached to the boat .

One's partner

Choice of partner in a race of this nature is not is no easy job and is bound to be a bit of a gamble for it is obviously impossible to pre judge a persons ability to complete the course. If anything a little surplus weight in a competitor appears to be an advantage but the main thing is for both members of a crew to be about the same weight and size so the same length of paddling stroke suits each equally well. A person who has shown some ability on other long distance activities can usually adapt himself to this type of canoeing. A crew must temper their killer instinct with a good helping of patience if they are not to burn themselves out in the early stages of the race

The Competitors Mental Approach to the Race

Probably a fair proportion of the normal finishes in this race, although fully competent physically, allow themselves to become victims of stage fright when they unexpectedly realise the full magnitude of the ordeal they have set themselves. To prevent a crew retiring from this cause they must be prepared for a series of setbacks and more importantly they must be pre indoctrinated with

the intention of carrying, on bashing; on after the set back. Crews should understand before setting out from Devizes that if they do not meet with any dramatic mishaps long before covering half the course they will have acquired more than ample justification for retiring. To forewarn and forearm the perspective crews this write up and in particular the following few paragraphs will deliberately stress the possible setbacks and discomfort screw must weather in order to reach Westminster.

in 1950 a crew had reached County lock Reading and were sufficiently ill advised to attempt the shooting of the Weir which resulted in a hole over 4 foot long by one foot wide being torn in the bottom of their canoe. It had run onto a steel steak protruding above the wear and to just below the surface of the water in addition to ripping the hole opened a steak took with it 3 of the canoe frames and even more for the Forward paddler it ripped down the full length of his trouser leg. Naturally the canoe sank immediately settling halfway over the weir where the water previously flowing out of the weir was now flooding a torrent in through the hole and down to the bow with the build up of pressure burst open the decking to distribute most of the crews equipment down the river.

It was the crews second attempt the journey the first having ended when a much less dramatic incident had occurred. Being particularly conditioned to such a set back the crew began the seemingly impossible repair more from instinct than belief in its feasibility. Anyway 4 hours and 2 pounds of Bostic later the crew were on the water again in what was now a unique craft; the first flexible rigid sieve to take part in the race. The missing ribs and loose skin of the repaired canoe caused it to lose its Rigidity and behave like a lie low on the sea and take up the way formation of the surrounding water rather than cut through the waves. Despite the sorry state of the leaking craft the crew battled on through the night into torrential rain to complete the course and came in 3rd place approximately 5 hours behind the winner. The following year a new rule was added banning the shooting of weirs. The canoe was subsequently rebuilt and used by another crew the following year. Destined to sink on all 3 of its attempts but on the last occasion not until just after the crossing the finishing line; the old pair of socks plugging a hole in the Hull had worked loose!

Four years after sinking on the line the same crew, by now old hands at the race capsized their narrow kayak only a few yards from the first instant mentioned at County lock. They found themselves out of their depth and due to the heavy clothing and general fatigue unable to swim they were only able to regain the bank by walking across the bed of the river underwater. One of the crew, incidentally a submariner by profession, made it abundantly clear using colourful navel terms that he was only interested in the conventional methods of underwater travel and had no desire to walk it again. It was not until 6 hours later when they had salvaged their boat and equipment, dried themselves out and we're arranging for transport home that they realised the possibility of continuing in the race.

So they re launched their canoe, and completed the double coincidence by, also coming in third. It is worthwhile noting that when this crew took part in the race again they wore life jackets. Although it is unlikely the crew suffering 4 or 6 hour delays could hope to gain a place nowadays the winners in 1960 had survived a capsized.

The Kennett and Avon canal although a magnificent achievement of civil engineering in its day has been allowed to deteriorate into little more than oversize dilapidated weed choked ditch so crews can expect but little dynamic inspiration from its appearance. Assuming a crews set out from devices on the Good Friday morning they can be sure even in perfect weather that the time darkness falls they will be cold wet tired hungry and with hands probably sporting a number of broken blisters. They will realise that were it not for the race they could be in the shoes of the happy drunk they see staggering home over the canal bridge, singing at the top of his voice or they could be in the dance floor from where they hear the music drifting.

Competitors will appreciate for the first time the feeling of envy the tramp must feel when he sees the flicker of a warm fire from the front rooms of nearby house. There is no doubt about it there will be a strong tendency for the competitors to be fed up to the back teeth. They must not be surprised to find themselves heartily cursing the day they first lifted a paddle with their opposite number, their canoe, everything in sight and anything else that they can bring to mind. Nevertheless they must still keep bashing on

The race

With the long awaited start so imminent, on the eve of the race it is wise to have a good few sleeping tablets handy to make certain of a good night's sleep.

Timing of the start

A reasonably good estimate of the crews best time to start is of great importance to their chances of putting up their best possible time. This choice must always remain a bit of a gamble. Once the tide has started to ebb at Teddington a crew have about 4 and a half hours to reach Westminster before the current turns against them. An average crew with the assistance of the current can usually cover the tidal stretch in under 3 hours so in order to gain the maximum advantage from the current they should reach Teddington about 3/4 of an hour after high tide. Most crews prefer to aim at the actual high tide Teddington to leave themselves a one and a half hours safety margin.

If a crew find themselves confronted with the incoming tide it need not mean the end as it is possible to make progress against the tide by keeping close to the banks. There are back eddies which usually swirl. At low tide shingle beaches are exposed either side of the river from which the canoe can be lined. A crew should pick the tide that will give them the greatest number of daylight hours on the canal for the daylight is important to the fast Portaging of the 57 canal locks. Light also comes in handy for seeing the low canal bridges spanning the waterway at about the canoeist neck level and saves them from the discomfort of being sheared off at the shoulders from time to time.

Crews can decide on the target times for the journey after they had seen how their performance in training is going. Judging from the winning times over the years in relation to the prevailing racing conditions is appears that the main factors influencing journey times are the wind and temperature. A cold easterly wind can cause an increase of up to 5 hours to the winning time and 80% rate of retirement. A crew should therefore work out a series of time schedules for the race and leave the final choice until the weather forecast is known. The time the crew proposed taking on the tidal stretch should be deducted from their target time and will arrive at their starting time from devices. The result should be deducted from the time of the high tide Teddington. Note high tide Teddington is one hour 2 minutes after London Bridge. Timetables are usually given in Greenwich mean time so it may be necessary to allow a further hour for summertime.

Portaging locks

The main point to learn about the art of lock portaging is to lift the bow and stern of the canoe out of the water simultaneously and similarly launch the boat side on as this method saves a good deal of time. There are a few difficulties in portaging in the canal locks provided it is remembered to portage the locks on the towpath side of the canal. The locks along the Thames present their individual difficulty and each will require reconnoitering during training runs to discover their best portage route. Some locks are most easily traversed by portage in the lock itself while others it is faster to either cross the lock island, use the rollers or portage to wear. The rules now lay down clearly all Portage routes at locks.

The Richmond half lock about 2 miles below Teddington is in effect a removable weir which is completely drawn from appearing 2 hours either side of high tide. Anyone reaching the lock outside this time bracket will have to negotiate the rollers to the left of the wear. The boat rollers at the Thames locks present a special hazard in the layer of green slime covering the concrete below the water. The behaviour of the weed can only be explained by the theory that it's slipping is controlled by some fiendish intelligence from outer space the deadliness of the weed is enhanced by its ability to allow its prey to take several firm steps before it displays its frictionless properties. The controlling intelligence is then able to defy a second law of nature by projecting its victims vertically down with about twice the acceleration normally attributed to gravity. It would probably pay a scientist well to discover the secret of this uncannily really efficient system of lubrication.

Unfortunately the observations of even the most learned of those with first hand experience of the weed have so far been unprintable. After carrying their canoe round a lock a crew are warned against throwing it into the water with too much gay abandon as there are often old revetment stakes takes just below the surface of the water that had been discovered too late by many crews. Crews should keep well clear of all weirs. Even the small harmless looking ones on the canal are capable of rendering a canoe immovable when caught broadside onto the Weir.

Flood conditions

When the river is in flood an unusual hydraulic phenomena occurs across the entrance to the Romney lock cut. At the point where the fast flowing river meets the stationary water of the lock cut a standing wave is formed about 150 mm high. In fact the level of the stationary water stands permanently at the height above the flowing water. Crews have no choice but to charge the step in water level square on and at high speed and hope for the best. Apart from the standing wave crews should avoid charging any other waves they see in the flooded river as these are usually caused by the faster water passing over more objects such as buoys, sunken craft and the like.

Rough water

On reaching the tidal stretch of the course crews can be unlucky enough to meet strong cross winds that whip up unpleasantly large wave for a canoe making it necessary to head the boat into the weather and proceed down the course broadside on, carried forward by the current alone

Leaks on the title stretch

All leaks collected on route should be repaired if possible when reaching Teddington as beyond this point there is a mark shortage of points where a canoe can be beached and drained.

Stimulants

It is wise to avoid taking Benzedrine and the like unless competitors really know what they are doing. Such drugs usually cause hallucinations which can be a greater handicap than the fatigue the tablets relieve.

Fatigue

The effects of fatigue are such that the competitor tends to lose all interest in the race and initially to become fed up and apathetic. To combat this tendency it must be the declared object of each competitor to be the driver of his partner. It is as important for both members of the crew to contribute all they can to the initiative required for the venture as it is for them to provide physical effort. A crew made up of the principle of one being captain and the other his crew would be at a disadvantage as it would be impossible for one person to provide sufficient drive for both throughout the whole journey. It will be of help to the perspective competitor to know that the

fatigue he feels will not increase in direct proportion to the distance travelled. For example on reaching the first lock 14 and a half miles from devices he will feel about 30% spent; that is after covering only 9% of the course. After covering a quarter of the course at about Newbury he will feel about 50% spent. This disproportionate feeling could cause the premature retirement with an over logical crew in the mistaken belief that if they are 50% after 35 miles. It will only be another 35 miles before they finally ground to an undignified halt and disappear in a cloud of dust. Fortunately fatigue do not seem to increase in a logical fashion because after reaching the state with about 50% wacked a crew will find they acquire an immunity to further discomfort. It as if the body is mechanism for indicating fatigue on reaching a certain level just packs up in sheer disgust. Fatigue although most unpleasant to the competitor is not without its light aside from the spectators point of view. During the race a tired crew pulled up into the starboard bank to portage the lock whereupon the tired man in the rear cock kit demonstrated his rugged individualism my alighting from the canoe on the port side

Thoughts of competitors while racing

The average competitor will be on the water for over 24 hours with little more than his thoughts to break the monotony. Most competitors devise their own formula for occupying their minds during the race. Probably the method most difficult to understand was the competitor who said he occupied his mind by thinking of women throughout the race. Obviously this practice cannot be recommended to others as it would without doubt require to much mental effort to keep up for long but in this particular case the competitor said he experienced no special strain as he never thought of anything else. One competitor occupied his mind by composing new versus of popular songs. Unfortunately his musical and poetic ability matched the low quality of his vocabulary and the result can be seen today where in certain areas within earshot of the river patches of grass still remain withered and refuse to grow. The interest of other competitors during the race often appeared to be equally cramped. There was the crew who gained light relief from boredom by barking at the dogs they passed on the riverbank. Apparently their idea was to crack the code of the canine language and so converse fully with their animal friends.

A fantastic coincidence occurred to a crew competing in 1951. They were using cycle wheels for Portaging and when approaching Newbury as the dawn was breaking lost one of their wheels overboard. It disappeared below the surface and despite a thorough search could not be found so the crew decided to press on without them. They continued down the canal for over a mile before taking 2 locks the hard way. Just beyond the second lock the crew were called into the bank at a checkpoint when in the half light they saw their lost wheel floating just below the surface of the water. This seemingly impossible piece of luck could have happened only by the lost wheel being carried over a weir and down the river while the crew had taken the canal route. Considering the long winding route the wheel must have taken, the chances of the crews ever finding it again must have been slimmer than winning half 1,000,000 pounds on the pools

Competitors remarks

The remarks made by competitors after completing the course or retiring from the race have been at least graphic if lacking in literary dignity. One competitor having reached Westminster in record time was asked by a newspaper reporter how he had enjoyed the journey. It would appear that canoeist had not been accustomed to spending his Easter in a more leisurely fashion for his unusually brief reply when translated conveyed the canoeists desire that the reporter should go away.
1952 Trooper Davis. I will not be in this race again until next year if I have my wits about me. 1952 Trooper Jack Stern. I am old enough to know better than to go into this sort of thing. Sergeant J

Richardson after his first attempt “never again”. After his fourth attempt if I had the choice of entering for the race of the Grand National as a horse I would choose the Grand National. It Is interesting to note in the light of the sergeants first remark that he had earned himself a special award after competing in the race for the 6th time for his consistent support of the race. 1958 A Stackpool expressed his desire to retire from the race by the following sentence. I am not dot dot dot Saint Bernard horse I am Jagging this dot dot dot in. A confusing habit of this crew was to not only refer to each other as horse but everyone else they met even their boat was named horse.
The hazards of the race are not all over when Westminster is reached. One civilian competitor used his old army battle dress to change into after finishing the race. While crossing Westminster bridge had the misfortune to can encounter a brace of military policeman with a shrewd eye for a fugitive from justice. Unable to produce any means of identification suspicion mounted with the police learned the suspect had not slept the previous night anywhere. Fortunately when they heard they're weary looking detainee had not spent the night before that anywhere either, they were sufficiently confused to release the shifty eyed paddler.
Incidentally it has been found from personal practical experience to be a mistake to partake of any strong alcohol after completing the course.

<u>Recovering from the after effects of the race</u>
Recovering after the race does not follow any of the expected rules for the slow one does the journey the longer it takes to recover. For example those who take about 40 hours over the trip might take as long as 6 weeks to recover fully. But after taking about 28 hours on the journey the average crew can expect to be as right as rain after a couple of weeks. One unfortunate competitor suffered from nightmares after the race. This in itself was not too bad but in his dream he was pushing the boat out from the Bank of the river after a Portage. Causing him to lose a good deal of favour with his wife. For she unfortunately formed the riverbank in his dream and each time he had a nightmare he pushed the canoe out the boat remains stationary and his wife found herself on the floor

Since the race was first paddled a good deal has been written about it. The following is a selection of extracts taken from various articles.
This marathon race, this canoeists assault course all this and paddles too
Paddle your own canoe and carry it too
Every mother's son who finishes the course deserves a medal
You have to be tough to canoe from Devizes to Westminster
They battled for more than 24 hours against wind, rain, sleet and snow
We started off in the blizzard, the conditions were shocking
I hope my hands will be alright soon but they still haven't any feeling.
My hat is metamorphically raised in deep admiration to all those who in a biting east wind with the promise of snow, launch their kayaks at Devizes during Easter (Dexter Watts)
The hot seat in a damp canoe
The world's toughest canoe race
This is a team affair
The most spectacular aquatic marathon in the British sporting calendar
DW is a fantastic conception demanding so much human effort, that finish at all is an achievement of the highest order.
A strongman can be reduced to a trudging zombie before he has covered half the course
This race has everything there is no need to tell this to the Marines

A fair proportion of entrants for the race use quite ordinary inexpensive and sometimes heavy equipment which leaves much to be desired. They rightly enter for the race to take up the sporting challenge of the toughest canoeing course there is with the main aim in mind of reaching

Westminster. To succeed this far at the first attempt will be no mean achievement and a crew would be well advised not to try a fancy time on this occasion

The refinements of a fast canoe, light equipment et cetera will probably make little difference to a crews time until the second or third attempt when they will be in a position to more fully appreciate the task before them .
The racing experience so necessary for returning a fast time can be gained equally well with inexpensive equipment. By the time the crew had gained the required experience they will also have time to collect together some sufficiently refined equipped to do justice to their improved ability. While offering every encouragement to prospective crews to enter the race regardless of the quality equipment it must not be taken that the crew is in anyway encouraged to use equipment that is in anyway short of the sort of equipment they would normally go camping with at Easter.

Having prepared the prospective competitors for the worst he should not allow it to put him off filling in his entry form. For although he can expect to be dismayed by the innumerable set backs he will meet with along the course he will be surprised, but this time pleasantly, by his unexpected ability to overcome these difficulties.

It is of course the necessity of overcoming the many hazards in order to be included amongst the fraction of the starters who finally win through to Westminster that makes the reaching of that goal such a worthwhile achievement.