American WHITE WATER
JOURNAL OF AMERICAN WHITE WATER AFFILIATION

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A NOTE OF EXPLANATION

Probably at this point you are slightly dismayed at the temporary change in format in this issue of American White Water. And as paid up members of the American White Water Affiliation you are entitled to an explanation. We who are publishing the magazine felt it is far better to keep in the black on the publication than to try and carry on over our heads here at the beginning. Therefore it is necessary that this issue be comprised of mimeograph material inside the lithographed cover.

You will note that this issue certainly is not lacking in content as none of the issues will, but the temporary switch has put the magazine very near the paid up mark. We will appreciate your bearing with us during our growing pains.

In connection with the financial situation, a great big "Thank You" is due the Elliott Printing Company, 1016 Jackson St., Oakland 7, Calif., for contributing the center spread for this issue. It is with support of this kind that any sport grows and flourishes.

Now is as good a time as any to point out to all members that the AWMA has a great deal to offer any sportsman interested in safe river boating. So don't keep the magazine to yourself ... urge your friends to join the AWMA and share their boating techniques with the rest of us so interested in the sport.

As you may have noticed on our cover, the magazine deals not exclusively with white water but also with wilderness waterways which includes the camping boater. We are in dire need of good camping articles and accounts. Address your contributions to American White Water, P.O. Box 8414, University Park Station, Denver 10, Colorado.

A final word to all members.... the firms who advertise in American White Water have demonstrated their interest in the promotion of our exciting sport. Tell your friends about them and patronize them yourself. In this way the knowledge and interest in the river riding sport will grow into a snowballing movement opening wild regions of adventure to the boating sportsman.

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COVER PHOTO

September and October throughout the United States provide some of the most pleasant weather during the year. These are the months when boatmen are taking their final trips before settling down to a winter of skiing and boat repairing. Our cover photo by Walter Burmeister, P.O. Box 361, Shrewsbury, N.J., illustrates the peaceful relaxation awaiting the boat-(2) man on the West Branch of the Delaware near Hancock, N.Y.
RIVER GUIDE PREPARATION

SOME PROBLEMS AND SUGGESTIONS

by Laurence I. Grinnell

One excellent way to stimulate birth of ideas for river guide-books is for one to try to write a guide-book. The writer has therefore set forth in this article some ideas regarding subject matter, policies and problems involved in guide-book preparation that have arisen during his current endeavor to complete a New York State guide. It is hoped that the material may be useful to those conducting other similar projects. Constructive criticisms are cordially welcomed, particularly at the present when the book compilation is in its infancy.

Lawrence Grinnell, 710 Triphammer Road, Ithaca, N.Y., has long been one of the deans of organized river canoeing. His illustrated booklet, "Canoe Trips Within 100 Miles of New York," published by the Appalachian Mountain Club in 1940, is one of the finest boating accounts in existence.

River Descriptions - General

Tabulations, summaries and comments regarding the following river data should be of interest (some of these objects might be combined in a general table.)

1. General statement of mileage already explored in region under consideration, compared with total canoeable mileage.

2. Statement of chief plateau and plain areas of region.

3. Complete tabulation of the main watersheds and their tributaries, with brief remarks as to relative steepness, speed and difficulty of each group of tributaries. Separate tributaries into direct and indirect tributaries. List tributaries in upstream-downstream order.

4. Statement regarding definition of "cruising mileage" as treated by the guide. Is the scope of the guide arbitrarily limited to streams which have a continuous, canoeable mileage of some minimum length; for example, such as say 10 miles, sufficient to afford a one-day trip? Is the guide limited to canoeable passages which are distant from stream source a certain minimum number of miles? For example, (3)
in flat dairying areas of New York State, experience has shown most river sections which are less than 20 miles from source are likely to be so cluttered with shoals, snags and barbed wire fences as to deprive them of pleasurable canoeing; whereas higher parts of some flat streams, which begin in forests, such as in the Adirondacks, where runoff is retarded, may be navigable from nearer to the source.

5. List of longest rivers in area, arranged in order as to length. This would prove useful should a series of tours on one particular river be planned for a number of weekends. Thus a group becomes thoroughly familiar with one river before starting on another. After the first installment, tours or subsequent passages will be simpler to manage, owing to knowledge acquired of convenient starting and stopping places.

6. Gradients of steep river sections, say of 10 ft per mile or more.

7. Rivers that are not recommended (these could be indicated by symbols in a miscellaneous tabulation):
   (a) Mostly too steep for uninterrupted canoeing.
   (b) Too obstructed by barbed wire fences, debris, and log jams.
   (c) Canoeing prohibited, because of reservoir, park or private property regulations.

8. River difficulty rating system. The principal purpose of a rating system is to provide as precise a common language as possible for all to understand regarding degrees of navigating difficulty.

Uniform Rating System a Must

Formulation of a satisfactory difficulty rating system is a problem. Some classifications rate rivers according to skill required, such as whether the river is recommended for (a) novices, (b) intermediates, (c) skilled, or (d) experts only. This is a simple classification, but in its turn requires a new set of definitions which clearly demark each degree of skill. Grades of skill are convenient for occasional use. But for standard use it would seem preferable to adopt an objective type of classification, based on actual river conditions, rather than the skill of a navigator. Each definition of river difficulty should be precise, yet as simple as possible.

A perfect series of difficulty-rating categories seems (4) improbable of attainment because of difference between
adaptableities of foldboats and canoes to rough water. Difficulty ratings for open canoes, single-seater foldboats, and double seater foldboats operated by two persons do not coincide. For example, a canoeist on fast rivers with high waves may have more difficulty than a foldboater. Conversely, a canoeist may find less trouble than pilots of double foldboats in dodging boulders of a heavily rock-strewn river. Standardization of terms has certain advantages but attempts at over standardization may well tempt pilots of a less adept boat group to trespass beyond boundaries of safety. The question of standardization needs careful thought and discussion before attempts to adopt standardization be made.

Should there be any definitions proposed by the Nautical Commission of the Alliance Internationale de Tourisme for classification of river difficulties be universally adopted in the U.S.? To refresh your memory, they are as follows:

Class I- Easy canoeing. Safe banks, bends without difficulty, small regular waves, unimportant rapids.

Class II- Minor difficulties...unobstructed rapids with quick flowing water, side open passages, deck cover useful.

Class III- Difficulty in canoeing. Maneuvering in rapids necessary, small falls, large regular waves covering boat, wind current under bushes and branches. Deck cover necessary. Not advisable for two-seater kayaks.

Class IV- Difficult rough water. Long rapids, irregular waves, rocks and stones directly in current, reconnaissance often necessary. Experience in rough water indispensable.

Class V- Extremely difficult rough water. Long, rocky rapids with malicious breakers, strong current, difficult landing, frequent reconnaissance absolutely necessary. Only for extremely experienced canoeists.

Class VI- Limit of navigability. Generally impossible, during certain water levels perhaps navigable. Extremely dangerous.

EDITORIAL NOTE: Apparently a need for quiet water classifications has been recognized by the Europeans for we note the following supplementary table in the most recent Table of Grades of Difficulty published by the Deutschen kayak Verein in which the white water difficulty coincides with the above six grades I through VI.
QUIET WATERS

A. Pools and waters, slowly moving, with speed less than a pedestrian's, velocity less than 2\(\frac{1}{2}\) mph.

B. Streams, the velocity of which equals a pedestrian or exceeds it slightly (2\(\frac{1}{2}\) to 4\(\frac{1}{2}\) mph).

C. Flowing waters, the velocity (over 4\(\frac{1}{2}\) mph) of which cannot be overcome by back paddling, and which requires a limited amount of (boat) control, on account of obstacles, i.e. sand banks, bridge piers, shore structures, as well as bends.

Inflexible generalities about rivers should be avoided. Misinterpretation may lead to misfortune. For example, a pair of novices heard that a certain river was classed as intermediate. They incorrectly assumed that this qualification applied to the whole river and attempted it well above the usual starting point. This was a risky section; they got into trouble and had to be rescued. Remarks therefore should be applied to limited sections and to specified water stages.

RIVER DESCRIPTIONS: Individual River Information

The following is a suggested outline of information to be included in individual river descriptions:

- Name of river and derivation of name.
- Name of river to which stream described is tributary.
- Name of county.
- Cruising mileage divided into sections.
- Average width of river, divided into sections.
- Water stage when run, including dates. Water stage could be conveniently divided into four (or more) classifications such as the following:

  LOW (L) - Water level well below normal. On normally canoeable small streams, many places will be found where shallow shoals or exposed rocks require wading or portaging.

  MEDIUM (M) - Some shoals partly exposed, but not enough to seriously impede navigation on most canoeable streams.

  HIGH (H) - Water covering most sandy and muddy shoals.

  VERY HIGH (VH) - Water level well up to tops of
many banks, overflowing them in places. Volume of river very heavy.
Flow (cu. ft. per sec.). This information not always fully available.

Difficulty ratings (details already described)
Maps of U.S. Geological Survey quadrangles, or other maps covering route described.

Public Campsites
Names of persons scouting river (unless stream is too popular to warrant inclusion of such information.)

Detailed description in upstream to downstream direction.
Date to include remarks on degree of difficulty along specific courses, hazards, impediments, dams, falls, rapids, portages, nature and attractiveness of scenery. Information which is subject to variation because of changes of water level or other conditions, should be recorded in narrative form, i.e. as having existed at time of exploration. Avoid excessive use of generalities which under other water conditions may be inaccurate. A narrative account permits inclusion of such valuable information that may at times become erroneous if generalized.

Descriptions may well include notes on features of local historical, industrial or natural interest. The description should emphasize unusual features of river or background, rather than appear as copies from an information blank.

One suggestion which we have heretofore noticed as having been applied only to certain European river maps, is to place a warning symbol, such as an exclamation mark (!) on one side of the text wherever reference is made to passages entailing extra caution.

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--- A REMINDER ---

The WHERE TO FIND IT page listing firms dealing in boating supplies will appear in every third issue of American WHITE WATER, so please keep sending your additions and deletions to the list.
The listing of MOVIES AVAILABLE likewise will appear in every third issue, but inquiries concerning any boating pictures, slides or movies, are welcome any time.
OLD RECORD BROKEN EIGHT TIMES.....

EUROPEANS SWEEP SALIDA RACES
by Joe Lacy

It's all over for another year, even the shouting, and once again visiting Europeans boaters led the pack down the swift Arkansas to take top honors. Rudolf Pillwein of Vienna, Austria, racing his last serious competitive race, set a new record for the 25.7 mile run in 2 hours, 30 minutes, and 44 seconds. Highlights of the race in outline form are as follows:

Second - Walter Kirschbaum, Munich, Germany, 2 hours, 39 minutes, 36 seconds.
Third - Xavier Kuersmannodobler, Munich, 2 hours, 41 minutes 33 seconds.
Fourth - Steffen Koerner, Munich, 2 hours, 43 minutes, 13 seconds.
Fifth - Lawrence Campton, Salida, Colo., 2 hours, 43 minutes, 58 seconds.
Sixth - Penny Campton, Salida, 2 hours, 49 minutes, 43 seconds.

BOTS USED: Pillwein used a small, sleek foldboat he designed and built himself. Kirschbaum Kuersmannodobler and Koerner all used Klepper's new model T/65, a combination slalom and down-river racing model. Both Campbans used Pioneer or Kummer slalom models.

The winners in the canoe down-river race finished like this:

First - Charles Dusset and Jean Rossinger, Switzerland, 2 hours, 44 minutes, 5 seconds, using a fiber glass canoe of special design. (They were the only canoe combination to break Ehrman's 1954 record.
Second - Roy Kerswill and Bud Parks, Denver, 3 hours, 11 minutes, 50 seconds.
Third - Larry and Paula Zuck, Englewood, Colo., 3 hours, 43 minutes, 30 seconds... the first man and wife team to finish the race in a canoe, second man and wife team to (8) enter and finish the race (See Pat Fretwell's story)
In the slalom event held on the Thursday and Friday prior to the main down-river event, American racers fared little better. Walter Kirsch ha landed with first place in the event in a winning time of 3 minutes and 60 seconds. He didn't touch even a single gate for a perfect score.

Second - Rudolph Fillwein, 3 minutes and 30 seconds...he hit one gate.
Third - Kavet, Versamisheal, 4 minutes, 30 seconds.
Fourth - Steffen Kober, 5 minutes, 44 seconds.
Fifth - Larry Zuk, Englewood, Colo., Rocky Mountain Region Commodore of the CA, 7 minutes, 17 seconds.

THIRTY BOATS in all entered the race. Raymond Zubari of Bordeau, France, paced the race and kept ahead of the field all the way until he flipped in Cottonwood rapid three miles above the finish of the race. One of the race winners flipped. Dick Stratton of Boulder flipped in Tin Cup...about midway in the race. It was the worst of the rapids this year.

All of the first seven one-sea knock and the first place canoe team beat Bob Ehman's record set last year at 2 hours, 53 minutes, 3.5 seconds. Ehman did not come to the race since the CA has ruled him a professional boatman making him ineligible.

More than 30,000 people watched the race. Over 6000 cars followed along the highway...this by actual count, not estimate. It was the biggest crowd in the seven year history of the race.

OUTSTANDING PHOTOGRAPHS OF THE RACE MAY BE OBTAINED AT REASONABLE RATES FROM HAY PHOTO STUDIO. WRITE TO: HAY STUDIO, SALIDA COLORADO, FOR SAMPLES AND PRICE SCHEDULE.

The water level was higher than in 1954 ('54 was the lowest year since race has been held), but not near the 1949 through 1953 levels. This year's race was a good comfortable race, but required more constant paddling to make good time.

Erich Seidel, winner of the 1953 race and second in 1954, now lives in Salida, but was unable to race because of a wrenched shoulder.

The slalom course had 16 gates and covered a half mile...also had one barrier. Two local Salida girls entered the slalom but neither placed. Space does not permit a detailed description of the course.
Let's look at some of the sidelights such as the type of equipment used, techniques and the river course itself. All of the first five fastest times were made by single kayaks which have proven themselves in past years as the most ideal type of boat for the race. In fact the Salida race has never been won by anything but one man in a kayak. Pillwein used a very small personally designed and built folding boat. It was smaller than the smallest Klepper made, very narrow and with a very shallow depth. Needless to say it takes an expert of many years to master a tricky draft of this type, but Pilwein has been racing for almost 20 years.

The next three places in the race were taken by the new Klepper T/65 model making its debut this year. The boat is about 14 feet, 6 inches long with a round bottom, designed to make it a good slalom and down-water racing craft. Kirschbaum also won the slalom in a T/65. The other foldboats included older Klepper models, both slalom and T/6, Pioneers and Hammers.

In the canoe class, Dussett and Rossinger skimmed along the rocky Arkansas course in a specially built and decked over canoe. Unlike the Canadian canoe, the gunwales were no higher than the rest of the boat, and the beam was narrower than the Canadian model. The other canoes used were the conventional Canadian model.

As to techniques...a combination of skill, experience and endurance won the race for Pilwein. All of the racers paddled continually down the course even through the rapids.

An idea of the speed of the current is apparent when you realize that the 25 mile course was covered by most of the boats in considerably less than three hours.

THREE MAJOR RAPIDS.....

For those of you who have never seen the Arkansas race course, I'll try to describe the three major rapids in the race. The first, about three miles from the start, is Bear Creek. It is the longest of the three, comes in two phases, and varies tremendously with the height of the water. It is caused by the material washed into the Arkansas's bed by floods from Bear Creek. Upon rounding a curve you find yourself in a wide, very shallow bed of boulders. You must pick your way through this mess (almost any channel you select
is as bad an another), but the determining factor in your choice is the narrow channel this wide flow takes you into, and this now-narrow channel in turn smashes into the bank and curves to the right causing large haystacks as it churns on down to the second half of the rapid.

As if the river's bent channel weren't enough of a challenge, there is a half dead tree that hangs low into the channel directly in the main current...insuring you disaster if you don't come out of the wide shallows well to the right.

Having successfully negotiated upper Bear Creek, you are riding a swift narrow stream toward some large "elephant" rocks which guard another slight turn. This time the main current gradually turns to the right and smashes headon into a large rock formation which ricochets the current back to the left again. In low water, it is relatively easy to keep far enough to the left to miss the rock formation, but in high water, haystacks on the left and the powerful, smashing current really make you fight to make the turn.

We'll assume you are successful in riding Bear Creek and are now about midway in the race...which means you are about to "enjoy" Tin Cup. This is the shortest of the three major rapids and is far off the highway stream of traffic. In past years few people besides the harried boatmen knew where Tin Cup was or how to get to it, but now it seems that everyone knows about it...approximately 2500 people lined its high cliffs to witness the 1955 running.

Your only warning for Tin Cup is a view of light gray cliffs above the railroad track on your left. When you see them you'll note simultaneously that you are entering a small canyon. The acoustics are such that you cannot hear the roar of the narrow left hand tunnel which is Tin Cup until you are about 50 yards above it. Unless the water is very high your only passage is to shoot right down a channel about 20 feet wide in the midst of tremendous white spray rollers that are sure to cover your in no matter how fast or slow you paddle. Fortunately there are no rocks to dodge if you take it right in the center, and if you use the paddle brace wisely, you'll come through with only a good dousing. When the water is low Tin Cup is the worst rapid of the three, but at high water it is possible to sneak down a rock ledge on the far right by bouncing along on the rocks, an alternative most non-dare-devils prefer.

And then about three miles above the finish of the race comes Cottonwood, the neighborhood of them all. Briefly
described, it is a narrow spot at the head of the Arkansas river canyon beyond which the river drops about 12 feet in a distance of some 1550 feet. That’s not too bad, but the entrance to this drop is only 15 feet wide! There are no hidden rocks to dodge, but oh what rollers and churning, foaming powerful water!!

You are well aware you are approaching Cottonwood because the narrow slot at its start backs up the river like a dam for about a quarter of a mile. Then too you can see the thousands of blood-thirsty spectators lining every rock around the rapid. You can hear Cottonwood too, very nicely...and it’s not roaring any welcome either. But because of the tremendous drop you cannot see a thing, not even bouncing spray until you ride out on the tongue and catch your breath before you go under the first huge roller (about 4 or 5 feet high). Then it’s just one smashing side current after another. A number of the boats get caught in the whirl pools on the left side and get pulled into a cove of huge boulders only to have to shoot right back into the churning rapid...usually in a disastrous sideways position. Cottonwood is only about 200 feet long, but mighty nasty. One good thing about it though, if you make it OK (and all but one did in 1955) you have the race licked and you’re only about three miles from a glorious and triumphant finish.

THE Eskimo ROLL IS MORE THAN A CLEVER TRICK....

WHY ROLL?

By Bruce Grant

6255 Chabot Road, Oakland 15, Calif.
(Secretary of the American White Water Affiliation)

Is this a stunt for exhibition like a somersault on skis, or is there some practical value? To learn the roll one must learn first to use his paddle effectively and to keep thinking clearly when underwater. What we are really out to learn is how to get up after a fall and we gain confidence rapidly as our instinctive response patterns build up following practice.

Teaching the roll, we start first with long or extended paddle methods because our chances of success are good in (12) spite of undeveloped coordination. When we can do the
--- ESKIMO ROLLING ---

by John Ryley

The Eskimo Kayak is all very well
For saving young ladies like Eskimo Nell
From a fate they consider a deal worse than hell.
But once fitted round a fairly large chap
It not only protects both his legs and his lap
But makes him a prisoner - a rat in a trap.

He cannot be blamed if he panics and cringes;
This treatment's enough to give anyone twinges
Unless he's got legs with reversible hinges.

He paddles away with an air of nonchalance
Then, trying a turn, he loses his balance.
Now in spite of his knowledge of swimming and boating
His top half is sinking, his bottom half floating.
He's practised these antics in all kinds of weather,
But one at a time, not the two things together.
The feeling of panic, the sense of alarm,
Adds power to his swimming, adds strength to his arm.

The learned instructor bawled out from the brink,
"Hi Charlie! Stop swimming, I told you to SINK!"
Charlie can see this would mean sudden death
And he's not going to die till he runs out of breath.
He gulps in some water and utters a shriek
Then turns upside down 'cause he's feeling so weak.

Under the water he kicks and he gurgles
Till fortune half smiles on the poor fellow's struggles.
He falls from the kayak and swims to the shore
Crying, "Teacher! Please teacher! Dear teacher! NO MORE."
I'm not going back through that horrible hole.
You can do what you like with your Eskimo Roll.

(from CANOE CAMPER, Autumn 1954, Number 63)
long methods successfully we go on to practice short (or screw and normal grip) methods. The short methods are of course the most useful because they can be applied instantly without shifting the paddle. Frequently the upset can be averted before it occurs.

An excellent written description of several rolling methods is available in a British Canoe Union booklet, copies of which may be ordered through the editor of American White Water at 50¢ each.

Eskimo rolling classes can be conducted in the fall or winter in heated swimming pools. Three persons can work together with one single foldboat or kayak which has been equipped with a spray cover. In water about four feet deep two persons, one at each end of the boat, stand prepared to help the roller bring the boat upright if he is unable to make it alone. This way the student can make several practice attempts before getting out.

Practice first the brace with the paddle tipping farther and farther until you can put your face in the water. When the feel of this has been achieved try going clear down and return again to an erect position. Finally you will be ready for 360 degree rolls. Be sure to learn them both to the right and left.

When you can come up at will you are ready for deep water practice and to start learning other methods. The Pawlata method (an extended paddle sculling method) should come next, then the short or screw method. While you are learning the advanced methods you will fall back on the one you already know when the new one doesn't work out.

Once you can do the screw method, practice and practice some more until it becomes instinctive and easy. At first you will think great strength is required. Soon, with your coordination improved, you will discover that it has become quite easy.

Our Sierra Club River Touring Section indicates that a series of five weekly sessions will provide an opportunity for nearly everyone who attends regularly to learn at least the long method. A few will accomplish it in the first session, others only after several evenings. Those who pick up rolling quickly will be doing the screw method by the fifth session.

These sessions have served to hold our group together in an otherwise off-season period. With five or six boat groups (14) working in the pool together many will master the roll.
THE ESKIMO ROLL
Long Method - Paddle Under Stern

In the following sequence the foldboat is rolled through one complete revolution with the paddler submerging on his own left and surfacing on his right side.

In Figure 1 you will see how the left hand grasps the end of the paddle blade and the right hand the shaft. The hands must be sufficiently close together to make possible achieving the cross armed position in Figure 2.

In Figure 3 the roll is starting with the paddle extending the paddle back toward the stern so that it may be passed under the boat and swept around until it extends out on the other side of the boat with the blade near the surface and the paddler's arms again in the cross armed position illustrated in Figure 2.

This cross armed position should be noted carefully for it is the position which will again be assumed when the boat is upside down and you are ready to start the lift.

In Figures 3 and 4 the roll is starting with the paddler extending the paddle back toward the stern in order that it may be passed under the boat and swept around until it extends out on the other side of the craft with the blade at the surface. The paddler's arms will then be in the cross armed position illustrated in Figure 2.

After the lift has started the paddler should lean forward as shown in Figure 6. This is important. It is also important that a firm seat is maintained throughout and that the knees are firmly braced in order that the right knee can be effective in bringing the starboard side of the boat up in response to the effort on the paddle. Otherwise only your body will be lifted and as soon as the paddle effort is relaxed, you will fall back. It is necessary to consciously try to bring the boat to an upright position prior to achieving that position with the body.

Figure 7. Up again.

SIERRA CLUB
San Francisco Bay Chapter
River Touring Section

Demonstration by
Bruce Grant
Photographs by Cliff Bond
ON May 6, 7, and 8, the Buck Ridge Ski Club, in cooperation with the Southeastern Pa. Chapter of the American Red Cross, carried out an intensive river cruising instruction weekend believed to be the first of its kind. Dubbed the "Red River College of River Canoeing Knowledge", the course was planned during the winter and based in large part on the regular Buck Ridge instruction program.

Participants were recruited by mail, largely from among holders of Red Cross basic canoeing certificates. At least this degree of familiarity with a canoe and its problems was considered essential. The response to the announcement was very heartening to the planners and a student body of 36 was selected from more than 50 applicants. Students chosen came from Pennsylvania, New York, New Jersey, Delaware, and Washington, D.C.

The group met at the YWCA Blue Mountain Camp near Hamburg, Pa., located near the confluence of two branches of the Schuylkill River which together provide a total of about 15 miles of novice to intermediate white water well arranged for instruction.

The curriculum was closely scheduled, including in addition to river practice, lectures, slide talks, demonstrations, equipment exhibitions, and a written quiz.

Before discussing the results of the course, it would be well to state briefly the aims of the planners: Of course, the broad objective is to promote the enjoyment of travel on wilderness waterways. The course sought to do this by: (1) Transmitting enthusiasm, (2) Teaching skills, (3) Instilling safety consciousness, (4) Developing a desire to teach others, and (5) Encouraging the formation of groups to accelerate development.

The course did not make expert river canoeists out of anyone in one short weekend, but we believe we were successful in transmitting some distilled experience on trip management, safety, equipment, teaching methods and where to find good canoeing in this area. Also, it was gratifying to see the improvement in canoe handling skills in swift water and among obstacles. These were results we could observe.
River Canoeing Knowledge

Some of the other objectives seem to have been fulfilled, at least in part, judging from letters received from some of the students who were kind enough to write us after the course. Dick Wallace of the New York AYH Canoeing Committee, was very complimentary as well as eloquent in his statement: "Our own enthusiasm has soared to unprecedented heights and with the knowledge and experience you people have imparted to our small nucleus, we now have the equipment, figuratively speaking, for enlarging our own group by winning more converts to the kingly sport of canoeing."

In general, the staff was rather well satisfied with the overall plan as a first effort. The seminar material was well received, particularly the details on fluid flow and water reading. Slide talks and movies were popular. On the river, students seemed to make the most progress when paddling with an instructor first in the stern and then in the bow.

Some readers may be interested in a few details on some of the mechanics of organizing and executing such a course: Student capacity was limited by availability of instructors and aluminum canoes. Finding 21 available canoes may prove difficult if a group of this size is to be handled. Application blanks provided the staff with information on outing club affiliations, canoeing experience, instruction opportunities of the student and transportation problems of individuals. Students were assisted in making car pool arrangements. A charge of $12 per student covered food and lodging, canoe rental, insurance, administration expense and 1/8 of an instructor's food and lodging expense. Transportation expenses were extra and were taken care of within each car. A suggested list of personal equipment and driving directions were sent out as well as all the text material with instructions to read it before coming to camp. Text material included: Hints on reading fast water, suggestions for trip planning and management, check list of equipment for canoe trips, safety and rescue techniques and a guide to canoeing in eastern Pennsylvania. The Red Cross Chapter has issued basic certificates to those completing the course satisfactorily with an additional notation "With White Water Supplement".

The staff sincerely believes that courses of this kind will help to fill an important need in bridging the gap between adolescent activities like scouting and adult outings. Further, they should accelerate development and encourage interest in all outing clubs in this wholesome recreation. We intend to hold them regularly.

Special credit is due Dave Bernhardt, Director of Health, Safety and Education and George Redding, Director of Safety Services of the American Red Cross, for their joint sponsorship, encouragement and considerable help in planning and administrative matters.

The hard working, sleep losing Buck Ridge staff was made up of Bob McNair, Rosemarie Lachenmayer, Don Rupp, Jim Calkins, Kitty Wilhoite and Jeff Wilhoite.
Safety Isn't Sissy

BY BOB McNAIR

Conditions for recovery of the craft are not always favorable and must be considered in advance.

Photo by Niel Douglas

Chance acquaintances who hear I run rapids say, "That's too dangerous for me". They seem to think that fools, overflowing with courage, rush madly into danger. I think rather that those who follow the "dangerous" sports are a careful lot, willing to learn and to plan so that the thing they love to do is tamed and made safe. Making sure you get through is perhaps the great challenge of white water canoeing.

The knowledge that we must gain is costly to learn through experience. We must look to others who already know. Until recently only the favored few had the right contacts. The others made needless headlines. As we read the news accounts, we had a sense of guilt because we had not communicated our knowledge to them. This is one of the greatest benefits we will all gain from the AWWA.

Without training and advance preparation this could be serious. Photo by Niel Douglas

Some will say they canoe to escape from rules and organization. I can say only that a few rules may save your club a blighted future, and when the rules are a part of the thinking, no one notices any regimentation.

I have set some rules down. They are standards for habitual action and are devised from only with full knowledge that such exception is permissible. They are written for tough white water, but they apply also to novice trips where people are learning the game rules as well as the techniques. They are limited to eastern canoeing experience and so may well be incomplete. Let us look at them:

1) The ability to swim should not be taken for granted. Because many cannot swim, we have a swimming course each year, for it will build confidence and coolness under adverse circumstances.
2) To avoid canoeing beyond your ability is both an individual and a leader responsibility. The leader must restrain poor paddlers, and he must not hesitate to change plans when water level unexpectedly changes the difficulty rating of the stream.

3) Life belts must be worn in water too rough or cold for swimming. Some would word this even more strongly.

4) Always run as a team. We favor four to eight canoes. This number permits you to herd a few inexperienced people. A larger group is awkward and should be split into two or more groups.

5) The best water reader leads and you must follow the course meticulously unless he signals otherwise. He has been appointed to pick the best course, and in following his signals you will find the leader has chosen the best course for you. If you too are an expert it is only right that you maintain the safest course for the sake of the greenhorn in the canoe behind.

6) It is each boatman's responsibility to watch the boat behind, to see him safely through. To stop if he stops is the only way to keep the whole team from disintegrating. With green groups the lead boat may want to check adherence to this rule by counting off: "1, 2, 3, 4, 5, 4, 3, 2, 1". If the count returns, all is well.

7) The most experienced rescuers are assigned to the sweep (last) canoe. It is the principle rescue boat carrying one of the throwing lines, and he is responsible for staying in the rear to help people in trouble.

Bob McNair, 32 Dartmouth Circle, Swarthmore, Pa., helped Buck Ridge Ski club get its start 11 years ago. He has been an organizer of outdoor organizations ever since his college days at Harvard. Bob was born in Cambridge, Mass. in 1921. He earned his undergraduate and masters degree at Harvard majoring in mechanical engineering. He is now a gas turbine development engineer for Westinghouse. Bob and wife Edith have four children ages 4 years, 18 months and two 6 months old.
8) Cold water numbs and saps the strength so badly needed in spills. Woolen long-johns make a tremendous difference. Their use in very cold water is a safety must.

9) Fast, calm, accurate rope throwing comes only with practice. So all hands should take a practice throw each day at lunchtime.

10) Usually the trip leader is a good fellow, but he must have complete authority. Often he will delegate the lead position and his authority to a more skilled member of the group while actually running.

I will not talk of what to do when you spill or when others spill. Rescue is so important a subject that it needs an article of its own.

Of course a few rules and some practice in rescue are not enough. In canoeing these merely minimize the danger of what is still a very dangerous situation. There is an unusual emphasis (compared to skiing) on avoiding spills. And this means good sound instruction.

I'm sure that those who paddle other boats in other waters have additions and improvements to make to these rules. Please send them to our editor. They may not be applicable everywhere, but they should still be on the check list of standard behavior.

REMEMBER --- SAFETY ISN'T SISSY, IT IS THE GREAT CHALLENGE OF OUR SPORT.

RULES FOR SAFETY

1 - SWIMMERS ONLY
2 - DON'T CANOE IN WATERS BEYOND YOUR ABILITY
3 - ALL MUST WEAR LIFE JACKETS IN ROUGH WATER
4 - NEVER RUN RIVERS ALONE
5 - FOLLOW COURSE SET BY THE LEAD
6 - YOU ARE RESPONSIBLE FOR BOAT BEHIND
7 - APPOINT A SWEEP CANOE
8 - PRACTICE ROPE THROWING AT LUNCH
9 - WEAR WOOLEN UNDERWEAR WHEN WATER IS COLD
10 - RESPECT AUTHORITY OF THE LEADER
IDEAS

SPRING CLIPS along the canoe gunwales to keep painters from tangling feet...Bob McNair, 32 Dartmouth Circle, Swarthmore, Pa.

DUMP ALUMINUM CANOES by standing them on end. The tank floats them and permits dumping when only one end can be brought to a rock....Bob McNair

SPLICE PAINTERS on both bow and stern of canoes and foldboats so that you will have two ropes on each end to tie down the boat being carried on a car top....Bob McNair

CARRY SMALL SPONGE on the floor of your boat to wipe up small amounts of water dumped in through spray cover...Clyde Jones 2565 Poplar, Denver 7, Colorado.

BILGE PUMP made of small bellows or syringe installed where foot can work it. (See Pat Fretwell's story, page 24)

This column will appear in each successive issue of American WHITE WATER. It was suggested simultaneously by Clyde Jones and Bob McNair. Please jot down any ideas you have for more efficient boating, long or short, and mail them to the magazine (address on page 2).

*****************************

Letters from Readers

Dear Sir,

I am a German Immigrant, three years in the USA. Formerly I was teaching physical education, studied in Prague and Munich Universities.

Just now I am preparing a big trip to South America, Colombia and Venezuela, tracing the ways of A.V. Humboldt. I shall use a Klepper single foldboat. White Water will be on the Duda and Guaviare Rivers for some hundred miles. And again on the Casiqiare, the connection between the Rio Negro and the Orinoco.

Do you know somebody who has the time and money to go with me? Time: about three months. Money: about $1000. I am making the trip in order to complete my university studies for which I shall write my thesis about Humboldt-lands today.

Then too I shall take lots of movies and pictures.

E. E. Hegen, P.O. Box 16, Limona, Florida  

(21)
DEEP ROCK: makes quiet boil or whirl on the surface. Little or no danger, but when current is slow, rocks show less in surface boils. In still water, a rock an inch under water won't show at all. That's where bow man watches out. In deeper water you're past rock when you get into boil.

SHOALS: Broken, "dancing" water due to shallow rocks, fast drop. Look and listen for it in wide valley where river spreads out. Ride open "Ws" or on bend stay nearer outside of curve. Be ready to step out if canoe drags bottom, but keep hold of craft.

WHIRLPOOLS and OPEN V: Changes in river speed below big drops often cause whirlpools, dangerous only in big rivers. The "V" is canoeist's friend. Water rushes through, often forming haystacks below. They pack wallop. If small, OK, but if big, skirt edges then bail.

EDDY: A backwater may be a yard, or a mile long. If behind a large rock, it can steer your canoe, bouncing bow away, then sucking it in. Paddle to side of eddy, as here. Larger eddies are longer, like slowed-down whirlpools above or below point of land. Foam shows current direction.
Ernest Schmidt, Schiff Scout Res, Mendham N.J. is Director of camping at the Nat'l Training Center for Boy Scouts. He has camped in every state and canoed in many of them.

CLOSED (DOWNSTREAM) V: This "V" points into the current and is dangerous. It's caused by a real canoe buster. Not hard to steer around, if you see it in time. Probably you won't hear it for there's too much other noise. Rocks rarely visible.

FLAT ROCK: Near surface in broken water—it's mean. Look for smooth black line with white foaming water—or comparatively still water—just downstream. If you hit, you'll stop, then sit there, or swing sideways while river pours in. These also make calm-looking areas in rapids.

BROKEN DROP: Several rocky ledges and steep rate of drop. It roars. Look for it where valley walls are high, river narrow. These rapids must be studied from shore first. Ride open V's. Haystacks, rocks may be rough. May be best to portage, or pull canoe from shore with ropes.

SHEER DROP: Always portage this one...If you want to stay alive! But if you get caught in it, you'll spill at lip (by turning and rolling) or at base. If canoe stays free, stick with A. If caught, leave and float on your back with current, feet downstream, head up. Hang onto paddle.
KEEP YOUR POWDER DRY ??

by Pat Pretwell

"I THINK IT WOULD BE FUN to enter the Salida Boat race," my husband suddenly announced at breakfast. I looked at Stretch (he is 6 feet, 6 in. long) to see if he were serious and found to my horror that he was. I immediately thought of a number of sound arguments against the proposal, which included our lack of experience, our lack of physical conditioning, our lack of knowledge of the Arkansas river, and his lack of good sense. He did not pursue the matter further, which was an ominous sign.

The weekend before the race Stretch suggested we take a practice run down the Arkansas. The water was up, the weather good, and the boating excellent -- so good in fact, we stayed on the river both days and abandoned our previous plans of climbing Hector, a nearby 14,241 ft. peak, on the second day. This clinched it. In a moment of ecstacy, I agreed it would be fun to enter the race.

By the time we were homeward bound to El Paso, the rupture had worn off and it was too late. I found that the actual shooting of the rapids did not worry me. I mulled over such problems as, "It might be dark out before we get off the river," and "we will keep all the race officials waiting at Colorado while we take hours to reach the finish." After I had exhausted these possibilities, I began to look forward to the race.

The day before the down river race we assembled our old two-place Folbot and set out for a practice run. We also have a faster two-place Klepper, which we were saving for the race. The morning's practice was quite eventful. We succeeded in capsizing in Blue Rapid, a rocky stretch where large rocks force the water through various swift passages (24) under the remains of swinging cable foot bridge. We
came out all right but the Polbot suffered a permanent fold completely breaking the bottom ladder, three stringers, the coaming, two metal gusset tubes, and cracking two ribs. We ran in the poor decrepit creature that afternoon, but it gave me an odd sensation to feel it flex in the middle every time we hit a slight riffle. I was very thankful we had not used the Klepper.

Sunday morning, the day of the race, we went out to review from the highway several trouble spots since we had not run the section between Howard bridge and Valley bridge this year.

Tin Cup rapid looked bad with four foot high tail waves, and Red Rock rapid right below Tin Cup had so many rocks showing it looked impassable. We mapped out a tentative route, but neither of us really expected to get through Red Rock without exposing at least three boulders. With this cheerful attitude we hurried back to Salida and assembled the boat.

We stuffed the area beneath the decks with three safety bladders, two partially inflated inner tubes, and a spare paddle for each of us. My engineer husband had an inspiration and at the last minute installed a bilge pump which consisted of a rubber suction bulb and rubber tubing. I was to operate the contraption with my right foot. A fine idea this was because our spray cover was so cantankerous that it took 15 minutes and three people to adjust it properly, making dumping water during the race too time consuming.

My reaction before the race began was that a run down the Arkansas river would be a fine afternoon's sport if only we could get out and look at the rapids before we shot them. Fortunately, there was not time to worry about it and after a frantic last minute scramble we were off.

To be actually on the river was a relief from the pre-race tension, added to by the milling crowd. I forgot that we were running against time and gave myself over to the enjoyment of pushing through the clear water. The first wave that drenched us reminded me how cold that water was. There was a gap in the spray cover at my waist that no amount
of squeezing would permit us to close. When a wave broke over the deck I would make a frantic effort, whenever possible, to raise the spray cover on my left side and divert a little of the deluge. My right foot became numb from working the bicycle pump, but this problem was soon resolved.... The bicycle pump broke. We resigned ourselves to an increasingly heavy water-logged boat. As the single place boats passed us, we greeted them and waved. Some failed to respond at all in their grimy grind to win; others seemed exceedingly surprised and others chatted with us briefly.

Bear Creek rapid went by in fine style. Flume rapid provided a moment of suspense and the thought flashed through my head, 'not again,' but our dunking of the previous day had taught us a lesson and we followed by the diagonal wave that had been our nemesis. Spring Creek rapid with its myriad of boulders and likewise the boulder field below Cherry Creek bridge caused no trouble. We back-vedered and slowly nudged through the obstacles. Wherever the river flowed near the highway I was aware of the tightly packed stream of cars crawling along bumper to bumper. I was glad to be on the river instead of facing the perils of the highway.

The Cup rapid provided quite a thrill and it took some hard paddling to keep on course. We churned straight through the center and I have never had such a wonderful sensation of sudden lift and drop as I experienced in the tail wave of the foot of this rapid. After The Cup we both were beginning to tire, and the boat had enough water in it to make it quite sluggish.

Red Rock rapid which had been our main worry, was unbelievably easy—glit through without even a nudge although I still don't see how. Then in Railroad rapid we hung up on a rock. In trying to push off, I paddled so fiercely I broke the back rest of my seat and received a lacerated vertebral, my only casualty. The Klepper was not so fortunate and suffered a cracked bottom ladder and two splintered ribs. Railroad is not spectacular, but it was a very busy place while we were there. In addition to our boat, there was another boat hung on a rock end one capsized. As soon as we were free of the rock the situation struck me as ludicrous. All of these people standing around in this little, insignificant rapid!

Soon I could hear the roar of Cottonwood rapid. But something sounded different—a bell noise. It dawned on me (26) that above the roar of the water I could hear the voice
of the crowd. All the rocks on the highway side of the rapid were packed with people, and on the railroad tracks bordering the left side of the rapid the special Denver and Rio Grande train stood.

We were both tired by then and the boat was quite heavy with water. The cheers of the people provided a lift to our spirits, and we forced out tired arms to paddle bravely out of sight around the corner before we put down the paddles for a very brief rest, at which time Stretch solemnly announced, "My left arm has the giggles." For us the area below Cottonwood was the worst part of the race. Things we would easily have avoided earlier became inescapable due to fatigue, and on two occasions we pioneered a new route through some very thin boulder fields. The quiet water above Cotopaxi was a relief and enabled us to catch our second wind. Again we heard the voice of the crowd above the sound of the water and saw the wonderful bridge at Cotopaxi, marking the end of the race. It seemed as though the last lap from the bend of the river to the bridge was no effort at all.

I felt elated at the end of the race and was elevated even more by a small girl who asked for my autograph. I was not nearly so tired as I had expected to be. After the first five minutes the primary sensation I felt was not fatigue but an overwhelming desire for a very large, very rare steak. I really regretted the race was over because it had been a thrilling afternoon. We finished tenth in a field of sixteen with a time of three hours and six minutes, twenty-eight minutes behind the winner.

We were the first husband and wife team to finish the race, and prior to this year the kayak class had been an all male event. I hope there will be more two-place kayaks with husband and wife teams entered in the next Salida race. I do not think the race is too strenuous or the river too difficult for any experienced woman who wishes to enter. I would like to see a double kayak class, which I feel would be an attraction for the "weekend" type of boater and would enable him to enter competition against others of comparable experience.

Editor's note: As we were going to press, it was learned that Ray Zubari flipped his boat purposely in Cottonwood rapid to demonstrate the Eskimo roll. But an over zealous lifesaur leaped to the rescue and grabbed the boat.
SPECIALLY DESIGNED CRAFT HANDLES BEAUTIFULLY....

FRENCH SLALOM CANOE
by Larry Zuk

In 1952 the French competitors in the Arkansas river races introduced a new canoe into the United States. This exciting new model is designed especially for white water, and as such is far superior to American made stock canoes that are designed primarily for use in quiet water.

This boat is 15 feet, 8 inches long with a beam of 35 inches. It is 11 inches deep amidships and 15 inches at the ends. The rise in the keel is 4 inches from the center to within a foot of the end making the rise of the deckline about 8 inches from center to the ends. Its flat bottom amidships with long pointed ends combine with this high rocker to give it tremendous stability and a great maneuverability. For example, in a quiet, windless lake, one sweep of a paddle stroke will spin the boat and a single paddler around three complete turns. The pointed ends enable the paddlers to be near the edge of the boat which is narrow at the paddling positions.

Larry Zuk, 4072 S. Washington, Englewood, Colo., comes from an old canoeing family and has been paddling canoes and kayaks just about ever since he was born in New York City in 1923. His father was a paddling and sailing champion and Commodore of the ACA. Larry also cruised for many years in New York and Maine and has taught canoe classes as a volunteer for the Red Cross in the East as well as in Denver. Coming to Denver in 1949, Larry and wife Paula and seven year old Ricky started cruising the rivers of the Rocky Mountains and in 1954 got together the Colorado White Water Association. Larry was elected first president of the CWWA and vice-commodore of the Rocky Mountain Division of the ACA in 1955. Larry is an industrial engineer (26) in the management of the Heckethorn Mfg & Supply Co.

This boat was so popular that two of them were used in the 1954 races by the Frenchmen, Andre Pean and Pierre D'Alencou, who won the canoe class, and by the French girls Raymonde Paris and Jeanette Pean. These same two boats were purchased and used by two American teams in the 1955
races. Bud Parks and Roy Kerswill took second in the canoe class of the down river race and Paula and Larry Zuk took second in the slalom and third in the down-river race where aluminum canoes failed to finish.

The Swiss team of Rosinger and Dusset used a completely fibre-glassed canoe to win the 1955 races but this boat was definitely a single purpose racing canoe whereas the French canoe is a narrow strip cedar open canoe, covered with fibre-glass, and it can be run open or decked. This makes it an excellent boat for carrying a large load on a long trip, fishing on a lake or even sailing, as well as for its primary purpose of running slalom and white water.

A primary feature of this canoe is the removable canvas spray deck pictured in the diagrams. This deck has elastic around the waist of the cockpit and large sacks in the boat in which the paddler kneels. This provides for quick emptying in case of capsizing since only the sacks fill with water.

It also aids in keeping camping gear dry and sand and dirt out of the bottom of the boat. In heavy water the kneeling position must be maintained but on long trips, it is possible to relieve the strain on the knees by sitting on the thwart with feet in the cockpit.

This type of spray deck is easily applicable to American made canvas or wooden canoes as it can be made to cover the deck of the canoe and does not have to go all the way to the end of the boat. For use on the aluminum canoe it needs some modifications.

One drawback of the French slalom canoe is its weight of approximately 80 pounds caused by the fibre-glass finish. This can make portages difficult. Another drawback is the protrusions on the side for lacing on the deck. These are too easily hit by the paddle. However, for a combination of slalom racing and white water cruising, it is far superior to any canoe we have yet seen and has proved itself, not only on the Arkansas, but in small rocky streams like the South Platte and Cache la Poudre, and fully laden in long runs like the San Juan.

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DIAGRAMS ON THE PREVIOUS PAGE ILLUSTRATE THE FRENCH SLA-
LOM SPRAY DECK. QUESTIONS ON THE FRENCH CANOE SHOULD BE
ADRESSED DIRECTLY TO LARRY ZUK, 4072 SO. WASHINGTON,
INGLEWOOD, COLORADO.

(30)
In the roaring twenties, the cradle of American Foldboat was a houseboat off Newport, Ky, across the Ohio river from Cincinnati, Ohio. The pathfinders of the waterways congregating there included a few office, factory and laboratory workers, two M.D.s, one ex-sailor, one dentist and one sparetime tent preacher. Wives and sweethearts were invited.

The houseboat privacy allowed the ladies to go in bathing suits without stockings, still mandatory on the riverbanks. The men were in regalia with chests fully covered.

From our headquarters we travelled over old countryside roads to the rivers and lakes within a 200 mile radius on weekends, sometimes with three boats on the fenders and six people in one car. Other times we rented a truck for the whole gang. On such trips, when we came from nowhere up a riverbank to the eating places of small towns, the caretakers would retire usually behind a counter close to some weapon.

One of the boatmen, a troubleshooting telephone lineman by trade, announced through reporters in the papers of an Ohio town that he would jump their 20 foot dam in floodwaters with his boat. Two thousand people lined the banks according to the papers. An ambulance was present and we needed it when he missed the washout and landed on the apron below, fortunately thrown clear but knocked unconscious. He was in the hospital a short time, but only fragments of the boat were found later.

In 1928, the writer went abroad to the foldboat factory where Captain Romer prepared for his Atlantic crossing. His personally compiled grublist and other data never published may appear in this magazine at some future time. In 1929 President Hoover was invited to get a close view from a foldboat of the Ohio river canalization then underway, but the Whitehouse secretary tactfully declined.

Heralding the era of TV, jets and last but not least, foldboats was the use of the latter by the Byrd Expedition on the first flight over the Southpole. For some time after, I had to extol the merits of folding kayaks for use among headhunters and equilmaux over a taxpayer-sponsored program, where I was introduced as the "father of foldboating."

The old-timers of those days have drifted apart, but now foldboating is coming into its own.
WILDERNESS WATERWAYS...........by Bruce Grant

Support for the AWWA continues to grow with new member applications in each day's mail and with requests for information from sections of the country not previously included in our roster. To achieve the AWWA goals we must have the continued support of boatmen and canoeists from all over America. By support we mean not only money; we mean time, hard thinking and writing.

As suitable articles become available we will offer more and more on camping, river and lake touring, fishing, ocean paddling and surfing, canoe sailing, and other activities kindred to the exploration of wilderness waterways. We will always need fresh points of view and consider it a sign of health when new voices contribute to our effort.

Support for the AWWA must also come from distributors of paddle-craft, camping equipment, sporting goods, wilderness outfitters and guides. Let us all give these advertisers encouragement by letting them know that we read about their products in American WHITE WATER.

Strengthening support of all types will increase our effectiveness in making known the great recreational opportunities on our wilderness waterways and the importance of preserving the better routes for enjoyment by our children.

MORE BOATING ARTICLES

- Idyll in the Ozarks, Saturday Evening Post, June 25, 1955
- He Tamed our Wildest Rapids, Sat Evening Post, Jul 30, '55
- Rollercoast to Tidacghton, Outdoor Life, May, 1955
- We Swam the Colorado, Colliers, Aug 5, 1955
- Arkansas Race, Ford Times, June, 1955
- White Water Vacations, Argosy, July, 1955
- Take a Boy, A Man and a River, Town Journal, May, 1955
- Along Alaska's Great River (book) by Frederick Schwatka published 1885...covers rafting techniques.
- The Sound of White Water, (book) by Hugh Fosburgh, publ. by Scribner's Sons, 597 5th Ave, New York 17, NY
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