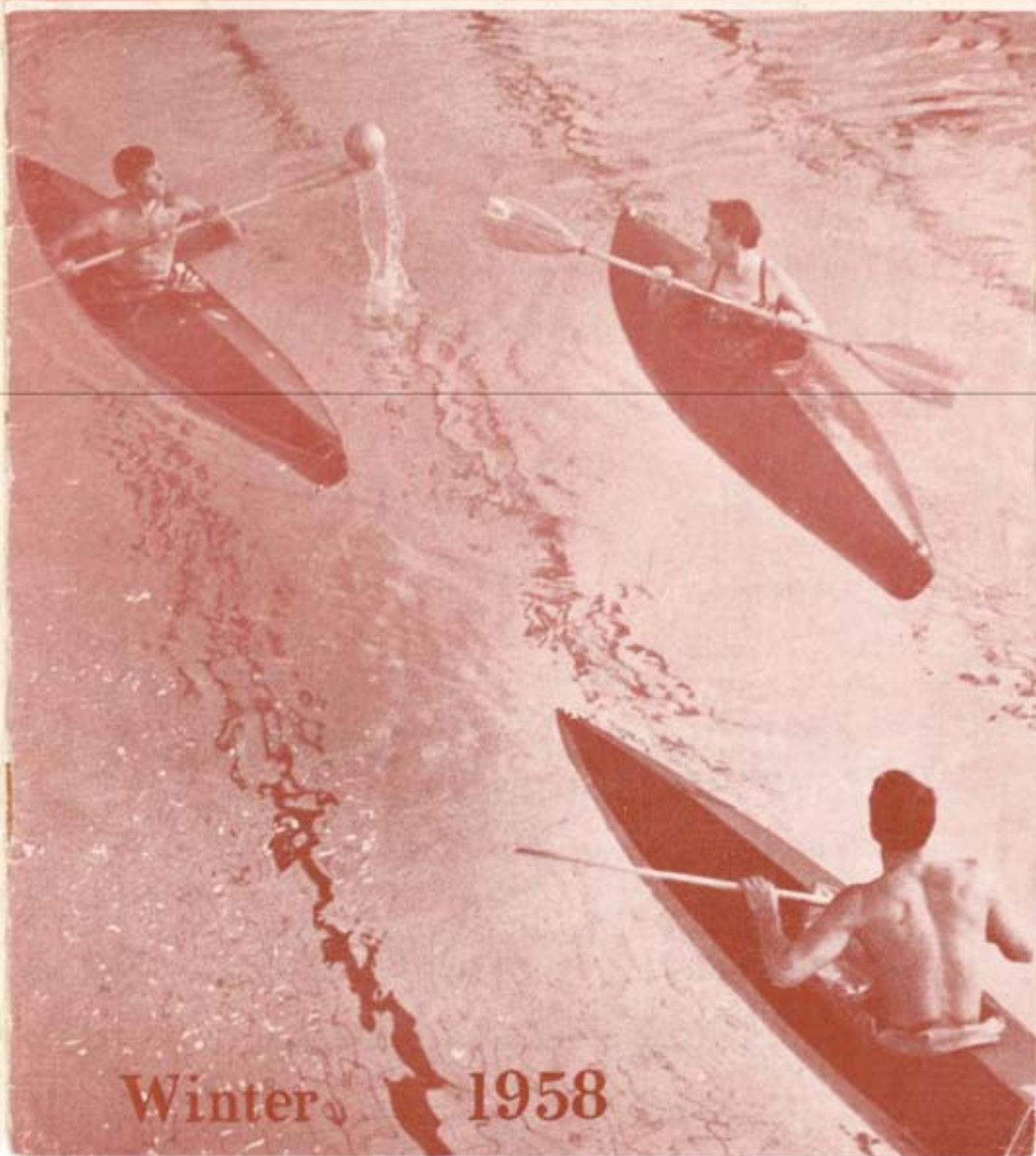


American **WHITE WATER**

JOURNAL OF AMERICAN WHITE WATER AFFILIATION



Winter 1958



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AMERICAN WHITE WATER

Sponsored by
The American White Water Affiliation

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Number 4

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EDITOR.....Dave Stacey

Secretary.....Harold Kiehm Business Henry Barce
Eastern AdvertisingAl Washington Circulation Clyde Jones
Western Advertising Elsa Bailey Art Roy Kerswill

American WHITE WATER is mailed to all members of the American White Water Affiliation in May, August, November and February. Membership is open to all who are interested in river sport, for the sum of \$2.50 per year.

The magazine welcomes contributions of articles and photographs, but assumes no responsibility for them. Address all editorial material to: Dave Stacey, 601 Baseline Rd., Boulder, Colo.

Printed in the United States of America

COVER—Kayak polo  December. Chuck Daley lifts the ball from the water in preparation for a pass. Joan Stacey is ready to intercept, while Walter Kirschbaum waits to receive.—Photo by Dave Stacey.

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 (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 canyoneering about the AWWA. 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.

COUNT ME IN

as a member of the American White Water Affiliation. As a member I will receive issues of American WHITE WATER magazine in May, August, November and February. Here is my \$2.50. My address is



Type of boat preferred: _____

Boating club membership: _____

Suggested articles: _____

Mail to: American White Water Affiliation, 5525 E Bails Dr., Denver 22, Colo.



*AWW appreciates your many kind letters. Please keep them up. For some differences of opinion, see our new department, **CONTROVERSY CORNER**.*

December 10, 1957

Dear Dave:

Being an amateur river rat I take the privilege of addressing you rather informally. Hope this meets with your approval.

I was pleasantly surprised to receive your recent letter and to find that Mr. Wilbert (Hill) Schade had subscribed to the magazine **WHITE WATER** for me.

Mr. Schade is a member of our YMCA Hoard of Directors and I am the current Physical Director.

Went with the late Norman Nevills as a passenger in 1942 down the San Juan. The river bug bit me and I still have the virus in my system.

Later ran with Nevills as boatman on two trips and then started building my own boats. In all I have run the San Juan four times, Yampa and Split Mountain twice, Lodore once, Desolation and Gray once, and the Grand Canyon three and a fraction times. The fractional run was last June. Started on 118,000 C.F.S. at Lees Ferry—the highest water for oars to our knowledge. Drift was a problem and we quit at Phantom Ranch because we were afraid of not being able to penetrate the seven mile drift jam on upper Lake Mead. Hope to retrieve the boats next June.

Capsized once in Horn Creek Rapid in 1955. Have run all rapids I've seen, including Hell's Half Mile at low water, with the exception of Lava Falls in the lower end of the Grand.

Would like to run the Rogue in Oregon before hanging up the oars.

Sincerely,

Moulton Fulmer

(Continued on Page 26)

From Your Editor

The Christmas season has now passed and your Editor and his staff hope that all of you had a very merry Christmas. With the winter season upon us, only those who are fortunate enough to live in the south have a chance for outdoor boating. However, our favorite sport need not be entirely forgotten.

For those with access to a swimming pool, all sorts of fun may be had. Kayak polo, described by Walter Kirschbaum in his article, is both good training and lots of fun. Walter was instrumental in getting this game started in Germany, and when he left, it had become very popular. People in his home town were paying admission just to see Walter and his friends have fun. This is a very good way to earn money for a boat club. Who knows what future the sport may have in America?

Another occupation for winter is the chores that were put off from last summer. How many, (like myself) have reels of unedited film just waiting to be spliced together? There is no question but a little careful cutting and arrangement will do wonders for home movies. Now is the time! And for still photographers, now is the time to arrange the slides or make the prints. If they are good please send a copy to your Editor for use in the magazine.

The canoe, kayak or raft undoubtedly took a beating this summer. Why not patch it up now while time is cheap? Pretty soon it will be spring and you won't want to waste valuable time working on it. How about the paddles that took such a beating on those rocks? How about putting fibreglas on the tips so they will stand up better next summer?

Now is the time to renew your subscription and membership in the American White Water Affiliation. Enclosed with your magazine are all the necessary papers. It is with regret that we raise the price to \$2.50 a year. Like everyone else, we have been hit by the rising cost of doing things. We are sure you will understand and help us in our effort to serve.

Dave Stacey
Editor



AFTER the 1957 National White Water Slalom Championship in Salida, Colorado, I was asked how I felt about going to Germany for the International. In as much as I had spent the previous winter dreaming about the remote possibility of such a trip, I replied that I did not see how I could possibly afford not to go—since there would never be another chance for me to go under similar circumstances. So I was told to wait for word. I asked whether I should attempt to book passage. "Just wait," and wait I did, until at the slalom race in Dillon a few weeks later I learned that passage had been obtained, and that five of us would be going, three paddlers and two managers. It was with great delight that I learned that Carol Kane, woman champion, and Eric Frazee, men's runner-up would be going with me.

Preparations were hurried, application for a passport was air-mailed—then followed by a wired request to have it sent to the New York passport office to save time. Unable to leave with the four others who traveled by private car from Salida to New York, I flew and joined them there. Passports were awaiting us,

as hoped for, and we had an afternoon to spend sighting. So—we took the boat trip around Manhattan.

The trip from New York to Rotterdam, with stops at Southampton, England and LeHarve, France, took eight days and we spent many hours in the ship gymnasium trying to keep in some sort of physical shape, for we knew that there would be far too little time to regain paddling tone before the races.

At Rotterdam we were met by three Germans from the Klepper-Werke in a company owned VW station wagon, a vehicle which we all learned to esteem highly before the trip was over. The driver and his wife spoke no English, but Gretl Maurer spoke it excellently. She was Herr Klepper's secretary and was sent by him to act as our interpreter and guide for the trip. Her charm and delightful personality were equaled only by the unbelievable gesture of hospitality made by Herr Klepper himself. Imagine our sending a station wagon, driver and secretary, for example, from Colorado to New York to bring back a group arriving from Europe. Yet this is the equivalent of our drive.

American WHITE WATER

HAVE KAYAK— WILL TRAVEL

by DICK STRATTON

America's slalom champion reports on his trip to the Internationals.

One of the easier gates in the Race. Note the constructed chute. Photo Hedi Milenz

We rolled quickly through Holland, having dinner, or at least, an oversized lunch at a roadside inn. On passing through Antwerp, we took a side trip to the beautiful and huge cathedral, then had coffee on the 24th floor of an ancient building from which we had a fine panoramic view of the city. That night we stayed in a small hotel in Brussels and I got my introduction to European beds, to which I never did become enured. The landlady at the hotel insisted on getting our pedigrees on the register, including our passport numbers, place and date of birth, etc. This was common procedure, according to our German friends, who assured us that no one could stay overnight in any hotel in Europe without all this information. Dinner was a late one and already we realized that there would be no such thing as a quick meal, too much negotiating and computing had to be done before we could pay up and leave.

Next day after we had passed through customs and immigration inspections we reached a beautiful river. I was amazed at the amount of traffic on the Rhine and at the speed of the down-river craft. Powerful tugs were fighting the swift current to pull as many as five loaded barges upstream. And lo and behold, in the evening while dining in a hall overlooking the river, a Swiss motor launch which had been in the harbor at Rotterdam the morning we arrived, swept swiftly up the Rhine. By traveling twenty-four hours a day the tortoise had overtaken the hare, which had stopped too frequently and too long to eat and sleep.

The following noon found us lunching in Heidelberg in a quaintly beautiful inn overlooking the Rhine far below, a wonderful view despite the frequent rain and low clouds.

In the evening we came to Augsburg, our ultimate goal, but not our immediate one. We persuaded our driver to take us to the site of the slalom races on the Eiscanal. Many of the contestants were camped in a large tent city with a colorful array of flags of the various nations indicating where the national groups were located. We anxiously looked over the canal, as someone showed us what the course would be like except that there was no water in the last third of the course and very little in the first part. We heaved a sigh of relief as we decided that it would not be too wild for our limited ability (how little did we know). We were issued programs with the paper plan of the course and badges to permit our entry into the area as contestants.

With our "frayed" nerves temporarily soothed we were soon rolling on through Munich where our intrepid driver and stout hearted vehicle took us through a flooded underpass that had scores of other motorists stranded waiting for the torrent to subside. We arrived at Rosenheim after midnight completely tired out, and we welcomed Mr. Klepper's guest house. Next morning we had breakfast in the factory dining room, had a brief and incomplete tour of the fine modern Klepper factory, and arranged to buy boats. Eric and Carol wisely chose slalom models, but I took a T-65 because I was accustomed to that model back home. I forgot that I had altered mine to fit my ungainly carcass and in so doing had also changed the performance characteristics.

That evening we were dinner guests of Mr. Klepper in a small but elaborate restaurant and enjoyed a wonderful meal. He impressed upon us the gravity of our situation, namely, being in Europe without reservations for the return trip. He said emphatically, "Dot iss not gute, clot iss not gute." He may have had visions of having five hungry yankees on his hands indefinitely. As a result of his admonition, Steve Frazee stopped in Munich next day and secured plane reservations for four of us while Howard Blakey obtained a reservation on a boat. Meanwhile we three paddlers bought life vests and training suits and went on to Augsburg.

Not having any camping gear we took rooms in a hotel and hurried on out to the canal to assemble our boats and get in some practice. As we approached the Eiscanal, three days before the races, we could hear loud bursts of laughter and good natured shouting and a moment later we could see the cause. Such a concentration of kayaks, single and double canoes, ~~we~~ had never seen before, and all were practicing. Most of them were paddling upstream in the turbulent backwater then turning into the swift current as it raced down a spillway from the control gate above. Now and then someone would upset. Some failed to make an Eskimo roll recovery—hence the laughter from the other boatmen.

After watching for a short while we hurriedly assembled our new boats. It had been three weeks since I had dipped a paddle and the eight day ocean trip followed by three days of travelling overland from Rotterdam had left me soft and weary and after seeing the fabulous water and the crowd of skilled boatmen, my stomach was full of king size butter-Hies. However, we were soon taking our dunkings along with the others. On one of my upsets I was assisted in recovery by a Swede, on another by a Czech. I learned the nationality of the first from his pretty wife next day as she commented to me that the East Germans did not help anyone who upset. I pointed to the boatman who had helped me the day before and held her what he had done. She smiled and said, "Yes, I know. He is my husband."

My attempts at Eskimo rolls were futile and breath-consuming, and on each upset I had a long swim before getting my boat ashore. European boatmen, or least these champions, succeed in Eskimo rolls more often than they fail, even in turbulent water. The courses are laid out with ~~up~~ ~~sets~~ in mind to test that skill as well as slalom ability. If a woman upsets and has to swim for it, she is forgiven by the crowd, but a man, never. However, if a man does recover from an upset and continues the race, he gets an appreciative hand from the slalom-wise audience. I was amazed to see single canoists making Eskimo recoveries as readily as the kayakers. On Sunday, the second day of the races in the two man canoe event, I saw the ultimate. One canoe of the French team upset, but with beautiful team effort and coordination they rolled back up and continued. Their's was the most appreciative applause of all.

Our first work out was necessarily short since it started late in the day. Afterward while I was bending over my boat making some adjustments, some one whopped me on the back of the neck almost standing me on my head in the cockpit. I recovered and looked up into the welcome grin of Fernand Götz of Switzerland, who had been a guest of the FibArk club in Salida in 1956 and is a white water whiz kid. Although he had spoken no English in Salida, he could now make himself understood.

Later I met Roger Paris from France and his pardner, Claude Neveu. Fritz Schwingl of Austria introduced me to some of her team mates. Meeting these kids again lifted my morale no end. I recognized Charles Dussuet, canoist from Switzerland, but his former partner, Jean Roessinger had me fooled until the last evening, because he was sporting an Abe Lincoln type beard. He had quite a laugh over my trouble in placing him and he, too, now spoke much more English than he had while in Salida. Carlo Wetzel, from Luxembourg, greeted me with "Do you see what I meant in Salida?" I recalled that he had told the FibArk officials that they were making a mistake by holding their slalom races in such easy water. A very pretty blond asked me,

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"Can we help you Americans in any way? We are British, you know." Later on, one of the British men told me that he had just learned that gate No. 24 would be right in the middle of the channel and would require no correction. Then he asked me, "Are you camping or hoteling?"

I replied that due to our lack of camping equipment, we were hoteling, so he invited us to visit them at the camp. They would be very easy to find, you know, just watch for the Union Jack. We did not get to visit that colorful camp but had seen the impressive array of tents and flags from the road.

That evening I got a phone call from a reporter. He said that the United Press had asked for a report on the American Boaters. He made an appointment for later and met us in the dining room. Like so many Germans we met, he spoke excellent English. Although we assured him that we were overwhelmed by both the course and the competition and made no pretenses about our inferior ability and our apprehensions, he was more than

generous in his report. When it reached the U. S. it was headlined, "American Boaters Are Attraction in Augsburg Races." And, of course, we were an attraction—because everyone expected me to drown each time that I upset.

The next day the Czechoslovakian team captain asked me if our woman, Carol Kane, would paddle in the team event with the two Czech girls, so that all could get in extra practice on the course. I replied that I would be glad to ask her but that the decision would have to be hers. He indicated amazement and asked if I were not the team captain. I assured him that we were three individuals and none was captain and that he would be welcome to talk to Carol personally. Obviously he did not quite comprehend such inefficiency; I should be able to tell Carol that she was to paddle with them and she would obey. I did try to sell Carol on the idea but she was apprehensive lest she might spoil the team event for them despite their reassurances that the outcome was unimportant.

Manfred Vogt, the World Champion, having a rough ride on one of the nasty waves on the course. Paddle braces and eskimo rolls were an absolute necessity.

Photo Hedi Milenz



One of the features of the whole event which impressed me was the manner in which the safety and rescue team operated. They were seventy fine swimmers who trained daily by swimming down the swift current of the canal. They were strategically spaced along the course at points where contestants were most likely to upset. Each would wait long enough to see whether a boatman was going to succeed in righting himself but the instant that it became apparent that he could not, three swimmers would plunge in and do an excellent job of recovering boats, paddles and any other equipment (including the paddler some of the time).

The weather preceding the race had been cloudy and cold with frequent rain but on the first day of the race it poured down all day long. Boaters waiting to be started, paddled ceaselessly back and forth trying to keep their blood circulating. Many had plastic parkas or jackets, but I who have three such jackets at home had not brought any in my effort to keep luggage weight down.

The course was laid out in a way to challenge skill, strength, and endurance. The start of the race was on the slowly flowing upper canal. The contestant faced upstream while the starter said three, two, one, go (in German, of course). One made his turn downstream, paddled briskly to gain steerage way for about fifty yards, then swooshed down the spillway into a lower canal where a sharp turn to the right had to be made to pass through gate No. 1 into the turbulent back water. This first turn flipped many a champion but most recovered with an Eskimo roll. Then one paddled upstream and crossed to his right through gate No. 2 and into the swift current at the foot of the spillway. This picked off quite a few. So went the race, there being twenty-five gates in all, the next to last one being situated above the most unpredictable wave I have ever seen.

Making no excuses for my performance, it was the poorest I've ever done, upsetting on both runs. Eric Frazee did better in that he got as far as gate No. 24 on one run, but he too, upset both runs. Carol Kane did exceedingly well considering the short time she had to get acquainted with her new boat and made it

clear to the finish on her second try. Results of the winners in all events now follow.

INDIVIDUALS

F-1 Men

1. Manfred Vogt, W. German
2. Dimitij Scilil, Czech
3. Heinz Bielig, E. German

Women

1. Brigitte Magnus, E. German
2. Eva Setzkorn, E. German
3. Annelies Seidel, E. German

C-1

1. Manfred Schubert, E. German
2. Emil Zimmerman, E. German
3. Jean-Claude Tochon, Swiss

C-2

1. Kleinert-Friedrich, E. German
2. Havel-Hendrych, Czech
3. Kotana-Hrabe, Czech

C-2 Mixed

1. Schmidt-Glockner, E. German
2. Krugel-Seicleman, E. German
3. Schale-Seifert, E. German

TEAM EVENTS

F-1 Men

1. East Germany
2. Czechoslovakia
3. West Germany

F-1 Women

1. East Germany
2. West Germany
3. Austria

C-1

1. West Germany
2. East Germany
3. Czechoslovakia

C-2

1. Czechoslovakia
2. Switzerland
3. East Germany

C-2 Mixed

1. East Germany
2. Combined France and Switzerland

Other countries represented but not mentioned previously were Poland, Belgium, Yugoslavia, Italy, and Denmark, making fifteen in all.

In 1959 the world championship will be held in Switzerland. It is the fervent hope of this "muddle-aged" dunker that these United States will be able to send a larger and better trained representation to that event. Questions from sincere aspirants will be gladly answered.



RESPECTFULLY YOURS— THE EDDIES

by WOLF BAUER

Washington Foldboat Club, Seattle

IN the last issue we tried to get acquainted with the basic elements of the eddy complex, and the form variations of the back-eddy. This month let's look briefly at several of the other types.

Whether eddies are our parking spots or play spots, obstacles or havens, they are nevertheless a most fascinating and often perplexing member of the river hydraulics family. As a kayaker, these eddies are yours to use for many purposes, provided you have learned something of their make-up, and recognize their separate distinguishing features and differences. They may be graded as to navigational difficulty and hazard just as any other portion of running water, and thus given the respect due them in each classification.


SIDE EDDY One type of eddy or reaction turbulency is the side eddy (Fig. 1). This type of eddy is basically the same as the back eddy, except that often stronger rotational currents are set  on the surface, due to the nature of the underwater condition and depth of the river bed and bank on one side. I shall define the side eddy as an eddy caused by an object and current-diverting obstruction, past which water flows on only one side. Since on a river this usually involves direct linkage with the shore or river bank, it is apparent that the underwater cross-section is not symmetrical, and the current depth and speed is unequal. If the shore has a gradual slope, in the eddy area behind the obstruction, then the reverse current may be slowed down considerably along the shore, while a steeply pitched bank or rock shelf shore will show  the fastest eddy current right up against the shore line. Due to the shallower shore side and lack of current interference on that side, and because in the shallow zone the water is more or less restricted to travel and behaves as a single


layer without vertical turnover as in deep water eddies, the deeply indented or broadly sheltered side eddy assumes more the motion of a slow whirl rather than straightline reversal of current as in the back eddy. Also on the upstream end of the eddy, there is usually very much less down-turning of the current against the obstruction than is the case in the back eddy, and the water generally turns out toward the stream current in a positive and strong current at this point. This difference between the back eddy and the broad side eddy creates wonderful merry-go-round cavorting spots for the foldboater and his maneuverable kayak. The broad and strong side eddy is to the foldboater what the powder snow covered broad jump or ridge is to the downhill skier, namely the spot to swing a lusty christie or skid turn and plane with full Freedom and great speed. Obviously side eddies are also found in all degrees of development, from the nearly stagnant narrow shoreline indentation having no pronounced rotation or upstream reversal, to the slowly spinning fully developed side eddy behind a broad and sharp promontory piercing into the fast current of the stream.

Side eddies can also be formed by chan-nel constriction causing differential velocity between middle and side portions of a stream. As such a compressed and high-velocity jet of current spreads out into a wider channel or deeper section,

In this article, American White Water continues its presentation of parts from Wolf Bauer's forthcoming book. It should be noted that the copyright of this material remains in the possession of the author. It is planned to present sections of this book in each of the future issues of American White Water.

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strong rotary side eddies  be set up on each side.

WHIRL EDDY  From the well-developed side eddy to the whirl eddy is only a short step and matter of degree, although the causes are not quite the same. Due to a bouncing effect given a stream in a sharply twisting channel, or when the stream impinges head-on into a bank or rock wall projection blocking its path to the extent that it must swing at an abrupt right angle or more to the side, very pronounced rotating eddies may be set up due to the splitting of the current. Such a whirl eddy is given rotational momentum by the current being actually diverted and banked around into a circular path, thus maintaining full current velocity in some portions thereof. Centrifugal force and effects are generally noticed in the whirl eddy, and water may be raised and piled up at a higher level along the outside perimeter of the eddy.

Within this whirl eddy may be found unsteady vortexes or true whirlpools of smaller diameter and high rotational speed. In differentiating between whirl eddies and whirlpools, we might say that any turbulent mass of rotating water is a whirl eddy, while a whirlpool, usually smaller, has a vortex center with a depression or funnel-shaped hole around which, and down which, water spins and spirals at such speed that its centrifugal force and momentum prevents the vortex from filling in (unless disturbed and deflected). It is conceivable and often actually the case, that a whirl eddy may have one or more whirlpools within its area.

The position of the side and whirl eddies is always more or less fixed in relation to location in the channel. However, there are unsteady conditions in deeper rivers where twisting channels may produce traveling whirl-eddies. These can become extremely hazardous because of the unpredictable effects created when such rotating masses of water impinge on various channel projections and other hydraulics. In such waters it is an advantage to hold boat speed to a minimum in order not to cross suddenly appearing eddy lines with unbalancing impact and momentum. But more of that some other time.

EDDIES ARE NAVIGABLE WATERS

The easy recognition and ready classification of all types of eddies comes only with experience in their use. Thus the beginner should have some early opportunities in familiarizing himself or herself with their actions, their advantages and disadvantages. We think, in fact, so much of the importance of recognizing the components of the eddies that in the first field practices considerable time is devoted to the simple maneuvers of correctly entering and leaving side eddies. Why this emphasis? We can best answer that by pointing out some of their uses and special problems to the paddler of the slim and sporty kayak.

Learning to pull safely out of and into a parking space along a crowded arterial highway is part of the car driver's first operating lesson. So also the paddler's. The side eddy is generally the most useful and safest because it provides access to the bank or shore, and minimum shore current near the eddy tail section (see Fig. 2.). If large enough, a whole kayak river party can arrest its downstream journey momentarily or pull out of the water. Conversely the side eddy often serves as a convenient put-in spot, or a first water-born party assembly spot below a fast-current setting-in place. Side eddies provide anchors for support boats, often very conveniently on opposite sides of central stream jets, drops, chutes, or rapids sections.

As already elaborated in the article "Playing the River" in an earlier issue, the side eddy, or the double opposed side eddy constitutes an area that nature reserved especially for the playful paddler in a frivolous moment. In addition, side eddies perform one of their most appreciated services (bless 'em), in the form of catch-all baskets wherein the dunker and his loose ends are reunited.

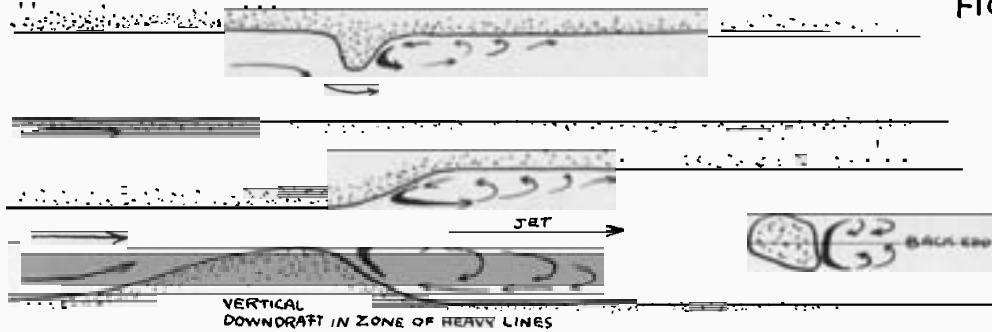
The back-eddy (Fig. 3) also has similar useful significance, although it is generally smaller, less frequent, and usually more difficult to get into and out of. However, these eddies in bouldery rapids

Illustrations  *Wolf Bauer and Roy Kerswill.*

TYPICAL SIDE EDDIES

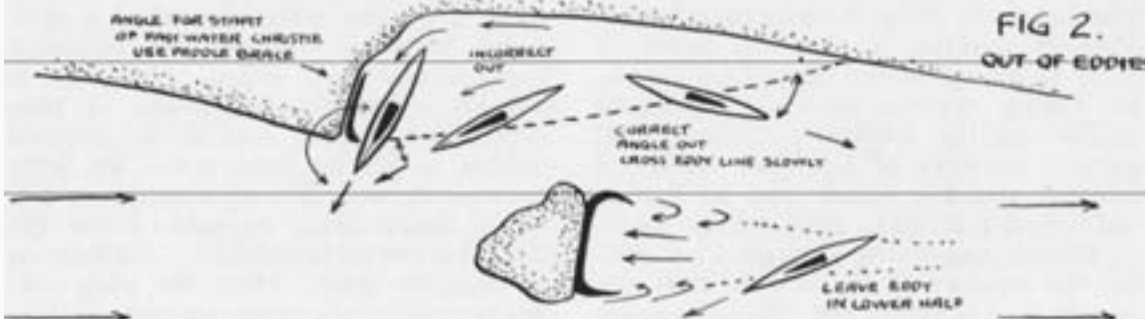
PLAN VIEW

FIG.1.



Into and out-of strong eddies

FIG 2.
OUT-OF EDDIES



INTO EDDIES

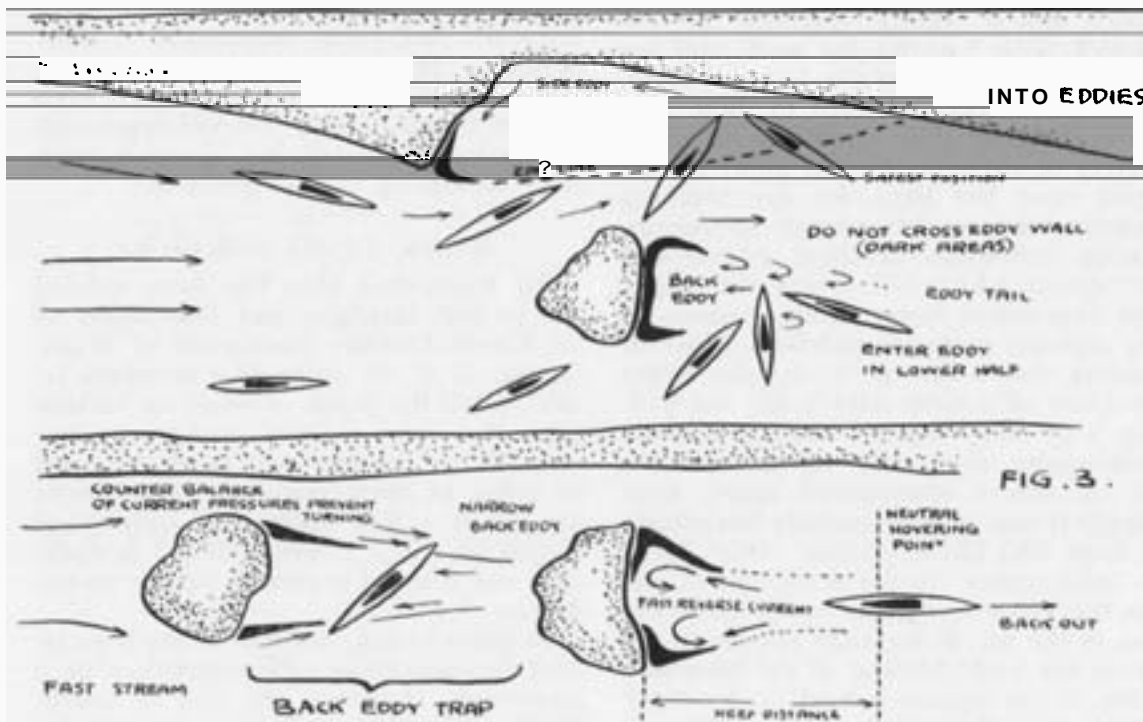


FIG.3.



sections and graveyards are extremely useful to the experienced kayaker who knows how to handle them. To him they furnish off-street parking, a place to pause in order to gain time for charting a course, for resting straining muscles, an anchor amidst swirling confusing. Difficult and lengthy stretches of bouldery rapids in medium and low water may be battled and solved piecemeal, eddy anchor to eddy anchor, conserving strength and making the mastery of the stretch more enjoyable by extending the time of passage and of contest.

LOVE 'EM & While learning to use LEAVE 'EM eddies for need and for fun is also to enjoy them, yet they can become traps to those who fail to recognize their mechanics and their degrees of strength. At this point let me again state the basis for my teaching analyses—namely that we are always discussing hydraulics of those proportions and speeds which fall within the enjoyable experience range of the experts of any regional group of paddlers. Thus all grading is on a flexible local scale. When the entry of a river stretch fills the paddler with misgivings or subconscious apprehensions, then such navigation does not constitute recreational sport, even though it may have an unholy fascination to those who like to recount their "luck" or "misfortunes" to the detriment of our aim for wider acceptance and popularization of the art. If the eddy current is too strong for backpaddling, if the buoyancy is low, if the support is weak or not available in case of a tipover, then use the eddies only near their downstream fringes.

Figures 3 and 4 illustrate two types of eddy traps. The back-eddy trap is one where a narrow eddy (less than a boat length wide) is situated just upstream from another fixed object. The scene is laid for a hilarious exhibition of frustrated effort on the part of the trapped paddler to get his boat across the eddy line or eddy wall. The photograph in Figure 4 shows what happens when the kayak has moved broadside to the eddy at the aeration point. Here the eddy current is pushing the upstream gunwale under the falling rim of water at the aeration point while the low buoyancy water keeps the hull partly submerged. A short period of juggling and bracing may ensue, but a bubble-bath is imminent, even for the expert. (Later we will report on our planned skin-diving research with eddy swimming and extraction.)

RIVER LEVEL SERVICE

An interesting idea has been carried out by Bob Harrigan and John Berry of the Canoe Cruisers Association of Washington, D. C. In order that members be able to tell the depth of water on various trips, they have painted markers on certain selected bridges and rated the trips in terms of these numbers. The mark3 are about a foot apart and have been chosen so that 1 is low water, 2 is desirable and 3 and 4 represent danger to the novice.

Needless to say, this system needs to be used in connection with experience or a guidebook. However, the idea is worthwhile and can be used in many ways by the various clubs throughout the country.

THE MAIN SALMON

by JO and KILL RUSSELL

Come with us on one of America's most beautiful trips.

Reprinted from SPRAY, the journal of the Colorado White Water Association.

IF you are tired of gazing into murky silt clouded waters, or worried about the palatability and safety of drinking river water, and still are looking for an exciting white water trip, the Salmon River in Idaho is for you.

We were lured by tales of sea-run salmon and better than average trout fishing on the fabled "River of No Return" so we joined a group of 26 white water enthusiasts, headed by Don Hatch, for the trip from the junction of the Middle Fork to Riggins on the Main Salmon. The party included members from the Appalachian Mountain Club, American Alpine Club, and several members from Colorado, including Evelyn Runetts, Betty Rumford, the D. R. C. Browns and ourselves. Equipment included two of Hatch's pontoon rafts, six decked canoes, and one Folbot.

This portion of the Salmon runs through one of the last wilderness areas in the United States, cutting through steep canyons as well as broad valleys, covered with a heavy growth of large, western pines. We saw mountain sheep and deer practically every day.

We spent six days on the river, covering about 120 miles to Riggins, Idaho, encountering exciting rapids nearly every hundred yards or so. One of the most pleasing aspects of the trip was the way practically every major rapid provided a smooth run out below where you could catch your breath (or maybe right your canoe) before you headed into the next rapid. There were rarely dull moments.

We met the usual quota of river rats and characters. At one point, named Nez Perce, Idaho, we encountered a sign near a primitive cabin on the river bank. The

sign read "Stop—Please Mail." We inquired at the cabin, and were met by a grizzled old timer who calls himself "Hank, the Hermit." He told us he had already sent the mail out, and invited us to have coffee with him. We later learned he pulls this "mail trick" with anyone passing on the river, merely to get an opportunity to talk, in his engaging Pennsylvania Dutch accent, to someone from the outside world. He passed out neatly printed "business cards" which read, "Hank, the Hermit, Prospector and Miner, Nez Perce, Idaho." This was one of the first professional hermits we had ever met.

Our camping sites were beautiful, usually being located near brilliantly clear streams which cascaded into the main river. These feeder streams were really cold, providing an excellent cache for beer and a plentiful source of scrappy trout. The third day out, we stopped at a beautiful camp site near a natural hot springs. Someone, no doubt many years ago, had wedged an ancient porcelain bath tub in the rocks under the springs, so we enjoyed a delightful hot bath before dinner.

The trip was filled with real white water excitement. The gauge above the Howard Ranch read 4.4, so we were running the river under perfect conditions. Although the river has been considered "impassable" by some when it is either too high or too low, there is no fall area which could not be carried around or lined. With the ideal water level we encountered, no carries were necessary, and only about ten rapids had to be inspected before running, including Salmon Falls, Carey, Elkhorn, Rig and Little Mallard, Growler, Ruby, and Lake Creek.



*Starting a
new day's
trip from
Mallard
Beach*

Bill Russell

Our canoe dumped twice, once due to carelessness, and the other time because, foolishly, we elected to run the "Ten" side of the Big Mallard Rapid rather than the more sensible "Five." So you see, you don't have to be an expert to run the Salmon.

Although there were plenty of ten foot waves, most of these could be avoided by planned, sneak passages. All the canoeists experienced at least two tip overs, but the only Folbot on the trip, ably manned by the intrepid Ruth and D. R. C. Brown of Carbondale took the roughest of all the rapids right down the middle, without incident—although they managed to stay thoroughly wet most of the time.

The rapids were individually short, perhaps averaging 50 yards each, with only Ruby Rapids extending about 500 yards. There is adequate warning before each major rapid, so the trip could not be

considered dangerous for the reasonably experienced Foldboater or canoist, at least with the water level we experienced.

River scuttlebutt informed the townspeople of Riggins that we were on the Kiver. As a result, the town's leading citizens turned out en masse to welcome us as we approached Riggins, cheering us on through the last (and most exciting) rapids—Ruby and Lake Creek. When we put into shore on the last day, they met us with the most delicious cold watermelon I have ever tasted, boundless hospitality, and even a newspaper reporter who did a story on the trip for the Lewiston, Idaho, paper.

We certainly are enthusiastic about the Salmon, and think it to be one of the most beautiful rivers we have ever seen. We recommend it highly as an exciting one week trip into primitive, western wilderness.

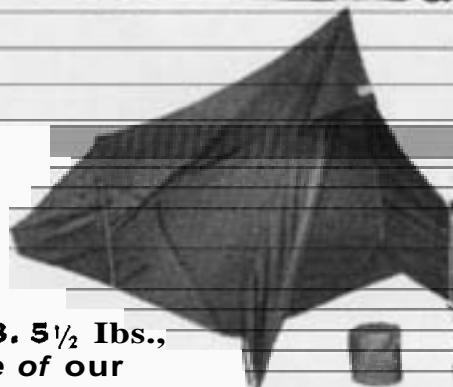


*A couple
from New
York run
Salmon Falls
rapid*

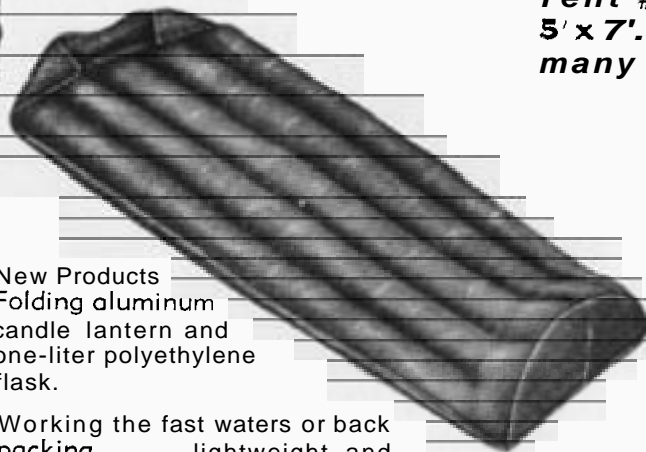
Bill Russell

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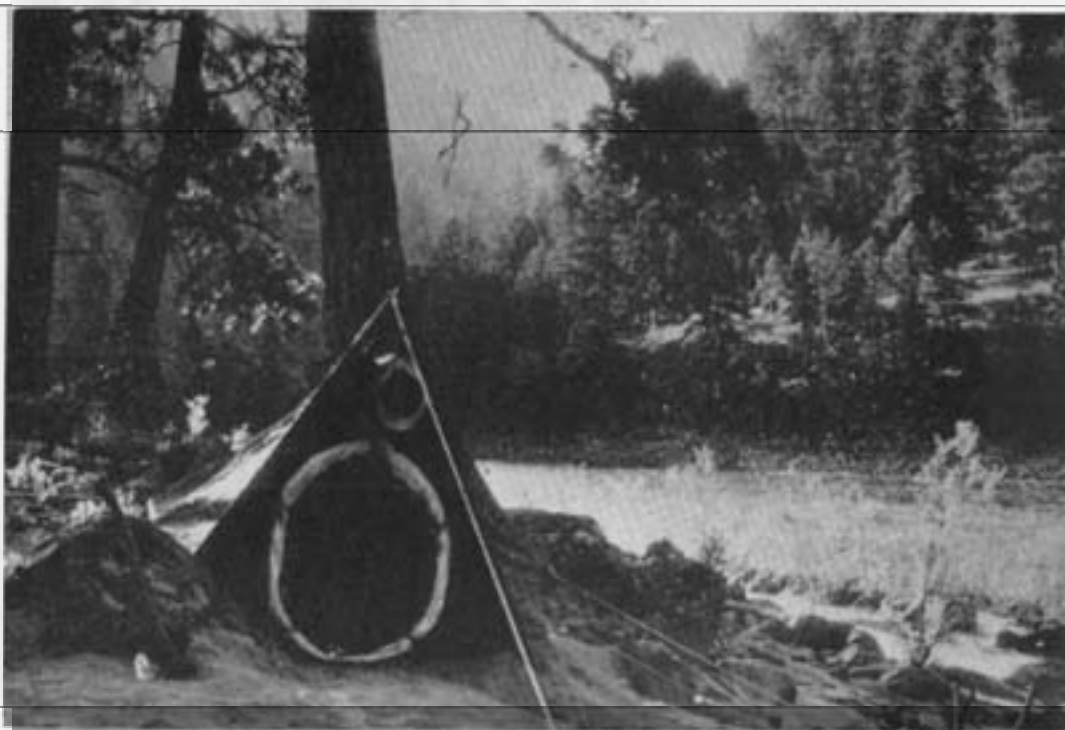
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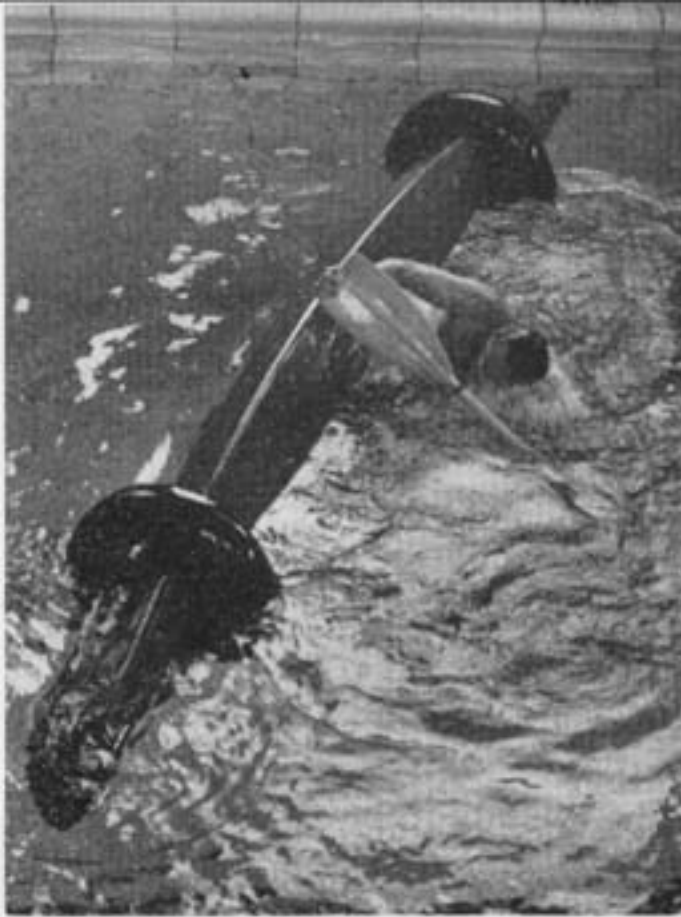
The camp at Mallard Beach



Bill Russell



Dick Stratton starts a "screw stroke" roll. Note the paddle position.



Dave Stacey finishes a roll in his "lazy man's trainer." It makes them easy.

ESKIMO ROLLS

by JOAN and DAVE STACEY

In the Spring (1957) issue, we carried an article about an Eskimo Roll Trainer by Carlos Yerby. It was made of two oil drums and wooden framework. While this is obviously the ideal machine in which to practice the Eskimo Roll, your Editor was too lazy to build one. He is also too lazy to carry one around. As is so often the case, in civilization, laziness led to invention.

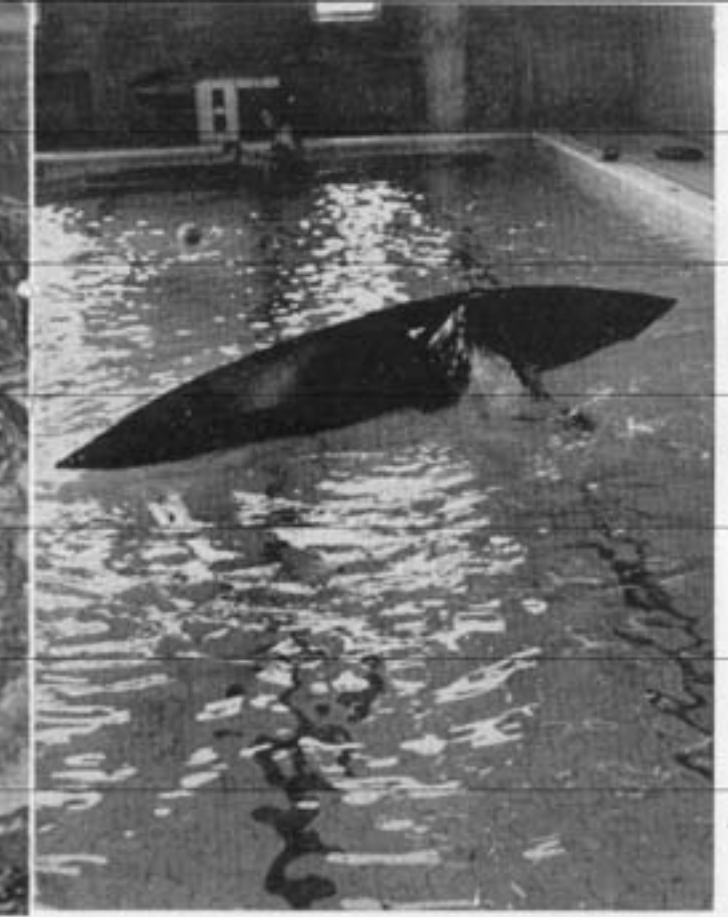
The fibre-glass kayak COLORADO is an ideal boat for rough white water, but is very difficult to roll. After several sessions of complete failure, an idea presented itself. The COLORADO was hard to roll because of its beam and large deck area. Why not put some flotation on the

deck so that when inverted the deck would not be fully awash?

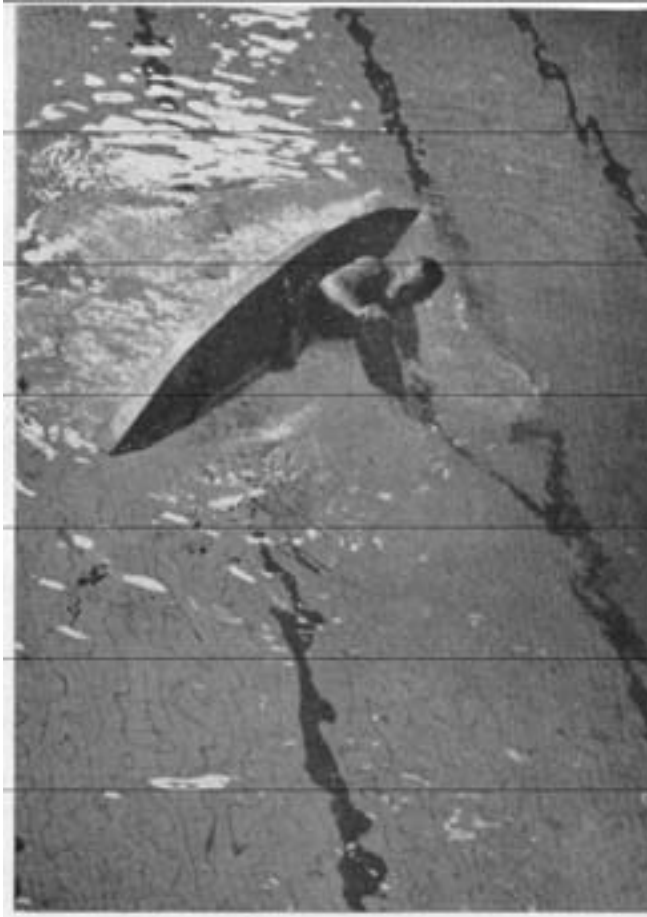
In a lazy man's search for the easiest way to do this, some old innertubes lying around the house became the obvious answer to the problem. Why not push one over the bow and the other over the stern and see what happens. The result was most gratifying. When used in a normal fashion ~~with~~ a spray cover, the boat was appreciably easier to roll. Furthermore, with the spray cover omitted and the ~~boat~~ essentially filled with water, it became a lead pipe cinch to roll. A mere flick of the paddle righted one in nothing flat.

This technique can be applied to any

American WHITE WATER



Walter Kirschbaum comes up, as Ruth K. and Carol Knne discuss technique.



Dick finishes the roll he started on the opposite page.

MADE EASY

kayak with negligible effort. All you need are two innertubes. If there is any doubt in your mind as to being able to do the roll, first fill the boat completely with water—then go into your normal tipping over routine. Because of the change of buoyancy, you may have trouble becoming completely inverted. This makes it easy to come up on the same side as you went over. To roll completely in one direction, an additional paddle stroke is needed to get you completely inverted. Because of the ease of righting, these underwater strokes become a matter of habit and are done with no trepidation at all.

It is an open question whether to practice with a skin divers face mask or merely to use a nose clip to protect one's sinus. we prefer the face plate, because it enables us to see and keep track of the blade angle during the various types of roll.

However, it is a nuisance and has a tendency to fog up. One solution to the fogging is to make a mixture of a few drops of Kodak Photo-flo in several ounces of water. A little of this splashed on the inside of the face plate prevents fogging. However, be careful not to get it up your nose, as it is most painful.

In this issue we make no attempt to describe the various techniques of doing the Eskimo Roll. One method was described with illustrations in the August 1955 issue of *American. White Water*. Many methods are described in the publication of the Britishs Canoe Union on the Eskimo Roll. This is available from Don Rupp, 3766 Woodland Avenue, Drexel Hill, Pennsylvania for a nominal charge. If there is sufficient interest, your magazine will do a series on the technique.

Controversy Corner

Once again your magazine brings you an area of disagreement. The following letters are very interesting in that they point out how the difficulty of a river varies with the amount of portaging.

Each issue of our magazine contains material which is controversial. This is as it should be. But, if you disagree with what you read, please drop us a line giving your side of the argument.

1858 W. 15th Ave.
Vancouver, B. C., Canada

582 Riverside Drive
Maplewood P. O., R. C.

Dear Mr. Jones:

I have not received the "White Water Magazine" in August and I would be very happy if you would be so kind and send me this copy.

There are some copies I would like to have if they are still available. They are May 55, 56, Aug. 56, Nov. 56.

Do you remember the letter from "Bud" Price from Hedley, B.C. which you printed in the Winter 1957 copy? I don't believe that 'Bud' made this whole trip alone with his wife. The Lillooet River between Lillooet Lake and Harrison Lake is one of the most difficult waters I ever drove. It's about 55 miles. The river grade of this 55 miles is not less than 3-4 and no rapid is under 4-5 and some are 5-6. That is not including the danger of the ice cold glacier water. (The Lillooet River drains some of B.C.'s largest glaciers). We were a team of three, expected the trip to be a nice cruising trip, but had to find out that this isn't true. We paddled a stretch of 35 miles in less than two hours! In Pemberton they told us two experts from U.S.A. tried to make the trip and drowned! They used an aluminum canoe.

The Indians told us the same and said that not too long ago 3 other persons drowned. They said "no damn white man ever came down this river alive."

I hope you will inform the members about this stretch of river before there are any more accidents. It can be done by a team of experts, and it is a very interesting trip. We made the trip between Aug. 31st and Sept. 3rd. We paddled a length of 89 miles.

Yours very truly,
Vern Rupp

Dear Sirs:

Was glad to hear from you even tho I'm not prepared to do much arguing much as I enjoy arguing with Werner.

The stretch of water he refers to between Lillooet Lake and Harrison Lake apx. 55 miles is probably all that he says it is. We made many long portages and once hauled our gear a half mile up the mountain to a logging road and bypassed quite a stretch.

We were ten days making the trip. Quite different to Werner's trip. He knows very well that I wouldn't take my wife thru water that was too rough.

That Indian will have to change his tune now. Some damn white men have come down and lived.

I heard the same stories at Pemberton when I went thru there. The worst rapid I believe was locally referred to as Skookumchuck Rapids. That one I didn't see at all. It was dark when a logging truck took us past there.

Sure wish I could have been with them on their trip. It must have been a good one.

In closing, I have no objection to you publishing anything I have written, if you think it will promote interest, but in this case Werner is quite right, we did not make the complete trip.

Just for the heck of it tho', I should tell him I made the whole trip standing up in the canoe.

Yours truly,
M. D. Price

Let's have some more discussion. Send in your opinions on any pertinent subject.

American WHITE WATER

How to Make a Fiberglass Canoe

by LARRY ZUK

This article can be fully appreciated only by those who have built a glass boat.

AHE first thing you do is go down town and buy three or four cases of a clear amber colored liquid which is to be the main ingredient in the manufacture of your canoe throughout the design, manufacture and testing phases. Coors or Budweiser would be preferable but any standard brand will suffice. Make certain one case is cold so that you can start sampling immediately upon your return home.

You could then start by opening a can and reading all of the articles on boat design and manufacture that you could find. But this would only be confusing so the best thing to do is to put this paper down and call several other eager (?) boaters, some who have made fibre-glass boats and some who want to make them. Open several more cans of catalyst and get *every-one* confused.

Excuse me a minute while I scratch. I've just been working on my glass boat. Now the instructions in this epistle which I am writing have been developed by a long period of research during which time three boats have been made and they all Hoat. The reason for setting down these instructions in a clear, concise manner is to provide for my friends a process for manufacture of these boats so that each one of them will be certain to get into as much trouble and make all the mistakes that I made. I wouldn't want anyone to miss all the fun.

Now after an evening of discussion with the aforementioned group and a case of beer (Don't forget to order some more at this point), you should all have decided on what kind of boat you want to make—a kayak or a canoe. And, at least half the group will have decided to buy a folding kayak.

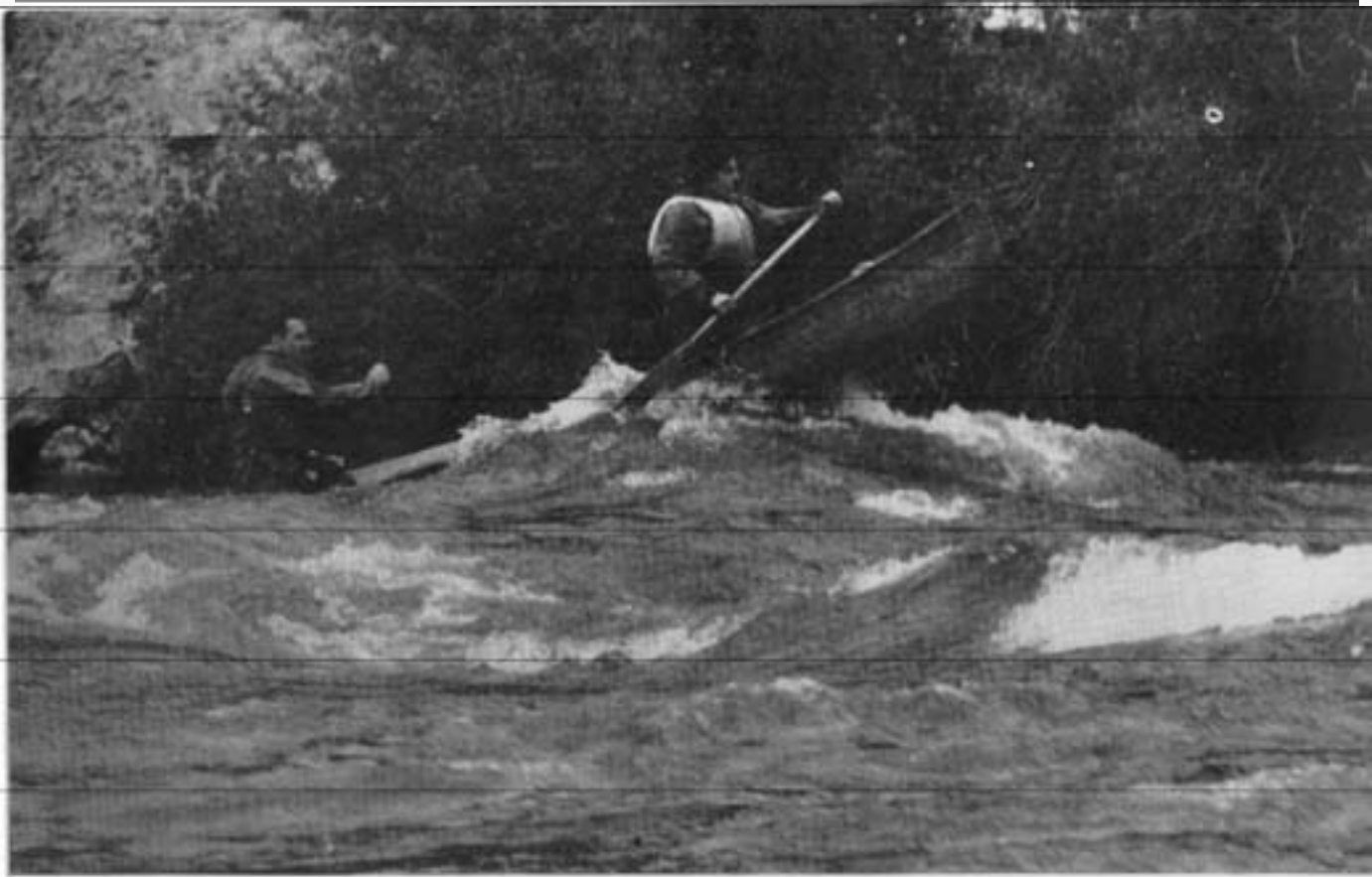
You can now start to design your own boat which is a very dull process because you have to think. This is done by carefully measuring all the boats you can find

and drawing them on pieces of paper with lots and lots of mathematical calculations in the margins. This is most impressive when the aforementioned group of eager (?) boaters (who are all waiting for you to make a mold so they can borrow it) come around to see how you are coming along and whether the beer you ordered has arrived yet. Then you decide that all the fellows that designed the boats you measured didn't know anything about it in the first place and go off on your own.

Your boat is going to be the fastest down river boat with plenty of rocker so that it will be the best slalom boat too and don't forget plenty of width for maximum stability and very narrow and sharp for speed. Oh yes, remember, lots of storage space for cruising, heavy sturdy construction for bouncing off rocks—as long as it weighs less than 20 pounds. One fellow also had an absolutely water tight deck design which we all liked but didn't want to hurt his feelings by reminding him he forgot the holes for the paddlers.

Enough of this highly technical information. To simplify the above, just make it pointed on both ends and longer than it is wide. One hole in the middle for kayaks and two holes near the ends for canoes. Get a big piece of paper and put some lines on it and take it out in the garage and spread it on the bench. It comes in handy for mixing plastic and spilling screws, etc.

Notice above that you make the boat in the garage because you all know the story about the fellow who made the boat in the basement and then—. Well, go ahead try it and see what happened to him. I made that mistake on my first boat and it's a nice boat. If anyone wants to see it he can come over and we'll go *down* and see it.



Larry Zuk and Roy Kerswill (bow) play roller-coaster on the Blue, near Dillon, Colo.

Wayne Stacey

Now you are ready to make a mold and I must use some technical language again. There are two kinds of molds, male and female (what else?). You all know what male and female are, don't you? (Don't run for the dictionary; there are better ways of finding out!). O.K. So now a mold is like a model. Now would you prefer a male model or a female model? There, that was easy and enough said about molds.

Now that you have made your mold you will have a great many more friends. Most people prefer to use old boats for molds or to beg, borrow or steal one. Showing great interest in your friend's boat and great appreciation for his skill and the design of his mold will go a lot farther than that old hard work of hacking out your own. And then there was the fellow who gave up at this point and just took Dave Stacey's boat out of his garage.

So all of your eager friends will want to borrow your mold and you can tell them that unless they help you make your boat they can just go toooooooo!

Please excuse, my fingers are full of plastic and I got stuck on the keys—besides, I got a little on the seat of my pants

so I might as well write some more technical advice while I'm stuck here. That's why, when you are making a boat and pick up those instructions you just won't be able to put them down. They're so 'fasten-ating.'

Now, if you peeked at the end of this article you have already ordered a lot of fibre-glass cloth and plastic and catalyst and brushes and acetone and all sorts of stuff and are ready to make your boat.

You're not discouraged, are you? People thought I was getting gray hairs from building my boat but it was just fibre-glass strings that I got in my hair ~~when~~ I leaned over and bumped my head on the boat because, you see, I stepped into some sticky plastic on the floor and somehow picked up some newspaper and string and fibre-glass that sort of came with me into the living room and my wife chased me back to take off my shoes and stand my pants in the corner. Simple, you see, and now you know what the acetone (see above) is for as it takes the plastic out of the living room rug.

Now you take the glass cloth and place it gently over the mold. For a heavier boat use more cloth and for a lighter boat, less cloth. (How technical tan you

get?) Then you mix your plastic and catalyst in suitable containers. This is most important because if you use beer cans and then you put the plastic down on the bench for a minute, well—note the following carefully, because otherwise you will learn from sad experience. 1. Plastic tastes terrible. 2. Salt is better in beer than catalyst. 3. A clean brush is better than an old one to dip in the beer. 4. The beer just doesn't set up hard enough when applied to the boat.

Now you just pour the plastic on the cloth and dive in. You mess the stuff up with your hands and just smooth and pound and generally potsy ~~around~~ in it until everything is full of plastic and don't forget to get some on the boat. (Editor's note: There is an easier way to do this but we don't want you to miss all the fun.)

If you had a lot of foresight you made the boat in two halves, otherwise the mold is inside; and you see the problem. There isn't any room for you with the mold in there. So now you stick the two halves *firmly* together and you think ~~you~~ are through.

Hut you're not. Now you have to sand it smooth and it is August and you can't use it much this summer anyway so you get out' the old aluminum canoe and another case of beer.

Then all winter you sand and file and scratch and sand and file and scratch.

In the spring you chop a hole in the ice and put the thing in the water and there are lots of pin holes and it leaks. Never fear, there is a simple way out. Take your boat down to the dirtiest river you can find and put in at an old mud bank. Afterwards turn it over in the sun and bake it. The pin holes will all be filled and your problems solved but don't ever wash your boat!!

Now that you know all of the technical intricacies of making a fibre-glass boat, rush right down and order your material because I have ~~bought a~~ lot of stock in some fibre-glass ~~companies~~ and just for insurance I bought some stock in some companies that make those old fashioned kind of canoes we don't like to mention. (Advertisers please ignore. Ed.)

If you need some more help, and have followed faithfully the first paragraph of

this article, call me. My old fibre-glass clothes are buried out in the back ~~yard~~ somewhere.

Have fun! And when you finish your ~~boat~~ don't lend it to some damned fool who will lose it in the Arkansas river. (Who is he talking about? Ed.)

New Rescue Device

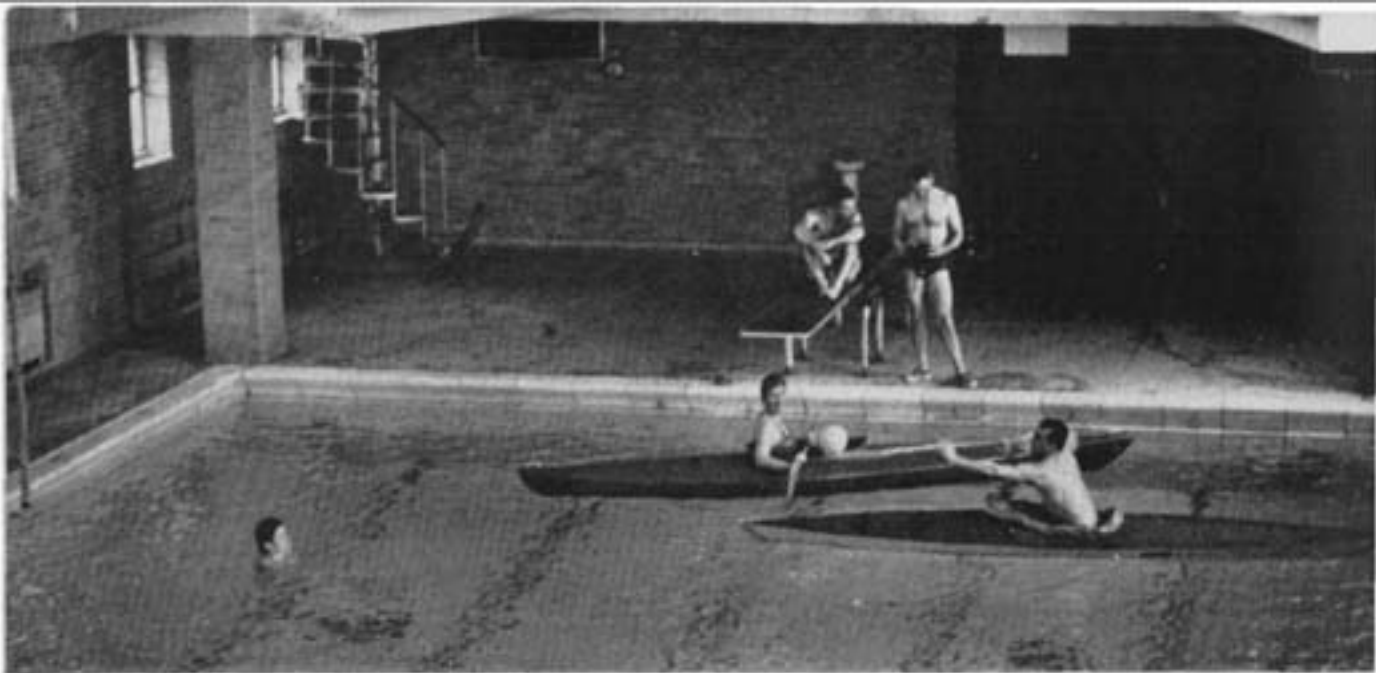
Last summer, at the Slalom race sponsored by the Colorado White Water Association and the town of Idaho Springs, a novel rescue device appeared. The contestants thought it was a very good idea and a distinct improvement over previous systems. Instead of the cork buoy, a rubber innertube ~~was~~ used at the end of the safety line. When tossed at a boatman in the water, there is no danger of knocking him out. The innertubes are easy to throw and easy to hold as they fold over the swimmers arm. There is also considerably more buoyancy than in the conventional cork lifesaver.

Any club involved in rescue work should consider this system. Note however, that there is no substitute for a boat in situations where the swimmer can be washed downstream out of reach of the safety crews.

Business Manager Appointed

It is with pleasure that we announce the appointment of Henry Berce as Business Manager of your magazine. Henry will now take over the various jobs associated with money (or the lack of it). In the future, all membership applications and renewals will be sent directly to Henry, who will process them and send the cards on to Clyde Jones. Clyde, you will remember, is our Circulation Chairman, and handles the mailing of the magazine.

Henry will also take over such jobs as the billing of our advertisers, the forecasting of income and other such money matters. In addition, he is Chairman ~~of~~ our Advertising Committee, and with Roy Kerswill is spearheading a drive to increase our advertising. If you are able to help out, drop him a line at 1576 South Meade Street, Denver, Colorado.



Walter juggles the ball, watched by (l. to r.) Ruth K., Joan S., Henry Berce and Dick Stratton.

KAYAK POLO

by WALTER KIRSCHBAUM

Here's fun and good practice the year around.

IT takes some experience to run white water safely. How do you get prepared for it? There is one way to acquire skill and good command over your kayak in still water. Thus, you can get around paying dearly for your experience. It is a ball game we call kayak-polo and in the old country, it attracted quite a number of young people. It was a tremendous amount of fun and was really efficient in training beginners for white water. The whole secret consists of having conditions inherent in it which equal, to a great extent, conditions of white water. That is to say, the necessary motions of a kayaker in chasing the ball very often corresponds with the way he must run an obstructed rapid in safety.

All the game needs is a playing "field" of approximately 20 by 60 yards, two goals of 15' width and 5' height at either end, three men to each team, an umpire, and a ball. Avoid artificial pools where solid edges represent the sidelines. Impacts would make the play too costly.

Paddle, boat, and body may be used to move the ball toward and into the opponent's goal. Hands and arms may not be used unless they are manipulating the

paddle at the same time. This rule will be understood by anyone who knows that releasing the paddle shaft means loss of balance and maneuverability.

In the past, the game would become so hot that collisions were the rule. Its inventors, therefore, played it in inflatable kayaks that had no solid frame at all. Four years ago, however, the idea of good preparation for wild rivers by means of this game developed sufficiently that it has now become rather common to play it in the same boat in which you would run a steep rocky stream. This refers to the fact that a maximum familiarity with your kayak, in other words, a "one piece set" that may be compared with horse and rider, is one of the vital points for ability in rough water.

Then, in order to evade collisions, we felt we had to have strict rules of approaching one another, rules that had to be observed and enforced from the very beginning. At first, it looked difficult to get the boys to obey them, but in the course of three or four weeks everyone could be trained to omit perpendicular approaching.

(Continued on Next Page)

It has also proved to be dangerous to come close alongside another kayak ~~from~~ the rear, since the other boater probably is busy chasing or moving the ball. Therefore, he cannot be expected to watch out behind him, and another bow can easily hit and ~~hurt~~ his elbow. This is why we prescribed at least a foot side distance for one approaching from behind.

Naturally, some practice of moving a ball with the paddle is recommended prior to the first game. Any beginner will find it rather difficult to lift a floating ball out of the water and pass it forward. The blade is apt to get caught in the water and he may lose his balance. Yet, it takes the average kayaker about 80 minutes of practice to find how to lift the ball without getting much water with it. Some of our boys preferred to hit the ball on its top, thereby causing it to rebound out of the water, and, at its highest, to ~~hit~~ and move it sideways with the blade. This method, however, involves the danger of breaking a blade if you hit it too hard.

You will also find that it is relatively easy to guide the ball, with the blade, over your head to the other side, thereby thwarting an attack. We prohibit holding ~~the~~ ball on a raised blade, on the boat, or below the water surface for longer than a second.

~~The~~ game is properly played when ~~the~~ ball keeps being passed from one ~~man~~ to the other, at least two of them moving ahead at the same time. As in soccer, for instance, it captivates both members and spectators incomparably better ~~when~~ ~~the~~ ball remains in motion among ~~the~~ men, ~~than~~ if one keeps guiding it. Everyone should comply with proper tactics to develop joint attacks; at the same time, attempt to cover his individual opponent, and, in this way, hamper the other team in accomplishing an attack.

Additional attraction is involved if the competitors can do the eskimo roll. It happens quite often that, in the ~~hot~~ chase for the ball, one or another loses his balance and turns over. Other members of his team are, in this case, allowed to help him empty his kayak and get back in, if he cannot do an eskimo roll. The game, however, will never be interrupted! This is no doubt a cruel rule, but by it we

manage to get our boys fit ~~in~~ the eskimo roll.

Naturally in a play like this, any violence or intentional bothering of another man other than a sound, direct and fair attempt to get a hold of the ball should never be tolerated by the umpire who would interrupt the game immediately upon any instance of transgressing the rules. This policy may work out to be an ugly interrupting factor during the first few games. Nevertheless, we have found this to be the only way to make the players quit their bad practices—get them to stick to the rules.

Normally, we have a 30 minute game with an exchange of the sides at the half time. Whatever the facilities may be in your club, it is advisable to start out having three men form a team. Usually one of them is designated to cover the goal. He, however, is not bound to the space in front of it only, but allowed to catch up once his team is moving forward. Being wise, however, he watches the fellow posted close to his goal who might get the ball in the next second.

As a ball, we used and are presently using a cheap, plastic one with a ~~7 1/4~~ diameter. Its dimensions do not matter much. But choose one that is not too heavy. And have a lot of fun with it!

FOR SALE: Hammer "Sport" Single, silver Hammerit hull, orange deck, complete with spraycover, paddles, and bags. I am selling this beautiful brand new boat for \$135.00 due to transfer abroad. Mary Kendall, 99A Southern Heights Blvd., San Rafael, Calif.

Your Magazine

Every member should have received all four issues of this magazine. Membership dues each year entitle the member to four issues of WHITE WATER.

With this issue, your membership and subscription expire for the year. We hope you will renew with another payment of \$2.50. This will help the magazine, which in turn serves the sport. A card is included in the mailing envelope for this purpose. Also, please tell us on the card what you would like to see published.

Boats, Band-aids and Alligators

by WARREN BECKLEY

We reprint here a story from AMFacts, a company publication. It concerns two AWWA members and their Folbot trips.

CAN you repair a leak in your boat with a bandaid? Ernie Weiss, engineer in the Electronics Laboratory, can—in an emergency—do just that. What's more, he has no boatyard expenses, motor repairs, or mooring fees to worry about. Another advantage is that the craft seems to be unappetizing to alligators but more about alligators later.

If Ernie, his wife Katherine, and their two pedigreed dachshunds, sight an inviting lake or stream while out driving, Ernie just stops the car close to the water, lakes the boat out of the trunk, and shortly thereafter the foursome is ready for the launching.



Ernie and Katherine Weiss, their two pedigreed dachshunds Big Baby and Little Lump, in their Folbot on the Edisto River in South Carolina.

As you can guess, this is no conventional boat, but a kayak-like craft called the Folbot. This unusual means of water transportation weighs eighty-five pounds, is seventeen feet long, holds three people, and floats on not much more than damp grass. The Folbot can be disassembled and stowed away in only a few cubic

feet of space. When it is to be used, Ernie unpacks the bundle, hooks the wooden ribs and framework together, slips the frame into the vinyl-canvas outer skin, has the Folbot ready for the water within a half hour. For temporary repairs to minor cuts, a bandaid can be used; repairs, involving vinyl-canvas strips and contact cement, are no more difficult.


Ernie became interested in Folbots in 1954 while in Georgia for AMF on the Savannah River Project. After investigation and a few trial runs, or paddles, the Weiss family found themselves Folbot owners. For the duration of their stay in Georgia, their free time was spent exploring the rivers, lakes, and streams, in their area, and in planning trips to take on future vacations.

The next AMF project took the Weiss family to Rome, New York. During their year and a half stay there, Ernie, Katherine, dachshunds, and Folbot became familiar with the many wonderful waterways in upper New York State. They found their craft ideal for navigating the small, fast streams normally impassable to larger boats.



The Weiss family Foldbotting on the Edisto River. Everyone—including the dogs—is shown literally putting his back to the job.



Homeward bound after a stretch of South Carolina's Edisto River. Just a foot or so closer and Big Bnby and Little Lump  be landlubbers once more.

The high spot in Folboting came very recently for Ernie and Katherine. On following completion of the project in Rome, "back at the Lab," plans were completed for a two-week vacation in Florida, the first in 18 months. In March of this year, they were on their way to explore as many of its bayou-like waterways as possible.

The big trip turned out to be a twelve-mile expedition up a narrow, moss-hung waterway called Juniper Creek. Katherine was in the bow, Ernie in the stern, with the dogs in their usual position—perched right behind Ernie. After six miles, while Katherine paddled and watched for snakes overhead, an underwater projection tore a baseball-sized hole in the bottom of the boat! To plug the leak, Ernie stuck the nearest object—his heel—into the hole; much to their amazement and relief, this managed to stop the inrush of water.



Ernie beaches their Foldbot, "The Eek," so that Katherine may feed the dachshunds whose legs, though short, need occasional stretching.

It was then that Katherine saw the alligator, a king-sized model at that. What do you do in a situation like that? Simple—paddle like mad and hope the alligators have already had their dinners. Luckily, they had, because Ernie's heel didn't even get a nibble. In all, half a dozen alligators "visited" closely with the Weiss family. One of them even scraped right under the boat—and Ernie's bare heel! Nevertheless, six miles of very energetic paddling later all were safe ashore.

The next project for Ernie will be in Arizona. Will Katherine, the pups, and Folbot go along? Why certainly. Investigation shows that there are practically no alligators in Arizona. Incidentally, the Folbot has a name, "The Eek." Could be that that's what Katherine said when she saw that king-sized alligator!



The Spectacle of Sport

SPORTS ILLUSTRATED has put out an excellent book entitled "The Spectacle of Sport." This excellent book has had very favorable reviews in many quarters and is indeed a delight to the eye. With a minimum of words and a wonderful supply of sporting pictures, this hook is all one could ask for.

In the world of sport, water and wave occur frequently. Sometimes it is fishing,

sometimes sailing and sometimes our own beloved white water. Your Editor is more than flattered that they chose to reprint the excellent picture taken by Miggs Durance of Cottonwood on the Arkansas. There, big as life in the center of the picture is Ye Olde Editor. He may not be a good boatman, but he sure has a photogenic boat.

* * *

LETTERS FROM READERS (Continued)

Lowe House
Denstone College
Vtosceter
Staffordshire, England

25.9.57

Dear Sir:

I am a very keen rough water canoeist and I belong to the Manchester Canoe Club. I am also a member of the American White Water Affiliation and I always look forward to reading your magazine. One of the aspects of it that strikes me most is your amazing photographs of rapids. I love to look at them as our own rivers over here are nothing like as rough as yours. I think your last prospectus contained some excellent pictures which demonstrate the most exciting aspects of our sport.

One thing that is very obvious to see, is that you out-class us by far on the rapids and white water, but your slaloms appear to be held on the "proverbial mill-pond" compared to ours which are held on the white water itself. Our club takes a very active interest in slalom as our Hon. Sec. Maurice Rothwell is the chairman of the British Canoe Union Slalom Committee and our club has played a leading part in developing the sport in this country.

The point about which I really ~~wrote~~ to you was this. I have three friends whom I am trying (and almost succeeding) to interest in white water canoeing. If I do succeed, it will be very useful for me, because we will be able to canoe together and thus, in accordance with the safety rules of both the B.C.U. and the ~~W.W.A.~~ I will not have to indulge in the dangerous habit of lone-canoeing. So, please, could you be so kind as to send me three copies of your prospectus which came out last month and any other old pictures and old prospecti which you have no further use for.

I would be very grateful if you would do this as they might thrill them and "turn their hearts."

Ours hopefully,
Chris. Sutton

P.S. Do you sell A.W.W.A.
Canoe pennants, cloth badges
or stud badges?

10, Lockingwell Road,
Keynsham,
Nr. Bristol.
~~25~~ November, 1957.

American White Water Affiliation,
601 Baseline Road,
Boulder,
Colo.

Dear Clyde Jones,

I am writing on behalf of my fiance, who unfortunately after doing a 5 year apprenticeship has been called into our Royal Air Force to do his two years National Service. However, he hopes to take our folding canoe with him if he happens to be stationed near a river or the sea.

I wish to say that I have passed on to Mr. Bill Emm, 7/- which is the subscription due for your magazine and I shall be glad if in the future you will forward this to me as Chris is of course away. I will forward of course after reading. May I say how I thoroughly enjoy reading your articles and hope I shall continue to do so.

Your sincerely,

O. V. Young (Miss)
on behalf of Mr. C. J. Hawker,
35, Upper Cranbrook Rd,
BRISTOL. 6.



DON'T FORGET TO
RENEW YOUR MEMBERSHIP

American WHITE WATER

FOREIGN MAGAZINES

Your magazine now has an excellent collection of almost all foreign magazines concerning white water. These now repose in Chicago at the house of the Chairman of our Library Committee. He is John W. Geert, 5686 North Ridge Avenue, Chicago 40, Ill. If you are interested in back issues or information about them, drop him a line, or drop in when you are in the neighborhood.

There are a number of magazines being published abroad. They have interesting articles—if you can read the language! For those who wish to stick to English, may we recommend "White Water" as being both up-to-date and interesting.

The first group is an excellent series put out by the British Canoe Union. These are available for 50 cents apiece from Don Rupp. Please note that the word canoe here means kayak, and that the Europeans refer to our canoe as a Canadian Canoe. They are:

1. The Eskimo Roll
2. Choosing Your First Canoe (Kayak)
3. A Basic Paddling Technique for the Double-Bladed Paddle
4. An Introduction to the Equipment for your Canoe
5. How to Handle and Manage your Canoe

We recommend most heartily the British magazine WHITE WATER. Their interest is similar to ours and the magazine has been in existence longer. Its articles are excellent and of interest to all who love the sport. A year's subscription can be obtained from Don Rupp for \$1., 3766 Woodland Ave., Drexel Hill, Pa.

Aria Apertn—Giornale dei Campeggianti, Via Durini 27, Milano, Italy

Brodarstvo—Federal Committee of the Yachting Federation of Yugoslavia, Miroslav Drangustin, President, Trg Republike 3/IV, Belgrade, Yugoslavia

Camping Voyages—13 Rue de Grenelle, Paris 7e, France

Camreggio—Canoa-Turismo, Storni Giovanni, Via Sardegna 61, Milano, Italy

Cnnoe-Camper—Canoe-Camping Club, 15 Whalley Road, Hale, Altrincham, Cheshire, England

Canoeing in Britain—British Canoe Union, H. Thelen, 8 Chesterford Gardens, London N.W. 3, England

■ *Canottaggio*—Federazione Italiana de Canottaggio, Via A. Avogadro n. 26, Torino, Italy

International Canoeing — International Canoe Federation, H. Thelen, 8 Chesterford Gardens, London N.W. 3, England

Kano-Kajak-og-Lejrsport—N. P. Nielsen. Jenagade 5, Kobenhavn, Denmark

~~Kanot Nylt~~ Pub. of Svenska, Kanotförbundet, Torsten Rundqvist, Hamngatan 4, Lidköping, Sweden

Kanusport, Der-Sportverlag, Neustadtische, Kirchstrasse 15, Herlin W 8, Germany

Klepper Band—Klepper Company, Rosenheim, Germany

Light Cmft—Published by: Caravan Publications Ltd., Link House, 24 Store Street, London WC 1, England

Agents for USE and Canada—Sportshelf, 10 Overlook Terrace, New York 33, New York

Lodni-Sporty—Verbands Zeitschrift des Chekislowsky Svaz, Jan Sulc, Jungmannova 24, Praha II, Czechoslovakia

Meloja—O. Kovvenkari, Soutustadion, Helsinki, Finland

Ons Waterland — Nederlandschen Kano Bondes, T. L. Prins, Ringweg 88, Zaandam, Netherlands

Pagaie et Tente—Organe des Clubs Affiliés à la Fédération Luxembourgeoise de Canoe et de Camping, Stephano Etienne, Rue Blochausen 21, Luxembourg

Touring—Review of the Camper and Canoe, Verband Schweizerischer Faltbootfahrer, 9, rue Pierre-Fatio, Geneva, Switzerland

Towing Plein-Air—(Supplement a la Revue du Touring Club de France). 65, Ave de la Grande Armée, Paris XVI, France

White Water—Chalfont Park Canoe Club, William Horsman, 15 Almond Ave., Ickenham, Uxbridge, Middlesex, England

WHERE TO FIND IT

The appearance of a firm's name in this classified section does not necessarily imply endorsement of such firm by American WHITE WATER magazine.

RIVER GUIDES

ALESON, HARRY, Larabee & Aleson Western River Tours, Richfield, Utah.
 ANDERSON, L. L., Challis, Idaho. (Middle Fork of Calmon, River of no Return).
 BAR-X-VACATION RANCH, Chalis, Idaho. (Salmon & Middle Fork), Meyers Cove.
 BRIGGS, ELMER, 719 S. W. Laurel Street, Grants Pass, Oregon. (Rogue River).
 PAUL GEERLINGS, 4900 Emigration Canyon, Salt Lake City, Utah.
 GREENE, ART, Clif Dwellers Lodge, Cameron, Arizona. (Colorado and San Juan).
 HATCH, DON, Hatch River Expeditions, 411 East Second North, Vernal, Utah, (Yampa and Green). See ad.
 HARRIS-BRENNAN, 2500 W. 48th Street, Salt Lake City, Utah. (Hell's canyon, Salmon, Green and Yampa).
 HELFRICH, PRINCE E, Vita, Oregon, (McKenzie, Willamette, Deschutes, Metolius, Owyhee, Salmon).
 MCKENZIE RIVER GUIDES, Vida, Oregon, (McKenzie).
 MOKI-MAD RIVER EXPEDITIONS, 968 James Court, Salt Lake City, Utah, (Glen Canyon, San Juan, Yampa, Green).
 NELSON, ED, Montrose, Colorado, (Gunnison).
 PRUITT, BOB, 120 SW M Street, Grants Pass, Oregon, (Rogue and Salmon).
 PYLE, SID, 2319 Jerome Prairie Road, Grants Pass, Oregon, (Rogue).
 REYNOLDS, ADRIAN, Green River, Wyoming, (Reynolds-Hallacy River Trips).
 ROGUE BOAT SERVICE, Gold Beach, Oregon, (Rogue).
 ROGUE RIVER GUIDES. Vida. Oregon, (Rogue).
 ROSS, KENNETH I., Mancos, Colorado, (Cataract, Grand Canyon and San Juan).
 SMITH, DON L., Box 716, Salmon, Idaho, (Salmon and Middle Fork).
 SOCOTWA EXPEDITIONS, 5851 South 9th East, Murray, Utah.
 STRATTON, E. A., Rt. 1, Missoula, Montana, (Salmon and Middle Fork).
 STUBBLEFIELD, BLAINE, Weiser, Idaho, (Hell's Canyon of Snake).
 THURSTON, ED, 240 Idaho Street, Bend, Oregon, (McKenzie, Rogue, Salmon and Deschutes).
 WHITE, GEORGIE and J. R., 435 W. Laconia Blvd., Los Angeles 61, California, (Colorado, Snake and Salmon).
 WESTERN WHITEWATER CANOEING EXPEDITIONS, Leslie A. Jones, 1710 N. 2nd West, Bountiful Utah (Runs Green, Yampa, Colorado, Snake, and Salmon).

WRIGHT, FRANK, Mexican Hat Expeditions, Blonding, Utah, (San Juan, Grand Canyon).

WOOLDRIDGE, GLENN, 413 West H. Street, Grants Pass, Oregon, (Rogue).

BOAT MANUFACTURERS

ALUMA CRAFT BOAT CO., 2633 27th Ave., South Minneapolis 6, Minn. (aluminum canoes and boats).
 BANTON CORPORATION, c/o Rolf Godon, 24 California St., San Francisco, Calif. (Hammer Foldboats).
 COLORADO KAYAKS, Box 1305, Greeley, Colo.
 FOLBOT CORPORATION, Stark Industrial Park, Charleston, S. C. (Folbot, accessories, sailing equipment).
 FOLDCRAFT, c/o John B. Sibley, R.D. 1, Phoenixville, Pa., (Hart-Sioux Foldboats), (See ad inside front cover).
 FULLER, JOHN T., 210 W. 62, Seattle 7, Wash. (boating agent for Washington foldboat club).
 HEALTHWAYS, 3669 7th Ave., Los Angeles 18, Calif. (Inflatable German Kayak).
 HOFINGER FOLDING KAYAK CO., 3021 Lincoln Ave., Chicago 13, Ill. (foldboats).
 KLEPPER COMPANY, c/o Albert N. Larrington, 1472-80 Broadway, New York, N. Y.
 LAC du NORD KAYAKS, 3135 W. Forest Home Ave., Milwaukee 15, Wis.
 MANTAGUE OAR & PADDLE CO., Box 207, Foxboro, Mass. (Canoe paddles, masts and spars, kayak paddles).
 METAL BOAT CO., c/o Fred W. Berndt, Marathon, New York, (Grumman canoes).
 NORDIC IMPORTS, 286 Ravenna Drive, Long Beach, Calif.
 OLD TOWN CANOE CO., Old Town, Maine, (canoes, wood boats, sail equipment).
 PENN YAN BOATS, INC., Penn Yan, N. Y. (canoes, accessories).
 PETERBOROUGH CANOE CO., LTD., c/o G. W. Birch, Division of Canadian Watercraft, Ltd., Peterborough, Ontario, Can.
 QUETICO-SUPERIOR CANOE OUTFITTERS, c/o Bill Rom, Ely, Minn.
 SKI-HUT, c/o George and Gaba Rudolf, 1615 Univ. Ave., Berkeley, Calif. (Retail Hammer boats).
 SKYJET, P.O. Box 115, Garden City, Long Island, N.Y. (12' Kayak Kit).
 SPORTSMAN'S EQUIPMENT CO., c/o Otto Koch, Pennsburg, Pa. (Pioneer Foldboats).
 WHALECRAFT MFG. CO., c/o Martin Geisler, 3223-25 No. Sheffield Ave., Chicago 13, Illinois.



CONSERVATION COMMENT

Dan Bradley, Chairman

13 West 82nd St., New York 24, N. Y.

THE most important Conservation legislation awaiting action by the second session of the 85th Congress is the **Wilderness Preservation Act**, **S.1176** HD.500. Hearings were held last June by the Interior Committees of both House and Senate, and revisions have been made to meet certain objections of the Departments of Agriculture and Interior. It should be emphasized again that the Wilderness Bill makes little change in administration. Its major purpose is to make wilderness preservation in our public domain a matter of national policy rather than administrative procedure, which can be too easily altered. This legislation is still vigorously opposed by cattle, mining and other commercial interests, and maximum possible support

will be needed to secure its enactment. Write to your Senator and Congressman now, urging his strongest support of S.1176 and HR.500, respectively, and get your friends and club members to do likewise.

The other major pending Conservation legislation is the **Outdoor Recreation Resources Review Bill**, which would authorize a comprehensive survey of all our outdoor recreational facilities and present any future requirements. Such a study has never been made on a national scale. With our fantastic rate of increase in population, it is long overdue and should be of immeasurable value in outdoor resources planning and management. It will take considerable grass roots support, however, to get this bill reported out of

House and Senate Committees and enacted into law.

Brief comment on other pending issues of immediate interest to us follows:

Clearwater River. An appropriation for preliminary work on Hruces Eddy clam was approved by the Senate but overwhelmingly defeated on the House floor. The issue hangs fire, however, until the Omnibus Rivers and Harbors pork barrel is enacted by both House and Senate. The Hells Canyon Bill, to authorize a high multi-purpose federal dam and supersede the pint-size private power dams, is buried in House Interior Committee and likely to remain there.

Dinosaur National Park. Efforts are being made to effect a compromise phrase satisfactory to all sides. If they are successful HR.935 (Saylor) and S.2577 (Allott) should have our support. That dam project isn't dead yet by a long shot!


Glen Canyon. Sen. Watkins (R., Utah) seeks \$7 million deficiency appropriation for balance of fiscal year, and more millions are doubtless in the Rivers and Harbors Kill. This project is bitter medicine for many AWWAers. It will flood an exceptionally scenic area of the Colorado, and the resultant lake with its varying water level will be of little value for rec-

reational purposes. We could think of lots of places from schools to Mission 66 where these millions could be better spent, but we have it from an informed Washington source that opposition is virtually futile. This is another Omnibus pork barrel project and the political power behind it is overwhelming.

S.963, to control billboards on federal highways, was buried in the Senate Public Works Committee by the powerful outdoor advertising lobby. It will take strong efforts to get it out and thus save the scenic values of our highways. This is one for everybody. We all drive, and we all would like *not* to look at billboards. An important principle—federal control in the public interest—is at stake here, and the advertising interests know it. Are **we** hep?

C.&O. Canal Park Bill. S.77 (Keall, R., Md.) was passed by the Senate with an amendment providing for a possible Army Engineers dam; no action by the House. This bill **would** preserve the upper half, at least, of the scenic Chesapeake and Ohio Canal as a national historic park. But highway construction has at last claimed most of the lower part of the Canal near Washington, though the parkway will for the most part lie adjacent to rather than directly on Canal property. The long and bitter fight over the George Washington Parkway has served, however, to weld the many outdoor and historical organizations into an alert and vigorous Conservation coalition, battle-hardened and exceptionally well informed, endowed by circumstances with top-rank Conservation leadership.

Some interesting questions have arisen out of the Parkway controversy. Just what is the National Park Service doing in the highway business, anyway? A thruway from city to city is no mere "access road," and the C. & O. Canal parkway is only one of a number of NPS highways in this area, some of which are just interurban parkways, but at least one impinges on the Appalachian Trail in the Great Smokey Mountains. Is this a proper use of Park property, a proper application of NPS policy and practice? The disturbing trend could spread, and it would bode no good for wild areas in other regions.



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We seem to keep reverting to ~~the~~ Potomac Valley, partly because the very unique Conservation set-up can serve as a model for action in other areas, partly because the leaders there keep your chairman best informed. (How about hearing from the rest of you throughout the country?)

We have received for instance, an exhaustive study of Potomac River Basin Research, Planning and Development by the Bureau of Economic Research of the University of Maryland, the director of which, Dr. John H. Cover, is a staunch friend of the Conservationists. Included are chapters on Land Use and Resource Planning, Water Requirements and Waste Disposal, Industrial Development, Transportation, Recreation, Government—all that goes into an objective, comprehensive Master Plan for a great watershed. Such studies are a vast improvement over the old hit-or-miss sporadic growth that has despoiled much of our countryside.

We feel privileged to announce that the following AWWA members have very kindly agreed to serve on our Conservation Committee for the coming year:

Antoni Sobieralski, President of the Seattle Foldboat Club; Bruce Grant, for the Sierra Club; Oscar Hawksley, for the Ozaark Wilderness Waterways Club; John B. Slater, for the Chicagoland area; Grant Conway, Vice President, C. & O Canal Assn.; Homer L. Dodge of A.M.C. and Steve Bradley of Sierra Club.

We are indeed fortunate in having such distinguished leaders on our committee, and we look forward to drawing all of our affiliates into an active Conservation organization.

No doubt, our members have many comments and contributions to make to the Safety Committee. Please address them to Donn Charnley, 5123 - 48 N. E., Seattle 5, Washington (Note the new address).

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2 seater, complete with sails and ready to launch. For sale, **\$135.00 f.o.b.** Conn. Fred Powell, Box **328**, Blairstown, N. J.

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More advertising means that we can afford more pages and more illustrations. If you know of potential advertisers, please drop a note to either of the following:

Eastern Advertising Manager,
Alfred Washington,
450 Maple Ave., Westbury, N. Y.

Western Advertising Manager,
Elsa Bailey,
27A Duboce Ave.,
San Francisco 3, Calif.

For everyone's information, our rates are:

1 page...	\$75.00	inside covers..	\$85.00
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1 column inch	\$5.00		

For two consecutive issues the discount is 10%, for three it is 15% and for four it is 20%. Copy for the next issue must be received by April first.

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Seattle **88**, Wash.



Club Activities



The AWWA is an association of people and clubs who are interested in boating. To this end, they work to make the sport better and safer for more and more people. Many of the clubs run classes for beginners, and most of the informal cruising groups are glad to help. This summer, the Colorado group had visitors from everywhere between Israel and California. There were a good number of Europeans. Next year let us try for some Australians, or some from Asia.

Our members are friendly and eager to share their experience. To find people in your home area, drop a note to the nearest of the people listed below.

AWWA ADDRESSES

Bauer, Wolf G.—5622 Seaview Ave., Seattle 7, Washington	Kerswill, Koy—1760 Magnolia, Denver, Colorado
Bradley, Dan K.—13 W. 82nd St., New York 24, N. Y.	Kiehm, Harold—2019 Addison Street, Chicago 18, Illinois
Charnley, Donn—1420 E. 56th St., Seattle 5, Washington	McNair, Kobert—32 Dartmouth Circle, Swarthmore, Pennsylvania
Dubois Eliot—Sandy Pond Road, Lin- coln, Massachusetts	Posada, Maurice—174 Waverly Pl., New York 14, N. Y.
Grant, Bruce—6255 Chabot Rd., Oakland 18, California	Kupp, Donald R.—3766 Woodland Ave- nue, Drexel Hill, Pa.
Grinnell, Lawrence I.—710 Triphammer Koad, Ithaca, New York	Simmons, Ed—455 S. Oakland Ave., Pasa- dena 5, Calif.
Hawksley, Oscar—Central Missouri State College, Warrensburg, Mo.	Stacey, David—601 Baseline Road, Boul- der, Colorado
Jones, Clyde—5525 E. Rails Dr., Denver 22, Colo.	Wilhoite, H. J.—148 Rambling Way, Springfield, Del Co., Pa.

IF you are interested in learning more about the sport, or are interested in helping it grow—fill in the card below and send it with \$2.50 to American White Water, 5525 E. Hails Dr., Denver 22, **Colo.**

COUNT ME IN

as a member of the American White Water Affiliation. I understand that as a member I will receive four issues of American WHITE WATER magazine. Here is my \$2.50. My address is .



Type of boat preferred:

Boating club membership if any:

Suggested article subject:

Mail to: American White Water Affiliation, 5525 E. Bails Dr., Denver 22, Colo.

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Kenneth I. Ross, Director
Mancos, Colorado Phone 2341



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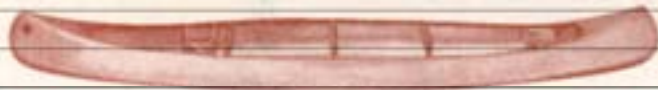
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