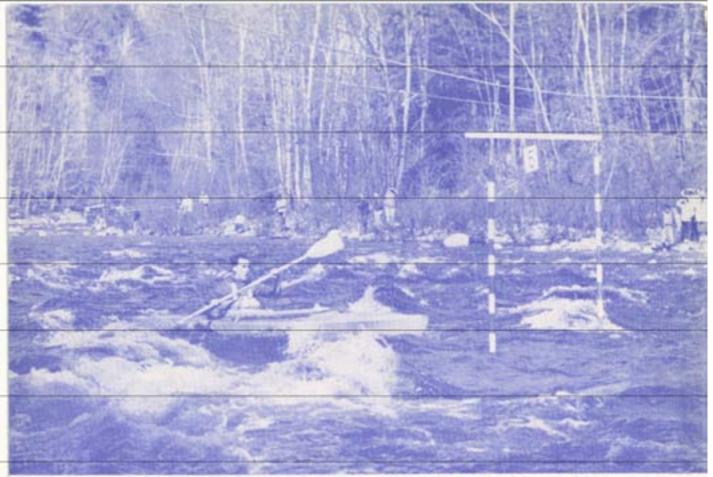
# American WHIE WATER

JOURNAL OF AMERICAN WHITE WATER AFFILIATION



"OF WILDERNESS WATERWAYS AND THE WAYS OF WHITE WATER"



Hart-Sioux in action, Eastern-National Championships, West River, Vt., April 1958

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### American WHITE WATER

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### The American White Water Affiliation

We are many individuals who wish to promote river touring, and to keep informed about wilderness waterways and the ways of white water.

We are an affiliation of outdoor groups, outing associations, canoe clubs, ski clubs, hiking groups, all interested in river touring for our members. Our groups range from the Appalachian Mountain Club in Boston, to the Washington Foldboat Club in Seattle. These groups have pioneered in developing river know-how. They are the local sources from which flow the currents tributary to our growing sport. Through group representatives, the knowledge of all is made available to all.

We are a non-profit organization. Our organizational simplicity permits all dues to go directly to the building of our magazine and services.

#### OUR PURPOSE

To encourage exploration and enjoyment of wilderness waterways; to foster research, development, and teaching of improved techniques and equipment designs for safely negotiating white water; to protect the wilderness character of our waterways for the growing number who are discovering the rewards awaiting the river tourist.

#### OUR PUBLICATION

All members receive our quarterly magazine "American WHITE WATER," which is a voice for all American boatmen. You are urged to contribute articles, pictures, cartoons, information and ideas (to increase the fun of our sport and ideas for improving our services to you).

#### **MEMBERSHIP**

Membership is on an annual basis with the new year starting in March.

Tell your friends who might enjoy canoeing or cayoneering about the AWA. Their \$2.50 will help foster enjoyment of wilderness water and bring each into the boating fraternity through the pages of American WHITE WATER magazine.



Salida, Colorado, U. S. A. March 25, 1959

AMERICAN WHITE WATER 7703 S. Green St. Chicago 20, Illinois

Dear Mr. Vanderveen:

The first National White Water Championships will be held on the Arkansas River, June 14, with the International Slalom and Western American Slalom preceding the downriver race on June 12 & 13.

This will be the 11th Annual Arkansas River Races.

We are offering this year \$100 traveling expenses to teams of three members, and of course board and room for one week, from June 8-14. We will also offer travel expenses and board and room over the same period to individuals. Limited funds make it necessary to hold to a total of 30 out-of-state competitors, whether as individuals or as club teams. First come, first served.

For further details, those who wish to avail themselves of the offer may write Howard Blakey, FibArk, Salida, Colorado.

The Arkansas Races, as you know, are world famous. Seven foreign nations were represented here last year, France, Switzerland, Belgium, Austria, Italy, Germany and Israel.

We are also planning novelty races, cruising events, and will have a school, free of course, in white water technique, the latter to be taught by Erich Seidel, former German slalom champion, and Walter Kirschbaum, former World slalom champion.

Sincerely yours, Steve Frazee Commodore, FibArk American White Water 7703 So. Green Street Chicago 20, Illinois Dear Van:

It suddenly came to my attention that I had neglected to forward to you the information about the 1959 National White Water Slalom Championships to be held in Glenwood Springs, Colorado on the 3rd, 4th and 5th of July.

The Slalom, sanctioned by is sponsored by Colorado white-water Assn. The races will be held where the Roaring Fork River joins the Colorado River in Glenwood Springs, Colo. The race course will consist of approximately 18 gates over a little more than ½ mile long, using the very tricky currents where both rivers meet. Walter Kirschbaum, ex-World's Champion, is setting the course, which promises to be one of the best ever put on in this country, On Friday, July 3, at 9:00 AM there will be a meeting of contestants in the Colorado Hotel in Glenwood. The first run of the Slalom will start at 1:30 PM. The second run of the Slalom will be on Saturday afternoon, 1:30 PM with a team race following the single events. Trophies will be presented at a banquet or dance on Saturday. Then on Sunday, 1:30 PM, there will be a downriver race of 15 miles length through Glenwood Canyon, through the town of Glenwood Springs and ending at Canyon Creek. This course will take the competitors over 23 medium to major rapids and should provide excitement for all concerned. The Colorado is rated at III to V at this time of year and the water temperature is expected to be around 55° to 60°.

Also in the planning stage are such things as a Camp-City for contestants and their parties, which will include drinking water and rest room facilities. This will be available at no charge. There is being planned a banquet or bar-b-que, a dance, a parade on Saturday morning (I think), movies and get-acquainted meeting on Friday night, in-between time cruises on both the Roaring Fork and Colorado Rivers and lots to do for everyone 'attending.

Further information and entry blanks

are available by writing C. A. Schell, 2500 14th Avenue Court, Greeley, Colo.
Allen Schell

Race Chairman, CWWA.

PS - enclosed is a check for my membership this year. I have neglected it too. Thanks!

507 Irene Street Joliet, Illinois March 10, 1959

Red Fancher c/o American WHITE WATER 7703 S. Green Street Chicago 20, Illinois

Just received my winter copy of AWW, and after reading Allan Boz' letter, decided to send you one, too.

You forgot to mention Lockport (Ill.) among the towns from where the contestants came for Jim Carnahan's Scout Regatta. In view of the fact that the Mariner Girl Scouts, troop 86, of Lockport have won the girls' trophy for four years now, we are very proud of them.

Also, wondered if you knew that Mary Fran Kennedy. Will County Red Cross Safety Services Director, has been having a regatta for years for high school Girl and Boy Scouts? Harold "Deacon" Kiehm was one of the invited judges last summer, and Howard Kern and myself are among the officials from way back.

No matter, Red, it was nice reading your report and from my own experience it is pretty easy to overlook a name or place now and then. I sure enjoy AWW, it is a swell magazine.

> Sincerely yours, William J. McCarley

> > Luxembourg December 15, 1958

American White Water Dear Sir:

In your summer issue 1958 we read with much interest the article by Peter D. Whitney, "Ideas for river maps." We must rectify some errors concerning what is called "international code." The old code indicated by you as international is a French code no longer in use. The new one edited by the International Canoe Federation in collabora-

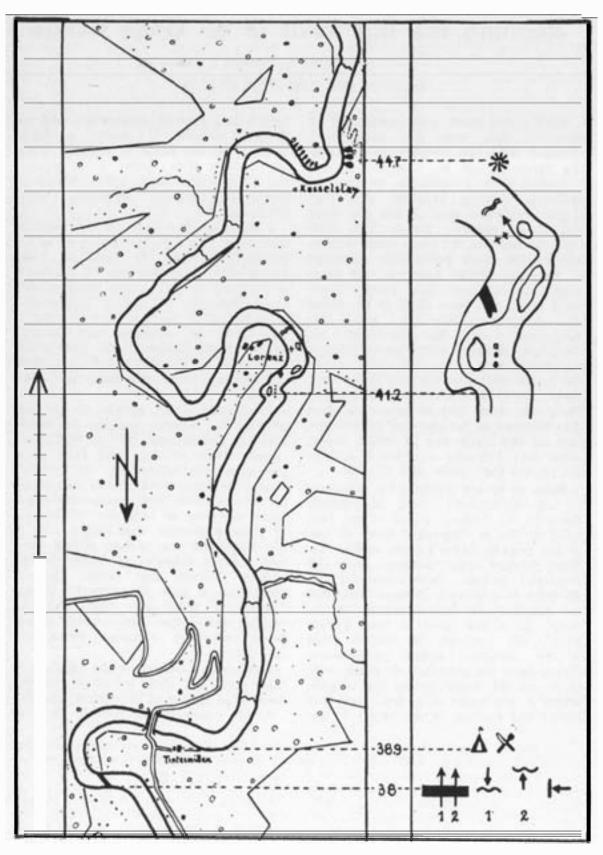
tion with the Alliance Internationale de Tourisme is very good and till now used in a dozen maps edited by the Touring Club of Switzerland, two maps by the Touring Club de France, and one by the Kayak Club Luxembourgeois.

To give you an idea of these maps I join the "Our River" map edited by my club. We believe that maps for American conditions— as well as for any conditions— must not be cursory. Otherwise they are no use for white water paddlers. Better concentrate on rivers of real interest, not too far away from the club acting as editor, pure unspoiled water, beautiful scenery without any factories on the riverside and no acrobatic portages.

Very kindest regards, Emile Hoffmann Kayak Club Luxembougeois 34, Avenue Victor Hugo Luxembourg

The "map" consisted of a thick booklet including an overall map of the river, a comprehensive list of symbols (below), a complete set of large-scale detail maps like the one on the opposite page, a profile chart, and a trilingual description of the river. Maps like this are a really ambitious and worth-while undertaking.

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Portion of map by Kayak Club Luxembourgeois

### Running the Big Sault in an Open Canoe

BY HOMER L. DODGE

Reprinted from Appalachia, June, 1957

Shall I run them now (perhaps), or never?" This was the decision wrestled with last October when, from the banks of the St. Lawrence River, I looked over a two-mile expanse of seething, surging breakers and haystacks and knew that at last the issue had to be squarely faced. The challenge of running the Long Sault Rapids, one of the most formidable stretches of water in North America, had fascinated me for over fifty years. Gradually there had been built in my mind the feeling that some day I would run these rapids. Now the long-delayed St. Lawrence Seaway and Power Project was under way. In a few short weeks the rapids would be dry and their place taken, later, by a man-made lake above the power dam. The decision was upon me. Because of background, experience, love of the river and of white water, there was but one answer: I had to try to run the rapids, and at once.

Some of us are particularly fortunate in our birthplaces. Born at Ogdensburg, N. Y., I spent much of my boyhood on the St. Lawrence River in one of the famous Aimè Guerin skiffs. Upriver, toward Lake Ontario, were the Thousand Islands. Down-river, for the 45 miles to Cornwall, Ontario, extended the International Rapids section of the river. It is the drop in this section which will produce the 85-foot head at the Barnhart Island powerhouse. These were the stretches of river, with their islands, swift points and rapids, which I explored as a boy, with my father and mother, in our skiff. It was

before the days of motorboats and we thought nothing of rowing a dozen miles from our home or summer camp for a day's trip. Later on, I ranged the river alone from Lake Ontario to Montreal, camping wherever night found me.

I was also fortunate in my parents' birthplace. As a child visiting at either grandpa's, I went to sleep on quiet nights with the muted roar of the Sault murmuring in my ears, unmistakable and persistent, but made gentle and soothing by its journey over two and a half miles of woodland and meadow near Massena Centre, N. Y., near which ships from all the world will pass when the Seaway canal and locks are completed.

Frequently, local people do not appreciate a natural wonder to which they are accustomed. Not so with these rapids. Most of the local farm boys got some experience on the river—enough to understand it and appreciate it, and to know how easily one could make the error of judgment or the slip in accomplishment that might cost a life. The fact that a few skilled oarsmen made a business of taking fishing parties through the South Channel made this a part of everyday living. Familiarity with the river and the rapids meant that they were understood, respected, admired, loved—and also feared.

This understanding of the rapids and their ways was what set apart the Big Sault—the rapids of the North Channel—in the minds of the natives. A boat-

Homer L. Dodge, a member of the Appalachian Mountain Club, is President Emeritus of Norwich University. After taking his doctor's degree in physics at the University of Iowa, he was for many years head of the Department of Physics and Dean of the Graduate School at the University of Oklahoma; during the war he was Director of the Office of Scientific Personnel of the National Research Council in Washington. A love of running rapids dates from his early years and has led him into many adventures on streoms both large and small in the East and in the West. Between the two stages of the remarkable expioit here he passed his sixty-ninth birthduy.



BREAKERS BELOW LEDGE AT HEAD OF RAPIDS

The freighter prefers the canal



Nick Podgurski, Massena Observer
OFF THE HEAD OF SHEEK ISLAND
Upper part of rapids in distance



"FIELD-RUNNING" ABOVE BARNHART ISLAND Nick Podgurski, Masseno Observer



ROUNDING THE HEAD OF SHEEK ISLAND

man could play with the idea of how he might *like* to run them, but no one in his right mind would ever attempt it. The Big Sault was to be looked at from the shore, or from a passenger steamer.

One of my earliest memories is of a Sunday School picnic on the high bluff of Long Sault Island overlooking the Big Sault. The roughest part of the rapids extended down-river for over two miles; there was plenty of dangerous swift water for miles above and below. I was so young when I first saw the rapids that I knew only vaguely what was meant when told, "Across there it's another country; that's Canada." But my eyes drank in the beauty of the wildly tossing waves and my ears were impressed with the stories of how the canal along the Canadian shore had been dug with wagons and wheelbarrows-in marked contrast to the great machines used today in constructing the Seaway.

If we waited until noon, we could see one of the passenger boats shoot the rapids. I can still see the bow of the steamer drop several feet as it dived into the "Devil's Cellar" caused by the water pouring over the long, wide ledge with a deep drop below which extended from the island to the Canadian shore, 500 yards away.

My first appreciation of the swiftness and surging power of rapids and of the fascination of the changing shape of waves developed here as I ventured out on the narrow fishermen's stagings which projected, one plank wide, out over the water. These the fishermen straddled, with legs locked underneath, as they gaffed sturgeon making their way up-current along the shore.

I began running the St. Lawrence rapids in my 'teens, methodically prac-

ticing in the Galop Rapids, eight miles below my home in Ogdensburg. Then I began making the one-day boat trip from Ogdensburg to Massena to visit relatives. The return trip was accomplished with the help of steamers or barge-tows coming up-river in the canals. It was on one of these trips, made in 1906 with my father, that I decided to run the South Channel of the Sault. At that time there was no weir obstructing the channel and the waves were so large that my father, watching from the shore, reported that the 18-foot skiff and I were twice completely out of sight. I can recall vividly the concern I felt when I realize I did not have complete control of the boat and that my fate was out of my hands.

This experience inspired me to per. feet further the art of handling a boat in heavy water. For this, the South Galop Rapids were ideal. An experienced person could run these rapids in the very worst part; hence he could concentrate on developing his technique and a greater understanding of the ways of rapids. It was a case of run, line the boat back up along the shore, and run again—over and over again. I can't now be sure whether my best day's record was thirteen times at seventeen minutes or seventeen times at thirteen minutes each. But I know that the hours of practice have paid off through the years by helping me know just what can and can't be done on rivers like the Colorado, the Green and the San Juan.

About 1918 I changed from our St. Lawrence River skiff to a 17-foot White featherweight canoe which was far less well adapted to the heavy water of the St. Lawrence rapids. There was now a weir across the South Channel

1. The North Channel was run by passenger steamers until a few years ago. For many years the only "navigation" of the South Channel was by the timber rafts which ran the rapids until 1911 and the steamer Algona which operated until 1916. Thereafter it could be claimed that the channel was no longer used for navigation, thus opening the way for the construction of a weir to increase the flow in the Massena power canal. St. Lawrence River skiffs were used in the South Channel. At least two kayaks and one skiff (oarsman drunk) have run the North Channel. In recent years a newly-designed "sturgeon boat", using both outboard and oars. has been successfully used on the south side of the North Channel.

of the Sault, to force more water into the Massena power canal. As a result of the reduced flow in the river, several small rapids, which could be run in a canoe, replaced the one stretch of heavy rapids formerly at the lower end. Each trip through this part of the river provided me with the opportunity to cross Long Sault Island and walk the shores of the Big Sault, pondering how one might run it in a skiff or a canoe and always discovering good reasons why it would be foolhardy to attempt it. When the automobile made the Canadian shore easily accessible, I was able to study that side of the rapids as well, finding them from this vantage point to be equally forbidding.

Then a friend sent me a clipping telling how the Big Sault had been run in July, 1933, by a man in a kayak. I found a woman who, from Sheek Island, had seen this man come through some of the roughest water, pull into the deadwater below the head of the island to rest a few minutes, and then disappear down the river (reminding one that white-water devotees have a way of appearing suddenly from nowhere, astonishing the natives for a few minutes by their crazy antics, and then passing on to oblivion). The spell was broken; no longer was the North Channel a completely forbidden place. Perhaps it could be run in an open canoe!

As a result, I was not disturbed to learn from Julia Grinnell, in the spring of 1952, that Walter Burmeister wanted to run the St. Lawrence rapids in a kayak and would welcome any help I could give. By this time I had run in a canoe the Coteau, Split Rock, Cascade and Lachine Rapids, making all the rapids to tidewater except the Cedars, which had been dammed before I could get to them. So I offered to serve as guide, helping him put in and take out at the most convenient places and suggesting the best ways to run the various rapids from Ogdensburg to Montreal, all of which I had also run, in 1910, on a timber raft.

On the way to meet the Burmeisters and Grinnells, with my son, Norton, I examined every foot of the Canadian side of the North Channel of the Sault. Conditions were ideal, for the water was at its highest stage for fifty years, making more room than usual between the shore and the huge, breaking waves which filled most of the river. My Burmeister was that it report to seemed feasible if he kept far enough out to maneuver among the disagreeable shore waves but not so Ear as to be drawn into the enormous waves a little Farther out. As a matter of fact, he ran very close to shore, preferring to take his chances there. A kayak, being completely covered, can take the nasty waves near the shore better than m open canoe, which is likely to ship too much water. A canoe should run between the shore waves and the place where the waves become too large and turbulent for safety. The higher the stage of water the more room to maneuver.

With the water at this stage, I thought the rapids could be run in an open canoe, and I would have attempted it had I received any encouragement from my son. He was certain that it was too risky, and refused to cooperate. This settled the matter, for one must have assistance in getting boat and car together after the run and arrangements should be made for a boat waiting below, in case of mishap.

My interests shifted, and during the past four summers my attention has centered in the West, where I have run rapids and canoed over 800 miles on the Colorado, Green and San Juan Rivers. Returning last fall from a canoe trip through Lodore and Whirlpool Canyons of the Green, I drove along the St. Lawrence and saw the great progress that was being made with the Seaway and Power Development. Photographs of some of the most important phases of the work had to be taken soon or missed. Consequently, in Octoher, I was again immersed in the atmosphere of the St. Lawrence, where I studied and photographed the construction projects for several days. The canoe was on the car and I took more seriously than was intended the repeated question of the engineers, "Aren't

you going to run the rapids before we close them off in December? It will be your last chance."

And so it was. No longer could I put off the running until the water was at a better stage, or the weather better, or I felt more like doing it—or, perhaps, just because I was too timid. Arrangements for someone to be ready in a boat below in case of trouble would be a problem at any time, but especially in October. This was solved by the generous offer of one of the engineers to get his outboard boat out of storage and on the river, if the rumors were true that I would try to run the Big Sault. "No altruism," he assured me, "only a desire to be there when it happens and to have a frontrow seat."

The decision was, I suppose, really made that night when I drove to Sheek Island and up along the canal bank and took a close look at all the more critical places. A stiff, cold wind blew out of the west; I made a windbreak behind the car with a tarp, unrolled the sleeping-bag a few feet from the river, and went to sleep, letting the roar of the mighty rapids give me the answer.

My mind made up, a few days later I went to the Burlington Weather Bureau and told them what I planned to do, explaining that it was not the water that I feared so much as the wind. One must be sure of instant and complete control at all times. "Too bad you aren't up there today," was their comment, "but if you can run the rapids the first thing tomorrow morning, you will have a chance." It did not take long to get packed and, with "I think you're crazy" as the parting words from my wife, I was off. That afternoon I painstakingly looked over

a possible route along the Canadian side and decided to make the run, weather permitting.

But an evening in Massena with my cousin and his wife, who were horrified at the thought of my attempting the rapids, almost changed my mind. They regaled me with stories of how the local experts who had attempted the Big Sault in canoes had always been tossed over and swamped. Moreover, they had always had a hard time in getting out of the river alive, in spite of being strong swimmers. One canoe went fourteen miles before it was rescued? Their only encouraging words were that one man had run them in a skiff but his principal qualification, apparently, was that he was too drunk to know what was going on.

I decided not to try to qualify in this manner and went to bed wondering why I should expect to succeed where swimming qualifications seemed to be the most important. It was October; if I rolled over in the upper part of the rapids I would be swept down through the largest waves for a distance of over two miles before I could possibly be fished out. These were chilling thoughts for the middle of the night. At last it occurred to me that there could be a reasonable compromise. One didn't have to run the entire stretch of rapids at one time. It could be done in two parts. If I tried the lower half first and tipped over, the time in the freezing water would be relatively short. If I succeeded, I could then decide whether to risk the more serious consequences of capsizing in the uper part.

As it will be seen from the map, the St. Lawrence River is divided by Long Sault Island into the North and South Channels. The Long Sault Rapids,

<sup>2.</sup> Some Massena people say that one of these men finally made the run in a canoe, but there seems to be no first-hand knowledge of it. There has been little use of canoes on this part of the St. Lawrence. The expert rivermen were oarsmen until the odvenr of power, and their boat was the St. Lawrence skiff. The traditional 16- and 17-foot canoe is "not enough boat" for the massive waves of the St. Lawrence rapids. My 17-foot White was inadequate; my recent runs have all been made with an 18-foot lightweight Grumman canoe. With one person using a double paddle, and with some 60 pounds of rock ballast, it is both a lively and a stable craft.

often referred to by the natives as the "Big Sault", are in the North Channel. The rough water begins about a mile above the lower end of Long Sault Island, where the wide ledge extends across the river approximately ten feet below the surface. For miles above the ledge, the water has that smooth, glassy appearance characteristic of much of the deep, swift water of the St. Lawrence. The wind seems never to be able to get a good grip on it.

As the swift water approaches the ledge, it speeds up still more and forms a series of great, smooth swells, here and there breaking in white crests. Below the ledge there is a sharp drop, the water leaping up again in an enormous crest several hundred feet long, which is followed by others forming the wildest part of the rapids. The general pattern of the whole stretch of rapids, as seen from the aerial photographs, is permanent; but over much of the area the waves at a particular place are continually changing in shape, size and position, and rising, falling and slapping about at random. Such waves cover practically all the river except the bays, even though they do not show in the aerials because of the direction of the light and the distance of the camera, which was about two miles.

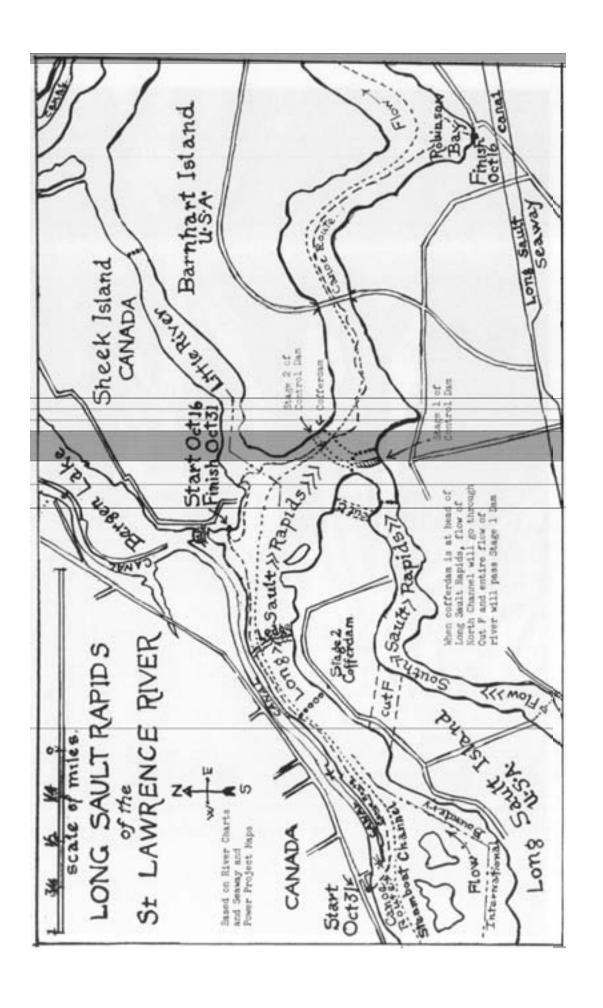
The deepest channel, which is much like a trough and is only a relatively short distance from the Canadian shore, makes a 90-degree turn to the right in the space of two miles. The result is that a half-mile below the ledge there has begun an immense arc of haystacks; which extend as far as the head of Barnhart Island. The steamers had to enter the rapids at just the right point, the pilot being guided by

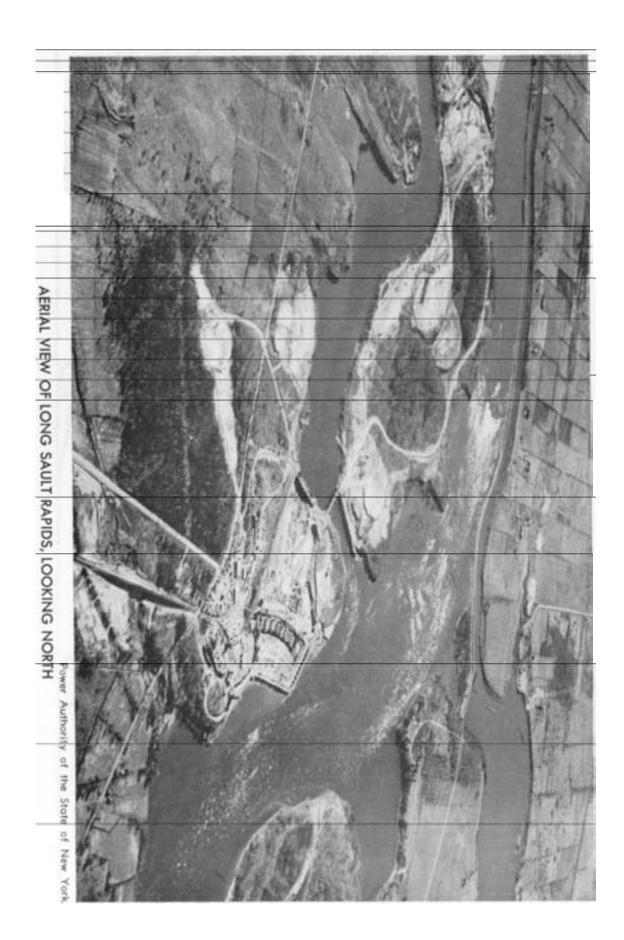
two range targets on the canal bank. The ledge was crossed at its lowest point and narrowest place. The steamer then dropped into the end of the Devil's Cellar, recovered itself and plunged forward through and near the mile of havstacks. This route was followed not so much because it was the most exciting course as because it was the safest channel, a principle often followed by canoeists if haystacks are not too big. Opposite Sheek Island the haystacks are only about 150 feet from the shore in water 20 feet deep. They are 60 feet from crest to crest and, when breaking, 12 and more feet high. Halfway through the rapids the steamer bore a little to the right to miss the highest crests.

Since the rapids make a full 90-degree turn and the deepest channel is on the outside of the curve, there is a heavy thrust of the current against the Canadian shore, causing great turbulence. Irregular, vicious waves are continually spewed toward the shore by the seething, larger waves. It is in this area that one must run in a canoe.

Near the shore there was a strip of nasty water, in some places consisting of irregular waves slapping about and in other places marked by rows of steep, firm, curling crests all ready to spill over into the canoe or even flip it over. They reminded me of some waves that flipped over my canoe in Whirlpool Canyon of the Green River in 1954, the only time I have had such an accident. One wants to be outside such waves or in a position to cut straight through them. Farther from the shore the waves got bigger and bigger. The problem was to find, between the vicious shore waves and the big, turbulent waves farther out, a path

<sup>3.</sup> A useful term, familiar to white-water people, applied to the relatively narrow series of permanent, steep, high, breaking waves which appear at the lower end of most rapids where water pours from shallower sides into a deep main channel. Such a wide river as the St. Lawrence will seldom have this condition, but the situation here is ideal. The ledge, being only a little deeper on the Canadian side, permits a heavy flow on the island side, where it soon runs into large shallow areas which force much of the water into the deep trough running from the ledge all the way to Barnhart Island and beyond. The result is the longest and most spectacular display of giant haystacks I have seen anywhere.





along which one could manage to maneuver a canoe. The reason a high stage of water is desirable is that the canoeable strip is then a little wider.

Early in the morning on Tuesday, October 16, I called the Weather Bureau at Massena and inquired about the wind. "Zero velocity," was the answer, "and it probably won't come up until about noon." I then called the engineer who was to fish me out, and we agreed to get to the head of Sheek Island as soon as possible. It meant several miles of driving for both of us, considerable preparation, and several miles on the river for him. At about eleven o'clock he was tied up in the deadwater just below the head of Sheek Island and the canoe was ready to be launched in the deadwater just above the island.

I would kneel on sponge-rubber pads, with my buttocks braced against the stern thwart. Just forward of the center thwart I placed a half-dozen flat stones, weighing in all about pounds. I wore a belt-type life preserver and had a well-filled inner tube within reach. I also had a change of clothes in a waterproof bag, for I thought the chances of capsizing quite good. My anxiety was further increased when I found at the last minute that, in spite of my critical examination of the proposed course, I had missed seeing a barely submerged rock at a point precisely where I had intended to go. This meant that I must push out farther toward the heaviest water of the entire rapids. It was agreed that I would start out at exactly 11:30 and my friends went to their motorboat to be ready.

The most dangerous place was about a third of the way down the exposed end of Sheek Island, across which the main force of the rapids swept. Here the canoeable path was reduced to zero width. A large, flat, sloping rock thrust itself far out into the current, and above it and still farther out was the just-submerged boulder that threw up leaping waves, merging with the raging turbulence which accompanied the giant haystacks just beyond. This place is clearly shown in the large aerial photograph.

It was fortunate that I discovered the full import of this situation after the time had been set for the start or I might have changed my mind. The only thing to do was to push far out into the river at the head of the island, so as to be in position to cut in through the rough water near the rocks and thus avoid being carried out into the still rougher water below. While I was impressing every detail of this situation on my mind it would have been easy to abandon the whole project, but I concentrated on the fact that the decision had already been made and the time set, and that my potential rescuers were waiting for action in the cove below.

I got everything in order and at exactly 11:30 let the French Canadian woodcutters, who had helped get the boat down the high bank, push me off with a hearty "Bon voyage". Working out into the current well above the head. of the island, I made myself go far enough so that from there on I should be heading toward the shore. There was no particular difficulty until I approached the projecting rock. Here, as I expected, I was roughly tossed about in the madly pitching water. I underestimated the power and velocity of the current, which was fifteen miles per hour or more, and cut in a little too sharply and too hard. The result was that immediately I found myself having to work hard to keep from getting dangerously close to shore. Then, in a moment, I was paddling along just at the edge of the eddy and moving over into the deadwater between Sheek and Barnhart Islands.

After a few minutes' rest I bailed out the quart and a half of water which had come in and played along at the outer edge of the deadwater to see if the smaller waves continually being driven off from the main flow were as vicious as they looked. So it proved, for one slapped the stern and put more water in the canoe than the rapids had done. With this bailed out, I started down the river for the final stretch.

The normal thing to do would have been to follow along the shore of Barnhart Island. Rut the direction and

nature of the waves called for one to be far out at the head of the island anyway, and a hasty glance at an aerial photograph that morning had confirmed my feeling that some fill which had been placed as the beginning of a cofferdam had created a considerable area of dangerous waves.? It has been my experience that where any artificial work has been done in a river it is always more dangerous than where shore line and current have been able to adjust, the one to the other, through tha centuries. An experienced boatman becomes attuned to the manner of such adjustments and knows what to expect. Not so with the results of man's tampering; they always furnish surprises.

Therefore, knowing that nothing more serious could happen than the taking in of considerable water, I worked steadily out toward the middle, moving right or left as required to avoid concentrations of heavy breakers as they appeared down-river. This brought me under the center span of the new Barnhart Island Bridge and down around the bend to my destination in Robinson Bay. In such a wide river and with such heavy current one might be expected to head for shore as directly as possible. Not so in the case of a bend of this type. I stayed out in the current, ran far down, and then pulled over into the immense eddy which fills the whole bay and sweeps back up along the shore. This run was three and one-half miles and the overall time was one and one-half hours. Practically no water was shipped.

My friends in the motor boat and I agreed that we had done enough for one day, so I loaded the canoe on the car and began the 150-mile drive home. It was a beautiful, sunny day and as soon as the tension was over I found it impossible to understand why I was in the car and not back on the river running the upper end of the Long Sault.

As a matter of fact, within a few

days this had become a very real problem. Because the Long Sault Rapids have meant a great deal to the people of the North Country, the local press was interested. Other papers picked it up and Lowell Thomas even carried it in his news broadcast. Newspaper clipping began to come in and letters from friends congratulating me on "having run the Long Sault Rapids". I well knew that I had not run the entire rapids. I had run what I still regard as the most difficult part, but not what I thought to be the most dangerous in its possible consequences. I had been too timid to do that. Was I to live the rest of my life accepting credit for something I had not really done—in fact, that I had been afraid to do—or else always have to go into defensive explanations? Would it not be simpler to risk the chance of a long, violent freezing ride on an inner tube down the haystacks of the main channel?

On October 30 the Weather Bureau promised good weather and I was at the rapids again in time to walk every foot of the canal bank before dark. It took an hour and a half to make a sort of strip-map of the critical points. Of course the waves themselves and any landmarks close to the water don't look at all the same when one is in the boat. So my notes were of the "Opposite the tree with the crooked branch, be five boat-lengths out and then cut in sharply to hit the next waves right. Then out quickly to get in position for those below. Shave close or get caught in the next."

The rapids are really run during this period of intense observation, while one goes through the process of analysis and planning required to get it all down in diagrams and instructions and, later, when one tries to get it all into one's head. With such a fast run, there would be no time to glance at notes. During the night, finding that I couldn't possibly remember it all, I reduced it to a few, simple general

<sup>4.</sup> This was the only place on the Canadian side materially affected by construction work. On the Long Sault Island side there are great changes.

instructions directed to myself. I still know just what they were, expanded here a trifle for clarity:

You will be scared to death when you find yourself actually below the entrance to the canal. The safest place is as far out as you can possibly bring yourself to go. There you will have a little room. Head for the ends of the long, breaking crests near the Devil's Cellar, although it will take all your nerve to do it. Then, cut in just enough to avoid the breakers. The swells will be heavy but not nearly as tough as the nasty devils near the shore. Every chance you get, keep out so that when you need to cut in to take the nasty ones just right you will have room to work. You will be scared you can't possibly make yourself go out too far, so KEEP OUT.

Of course, I did remember much of the detail also, but it was the continuous playing for position that was most important. At every instant the canoe had to be in the right place, moving in the right direction, and headed in the right direction (which is not the same thing). What I was doing in any position was determined by what I proposed to do at every point as far ahead as I could see, or remember what I had seen from shore.

All of this is familiar to white-water canoeists, but usually the rivers are not so wide, the critical parts of the runs not quite so long, and the consequences of failure not auite so serious or at least not quite so disagreeable.

The actual execution of this run was not difficult. I estimated that I should take in two pails of water; actually it was less than a quart. The really hard part turned out to be the mile below the head of the canal. Though marred by a type of turbulence known locally as "boilers", the water was for the most part glassy smooth and very swift as it swept the canoe toward the wall of breakers looming far ahead, the most formidable I had ever faced. There were butterflies under my belt and I had to add to the instructions, "For

fifty years you have dreamed of being right here. Now make the most of it and enjoy yourself." This run, from Dickinson Landing to Sheek Island, was two and one-half miles and took twenty-three minutes.

I always make a run, first, "for safet," taking it very seriously and playing safe in every move. After that, I like to run "for fun". There was not much fun in the two runs I have described, but they saved me from being forever sorry that I had not tried.

The rapids will soon be dry and will remain so until the Long Sault Control Dam and the Barnhart Power Dam are completed. When the water rises again, the rapids will be replaced by a great, quiet millpond with its kilowatts and its world commerce. To attain this, much will have been lost that is also of great value. That, too few people understand. For one thing, no one will ever be able to run the Big Sault in a canoe for fun.

Editor's Note: The two American locks of the St. Lawrence Seaway near Massena, N. Y. were officially opened on July 4, 1958, and Dr. Dodge was locked through in his canoe immediately following the Coast Guard Cutter Maple, the first of the four official vessels. Administrator Lewis G. Castle of the St. Lawrence Seaway Development Corporation had decided that small pleasure craft should be permitted all reasonable use of the Seaway. As evidence of this policy and to demonstrate that the locks are safe for the smallest craft, Dr. Dodge's transit was made a part of the official ceremony. A great stream of commercial traffic began immediately afterward. The gates of the Long Sault control dam were closed and in three days the water rose where the Long Sault Rapids and the old canal had been, forming Lake St. Lawrence above the power dam. During the past winter the five Canadian locks have been completed. With the opening of navigation on April 25 of this year, two-thirds of the ocean-going ships of the world have access to the Great Lakes.

### Repair of Aluminum Canoes

BY LARRY DURGIN Chief Engineer, Gruman Boats, Inc.

Grumman boats and accessories, with the exception of a few castings, are made from 6061 aluminum alloy, heat treated after forming to the T-6 temper. This alloy has the best combination of strength, corrosion resistance, and formability of any of the existing aluminum alloys, and has proven ideal as a boat material.

Although 6061 is a weldable alloy, the process of welding results in a distortion of the welded part, and unless heat treated afterwards, leaves a brittle area surrounded by a dead soft or annealed area. Welding is not used in the fabrication nor is it recommended as a means of repair.

Grumman boats are of riveted construction and utilize a sealing tape of compound between joints as a means of waterproofing.

If because of some abnormal load placed on the boat, a rib or bulkhead rivet should become loosened enough to permit a slight leak, the rivet as a rule can be easily tightened up. Hold a heavy hammer against the outside head and strike the-inside head with a small hammer to flatten or peen it over. Should a rivet be pulled completely through the hull or skin, it is necessary to replace it with a larger size. Rivets can be removed by either drilling or chiseling off the outer head, then punching out the remainder. Marine Sealer 900 has been used with excellent results along air tank seams where it has been difficult to find the exact location of a leak.

The commonest type of damage is a dent. Dents, of course, vary in size and severity depending on the impact which causes them. Large dents with no sharp-

ly defined edges can often be removed or sprung back into shape by merely striking the center a hard blow with one's hand. Small dents or creases in the metal will require pounding out with a hammer or mallet. When a dent is formed the metal is stretched. This results in a larger metal surface area than before the dent occurred. It is impossible completely to restore the metal to its original state, but if properly worked the dent can be made scarcely noticeable. Hold a bag filled with sand against the hollow part of the dent; using a mallet of rawhide, rubber or plastic, work around the outside of the dent, toward the center, flattening the metal back towards its original shape. If the blows are too heavy the metal may be further stretched in a reverse curve, obviously something to avoid. Use steel hammers only in the most severe cases and with special rare, as steel tends to thin out the material. A wooden block may be substituted for the sandbag if a firmer backing is required. Too much pounding with hard en the material, making it brittle.

Keels and gunwales, if bent, can usually be straightened by blocking either side of the bend and pounding with a heavy rubber mallet.

Most actual holes or breaks in the hull are the result of fatigue failures in the metal. An instance of this is sometimes encountered in a white-water upset where water volume combines with current to put extremely high load pressures on a canoe lodged crosswise to the current. Here the surging of the water constitutes a cycle which gradually work-hardens and crystallizes the material to the point where it loses its elasticity and fails. Generally

the actual skin break occurs after the stiffening members have collapsed, causing sharp creases or folds in the skin.

Holes, cracks or torn spots in hull are repaired in different ways, depending on the type of break. To avoid expansion of cracks, drill a 1/16" diameter hole at the very end of the crack. As in the case of a dent the skin is stretched before a hole is pierced; consequently by pounding the metal back in shape the hole will be nearly closed. For emergency repairs, the hole can be sealed with adhesive tape or most any marine glue or cement. Permanent repairs are best made by riveting on a patch or by use of Met-L-It, a sort of "aluminum plastic wood." Met. L-It, available through Grumman deal. ers and automotive stores, is applied either directly to the bare metal or over a fibre patch. In either case the metal should be clean and slightly roughened for best adhesion. It should be applied in thin layers and may be ground to a bright finish when dry.

Riveted patches are generally applied to the inside with gasketing and seam compound between patch and boat skin. The patch should extend an inch beyond any break. Use %" rivets located 3/8" from the edge of the patch and spaced ½" apart to both seal and reinforce the puncture. The neatest patch is accomplished by cutting out the torn or cracked portion of the hull to leave a rounded hole. An insert of the same gauge metal is then fabricated to just fill the opening and contoured to match. This is flush riveted to a larger patch which in turn is riveted to the hull with the sealing procedure described above.

#### Aluminum Canoe First Aid

BY JABE WHELPTON AND STU COFFIN

The Appalachian Mountain Club has amassed a great deal of experience in repairing aluminum canoes. Our four most common types of repairs: loose rivets, dents, bent members, and rivet. ed patches, are done exactly as described in Larry Durgin's article. In addition, we do two types of repairs not done in the article: Rib replacement is done in a straightforward way by removing the old rib and riveting in a new one, and does not require further explanation. Gunwale reinforcement is done by forming a %" x 11/4" aluminum strip and screwing it to the broken gunwale.

Of more interest, perhaps, is our method of emergency repair. After canoe has been wrapped around a rock, and then removed from the rock with the aid of a winch (which we always carry) it is in pretty rough shape. Amidships the floor of the canoe is up near the gunwales. The canoe can often be returned to an approximate canoe shape by emptying it of water, placing it in shallow water and jumping on the bottom where it bulges up amidships, It is important that this be carried out with the canoe in the water rather than on land. If you try it on land, the canoe will be further damaged. At this point, with the canoe in its approximately correct shape, there may still be conspicuous tears or holes in the skin. For on-the-spot repair, we use fiberglass cloth with automobile undercoating or asphalt roofing cement. The canoe can then be used immediately without waiting for it to harden or dry. More elegant patches can be applied later.

There are a few additional things that we've learned: For straightening gunwales, we block on both sides with heavy wood members and force the wood members together with C-clamps. In using this method, it is important to apply the force to the gunwale and not to the skin beneath. We have also learned that to repair large dents, a large hammer is absolutely essential. We use a heavy rubber faced truck tire hammer. In general our object is to keep the fleet in reasonable shape without worrying about the minor blemishes, and for this reason we do not attempt some of the more refined repair techniques.

### AWA Wilderness Trip

The Sierra Club River Touring Committee and the American White Water Affiliation have scored an important "first" in promoting a float trip on the Clearwater and nearby rivers this August. There have of course been a number of small parties of canoeists and kayakers paddling the Clearwater — Washington Foldboaters among them —but this is, I believe, the first nationally organized float.

It promises to be a fine trip indeed, with a touch of pioneering, but it also has a serious purpose. Following somewhat on the pattern of the famous hikes led by Justice Douglas to publicize recreational values, this wild river trip has been organized to demonstrate the supreme wilderness values of the Clearwater watershed.

We have heard of the rare beauties of this area from many sources. Last summer Sen. Neuberger, in protesting planning appropriations for the not yet authorized Bruces Eddy dam, said on the floor of the Senate: "The Clearwater River is the heart of one of the last great virgin wilderness realms within the limits of continental United States. I have hiked and ridden through these solitudes many times, so I do not speak of these scenic resources only from vicarious knowledge or contact."

This trip offers each of us a wonderful opportunity to experience and to enjoy for ourselves the rare wilderness values of the Clearwater area while still relatively "unimproved," so that we also can speak of it to others not "only from vicarious knowledge." co-operative base-camp type of trip is planned for the period of August 5 to 15, as there are a number of interesting runs in the area—the North Fork as well as the main Clearwater, and also the nearby Selway and Lochsa. Many parts of these streams are easily navigable for canoes and kayaks, and most participants will want to bring their own boats. But don't let

lack of a boat stop you, for there will be a couple of rubber rafts for **non**paddling land animals!

The SC River Touring Committee under Lou Elliott is lending its many years of experience and savvy to the efficient organization of the trip's operation—the logistics of equipment, sup. plies, etc.—while the skipper of the float will be Dr. Oscar Hawksley, past AWA Executive Secretary. He will be out there scouting the area in advance, and will be thoroughly familiar with the best runs, river hazards and water levels, before the first assembly in camp. Six bucks to Lou Elliot or Oz Hawksley will hold a place for you until July 1\*—and it would be of enormous help in organizing the trip if you would send in your reservation now. It should be a grand show, and you had better move fast.

It was while he was working with Bus and Don Hatch a couple of years ago that Oz was bit with the idea for the Clearwater trip. The Bruce Eddy dam on the North Fork has long been one of the primary objectives of the Army Engineers in their plan for the Columbia River watershed. They have been slowed up somewhat by the vigorous opposition of conservationists, because of the destruction to recreational, scenic and wildlife values. One correspondent has written that "I do not think there is a more beautiful river in the West than the Selway, nor one with a better variety of wildlife. ... You would see as wild a stretch of country as there is left in the West, and the hoot owls and coyotes would sing you to sleep." The Idaho Fish and Game Department, after a three-year study, have formally requested that no dams be built on any part of the Clearwater, and they have been informed by a State reclamation engineer that they have no legal right to any Idaho water sought by State or Federal authorities! State and Federal politicians, headed by Sen. Henry Dworshak,

are campaigning for the dams by fair means and foul—a vivid example of the powerful political combination commented on elsewhere in this issue.

There is a truism among backpackers that they climb mountains because they are there. The wilderness quality of our wild rivers being as fragile as it is, river rats have a somewhat sadder truism: Run our wild rivers now, for next year they may NoT be there!— or at best, they may be much altered. So you had better join up and run the Clearwater this summer: you may not have another chance. Then you too will be able to say, "I have been there, and I can tell you why this wild river should not be destroyed."

\*Sierra Club members should apply through Lou Elliot, Chairman, SC River Touring Committee, 1050 Mills Tower, San Francisco 4, Calif. All others should apply to Dr. Oscar Hawksley, Route 5, Warrensburg, Mo. Total cost of trip is \$71.00



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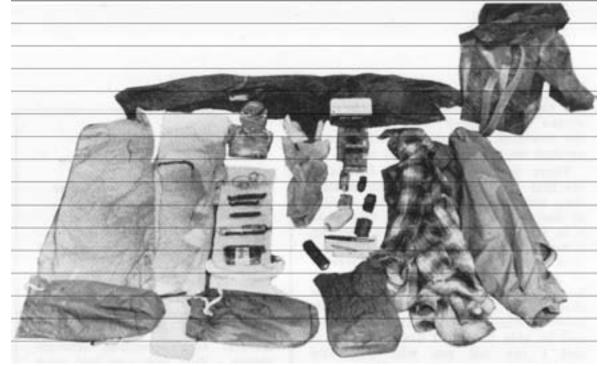
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# Emergency Kit for the Catastrophe-Prone (Most of Us)

BY JOHN BERRY

How many readers have suffered a cold water upset, and had to finish the day in wet clothes? Or borrow from friends? Ever get stuck for an unscheduled over-nite in some river gorge without food or equipment because you under-estimated the time necessary for a run? Ever spoil your own as well as everyone else's trip because your boat was damaged and you lacked effective repair materials? Ever to build a fire in the rain with wet matches and even wetter wood? Ever trust the weatherman for a sunny day and get caught in a downpour? Ever lose your wallet, car keys, or have clouds of biting insects descend upon you? Ever sustain a bad cut or other injury in a remote river area and have nothing to patch yourself up with?

Maybe by now you think I'm injury or catastrophe prone. Perhaps I am—for all of the above minor disasters and more have befallen me in my few years of river cruising. What's worse, they'll probably happen again! Sometime they may even happen to you. No, I'm not leading you down the insurance policy pathway. (Give me your name, and I'll have my brother-in-law commune with you on policy virtues). In fact, for types like myself, there isn't any preventive or absolute

cure for these little mishaps—beyond turning in my boats—which, as a matter of note, my brother-in-law, on advice from his company, has urged me to do.

Since this latter course is unthinkable, and my boatmanship still fallible, what can I do to make myself "safe" both for my own good and for that of my fellow cruisers? The answer is so simple that I am sure everyone has already thought of it. The trouble is, only the "thrice bitten" seem to make a religious habit of following through with it.

The solution? A completely waterproof, strong, floatable, durable, lightweight, compact, quickly accessable, and well-provisioned EMERGENCY which becomes as much a part of every white water trip as spare paddles, lifejacket, or even the boat itself! Sounds fairly simple, doesn't it? It is. Just remember to take it along ALWAYS. Make it an inviolate habitwhether for a two hour outing or for a two week cruise. Perhaps this necessary accoutrement should not be billed as a "solution." It won't stop the inevitable from taking place, but it will surely make many minor miseries easier to bear, and, who knows, may even solve an otherwise unsolvable situation.

Now, what sort of pack is best, and what do we put in it? Let's take first things first. Other than a few commercially manufactured rubberized "float" bags, which don't hold very much, and are also pretty squashy, I know of only one pack that really meets all the criteria set forth above. This is a U.S. Navy surplus roll-up rubber pack, (officially known as: Bag Waterproof Special Purpose), available in many surplus stores for anywhere from 99c to \$3.49, depending upon the size, and upon the cupidity of the store owner. These packs are sturdy, are structurally reinforced, and are obtainable in up to four sizes. smallest  $(12x7\frac{1}{2}x7\frac{1}{2})$  inside dimensions), seems to me to be the handiest.



The next size, (15"x9½"x8") will still Pit under the cowling of a foldboat, and while heavier and bulkier, does enable the user to cram in several additional articles. These bags, even when packed to the rim, have sufficient air space in the flap closure to allow them to float, and, in addition, have convenient tie-in web straps permanently attached. With only a minimum of practice, one masters the knack of

unrolling and re-rolling the flaps, making access to the contents quick and easy. This, then, is the pack. If there is a better one around for the money, please let me know—privately, however, as I'll need to unload the seven U.S. bags I own now.

Next question—what do we put in it? This may be something of a "to each his own" sort of proposition. Some years ago, before I found other local soul-mates for this river cruising mania, my step-father, on one occasion, was acting as chauffeur and bon voyage witness for a three day solo trip. He asked the contents of a small zipperred (and non-waterproof) refrigerator bag—long since gone to its watery grave. With condescending pride, I explained that this was my emergency kit. I amplified further by reaching in after a roll of canoe canvas (so big a hippo couldn't swallow it) and, unravelling it on the beach, I think I laid bare a few rusty nails, a rusty pen knife, matchcase, rusty beer can opener (and no beer), one small tube of Duco, and a two ounce bottle of "medicinal spirits". On viewing the latler item, my relative exclaimed in a kind of wondering disgust: "I always suspected you were nuts! Now I know it! Anyone who'd take a three day river trip in November by himself, and with ONLY TWO OUNCES OF WHIS-KEY, ought to be in a straight jacket!" Well, everyone is apt to have his own ideas on the type of situation which constitutes an emergency!

Here, for the record, is what I put into my pack now. Some items are obvious necessities — others may be considered as frosting on the cake. I may also be missing a good bet or two or three or more. Reader suggestions will be welcomed. In any case, all articles listed are easily acquired, are inexpensive, and might save considerable discomfort in event of accident. (Special note: Seek items first from AWW advertisers!). The following list is also a part of the kit itself, and a copy is tied on to bag #1 on top of everything else. Since I never open this pack unless there is an emergency of some kind, and being at the moment, on a

lucky streak for accidents plus being possessed of a brief memory, a look at the inventory tells me where everything is—if I can remember where I put the list! Each of the three inner bags (rubberized canvas and approximately 10" long by 4½" in diameter) also has its contents and number printcd in indelible ink on the outside. Beside separating small items, these bags have other uses too. Being rubber lined, they hold water, and can be used for a water carrier. Also, as kits for winter and summer vary on the clothing items, I keep two sets of these small inner bags packed for each season. Summer bags are substituted for the winter ones when the water warms.

#### INVENTORY (Cold Water)

Bag no. 1 (contents) Bag no. 3 (contents) Toilet paper Long wool under-Note paper Pen & pencil wear (bottoms) Wool sweater & Soap Money (\$3.00) Loose In Main Pack: Snake bite kit 1. Rolled canvas Halizone tablets patch sheet 8" x 20"; with: Matchcase Whistle a. nails b. pen-Comb knife c. glue! Compass d. can opener Insect repellent e. wire saw f. Flashlight fire starter g. Rubber bands tube alum. sol-Heatab stove der:!: h. 2 sizes & fuel Grumann rivets:!: Candle i. 2 oz resin & Extra car keys Cigarettes hardener j. strip Extra glasses fiberglass cloth: 10 ft. fine wire 2. Small J. & J. First Aid Kit Bag no. 2 (contents) pr. poplin trousers (plus 2 shots morphine)

■ T shirt Hooded rain jacket 3. Roll ( $1\frac{1}{2}$ ")

Scotch Brand can deh. beef plastic tape 6. Poplin shirt

- 50 ft. nylon line 7. Poplin jacket
- 5. Cellophane **a** g **I** I own & travel in aluminum, canvas, with:
  - a. 4 pkgs. deh. & glass canoes.
  - soups 

    You have to know
    b. can bullion a doctor for this
    cubes one.

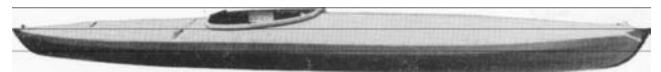
All of the "listed inventory" above, fits handily into just the one small U.S. rubber pack leaving ample air space for floatation, if necessary, and leaving too, additional room for several other compact items—including the "medicinal spirits" if desired. Total weight is about ten pounds. Like the great naturalist and conservationist, Teddy Roosevelt, who, it is told, arrived for memorable service in Cuba during the Spanish War with nothing more than the clothes on his back and his inseparable one dozen spare pairs of eyeglasses, I too suffer poor eyesight. I always wire mine to my head (though their "arms" - not through my ears!), and also carry one spare pair, the latter, as a rule, in my waterproof camera box (50 cal. U.S. surplus ammo box). If the latter, in which my fiberglass repair kit is also generally carried, does not accompany me, then both go into the pack described in this article.

While I am sure that the contents can be improved upon, what is included will certainly provide relief for most emergencies apt to confront the river cruiser. The main thing, comrade, is to make yourselves a suitable kit, and then, by Gosh, take the d—n thing along on EVERY CRUISE! If you don't need it, you can be sure that somcone clsc eventually will.

Asked if he would mind an appendix to his article listing repair materials for foldboats, John replied: I never thought to include anything for foldboaters. I just assumed that all such performers were infallible! Now that I think of it, I do recall seeing a number of foldboaters chewing large wads of gum. If any other substance is considered appropriate, please add it to the list. Here's the list: 1 large roll of fresh adhesive tape - cloth-backed, not plastic; assortment of inner tube patches; 1 can (not tube) of tire cement; large needle or awl and heavy thread or dental floss for sewing long rips. The adhesive tape can be used both for temporary patches on the hull and for splicing broken frame members. If John thinks foldboaters never have trouble, your editor is living proof to the contrary!



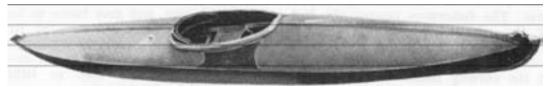
"STABILAIR" double-seater, with air sponsons. Unsinkable. Sailing rig available.



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For Information Send Postcard to:

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#### White-Watermen and Livid Fishermen

BY ELIOT DuBOIS

an unpleasant yet frequent experience for a white-water man to be cursed by a fisherman. The words are usually lost in the noise provided by the river, but the basic signal gets across. The fisherman resents the fact that the white-water man is on the river, lousing up his fishing. The usual reaction of the white-water man is that the cursing fisherman is an obvious boor, engaged in an incomprehensible sport, so the heck with all fishermen. This reaction is not in the whitewater man's best interest. It's worth while giving some serious thought to fishermen, even cursing fishermen. There are many more fishermen than white-water men, and if the fishermen become angry enough, they could push measures through State legislatures blocking the use of streams by canoeists and foldboaters. On the other hand, if good relations are established with fishermen, they could become powerful allies on conservation projects. With this in mind, let us consider a few facts of life concerning the fisherman.

First, the average fisherman is a fine fellow, possessing the same general virtues as the white-water man. He is devoted to the same type of countryside. He is filled with the same type of enthusiasm. The details are different. The fisherman prefers to stumble around on the rocks, casting flies or plugs for fish, whereas the white-water man prefers to whizz downstream, past the rocks and over the fish. The cursing fisherman, the fisherman who cuts slalom ropes and snaps flies deliberately in the faces of canoeists is definitely atypical. He is a member of an unpleasant minority, and

in most cases he isn't a "true fisherman". He's a pot fisherman, appearing on the streams for a few days after the opening of the season. He fills his creel with stocked fish, curses a few canoeists, and goes home to beat his wife and children. After the first of the season he leaves the streams to the true fisherman, who is much more interested in fishing than in filling his creel, and who is a true sportsman.

Second, fishing is a sport in which the actual consummation, the catching of a fish, occupies a very small portion of the total time spent. The average fisherman spends less than one percent of his fishing time actually catching fish. The intervening periods are loaded with frustration and suspense. He feels that he may catch a fish "any minute now," and if he is interrupted in any way he is convinced that the interruption cost him a fish.

Third, fishing is a wonderfully obscure art. All sorts of factors influence whether or not fish will take a lure. These factors, a few known, but mostly unknown, rest heavily on the fisherman's mind. The fisherman is obviously unhappy about any factor which he believes will discourage or "put down" a fish otherwise eager to be caught. To the fisherman, a canoe sliding over the fish is obviously such a factor. In the fisherman's mind it transforms a fish that the fisherman was about to catch into a fish with the sulks that nobody can catch.

It's worth while digressing to consider whether or not the passing of a canoe does discourage fish from taking a lure. On one occasion we were

conducting a slalom on the Salmon River in Connecticut. We had picked the date unwisely, as it was the beginning of the trout season. There were many fisherman on the river, and some were hostile to the extent of cutting our ropes. During the race, one poor soul staggered down the opposite, or less populated bank and was obviously amazed to find the river festooned with lines and painted poles. Canoes and foldboats flashed by once every three minutes. Undaunted, the fisherman set



up his rod and started fishing, right above gate 8. He actually caught a fish, just after one of the canoes went by. The same thing happened to me on the same river, though not on the slalom course. A fisherman hooked a trout about three feet behind the stern of my canoe. On another occasion, I watched a fisherman take six trout from a small hole that had been crossed minutes earlier by a fleet of twenty canoes. My personal belief is that canoeing interferes very little with the catching of fish early in the sea-

son when the fish are feeding beneath the surface. Later in the season when the fish eat surface insects (and when the water is too low for canoeing) canoes may present more of a hazard. The hazard, however, exists at all times in the fisherman's mind.

The fourth item to remember about the average fisherman is that he is surrounded by a sort of mystical area which moves upstream or downstream with him as he moves along the bank or wades in the stream. This area includes the spots he can reach with his lure, and the spots he is obviously going to fish next. Any other fisherman or anyone else, who enters or crosses this magic area is a trespasser and breaker of taboos. It is often very hard to canoe down a river without neatly bisecting the magic areas of a whole string of fishermen.

With these four items of information on the average fisherman, we can formulate a few rules for causing the minimum friction on the river.

Rule One: Avoid scheduling trips on popular fishing streams at the very beginning of the fishing season. The first-of-season fishermen are by far the most hostile, and there are likely to be so many of them that they represent a major physical obstacle. Fortunately, different States and different counties stagger their open dates so that with a little forethought the conflict can be avoided.

Rule Two: Pass fishermen so as to provide the least interference. If there is a fisherman on or near the left bank, and if the river is wide enough, then go right. Remember to go beyond the magic area, that is, beyond the normal reach of the fisherman's lure. A fly fisherman (using a long whippy rod



with a reel on the underside of the butt, below the hand) normally casts forty feet, although he tells his friends he casts eighty. A spin fisherman (using a shorter rod with a coffee grinder reel half way up the handle) casts eighty feet and tells his friends one hundred and sixty. If you must choose between going close to the fisherman or going close to the area he is fishing, the average fisherman would prefer to have his fishing ground undisturbed. If you pass behind a wading fisherman, this will cause the least anguish, but remember that a fly fisherman makes a "back cast" in which the fly and line pass close to the water behind the fisherman. Therefore it's a good idea to warn the fisherman if you are passing behind him. Do this by speaking loudly enough to be heard over the noise of the rapids. Don't bang your gunwale to attract the fisherman's attention.

Rule Three: Keep the canoes or fold-

boats together and in single file. (You should be together anyway for safety's sake). If the fisherman is interrupted by a canoe every four minutes for forty minutes, he is likely to be thoroughly enraged by the time the last boat dawdles by. Ten canoes in close formation will hardly cause him to wince. Similarly, if each canoe picks a different channel, then the fisherman will imagine that the whole river has been spoiled. If the whole party follows one course it means the least disturbance.

Rule Four: Be courteous. As you go by, nod, smile or give some indication that you understand that the fisherman is a human being with a right to be on the river. If the man in the lead boat says "Sorry to disturb you," and if the "sweep," "mop-up" or "rear admiral" says "This is the last canoe. Good luck." then we can count on gaining friends among fishermen instead of gaining enemies.



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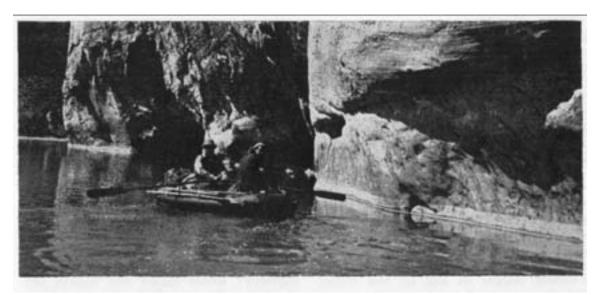
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### CONSERVATION COMMENT

DAN BRADLEY, CHAIRMAN

From Colorado we have received a copy of a very interesting letter. It seems the CWWA had been invited to become associate members of the National Ski Association, and they declined with thanks.

"We feel that one of the projects you mention, 'the opening of ski areas that extend into our National Parks, to be of such an obnoxious nature that it far outweighs the benefits afforded the public by many of your worthwhile projects . . . The National Parks are dedicated areas for future generations to have as we found them, not overrun with chair lifts, cables, parking lots, ski lodges, etc. We feel that this drive of the NSA to demand ski areas in the National Parks is partly due to an immature attitude and partly due to being unwitting victims of various Chambers of Commerce. I am sure in time the NSA will realize its mistake, but until such time we have to decline your invitation."

That of course is the proper attitude to take. It needs only to be added that ski-touring is encouraged in our national parks; only ski resorts are banned. Our Colorado boys are to be congratulated for their enlightened thinking. Other affiliates please copy—should the

occasion arise.

事 水 事

From Colorado comes also a weird tale of extraordinary political bumbling. Last year the U.S. Congress passed the Bonner Boating Safety Act in an effort to curb a menace with which canoeists and kayakers are all too familiar: the recklessly operated speedboat, inboard or outboard. The law provided for registration of powered craft of 10 h.p. and over, established certain minimum safety requirements and provided for administration by the U.S. Coast Guard in all states which did not, by 1960, pass equivalent legislation.

The Colorado Senate grabbed the idea and dove overboard with it. Senate Bill 83, introduced by Senator Dunkley in the naive belief that it was noncontroversial, would have required the registration and regulation of not only all powerboats but all craft—canoes, kayaks, rowboats—in all waters of the State (including, some wag suggested, Junior's spring-powered speedster in the family bathtub!). All activities of such craft, all races, exhibitions, regattas, even week-end trips, were at first placed at the mercy of the local sheriff's whistle, or of the state police (who would have had a merry time chasing along the State's 2,000 miles of river!).

Writing about it now, the whole thing seems preposterous, but at the time it looked appalling, not only in itself but even more in the dangerous precedent it might set for other states. The full local story of what occurred in Denver is told on another page by one of the participants.

The obvious confusion in the Colorado senators' minds was in mixing the attempt to restrict the activities of non-powered craft, which are a hazard to no one else, with a desirable curb on the reckless operation of powerboats, which *is* a dangerous menace to innocent people in and on the water. This is an example of legislative frenzy which could have seriously affected our sport, and which in large measure was stalled by the alertness and vigorous opposition of members of an AWA affiliate.

We are informed that some fifteen other States are considering legislation similar to the Bonner Act. As long as they cover only power craft, they are none of our concern. But our members should scan the papers for news items as to the exact limitations of such proposals and make certain there is no reference to non-powered craft. Should you find any such reference, or if the language seems in doubt, notify your Conservation Chair. man at once—and enclose clipping.

Every spring we river rats find further encroachments on our favorite rivers—dams, highways, and other "improvements" both public and private. Many of them are not necessary, but their construction brings great material benefit to everybody from local contractors to steel mills, and so they draw whoops of support from the local chambers of commerce and business clubs.

A vigorus article by Claire Conley in the March Field & Stream points up the illogical arguments in support of many dams: with a year's supply of wheat and half a year's corn already in government storage, what is the point of destroying irreplaceable wild-

life and archaeological assets for Reclamation dams? With ample power to meet present needs, and with atomic and thermo-nuclear pilot plants already working, what is the justification for further chopping up our wild rivers with massive power dams for private profit? That leaves the Engineers' flood control dams—and a recent study by some University of Chicago geography professors indicates that these dams have by an ironic twist resulted in ever-increasing flood losses.

Who is it that keeps demanding these improvements? The people whose lands and homes are condemned for a superhighway? whose farms and valleys are flooded behind a 500-, 750-, or 1000foot dam? the people from all over whose fishing, hunting, paddling and recreational areas are permanently destroyed? No, it is none of these. It is the Army Engineers, the Bureau of Reclamation, the National Park Service, and other empire-building government agencies, and the chambers of commerce and business organizations, and their representatives in State and National governments. No one in Congress dare raise a queep against any of these agencies, lest his district lose its share of the "pork barrel," with grievous political consequences.

We in the AWA are not opposed to "improvements" out of hand though we may have our private notions as to how much the works of man are any improvement over the work of God, or Nature, if you're agnostic. What we are opposed to is that Bind of professional mind that jumps to dams and highways as a first resort, a sort of panacea for all the ills that land and water (and local economy) are heir to. Such minds are a sort of modern counterpart to the ancient tintypes: the lumberman who can look upon a great forest and see only millions of board feet, and the industrialist who can look upon Yellowstone Falls and think only of billions of kilowatts going wholly to waste. Now we have the Engineers who can see in a great river valley only a vast area to be ripped up with dams, highways, power

plants and fluctuating reservoirs with their unsightly mudbanks. Material progress above all; backpackers? muletrippers? wilderness river cruisers? pah! a trivial minority, standing in the

way of progress!

Such minds, I believe, are to be profoundly pitied, for the blinkers that civilization has put upon their vision. For the values that are thus destroyed are the intangible poetic, spiritual values which differentiate man from animal, and which make life worth living.

Do not misunderstand: the Engineers as a group are one of the most valuable assets of a technological society. We realize quite well that many developments are necessary to the continued progress of our civilization. We ask only that certain river valleys and other areas of exceptional wilderness value should be set aside and left undisturbed as an enduring challenge for those few of us who seek the stars.

And that is the crux of the matter: who is to decide which areas are to be set aside'? and how will they be permanently protected against exploitation?

The prophets of materialism lay claim to the Clearwater, for example, in the name of "progress," while the disciples of wilderness affirm that primitive values are transcendent. Likewise the Middle Fork of the Flathead, of which John Craighead has written so eloquently, or of the Salmon in Idaho; likewise also the Cacapon and other tributaries of the Potomac in the East, and the Allagash in Maine, and—well, each of you can name your own favorite wild river.

There are some things the Engineers cannot be expected to know: the difference, for instance, between paddling on a fast river in a wild area and paddling on an artificial impoundment. To them both are "recreational boating"; to us they are different worlds one is wild, the other the same razzledazzle from which we seek relief. Like the blinkered horse, the Engineers require the guidance of men of wider and more enlightened vision. For if **to** leave these decisions to be made by technicians of limited perspective, we are all doomed to live in their benighted world.

The "Marlboro Man" in the HAMMER "Champion" runs the rapids of the turbulent Feather River in California.



The "Mariboro Man" Courtesy Universal Pictures

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### LEGISLATIVE ACROBATICS

ву JOE LACY

A bill for a State boating safety law extending the provisions of the Federal Boat Act of 1958 died in the Colorado House of Representatives this week after clearing the Senate. The interest aroused points up the increasing importance of white water boating clubs' role in promoting safety.

The dead bill, the fourth completed version drawn over a stormy hundred-day period, contained a constitutionally questionable provision exempting all boats affiliated with the "American White-Water Association." This provision, however invalid, indicated the important role that white water clubs played in contributing constructive criticism toward the legislation.

Action began with a newspaper article in early January announcing that Senator Donald P. Dunklee, a real estate man from Denver, had introduced a boating safety law. Although Senator Dunklee had requested research on the legislation by the Colorado Legislative Council, he clearly ignored recommendations of the Council and proceeded on the premise that if the Federal law was good for motor boats of more than 10 horsepower, a State law extending similar provisions over all boats would be even better.

The Colorado White Water Association's objections to the initial bill are summarized as follows:

- Careful research led to the exclusion of non-powered boats in the Federal law.
- 2 Not one single safety provision proposed was applicable to non-powered boats.
- Enforcement of law on two thousand miles of boatable Colorado river water impractical.
- 4. Would be serious deterrent to growth of slalom and downriver racing sports.
- Enforcement by Game and Fish Commission not in best interests of boating sportsmen (State

Game and Fish Director stated in hearing that the day was corning when a priority of sports would have to be considered on the State's waterways).

- 6. Enforcement by all peace officers in State unfair because technical knowledge is needed.
- 7. Fees of \$2.00 per year exorbitant for non-powered craft.

A committee from the Colorado White Association immediately approached Senator Dunklee with magazine and newspaper articles, copies of the AWA official safety rules, and AWA cards showing safety rule importance. The approach was to point out that only one fatality had occurred in twelve years of kayak-canoe river boating in Colorado, and this instance was directly caused by a violation of ail basic safety considerations. At the same time the Fibark Club in Salida was alerted to the movement and the Glenwood Springs Chamber of Commerce who are co-sponsors of the National championship race over the Fourth of July, 1959, were advised.

After a public hearing, a second version of the law was drafted containing a provision exempting all boats affiliated with the AWA from restrictions in the law except for fees.

A third version drafted by the Denver area motor boat clubs approached the law differently by writing in only those provisions contained in the Federal law. However, no standards were set in the third version, opening it to attack as being an "unconstitutional delegation of legislative authority."

The fourth and final version was a conglomeration of amendments and compromises so unwieldy that even the official Senate record keepers lost track of all the changes. Nevertheless the bill, including a note from the "Reviser of Statutes" that it did not jibe with Senate proceedings, went to the House of Representatives for consideration.

The provisions concerning white water boating had been returned to the final draft as follows:

Section 15. Any owner of a boat that is an affiliate of the American White Water Association is exempt from all the provisions of this Act.

One of the last approved amendments specifically excluded kayaks from provisions of the law.

Throughout the controversy on the law the one factor which carried the most weight with the legislators was the safety activities of both the Colorado White Water Association and the American White-Water Affiliation. Non-powered boats are not included under the Federal Boating Act of 1958 and are likewise exempted from most State boating safety regulations.

It then becomes more necessary for

boating clubs to enact enforceable safety rules to help foster enjoyment in our fast-growing sport.

our fast-growing sport.

The Colorado White Water Association has just approved revisions to its safety code stressing flotation in boats, boating within one's ability, club subsidized swimming lessons, and training in technique. Unless all clubs take steps to make river boating safer, we shall all be liable to governmental regulations sooner or later.

Editor's note: After this story had gone to press, word was received that the Colorado Legislature had at the last minute reported out and passed an entirely new bill patterned closely after the original *Bonner* Law, thereby providing a boating safety law without onerous features that would be objectionable to paddlers.



## AWA Safety Code

The story of the Safety Code is an absorbing and inspiring example of what members of the AWA do for one another. It's a story of a challenging, thorough, satisfying cooperative endeavor, long carried on and unnoticed by most of us.

With members drawn from the East, West, and Midwest, and under the chairmanship first of Donn Charnley and recently of Porter Baker, the Safety Committee has worked two years preparing this Safety Code. After submitting a rough draft in the Spring 1857 issue for the purpose of consulting our fellow members—after studying reactions, analyzing accident reports, publishing comments, and sifting a wealth and diversity of suggestions, information, and experience, the committee has now come up with a code it can recommend.

To cook up a code of digestible size, many members' proposals had to be pared to the bone—those which suggested comforts rather than safety measures; those which went beyond a code and amounted to a short course in boating technique; those which emphasized subjective considerations, such as "skill", and those which itemized special situations and conditions to the point that general \*principles would have been lost.

It was a problem to make the code both general and specific: general enough to apply to canoes, foldboats, and other craft, whether in Eastern or Western rivers yet specific enough to be meaningful and useful.

The most controversial question that had to be settled was, how much authority should the leader have? The committee went through the gamut from complete authority to no authority. At one point it looked as though the code would have to have a section on "How to run a meeting before you run a rapid."

Individualists in our ranks—of whom we're fortunate to have many—may be a bit disappointed to read, "Never Boat Alone." The committee respects and admires the spirit of adventure, but in keeping with other official safety codes (for skiing, rock-climbing, swimming, etc.), it was felt that our code—intended for white water or wilderness travel—should be firm on this point.

From this talk about "the committee" don't imagine, however, that all its members are unanimously agreed on all points. There will always be room for discussion and improvement in the code. If you have any ideas, send them to Porter Baker, 83 Lane Court, Oakland 11, California. or to any member of his committee—Donn Charnley, Franz Conrads, Leonard Fancher, Bob McNair, Eliot DuBois, W. F. Krone, Rov Kerswill, Jess Lombard, and Daniel Davis.

Those of us who have no further comments to send them at present say, "Well done—and thank you."

THIS SAFETY CODE HAS BEEN WORKED OUT BY THE EXPERIENCED WHITE WATER CLUBS OF THIS AFFILIATION. IT IS THE RECOMMENDATION TO BOATERS BY THE FOLDBOAT AND CANOE EXPERTS IN ALL PARTS OF THE COUNTRY. PLEASE MAKE IT A PART OF YOUR BOATING HABITS AND PLEASE HELP OTHERS TO DEVELOP THESE SAME HABITS.

- I. PERSONAL PREPAREDNESS AND RESPONSIBILITY
  - 1. NEVER BOAT ALONE. The preferred minimum is three craft.
  - 2. BE A COMPETENT SWIM-MER with ability to handle yourself underwater.
  - 3. WEAR YOUR LIFE JACKET wherever upsets may occur. The life jacket must be cap-

- able of supporting you face up if unconscious. A crash helmet is recommended in rivers of Grade IV and over.
- 4. HAVE A FRANK KNOWL-EDGE OF YOUR BOATING ABILITY, and don't attempt waters beyond this ability.
- 5. BEWARE OF COLD WATER AND OF WEATHER EXTREMES; dress accordingly. Rubber wet suits or long woolen underwear may be essential for safety as well as comfort.
- 6. BE SUITABLY PREPARED AND EQUIPPED; carry a knife, secure your glasses, and equip yourself with such special footgear, skin protection, etc. as the situation requires.
- 7. BE PRACTICED in escape from spray cover, in rescue and self rescue, and in first aid.
- 8. SUPPORT YOUR LEADER and respect his authority.
- II. BOAT PREPAREDNESS AND EQUIPMENT (Changes or deletions at the discretion of the leader only)
  - 1. TEST NEW AND UNFAMILIAR EQUIPMENT before taking hazardous situations.
  - **2.** BE SURE CRAFT IS IN GOOD REPAIR before starting a trip.
  - **3.** HAVE A SPARE PADDLE, affixed for immediate use.
  - 4. INSTALL FLOTATION DE-VICES, securely fixed and designed to displace from the craft as much water as possible.
  - 5. HAVE BOW AND STERN SAFETY LINES, securely fastened. Use ?"" to %" rope, 15' to 25' long, carried in such a manner as to be easily freed. Lines may be terminated in a loop or a brightly colored float.

- 6. USE SPRAY COVER WHER-EVER REQUIRED; cover release must be instant and fool. proof.
- 7. CARRY REPAIR KIT, flashlight, map and compass for wilderness trips; survival gear as necessary.
- III. GROUP EQUIPMENT (The leader may supplement this list, at his discretion)
  - THROWING LINE, 50' to 100' of ¼" rope.
     FIRST AID KIT with fresh
  - 2. FIRST AID KIT with fresh and adequate supplies; water-proof matches.

### IV. LEADER'S RESPONSIBILITY

- 1. HE MUST HAVE FULL KNOWLEDGE OF THE RIVER. He determines the river classification on the spot and adapts plans to suit.
- 2. HE DOES NOT ALLOW ANY-ONE TO PARTICIPATE BE-YOND HIS PROVEN ABILITY. Exceptions: (a) when the trip is an adequately supported training trip, or (b) when difficult stretches can be portaged.
- 3. HE MUST KNOW WHAT CONDITIONS IN WEATHER, VISIBILITY AND WATER TO EXPECT; he should instruct the group relative to these conditions and must make decisions on the basis of the related dangers.
- 4. HIS DECISIONS IN THE INTEREST OF SAFETY ARE FINAL.
- 5. HE DESIGNATES THE NEC-ESSARY SUPPORT PERSON-NEL, and, if appropriate, the order and spacing of boats.

### V. ON THE RIVER

1. ALL MUST KNOW GROUP PLANS, ON-RIVER ORGANI-ZATION, HAZARDS EXPECT-ED, LOCATION OF SPECIAL EQUIPMENT, SIGNALS TO RE USED.

- LEAD BOAT KNOWS THE RIVER, SETS THE COURSE, IS NEVER PASSED.
- REAR-GUARD IS EQUIPPED AND TRAINED FOR RESCUE, ALWAYS IN REAR.
- 4 EACH BOAT IS RESPONSI-BLE FOR BOAT BEHIND; passes on signals, indicates obstacles, sees it through bad spots.
- 5. KEEP PARTY COMPACT. Divide into independent teams if party is too big.

### VI. ON LAKE OR OCEAN

- 1. DO NOT TRAVEL BEYOND A RETURNABLE DISTANCE FROM SHORE.
- KNOW THE WEATHER. Conditions can change drastically within minutes. Beware of off shore winds.
- **3.** SECURE COMPLETE TIDE INFORMATION for trips involving tidal currents.
- 4. LEAD, REAR-GUARD, AND SIDE-GUARD BOATS ARE STRONGLY RECOMMENDED to prevent large groups from becoming dangerously spread out.

### VII. IF YOU SPILL

- 1. BE AWARE OF YOUR RES-PONSIBILITY TO ASSIST YOUR PARTNER, if you are in a double boat.
- 2. HANG ONTO YOUR BOAT. It 'has excellent flotation value and is easy for rescue party to see. Leave it only under special circumstances.
- 3. STAY ON THE UPSTREAM END OF YOUR BOAT; otherwise you risk being pinned against obstacles, or, in waves, may swallow water.
- 4. BE CALM, but don't be complacent.

### VIII. IF OTHERS SPILL

**1.** GO AFTER THE BOATERS, then the craft.

### **ACCIDENT REPORT**

On March 22, William D. Welch, 36, A.M.C. member, lost his life in a canoeing accident on the Charles River. The tragedy occurred during a practice session by the White Water Canoeing Committee of the Club. This type of practice is intended to introduce persons already familiar with canoeing to basic white-water paddle strokes before exposing them in rapids. The pond above the dam in Watertown has often been used for this purpose, having been considered a safe location. On the day in question there was a strong downstream wind with gusts, plus a heavy volume of water going over the threefoot high falls. The accident occurred while the group, on orders from the trip leader, was moving upsteam to avoid the falls. The two experienced men in the group, plus most of the beginners. were still on the bank when a canoe, paddled by Welch and his wife, was swept over the lip of the dam nearly broadside, upsetting. The Welches struggled in the icy, turbulent water below the falls. They had no life jackets. Mrs. Welch was carried downstream to a point from which she could be rescued; Welch remained at the foot of the falls, and eventually lost consciousness. In a rescue attempt made via the lip of the dam, the trip leader very nearly succeeded in bringing Welch out, but was unsuccessful, and was himself dragged from the water paralyzed by cold. Welch was finally brought ashore by a passerby who knew, from experience as a boy, that there was a bar of rocks across the river about five feet below the falls. Unfortunately this aid came too late, and Welch died at about the time he was brought to a hospital.

A complete report, including recommendations, cannot be made at this time because the accident is still under study. However, this account should serve as a warning to review safety practices, to examine training procedures from the viewpoint of safety, and to make a study of rescue techniques.

### PRODUCT INFORMATION

#### PIONEER FOLDBOATS

Pioneer Foldboats, made in Western Germany for the last 37 years, are being sold through their New York office at 206 East 86th Street. The Pioneer features wood parts made from selected ash, a five-ply hull, and solid brass hardware. The boats are unusually light. A catalog is yours for the asking.

### THOMPSON ROYAL-CRAFT CANOE

A new-type canoe, with obvious potentialities for white water was exhibited this year at several boat shows. The canoe is the 16' Royal-Camper, manufactured by Thompson Royal-Craft, Inc., of Cortland, New York. The canoe is made of Expanded Royalite, a plastic material which contains a small amount of rubber. It is made up of five layers. The two outside layers, or "skin," give it strength and durability. The center layer is of the same material as the outside layers but is blown up with air to form a foam. This core is buoyant and gives the canoe its flotation so that tanks or styrofonm blocks are not needed. The color is impregnated into the two outer layers making it unnecessary ever to refinish the canoe. The Thompson people had a sample of Royalite which they subjected to an impact test together with a 1/16" sheet of 61ST6 Aluminum and a 1/8" fiberglass sheet. The Royalite showed up very favorably.

#### KAYAK MOTOR

For the still-water canoeist and wilderness voyageur, Grade Engineering Company, of Springdale, Connecticut, presents the Zundapp, a light-weight but powerful outboard motor designed for easy attachment to canoes and kayaks.

This German-made motor weights 29 pounds and develops 2.8 horsepower. It will drive a light boat from 9 to 11 MPH, and runs from four to eight

hours on a gallon of gas. It has many features ordinarily associated with bigger, higher-priced motors.

The Zundapp motor has been used on a number of exploration trips including a recent one by the German explorer, Hans Ertl, up the Rio Ipurupuro, Rio Cocharcas and Rio Negro in the Amazon district. Two foldboats were coupled together and a single motor pushed them upstream with a fuel consumption of about one pint per hour.

#### CHAUVEAU FOLDBOATS

Peter Whitney, importer of the Chauveau foldboat, comments on the extreme rigidity of the Chauveau. Whitney writes that he assembled the boat in his living-room, placed chairs under the bow and stern, and then stood in the cockpit. The boat, says Whitney, sagged very little under his weight.

#### **RATIONS FOR RIVER-RATS**

Waterproofed food ration packages are now available from the Bolton Farm Packing Co., Inc. of Newton, Mass., the only firm in the Americas exclusively engaged in the design and packaging of special food assemblies for any kind of field use. Its new 1959 catalog pictures and describes the line and is available for the asking.

White Water enthusiasts will find the Mountain Pack ideal for trips. This compact feeding unit provides full meals for two campers for one day. Weighing less than two pounds per man/per day and measuring only 11¼ x 5½ x 5¼" it's sized right to fit in the prow storage space of any canoe. No refrigeration is needed and only water required. You can have your choice of six complete varied menus with either hot or cold lunches.

For short trips Bolton also provides the *Snackit*, a 10 ounce waterproofed food packet in packet size. This offers 850 calories and includes biscuit, meat—fish or cheese spread, dried fruit, non-

melting chocolate, chewing gum, can opener, matches, Wash-N-Dry (camp towel) and plastic knife.

### **FOLBOT KAYAKS**

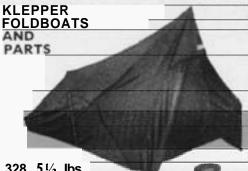
Folbot, the American-made folding kayak, is of rueeed construction to take abuse for years, has vinyl coated hull and decks to permit wet pack-up. This material is not affected by climate or polluted water, and wipes clean easily. Designs are stable with maximum width and under-water forms. Puncture protected bladders fit into the ends and provide flotation. Greater roominess inside Folbot provides space for tall persons as well as maximum storage space for duffle. Wide form makes Folbot ride high, above most rocks and obstructions. The boat is shaped to sail well, permitting the skipper to sit on deck and sail with a convenient hand-tiller rather than foot-pedal arrangement. Strong dural sailing gear, large rudder and leeboard rig permit sailing in storms and on oceans without fear of breaking. The large comfortable combination high and low seats also provide half-seats for kneeling position and indian-style paddling.

### **GUIDES WANTED**

We'd like to run a directory of river guides in an early issue of the magazine, but don't have a complete list. How about you guides sending in your names and a listing of your activities so we can be sure to include you?

### FREE '59 CATALOG

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324. C&T MOUNTAIN TOP Sleeping Bag. Dark Green cloth filled with 1½ lbs of the finest Northern Goose Down. A full length zipper alongside and across bottom permits full opening. additional zipper slide at bottom permits opening to cool feet. Constructed with a specially zippered hood and a semi-circular foot for com-fort. Usable from below zero to 70 degrees. Packed size in case 9" x 16". 84" long, 35"

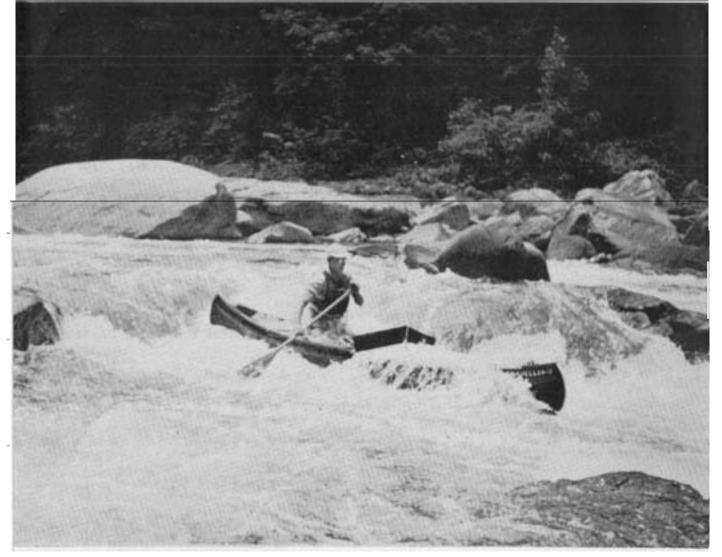
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John L. Berry in his 16 Old Town, "Traveller IV", on the Cayon section of the Cheat River below Albright, West Virginia. Photo by Bob Harrigan.

### OLD TOWN For White Water!

Whether you run rapid river currents or paddle through smooth quiet waters, your Old Town canoe will respond quickly, joyously to your least command. Feel her come alive as she leaps and turns and darts downstream. She's as keen for this brave new sport as you

White water boatmen say you can't beat an Old Town canoe for beauty and grace of design. Or for speed! Take an Old Town where the going is rough. She'll match your courage and daring with dashing performance and maneuverability. And because she's built by expert craftsmen, she'll give you years and years of dependable service. See your nearest Old Town dealer, or send today for a FREE catalog.

### OLD TOWN PADDLES

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OLD TOWN CANOES

### **MISCELLANY**

FibArk is making a very generous offer to contestants in the Salida races this year. Look in Letters to the Editor. . . . also for the Salida races, Larry Moninger of Waterways Unlimited announces that his firm is making available three or four of their whitewater canoes for loan to contestants in the slalom races. Write to Larry at 4235 W. Evans, Denver 19. . . . we have received from the International Canoe Federation a very interesting schedule of river tours. Those who visit Europe this summer have their choice of some thirty tours of one to three weeks duration. They are sponsored by various 'federations and clubs and range from the gentle Loire in France to the class V Vorderrhein of Switzerland. Almost every country appears on the list. If you want to join one of these tours, write Bob McNair, 32 Dartmouth Circle, Swarthmore, Pennsylvania, for further details. . . . from Die Naturfreunde, an Austrian water touring association, comes an announcement of International Wild Water Week during August 9 to 16 at Gross Reifling, Steinmark, Austria. The notice sounds tempting: "far from the hubbub of the city the paddlers of many lands meet each year in the ideally located Gross Reifling (Steiermark) and participate in the traditional Wild Water Week of Die Naturfreund. On the splendid wild waters of the Enns and the Salza they have the opportunity of taking trips of varying difficulty under experienced leaders. The wooded foothills of the Enns valley give a beautiful setting for these trips. Transport of boats to each day's put-in spot is arranged for. Easily reached peaks can be climbed under skilled leaders. Lectures, films and entertainment will help to make the evening hours pleasant. Meals can be had at low cost or each participant can prepare his own food at the campground. Paddlers from all lands can participate; each paddler must bring his own boat (which must be made unsinkable with flotation bags), his own tent, and if possible a life jacket. The organizer assumes no responsibility for risks. Participation fee for non-members is S 15 (about  $75\phi$ )."

American WHITE WATER

### **BOOK REVIEW**

LISTENING POINT, **Sigurd** F. Olson, Alfred A. Knopf, New York, 1958, \$4.50. Illustrated by Francis Lee Jaques.

This is a collection of essays about the out of doors, mainly the Quetico-Superior country of Northern Minnesota, by a beloved and effective champion of that region. Sig Olson has rendered great service to the preservation of wilderness waterways as President of the National Parks Association, a member of the council of the Wilderness Society, a member of President Eisenhower's Quetico Superior Committee, and as wilderness ecologist of the Izaak Walton League of America. He has known the country intimately as a guide and expertly as a professional biologist. This book records the thoughts Sig thinks while paddling, walking or skiing in his own north woods.

Most of the topics are part of every canoe cruiser's experience; for example, the sound of rain on a tent, the laughing of a loon, the portage, glacial grooves, a falling leaf, or logging roads. But when Sig Olson thinks about rain

### **HATCH**

### RIVER EXPENDITIONS

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Write soon for details!

"SEE DINOSAUR WITH US"

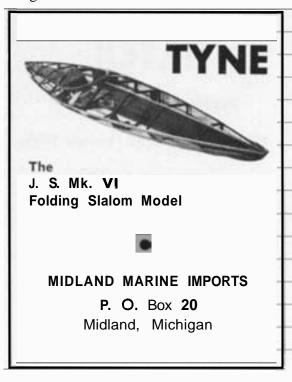
on a tent his thoughts range wide among the countless primitive shelters, overhanging cliffs, lean-tos, overturned boats and canoes under which he has slept on rainy nights, to a Washington club to recall a conversation on the subject with a famous geologist, to the idea of how long (1,000 years) it takes to make an inch of humus, and how the rain sinks into the forest floor.

This is only one of the more ordinary of the pieces. On the subject of "Fleur-de-lis", the thoughts begin with a history of the flowers and their introduction to North America. From here, the trail leads to an account of the early "courieurs de bois", whose flag bore those same "lillies of France", and their astounding feats on the Grand Portage or on the nine mile carry around the rapids of the Pigeon. In this one, Sig paddles with a friend to Prairie Portage, site of a former trading post, imagining as he approaches how it must have looked to the voyageurs of long ago. Later, he pitches a camp on the site of the old camp ground and projects himself backward in time to share the dreams and the laughter, and to hear the sound of the songs.

No rapids are run in this book, but a paddle is broken, and a canoe is sawed in half. The broken paddle is drawn on a black-bordered card which comes to Sig announcing the death of an old canoeing friend. The sawed canoe results when two old voyageurs past 70 realize that they can no longer pack their canoe or slog across the portages. Not wanting to abandon the canoe to slow disintegration, and rejecting the idea of burning it or sinking it in a rapid, they decide to saw it in half. Each man takes his half and stands it in the corner of his room where it will always be near, and where, fitted with shelves, it will contain "books, pictures, mementos, and the stuff of dreams."

"Listening Point" is a small and quiet book, as the wilderness itself is quiet. It is written in a simple and sincere manner which evokes the feeling of rocks, trees and water. It is almost like cruising through the Quetico-Superior with Sig Olson in the bow of your canoe.

Reviewed by Bob Chambers





### POSADA'S PODIUM

BY MAURICE POSADA, EXECUTIVE SECRETARY, AWA

Who

I'm happy to announce the names of two able members who have volunteered to serve on our committees. They are Rohert K. Morse of El Paso, Illinois, who is now the chairman of our Library Committee, and Sigurd F. Olson, who has been elected to the Advisory committee.

As some of you already know, Sigurd Olson, author of "The Singing Wilderness" (published by Knopf), has long been associated with the Isaac Walton League of America and the Quetico-Superior Committee and is now President of the National Parks Association. Take out your copy of our membership roster, turn to the list of committees, and put down Sigurd Olson's name in two blank spaces under both the Advisory and General Committees. Add D.C.—that's where you'll find his address.

#### How

After getting our membership roster with the last issue and seeing the list of the committees, a member wrote puzzled about their make-up. Some of you may also be puzzled, so here's the line-up.

There's an Advisory Committee, a General Committee, an Operating Committee, and several service committees.

Let's start with the Advisory Committee. Its job is to give advice, so it's made up of people suited by experience to do so. Limited to seven persons, so that they can be in quick and simultaneous touch by means of carbon copies of their letters to one another, four fulfill the qualifications of experience as past Executive Secretaries, which makes for the continuity that is indispensable to the current officers; the fifth is the Executive Secretary in office, who can consult the others on current problems and

relay their advice in appropriate directions; and the sixth and seventh are elected by the other five for their special counsel. At present, the two elected members are Dave Stacey, our former editor, and Sigurd Olson.

The secretary (with everybody's help) finds good people to do the day-to-day work of the Affiliation and puts them in charge of committees of their own choosing. These are the service committees—for safety, membership, library, guide-books, conservation, for other services that may be needed and. of course, for the magazine.

To see how a service committee works, look at the Editorial Committee. Its chairman, Martin Vanderveen, is the managing editor who (with everybody's help) found good people to help him—regional editors to get articles (with everybody's help), advertising managers to get ads (with everybody's help), Roy to take care of art, the Membership Chairman to double as circulation manager, and—last and first with nobody's help—his wife, Pat, to take care of the kitty (that's our cash, not their cat).

The Operating Committee is for the chairmen of the various service committees to get together (by means of the "carbon flurry") on common problems and common action.

Now we come to the policy-making General Committee. It's made up of thr Affiliate representatives (one from each affiliated club) and the members of the Advisory and Operating Committees. You can't get that many carbon copies on a typewriter, so the General Committee meets by mimeograph or spirit duplicator.

So that's the make-up of our committees: the Advisory Committee advises, the General Committee makes policies. and the Operating Committee carries them out through the service committees. At least that's the way things are supposed to work, according to proposed constitution and by laws, which haven't been ratified yet but which we've been trying to follow.

### AWA or AWWA?

Since the proposed constitution and by-laws were published in our last issue some amendments have been submitted to the General Committee which are now under study by those who drew up the original draft.

One amendment is about the name of our Affiliation and the letters that are to stand for it. Originally the name was "American White Water Affiliation." the letters for it were A.W.W.A. or AWWA, and that's how it was for several years until someone asked, "Why isn't the name hyphen-ated?" and somebody else complained that "a doublyou doublyou a" was too big a mouthful. After the suggestion was made to write the name as "American White-Water Affiliation" and abbreviate it to "A.W.A." or "AWA," some members started to do it, others preferred the original way, but nothing formal was done about it until in the last issue the proposed constitution had the name as "American Whitewater Affiliation" and the initials as AWA.

Well, you'd never think that so much water could produce so much fire. But we now have a Battle of the Hyphen, a War of the W, a Campaign for Capitalizing water, and a Fight for the Period.

Which do you prefer— American White Water Affiliation? American White-Water Affiliation? American White-water Affiliation? American Whitewater Affiliation? A.W.W.A., AWWA, A.W.A. or AWA? Or d'you just like to paddle?

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### Mema

Do you have friends
who should belong to AWA?
Let us have their names
and we'll send them a
sample copy of
American WHITE WATER

### **IT'S YOUR MOVE!**

If ya gotta move—MOVE! But don't keep it a secret! Here's WHY:

- (a) You may not get your AWW JOURNAL
- (b) Your copy may be returned to the circulation Manager
- (c) Every copy returned robs the AWWA Treasury of another ten cents
- (d) If you let the Postoffice send through your change of address, each time it robs the AWWA Treasury of still another ten cents!
- (e) All these unnecessary expenses come out of our li'l ol' \$2.50, leaving just that much less for our magazine, which makes ALL OF US the losers!

So . . . if ya gotta move —MOVE! But . . . make it a special point to tell your Circulation Manager, by letter, on a postcard, by telephone; or, if you must, use the "Count Me In" coupon in your AWW JOURNAL. Okay?? Okay!!



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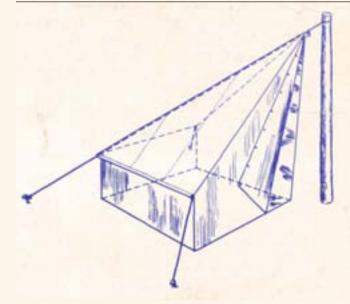
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