

STRIVE TOGETHER, THRIVE TOGETHER

The Story of JON LUGBILL and DAVID HEARN

This chapter discusses the paddling careers of Jon Lugbill and David Hearn, the top C1s in the World for the last several years. I feel it is appropriate to talk about them together for a variety of reasons. First, "Davey" and "Kid" as friends call them, are great rivals -- and great friends. Secondly, they approached canoe slalom from two opposite perspectives. Jon always emphasized great speed and power, particularly in accelerating the boat after a turn. Davey concentrated on endurance and cleanliness. As time went on, however, each began to do more of what the other had emphasized. This was especially true after 1979. The final reason for treating them both in the same chapter is because I feel the American C1s, as symbolized by Jon and Davey, have become one of the greatest driving forces in whitewater canoeing today, and I don't believe either could have accomplished this without the other pushing him.



Jon Lugbill, Bill Endicott, and Davey Hearn right after the 1981 C1 team race. "That was the greatest team run in the history of the World Championships."

(Alex Haller Photo)

In this regard, I should add that Kent Ford, Bob Robison, and Ron Lugbill (Jon's older brother), have played an important supporting role in this story. Space does not permit giving them the attention I would like to, but suffice it to say that, had it not been for Jon and Davey, I would have been writing about them! The rivalry between Jon and Davey, then, should be regarded as symbolic of the greater rivalry -- and friendship -- among all five C1s.

For about half a decade, Jon Lugbill and Davey Hearn have been waging titanic duels in major national and international races. Lugbill is undefeated in the World Championships in C1, having won four times, twice in individual, twice in team. However, he has never won the Europa Cup or the U.S. Nationals in C1. Hearn has won the Worlds twice in team and finished second twice to Lugbill in the individuals. Davey, however, is the only American ever to win the Europa Cup (in 1982), and he is undefeated in the U.S. Nationals since 1979.

Looking deeper, one can see that their rivalry has affected everyone else in the sport. They have, along with "Bumbo" Robison (Bronze Medalist in individuals, World Champion in team), Ron Lugbill (World Champion in team), and Kent Ford (Silver Medalist in wildwater team; twice third in the Europa Cup), completely revolutionized the C1 class. The winning C1 in a major race almost always runs clean now; that did not used to be the case. And their scores as a percent of the winning kayak are constantly dropping. In the Jonquiere Worlds, Jon was 111 percent of Richard Fox's score. In 1982, had he been entered in the K1 class and not the C1 class, Jon would have been seventh at Merano and third at Augsburg. At the Bala Worlds, the team of Ron and Jon Lugbill and Davey Hearn beat all but the winning K1 team score and in 1982 they placed against the kayak teams in most of the team races they competed in. With their ever lower canoes, daring leans, and above all, flamboyant pivot turns, they have caused many people to consider the C1 class the most interesting one to watch right now.

But the influence of the C1s, as exemplified by Jon and Davey, extends to every other class as well. Not long ago, Cathy Hearn, Davey's sister, and the first person in ten years to win three gold medals in a single World Championships (Jonquiere), asserted that she had learned more from watching the top C1s than from anything else. She said:

There's a lot to be learned from C1 technique and boat control that is helpful to all classes. Because the C1 has a blade on only one side, he must use it more efficiently. But if you can use both your blades more efficiently (in a kayak), you'll be a lot better off.

In the spring of 1982, Britain's Richard Fox, the current World and Europa Cup Champion in K1 and the great technical master of his class, explained to me that he had evolved his incredibly precise gate techniques in large measure from watching C1s, particularly Jon and Davey. The best way I can think of illustrating this is through the following anecdote:

One day on the Feeder Canal, our practice course in Washington, D.C., Richard was fooling around on the top four or five gates which are in the best water. He was paddling with only one blade, just like a C1. After watching him do this for a while, I started setting some little courses for him, to see if he could do them on one blade. No problem. No matter what I set, he could clean it. Then I asked him to run some courses which involved paddling reverse with one blade --upstreams in reverse, offsets in reverse. Again no problem: he cleaned everything, using essentially C1 strokes with one blade of his kayak paddle. He was equally good on either side. Finally, in desperation I had him do reverse paddling, with one blade, ON THE CROSS DRAW! It was only on this that he took a penalty or two. In short, he could do just about anything with either blade that Lugbill or Hearn could do. I believe this unusual dexterity is the foundation upon which his technique is built.

The influence of the C1s has also been strong on Steve and Mike Garvis, the current World Champions in C2. When the "Garvi" were trying to come up with new techniques for paddling the revolutionary close-cockpit C2, they borrowed heavily from the C1s. Secondly, the Garvi knew that whenever they beat the teams of Jon Lugbill/Bob Robison and David Hearn/Ron Lugbill, they had had pretty good runs. Trying to stay ahead of these two "throw-together" C2s has been a major incentive over the years. Essentially the throw-together teams paddled their boats like two C1s, and a few years ago, they were better than the Garvi. Since then, however, the Garvi have been able to combine many of the same moves with more synchronized stroking to move into the lead. For example, they can now do bow and stern pivots and fancy sneaks in much the same way the C1s can.

Could all of this have happened if Jon or Davey had existed alone? I don't think so -- certainly not to as great an extent. It's only when they race against each other that the performances are so impressive. I remember once a couple of years ago when I was running a practice on the Feeder Canal and Davey Hearn was there, but not Lugbill. Hearn was running well, cleaning the course and getting what appeared to be fast times. After about four or five runs, his times had stabilized and he appeared unable to go any faster. Just then, the Kid came around the corner, having arrived late. Once he got out there, the two of them lowered the previous best C1 time on that course by about 2 seconds (out of 70). I forget who won the workout, but I'll never forget the moral of the story: competition is a

tremendously powerful incentive. It is basically out of this competition that most of the new theories of paddling fast and new techniques and boat designs have come.

But the most amazing thing about the Hearn-Lugbill rivalry is the fact that they are the best of friends, always exchanging ideas, comparing notes and learning from each other. When most people hear the word "rival" or "competition" they tend to think of "enemy". But here is an extraordinary case where competition is actually a form of cooperation. For Jon and Davey, sharing what you have with your opponent, making sure he knows what you know, does what you do, has what you have, is the best way of helping yourself approach that "ultimate run" because your opponent is then better equipped to push you towards it.

For me, this embodies the ideal of athletic competition. The competition/cooperation is far more enjoyable and satisfying if the antagonists are openly helping each other. I have seen too many examples of the other kind of competition in which athletes become so obsessed with "beating the other guy" that they engage in petty tricks and secrets in an attempt to gain advantage. As a result, this becomes one of the factors in their not reaching the ultimate run.

Participation in a sport like canoe slalom is a form of self-expression. As exemplified by Jon Lugbill and Davey Hearn -- and others mentioned in this book -- it is a form of high art. One of the most satisfying aspects of such participation is training really hard in practice sessions and constantly racing with great intensity. If this happens, winning is really just icing on the cake and the real satisfaction comes from knowing that you always did your best. If you win, you know that you have indeed approached the ultimate run, and reached one of life's highest pinnacles. If you lose, you know that your opponent could never have gotten so good without you.

PART I --JON LUGBILL AND THE EVOLUTION OF "CANOE MACHO"

Jon Lugbill was born May 27, 1961. He is 69 inches tall, weighs 175 pounds and uses a 59 inch paddle. If I had to describe his paddling career in a few words, I would say it was a matter of developing an extremely aggressive style first and then learning how to control it well enough to get down a slalom course clean. In recent years, he has added impressive endurance to his formula and can thus sustain his torrid pace all the way down the course.

But there is really more to it than that. Winning isn't good enough for Jon. In fact, I don't think subconsciously it is the most important thing. He is always pressing for the ultimate run, always seeking to do more, do better than anyone else. For want of a better term, I call this attitude "canoe macho". Jon trains harder than anyone else in the sport, seldom taking a day off, and when he works out he usually takes more runs than anyone else. In devising a race strategy he invariably seeks the most daring one and encourages everyone else to, also. When running rivers, it's the same thing, always pushing it to the limit. And it's been going on like this since he first made the U.S. Team -- at age 13!

Getting Started

The first important thing to understand about Jon Lugbill is that he is a good all-around athlete, having participated in a variety of organized sports since he was very young.

Dad is really competitive. He thought sports were a natural part of growing up and he was active in sports himself. He was a basketball player for a small college in Indiana. So he taught us to play a lot of sports, such as basketball, football, baseball, soccer and skiing. He also really liked the outdoors and would take us camping.

Jon goes on to explain the value of participation in other sports:

I feel it is important to be a well-rounded athlete. For one thing, it makes you more agile. For another, it helps you to avoid injury. It also just makes you feel better. I remember in 1982 I didn't do anything except paddle from January to June. I couldn't run even a little bit without dying, and I was constantly worried about getting injured. Finally, doing a lot of other sports is a lot of fun.

Ralph Lugbill, Jon's father, was also pretty enthusiastic about whitewater canoeing and there is an old story in Washington, D.C., about how in 1974 when Jon and Ron were out West they phoned home to tell their parents what a good time they were having. Ralph and Merle Garvis (father of Steve and Mike Garvis), got so excited that they flew out themselves, so they could paddle C2.

The introduction to whitewater came in 1971, when Jon and his brothers Ron and Kent saw an advertisement in the newspaper about a raft race in Petersburg, West Virginia. The race was on April 1 -- April Fools Day -- and was on 1-2 miles of class II whitewater. Ralph and the three boys collected about 30 inner tubes and tied them together to make a raft. As it turned out, Ron and Jon were too young to race so Ralph and Kent did, "but there were all sorts of exhibits around about whitewater and that excited us," Jon adds. "The next year we came back, but only to watch. There we tried out a kayak and bought it." Later, the Lugbills bought a second boat and eventually their back yard began to resemble a used boat dump.

In thinking about those days, Jon says he really didn't like paddling very much: "I liked it when I got there, but I hated getting there." As a portent of things to come, his father would drive along the side of the river when Jon would paddle the kayak, then stop to take a turn himself.

Ralph Lugbill also bought a C2. But while Ron and Jon paddled it a little in the early days, it hurt Jon's knees so he couldn't do much of it. As a youngster, Jon had Osgood-Schlatter's disease in which the tendons do not grow as fast as the bones. It is a problem when you are growing but stops after you are full grown.

First Races

Jon's first race was the Petersburg wildwater race in 1973. His first slalom was also that year in August at the Seneca slalom. There he raced K1 and C2, with brother Ron. Ron also entered K1. In C2, the winner of the race was the boat of Steve and Mike Garvis, also in their first slalom. "We trained up for that race," remembers Jon with a laugh. "Ron had this book and we tried to learn from that." Later that season, Jon was in the Bellefonte slalom in Pennsylvania and in the K1 class, Jon beat Ron and perhaps first discovered the importance of speed: "I had 30 penalties but I beat Ron who was clean."

In the fall of 1973, the Lugbills bought a modified Hartung C2 which had been paddled in the Muota World Championships that year. Ron and Jon paddled some in it, with Jon in the stern, Ron in the bow.

But Ron was getting interested in training more seriously in K1. He had one gate on a little creek half a mile away from home. Jon

remembers Ron having to carry his boat, paddle and gate all the way to the creek and back for every practice. Other times, Ron would tie his boat to the shore and paddle against the water. "I also remember that my brother Kent started to get interested in mountain climbing and I started doing push-ups with him."

By the next year, 1974, the Lugbills entered races in C2 and K1. "Ron was killing me in kayak," Jon recalls, "and we did o.k. in C2." In one race, since there was no junior class, they raced with seniors and came in third, beating the Garvis brothers.

One year later, the Lugbills were in the World Championships.

1974 was a turning point for the Lugbills. In the first place, they got a better training site, a neighbor's pond about half a mile away. They put one gate there. In the second place, Jon stopped growing, and the effects of Osgood-Schlatter's disease diminished so that he could kneel without pain. "We decided to concentrate on C2 since we were doing so well at it." The training then consisted largely of timed English gates.

Jon also started paddling C1 at this time -- "probably because I was getting beaten so badly by Ron in K1." Since he paddled stern in the C2, he could handle a C1. "That May I decided that the other kids in my neighborhood didn't want to play sports enough to suit me so I started paddling to have a sport during the spring and summer."

The really crucial event that year, however, was the trip the Lugbills made out west to paddle. Jon tells the story:

In Colorado, we wound up swimming a lot -- we couldn't roll. We tried to learn on a lake at 10,000 feet and got blue with cold! We had 20 gates total at two different spots on the Arkansas and this was our first really good whitewater training. We were there 3 weeks. Dave Kurtz helped us a lot, by showing us the J-stroke. We didn't actually pick it up then, but we did later when we got home.

Rolling

The Lugbills taught themselves to roll C1s from a book. While they did learn to roll the C2, they never were very confident about it. In talking about rolling, Jon made some interesting points:

When I came back from Colorado I learned to roll on the right really well, then learned the left side, too (in a C1). Pretty soon I had a bomb-proof roll on both sides in whitewater. That's really important because

it gives you a sense of security in whitewater so you can keep pushing to do things without fear.

When they returned home, Ron and Jon paddled every day for the rest of the summer. They went to the pond and once in a while, they actually got out to the river. That fall, they raced at the Savage and Youghiogheny races where they had times almost as fast as the winners and placed 4th and 5th.

It was also at this time that Bob Robison, the neighbor who lived across the street from the Lugbills, started paddling with them. "He started training instantly," remembers Jon. "He had been a K1 before and had run some rivers, so he knew a fair amount."

That winter, they were too young -- at 13 and 15 -- to be admitted to the David Taylor Model Basin, the three-quarter mile long indoor pool used by the U.S. Navy to test models of ship designs, and by paddlers in the evening. But fortunately, it was a warm winter and the boys were able to paddle outside for all of it. "Now we had three gates on the pond and Dave Kurtz told us we could make the U.S. Team. That got us all excited and Dad started taking us to the river 2-3 times a week now."

That winter, they had 10 gates at a place on the Potomac River called Yellow Falls. The river was really high all winter so the site had fast, moving water with eddies on both sides. There, Ralph either timed them or they timed themselves on relatively short courses. Cathy Hearn and other boaters sometimes came to these sessions, also. "We probably paddled 4-5 times a week then," recalls Jon, "half on the pond and half on the river."

Spring 1975

The first objective for the 1975 season was to qualify for the U.S. Team Trials. The Lugbills won the Petersburg race, for many years the traditional "season's opener" for local boaters and Jon was also third in C1 (beating Kent Ford). "It was then that I got upset with Ron and got him to paddle C1 so he could get better control. After that we paddled C1 on the pond, C2 on the river."

In another race, the Lugbills came in 20 seconds ahead of the team of Steve Chamberlin (later the creator of the Gemini close-cockpit C2), and Joe Stahl, who were primarily wildwater paddlers. Chamberlin-Stahl were so impressed with the young Lugbill team that they invited the Lugbills to come up to Philadelphia and train with them. The Lugbills went there 2-3 times before the U.S. Team Trials. "They showed us how to paddle wildwater," says Jon, "and that's where we did our first sprint training." However, the Lugbills qualified as the third boat in the slalom trials and didn't bother with wildwater for the Skopje World Championships.

The Lugbills used an end-hole boat in these days because the first close cockpit boat, invented by John Evans, had just been made in 1975. The Lugbills did get to try one out just before the World Championships but while they liked it, there wasn't enough time to switch over.

Skopje

"We thought the Worlds at Skopje were pretty neat," recalls Jon. "We decided before the Worlds that we weren't going to paddle C2 afterwards because we were always fighting in the C2. So we spent a lot of time sitting around listening to people talk about C1 and training. We'd get to the slalom course very early so we could watch the DDR (East Germans).

They did a lot of 2-4 gate courses, very short. The coach was yelling at them and they were hitting gates because they were going so fast. They would raise the gates to practice undercutting. All of this had a big impact on us.

The Lugbills also did some sprint training with the other American C2s. One of the other sternmen was doing a pry in the stern in order to steer the boat. "We did a J-stroke and our boat didn't wobble around as much as his. He freaked out!"

Team Races

In those days, the C2 team race preceded the C2 individuals. "We thought we'd do fairly well because we'd trained team a lot," Jon recalls. But on the first run, the Lugbills, who were the last boat, caught their bow on one of the wire gabions used to make eddies on the course, lost a lot of time getting free, raced to catch up with the rest of the team, flipped and swam. On the second run, Jon broke the boat with a pry "and we sank." The team finished last, "but we didn't feel discouraged."

Individual Runs

"Between the two runs," Jon says, "we made all of the gates direct, but on each run we had 50s. We got 22nd. We weren't discouraged, though, because we thought that if we had trained C1, we would have done better in that class. When we came home we saw there were other C1s in D.C. and we knew that we would all make each other better."

Experience of Europe

"We learned a lot in Europe," Jon explains.

We watched Eiben (of East Germany), a lot. We ran down the bank watching him. We saw that he really went for it. He looked more efficient, too. The Czechs dominated the race, but they didn't look as good. Our Cls, Angus Morrison and Steve Fulton, were almost as fast as the winner, Sodomka.

I was pretty impressed with the awards ceremony, particularly the wildwater one, which was down by the river and on national television. I went nuts. I wanted to be up there. I even signed a few autographs (at age 14)!

Summer Fall 1975

Speed was definitely on my mind when we got back from Europe. I was a speed freak. I thought it was better to go really fast and maybe have a few penalties than it was to go really slow and clean. I thought it was critical to be aggressive everywhere.

For the rest of the summer and fall, Jon and Ron trained in Cl. They ran Little Falls, a good rapid on the Potomac, just outside of Washington. They practiced rolling in Bob Robison's swimming pool.

Ron had his license then, so we could get to the river more. This was when the Washington group of paddlers really started up. We ran the river a lot with Kent Ford and Davey Hearn. We did enders all the time and started playing a lot.

That fall, Jon had a faster running time in the Savage River race than Bernie Heinemann, a West German paddler who had been on the Olympic Team in 1972, and was wildwater World Champion at Muota.

At the start of school in the fall, however, Jon started playing football on the school team, "so I didn't paddle all that much."

Influence of Football on Paddling

Jon Lugbill played high school football for 3 years, his freshman, junior and senior years. In his last year, he was chosen co-captain of the team. Jon points out that he reached his full growth at a comparatively early age, so at 14 he was big and strong for his age: "I was in good shape that fall -- could bench press 225

pounds (at age 14)." Looking back on it, Jon reckons that football had the following influences on his paddling:

- * It kept me really well-rounded athletically. I didn't worry about paddling at all that fall.
- * It taught me aggressiveness. I played in the line, and to do that, especially on defense, you have to like to hit. I was big for my age so I was good at it. But I was too slow to be a half-back.
- * It taught me to deal with pain. I twisted my ankles, pulled groin muscles. My left arm was black and blue from hitting. I had to get my hand taped.
- * It taught me discipline. In the beginning, football practice was a lot harder than paddling practice, and that made me realize that what I thought was hard in paddling wasn't really all that hard. Later on, though, paddling became harder than football.
- * It made me stronger. I lifted weights for football. Between junior and senior years in high school, I lifted heavy weights for football. But I also learned Olympic weight lifting as another sport. At my best, I could do:

Dead lift: over 400

Bench press: 275

Squat: 335

Jon goes on to explain the relationship between weight lifting and paddling. "I was one of the strongest guys on our football team. It took me only 2-3 months to really bulk up with the weights. I wouldn't do that now, though, because of the fear of injury. Furthermore, I don't think there's a direct carryover from weight lifting to paddling.

In the first place, I can bulk up a lot just from paddling. For example, I can always do well on the weights after a period of heavy paddling. Secondly, weight lifting takes too much time. To do it right, you have to do it a lot, but there isn't the time to do that and paddle enough, too.

Winter of 1975-76

During the winter of 1975-76, Jon paddled in the Model Basin to do sprint work in the evenings and paddled outdoors to get gateway and whitewater experience. In those days, Jon's coach in the Model Basin was Jack Brosius, a flatwater kayaker.

Brosius helped us with our forward strokes and he certainly taught us how to work hard in the boat. He'd have us doing 20 X 500 meter sprints in the C1 -- the same as the flatwater kayaks. It was too much! But trying to do it made us real tough. Jack didn't work with us on the gates at all, though, because he was interested in flatwater for the 1976 Olympics. Bob Robison, Ron and I liked the gates and worked out a lot on them on our own. Finally, we had a confrontation with Jack and we wound up avoiding him by getting in and out of the Model Basin before he got there.

The training that year in the Model Basin consisted of the following gate workouts:

- * Some slow pace work with Wick Walker, member of the 1972 Olympic Team in slalom C1, and Tom McEwan, member of the 1977 downriver team.
- * Lots of gate loops.
- * Sneaking practice. We'd hang one pole a bit high and the other in the water so that if we hit the gate it wouldn't swing very much.

There were other young boaters in the practice sessions, too: David and Cathy Hearn.

Feeder Canal

Gates were first put up on the Feeder Canal in 1972 by Jamie McEwan and Angus Morrison, who were training for the Olympics that year. In 1975, there were 10-12 gates where the top 7 are today. In 1975-76, Jon did some paddling on them, "but mostly I went with Bob and Davey up to Rocky Island and 0-deck (below Great Falls), to do enders."

We went up there practically every day. We did enders for hours -- until dark. I blew my sinuses out that way, though. We did backenders

and threw our paddles away and practiced hands rolls.
One day I did 35 enders.

1976 Season

Jon won a lot of races in 1976 -- "I was by far the fastest."

But he also took a lot of penalties and as a result "Davey would often win because he was clean and consistent." Davey won the U.S. Nationals that year and Jon was second. Neither Angus Morrison nor Jamie McEwan competed, however, because they were trying to make the Olympic Team in flatwater.

The 1976 season was important in Jon's development because during it he did a 5-week trip out west. There he ran many good whitewater rivers and did gate training on some of them. "This was our big whitewater period," he says now. "I think it's really important for an up-and-coming boater to do a lot of whitewater gates at an early age."

After that trip, Jon raced the North American Cup, a series of three races held at Jonquiere, Madawaska, and the Savage River. Although he finished third over all, it was in these races that he had some spectacular running times. At Jonquiere, he had 70 penalties, but beat Bill Griffith of Canada, who was then in the top ten in the world. Griffith was clean. At Madawaska, he first noticed that his running time was close to the kayaks, but since he flipped, he again had too many penalties to win. In describing that period -- but it could just as well describe his whole career -- Jon states, "I could never just go slow and clean. When I tried that, I'd always lose anyway. I'd just rather go fast." Jon and other Washington area boaters went to 14 races that year -- "McEwan and Morrison thought that was an unbelievable number." But in later years, they were to go to more than that.

Fall of 1976

In the fall of 1976, Jon, Davey Hearn and Bob Robison designed the Max II, the first in a line of five boats which ultimately became the top C1 design in the world. "We heard that Karel Tresnak of Czechoslovakia was designing a C1 based on a Sanna kayak, so we thought we'd try it, too," explains Jon. "We were always optimistic about the boat. We never even considered whether it would turn out all right or not."

In school that fall, Jon didn't play football. The main reason was the Max II, which took a lot of time. Another reason was that the football coach wanted Jon to come out for the team early, before he was done with the paddling season.

I wanted to do two-a-day workouts then," recalls Jon, "but Ron, who had the driver's license, didn't think that was a good idea, so we didn't. But I remember thinking that we were really good athletes, only to discover that these guys on the cross-country team were training more than we were."

During this period, Jon was particularly fast on flatwater courses. "I concentrated on being really fast, while Davey was always slower but cleaner." Jon's development was largely a matter of eventually being able to transfer to whitewater the same speed that he had on the flatwater. "But we never had good whitewater gate training until Bill Endicott came."

1977

The spring of 1977 was the first year Jon did two-a-day workouts. Although Jon keeps no written records of his training, he has an uncanny recollection of how many times a month he paddled during key parts of his career. Of the spring of 1977, he says "I remember paddling at least as many times as there were days in the month."

Team Selection Trials

Jon failed to make the U.S. C1 team that went to the Spittal Worlds, although he did qualify for the downriver team and even won a bronze medal in the C2 team race. He tells the story about the team trials:

I blew the first day of the trials. There was this reverse gate in an eddy and I continually fiftied it. But there were other reasons, too. I was sick before the race. I hadn't thought about anything except paddling. I didn't think about eating right and that's probably why I got sick. Also, I took two gym classes that year, so I was often tired on race day. In one class I did weightlifting and in the other, basketball.

Even though Jon had qualified only for the wildwater team, he continued to practice slalom most of the time. He and the other members of the slalom team went up to Jonquiere for a training camp. "Here we did workouts consisting of five runs on three different whitewater courses. The C1s did all of the workouts, but the kayaks often did not. Jamie McEwan told us how tough we were!"

Spittal

In the wildwater race Jon and Bob Robison, his C2 partner, came in 14th. "We hoped we would really do well, but we were 50 seconds behind the winner. I was sick before that race, too, probably because I lost ten pounds in Europe. Another mistake was that we never really fixed a hole in our boat properly before the race and the patch came off during the run."

After the individual run, Jon had a pulled muscle in his stomach but he still had to get through the team race. "I considered not paddling, because it hurt so much, but that was really out of the question. I took 6-7 aspirin before the team race and made it down the course." Once again, the patch on the boat came off and his boat filled with water, "but we got a bronze medal."

The Slalom Race

Since Jon had not qualified for the slalom team, he was forced to watch the race from the bank. Even though Bob Robison came in a creditable fourth place, which was at that time the best an American C1 had ever done in the Slalom World Championships, "I was frustrated that our guys didn't do better." Jon ran the course after the race and didn't think it was that hard. "You could see that our guys were better than the Europeans, but they didn't have the race day experience."

After the Worlds, Jon and the other Washington C1s -- Davey Hearn, Kent Ford, Bob Robison and brother Ron -- went to Augsburg and Lofer. At Lofer, Ron was first and Jon second against many of the top Europeans.

When he got back from Europe, Jon raced at Jonquiere.

Mike Garvis bet me that he could pin me (wrestling) in a certain number of seconds. He won and in doing so partially separated my shoulder. I took a lot of aspirin before the wildwater race, raced in great pain, but won.

1978 Season

In the fall of 1977, Jon was one of the few paddlers who stayed in the Washington area. The others were mostly away at school. Thus I had a lot of time to work with him. He paddled twice a day all through the year. I felt that he had to learn to back off a bit in *his* race pace so that he could still run pretty fast, but clean. This was something Jon didn't really want to do, but because of a curious turn of events, he was forced to. Jon didn't have a race boat that fall. He had sold his good boat. The only thing he had to practice

in was an old, fat Jape. Because of not being used to the boat and because it could not sneak so easily, Jon had to learn to paddle it more cautiously. In the long run, I think this helped him, but neither of us foresaw this.

During the period that he was paddling, Jon always was doing football. I remember many times he would come to canoeing practice a few hours before a football game and actually work hard. Then he'd go and play hard in the game. He understandably never told his football coach what he was doing.

The football did have some small adverse effect on his paddling, I think, because he would get banged up in the games and come to canoeing practice the next day all black and blue. But he never complained about that and after a while I never even noticed it any more!

Many times during canoeing workouts Jon and I would be the only ones there. My recollection of the workouts is that they were invariably timed and over pretty short courses, 30-60 seconds in length.

In the spring races that season (1978), Jon had very fast times, often being right with the kayaks. That was when I first heard people coming up with reasons for why C1s had certain natural advantages over K1s. While this is true a C1 has more leverage and thus has an advantage on a tight course with a lot of turns -- that was not the main reason why Jon was so fast. He simply trained much harder than anyone else, and his training was for the most part on moving water gates.

But he still had a bad tendency to "blow" races. He'd have a phenomenal run going, but then make a catastrophic mistake, such as flipping or taking a wrong-direction 50. I felt this was because he was just trying to go too fast, but he never really believed that.

I blew the nationals because I started lifting weights right before it. I blew the Pre-Worlds because I had started football practice right before them. But after the Pre-Worlds, I was determined to prove that I wasn't a "choker".

At the conclusion of the 1978 season, Jon and Ron went through an interesting exercise. They closely examined all the past race results during their careers. They memorized all the scores, not just for the C1s, but for all classes.

We were looking for things to work on, things to do better. Also, we were trying to see what the competition had done. We totally immersed ourselves in

the sport; learned all the patterns, learned what the opposition was capable of doing so there wouldn't be any surprises. As much as I say I try to have the best race run for me, I also feel that there's no reason to race if you aren't planning things so that your best run will be better than anyone else's. If you don't do that, there's no point in racing. You might just as well go off by yourself and practice on a river and never go to races.

The 1978 season was important to Jon primarily because it "got my confidence up. I knew I was capable of very good runs. And we all knew that the best American would win the Worlds."

The Supermax C1 was also developed that year and "it changed everything. We did gates differently with the new boat. It could turn off the ends well. Before we had had bad boats compared to the K1s."

Another thing that underwent a lot of development in 1978 was the cross draw stroke. "We learned how to do them better, lean on them really hard, and stay on them longer."

Preparing for Jonquiere

In the fall of 1978, Jon paddled 4 times a week usually competing against Bob Robison for time over 30-120 second courses on the Feeder Canal. Jon also played football again, this year being co-captain of his team. From September through November he did heavy weights for football. From November through April he did two sets of the following exercises, five times a week:

- * 20-25 pull ups
- * 30 sit-ups
- * 60 dips between chairs
- * 20 times 130 pounds on bench press

He would take a two minute rest between each exercise, then do the exercise itself very quickly.

During the winter, Jon would paddle gates once a day in the Model Basin. He would also do 100-200 meter windsprints against competition in there. The rest was never timed and usually there was a fair amount of rest.

While Jon does not keep a written training log, it is possible to reconstruct fairly accurately the amount of work he did in preparation for the Jonquiere World Championships.

In the first place, Jon remembers paddling the following number of times per month:

January:	30
February:	30
March:	45
April:	45
May:	50
June:	50

Secondly, I keep records of my own. I believe that the number of timed and scored runs in practice is an important indicator of the type of training an individual has had. By this I mean runs against competition, in Jon's case against Bob Robison, David Hearn, and Ron Lugbill. Since my records show only the runs that I personally timed, the following figures do not represent all the timed runs a boater took because he might have been in sessions where someone other than myself timed him. This was especially true of David Hearn, who attended more training camps away from Washington than the other boaters did. (Also, these figures do not include all the untimed work a boater did in practice sessions, which typically is a much greater proportion of the total work done). Nevertheless, since I was usually on hand when the Cls competed against each other in practice, I think my figures are useful as a rough guide.

Number of Timed and Scored Runs -- Season's Total:

Jon	Bob	Davey	Ron
326	227	147*	188

*Not including the times when he was away.

Average Number of Runs Per Session:

Jon	Bob	Davey	Ron
9.1	7.8	7.7	8.9

Thus it would appear that Jon did significantly more timed and scored runs against competition. He attended more sessions and when he came, he took more runs than anyone else. I distinctly remember him paddling right back to the start after every run, passing others on the way, so he could get in more runs. In retrospect, I feel that because of the shorter recovery, he probably was operating at higher lactic acid levels than the others and this trained him to do so successfully in a race. He was learning to control the boat when he was extremely tired.

The other items in my records show who won in practice. On the Feeder Canal, especially later on in the spring, it was almost always Jon -- 51 out of the 65 scores in my records.

Jon got off to a somewhat slow start in the 1979 race season in terms of race results. He didn't win a race until his fourth outing. But winning wasn't the aim then: "I went to the Ocoee simply to get a clean run; I went to Mascoma to get a fast run; I got them."

Interestingly, my records show that Jon's performance in practice during the early part of the season corresponded with his race performances. Later in the spring, he almost always won in practice, and his race performances picked up, too. By the fourth race, this pattern was getting established; he won at Tariffville. In the two team trials races that followed, Jon split with Davey Hearn.

I felt a lot of pressure to make the team in 1979. But after all the training I did, I had the confidence to know that I could do what I wanted to do. It had just taken me one more year to get to this point. I don't think there's any other reason.

Stroke Analysis

In 1979, besides training hard, Jon also spent some time analyzing his strokes.

We had already done a fair amount of forward stroke analysis. We had found for example, that in white-water shorter strokes help tremendously to steer the boat. You just push the bow around. We also found that it was best to start the J-motion earlier, during the forward stroke itself and not do it just at the end.

I tried to make the same analysis of all my strokes, particularly looking for ways to get more extension on all of them.

No Wildwater

In my view, another thing that helped Jon Lugbill win the World Championships in 1979 was that he didn't race downriver at the Worlds and Davey Hearn did. Thus, Jon was able to specialize in slalom after the Team Trials, and Davey did not. Jon tried unsuccessfully to make the downriver team in C2 with Bob Robison. They made the mistake of competing in the trials shortly after an all-night drive. But losing was a blessing in disguise.

We celebrated when we didn't make the wildwater team; we realized that it was wasting time we should have been spending on slalom.

Jonquiere

Jon and I left for Jonquiere only a few days before the race. We got up early, had a practice on the Feeder Canal and then went to Jon's house to get his gear. I remember just before we left for Canada, Jon drove me around the neighborhood quickly to show me the pond and the creek where he had started paddling. Then we left.

Although neither of us ever said it, we both felt that if Americans were ever going to win the Worlds it would be at Jonquiere.

When we arrived at Jonquiere late in the afternoon of the following day, Jon went for a paddle on the race course. Practice sessions for the succeeding few days consisted of the following:

- * One timed session on the top third of the race course (with gates)
- * One session on the middle third
- * One session on the bottom third
- * One session on the whole thing
- * Timed runs at Shipshaw, a nearby river
- * Easy paddles on the lake

While this may seem like a lot right before a race, compared to what he had been doing, Jon was resting. I don't think that physically he needed to do this work, but it was good for him psychologically -- it kept his mind off the race.

Practice Runs

We took splits and videos of the practice runs, and we had the official running times and penalties of them as well. Before the race it was thought that Germany's Juergen Schnitzerling, winner of the 1978 Europa Cup, would provide the toughest competition. But the splits showed that he was not fast enough to win. Britain's Martyn Hedges was the only one who might be fast enough to do it, since he was second only to Jon on the first half of the course. However, Hedges could not do the ferry at 21 to 22 and never did get it straightened out in his race runs either. (Jon had the faster split here in practice.) The finish order after practice runs was:

1. Bob: 244.2 + 0
2. Jon: 231.5 + 20
3. Davey: 252.3 + 0
4. Hedges: 254.4 + 10
5. Sennelier: 271 + 0
6. Ron: 275.4 + 20

First Runs

My strategy at Jonquiere was to hold back a lot for the double upstream at gates 21-22. Even though I did this, I still was low on that ferry.

At gate 13 upstream I started to tip over because I could not get onto a cross draw fast enough (see photo). All I could think about was undercutting the bow while keeping the boat upright.

After the first runs the results were:

1. Jon: 238.5 + 0
2. Davey: 242.9 + 0
3. Bob: 255.6 + 0
4. Schnitzerling: 256.8 + 0
5. Ron: 241.0 + 20



Emergency! Jon Lugbill, about to capsize in gate 13, not only kept the boat upright, he snuck the gate. (Jon Nelson Photo)



Jon Lugbill at Jonquiere, 1979. (Leonard Isbister Photo)

2nd Runs

Jon was the last one to run in the C1 class. Before he got ready for his second run he told me he didn't want to be told how the others did until after it was all over. But no one bettered his first run, so he had actually won the race before even getting into his boat. Although no one told him this before he started his run, the crowd sure did during it:

You won! You won! I heard them yelling at me.
It's a miracle I was able to stay clean.

He goes on to describe the run:

In those days we figured we'd automatically be about 6 seconds faster on second runs just because we knew the course better. So I didn't think about doing anything particularly different. I was faster on the top part of the course but then I was even lower for the ferry at 21-22.

Even though the judges gave him a penalty he didn't think he deserved, Jon's second run was also good enough to win the Worlds. As predicted, he was 6 seconds faster: 232.5. But since none of the top five boaters had bettered their scores from first runs, the finish order was the same as after first runs, Jon Lugbill had led a sweep of the C1 class, the first in history.



Bob Robison, a righty, shown here paddling on the left at the Jonquiere World Championships in which he won a bronze medal in the individuals and a gold medal in the team race. (James M. Thresher Photo)

After Jonquiere

After a superb World Championships, Jon Lugbill faced a big mental let-down that was to cost him a spot on the U.S. Team in 1980 as well as to cause him to lose all three Europa Cup races and the Pre-Worlds to Martyn Hedges of Great Britain. It was only after this that Jon really started to plan and train comprehensively for the 1981 Worlds.

I never looked past Jonquiere. I never planned where to go to school or anything. (He had been accepted at the University of Tampa, in Florida). I had a vague notion of getting into flatwater and making the Olympic team in that. In Florida I felt that any sort of paddling was good enough and that it didn't have to be in gates. I had three weeks in gates the whole year I was there. I did a lot of paddling 10-12 miles of flatwater a day -- but none of it was in gates. After a while, though, I realized that training for flatwater canoeing was not that much of a carryover from whitewater. I also realized that flatwater wasn't much fun. Finally, I saw myself on CBS Sports Spectacular (they showed Jon's run at Jonquiere), and I finally said, "Why am I doing this?" (paddling flatwater).

During the fall in Florida, Jon lifted heavy weights, "and really bulked up." He weighed 190 pounds (race weight 175). He played a lot of intramural sports, particularly football.

At the team selection trials, Jon made the top six that could compete in the Europa Cup races, but not the top 3 that would actually compete for cup points. "The course was pretty easy, but I found that could not survive on my previous work. I realized that I hadn't done enough quality work -- quantity, yes, but not quality."

During the 3 Europa Cup races and the Pre-World Championships, Jon -- and all the American C1s -- had good running times but took penalties and that was what did them in. Martyn Hedges, hot for revenge after Jonquiere, got it by winning all four times against all the Americans, not just Lugbill. But we felt that while Hedges was indeed racing well, his times were not fast enough to win at Bala the next year. "When I was racing in Europe, I didn't really worry about Hedges that much. I knew that my training had not been good and that was why I was losing." Still, after Jonquiere, seeing all four American C1s lose to Hedges every single time they went out was indeed a shock.

In retrospect, while Jon certainly suffered during the 1980 season because of all the distance paddling he did in Florida, I think he was also laying the foundation for a high endurance level that has been one of his mainstays ever since. It has seemed to me that while Jon has great anaerobic powers, and depended on these to get him through the Jonquiere Worlds, since then he has added a formidable aerobic base which permits him to maintain great speed over long distances. He is now always in good endurance shape and it doesn't take many weeks of anaerobic work to get him really fast again. He seems to respond very quickly to that kind of training -- 30-60 second courses. I think the unusual aerobic base was begun in Florida.

Between the Europa Cup and the Pre-Worlds, Jon worked in England. There, he also learned about British slalom courses -- how rocky and shallow they often are. He formulated plans for a new boat, the Cudamax. Finally, he thought more about his training and did the following things:

- * Immediately started running.
- * Started doing more gates.
- * Started doing more distance work in gates.
- * Worked on his forward speed in gates.
- * Lifted weights that fall.
- * Learned how to paddle hard alone.
- * Became "real hard-nosed about paddling every day. Between January 1 and the Worlds, there were 5 days that I didn't paddle. Three of those days were because of a knee infection that wouldn't go away. One day was the day before the World Championships. I even did two-a-days right before the team trials."
- * Tried to get something specific out of each workout. "It wasn't enough just to go through the motions."
- * Changed his mental outlook to be more innovative. For example, he tried to seek out more opportunities for full length whitewater runs, regardless of the fact that he would have to carry back to the top, instead of paddling back, which he had always insisted on in the past. Other examples: He learned to paddle on shallow water; learned

how to cope with jet lag; tried to learn from other people and other sports. "You've got to avoid being complacent."

Despite the fact that Jon was able to implement this training, in retrospect he says "I was still lazy in the fall... I didn't get a lot done-I watched a lot of TV."

He also read a book called OPTIMUM PERFORMANCES, which had an impact on him. It was a series of case studies about people who had achieved high performance in athletics.

In case after case, the person was disappointed with his world record performance. Knowing this helped me because it explained why after Jonquiere I wasn't really satisfied with my performance.

Australia

One of the reasons Jon was able to do so much paddling in 1981 was because he had been invited to go to Australia to train and coach. Davey Hearn also went, although his expenses were paid by a different organization from the one which paid for Jon, so the two of them saw each other only at races and for a week of training. Australia worked out very well for Jon: "I had hoped to be on whitewater the whole time, but while it didn't work out that way, just being outdoors on flatwater was better than being home in the Model Basin." He was in "the Oz" for part of December, January and part of February.

The following are the number of times per month that Jon paddled as he remembers them:

January	49
February	45 (three days off)
March	59
April	60
May	60
June	50
July	"way down"

When Jon came back from Australia, he was incredibly good, better perhaps than he was in Bala later that year. He was winning races by phenomenal amounts, beating most kayaks. He was also training

tremendously hard and I think in retrospect began to overtrain. I was coaching full time then, so I was at most practice sessions with the result that more of the sessions were timed. Some days, Jon would work out three times and two would be timed workouts.

As a result, Jon -- and everyone else's -- timed runs against competition from February 2 through the Worlds soared:

Jon	Davey
994	976

All of this began to catch up with Jon and at the team selection trials he failed to make the team until the third race. That year, you had to win one of four races to make the U.S. Team. In retrospect, my being available so much was probably misused in that we overdid it at times. We didn't factor in enough rest.

I overtrained at times for Bala, but I think that might have actually helped me right at the end when I was sick and had to fight through it. It mostly helped because it increased my consistency.

Bala

The big difference between Jonquiere and Bala was that at Bala I went harder. I had learned to race really hard. Also, on each of my race runs I had a game plan that I was able to pull off.

Five second penalties really played into my hands. Lower penalties required a new racing strategy that none of the other classes seemed to grasp at Bala. Five second penalties were really the culmination of our old "go-for-it" attitude.

On the other hand, Jon was definitely sick at Bala (and became very sick for months afterwards), and this undoubtedly affected his race performance:

I was definitely sick at Bala but I never wanted anyone to know about it because they would have wanted to discuss it with me and that would have made me think about it too much and psyched me out.

As at Jonquiere, practice at Bala consisted largely of timed runs on parts of the race course; three sessions of timed and scored runs over the full length; and a session on some flatwater gates set up by the West Germans. While his running times were very good compared to the kayaks, Jon was not always the fastest C1 and he took a fair amount of penalties.

Towards the end of practice days before the race, an extraordinary thing happened which materially helped our chances, I felt. The official race course was revealed, and while all the gates were removed from the course, we were still allowed to practice on the water. Recalling an old East German trick, we ran the course with spotters on the gate lines. The times from those runs turned out to be within a second or two of the actual race scores, thus providing a sort of mental rehearsal, accompanied by actual specific physical rehearsal, and laying the foundation for later mental rehearsal before the race. For some reason, no one else did this type of practice. The British may have known the water better than anyone else at Bala, but we knew the race course better than anyone else.



Britain's Martyn Hedges, winner of the Europa Cup in 1980, placed fourth at Bala
Photo by Stuart Fisher of "Canoeist"(incorporating "White Water Magazine")

Race Runs

Here are the splits for all three runs at Bala, with the fastest ones marked with an asterisk:

Practice Runs

	start-6	6-10	11-15	15-19	19-24	24-27	27-30	time	penalties
Davey	36.1	28.9	32.6	23.1*	38.6*	21.4*	36.2	237.3*	75
Ron	38.5	29	33.5	24.0	42.4	25.6	38.6	249.9	5
Jon	32.2*	27.7	32.6	24.6	42.7	23.8	36.2	246.0	20
Kent	36	25*	31.9*	24.1	41.5	23.5	35.6	237.9	85
Hedges	35.8	27.7	35.9	24.1	39.7	23.3	35*	239.1	?

First Runs

Davey	35.5	28.6	32.6	23*	38.1*	22.4*	36.1*	234.9*	0
Ron	36.9	28.9	33.2	24.3	42.7	24.6	38.5	248.6	0
Jon	36	27.2*	32*	24.8	39.1	23.1	37.8	236.7	0
Ken	35.2*	28.1	35	23.2	39.2	22.5	40.7	245.2	15
Hedges	37	28.7	35.7	26.6	39.2	32.8	38.4	247.4	0

Second Runs

Davey	32.8*	26.6*	?	21.7*	37.5*	?	39.5	233.3*	5
Ron	35	29.3	?	23.6	42.1	?	36.3*	243.3	5
Jon	34.1	28.1	29.3*	22.8	38.7	?	38	234.6	0
Kent	35.9	27.5	33.3	?	41.9	?	39.1	242.2	10
Hedges	37.6	28.2	32.3	23.4	39.5	?	51.4	254.9	0

We didn't have the final running times after practice runs, just the split sections we had done ourselves. The British wouldn't give me the official times until after the race. But we could see from the

splits that Martyn Hedges was again probably not going to be fast enough to win. Jon goes on to describe the race from his point of view:

I saw that the poles were really high and this set my mind at ease. My race plan was conservative on first runs. When Davey beat me by two seconds after first runs, I felt it was just like another workout on the Feeder Canal and that I could win. My first run wasn't that great and I felt that I could do runs like that all day long. I knew I could do better.

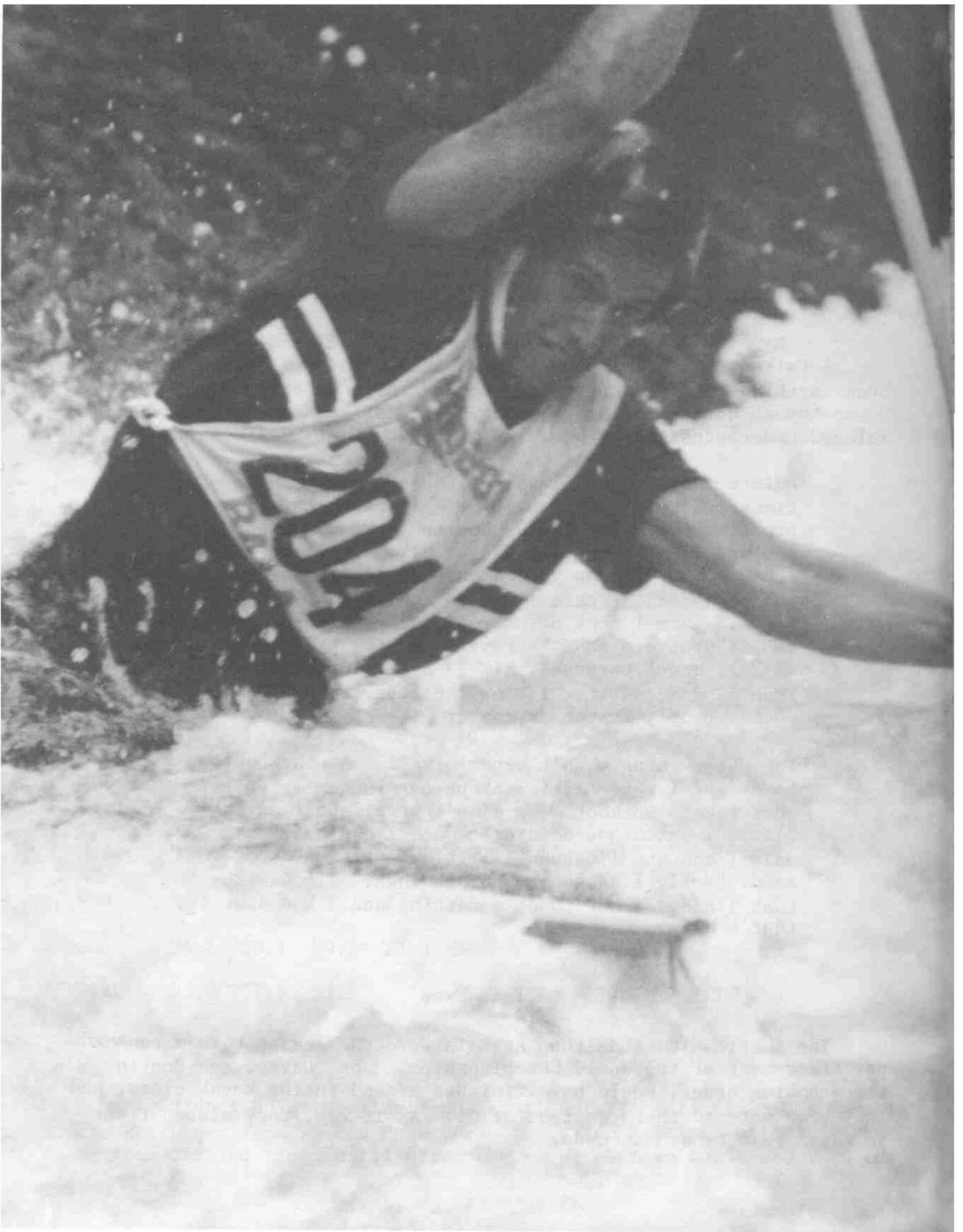
I talked to Jon in between first and second runs and I've never seen anything like it. He was as cool as a cucumber. Totally relaxed -- as though nothing at all were at stake. I've never seen anyone so relaxed under pressure anywhere in my life.

Before second runs, I walked the course a couple of times. Gate 15 was a problem. I hit it in my practice run. But I saw that the pole was higher now and I felt that I would be o.k. On first runs, I had hit my bow on a rock between 11 and 12 and wasted a second there. But on second runs I did it right. Then I took off for 13. I was scared of the double upstream and the reverse on the bridge (gates 22-24), and I purposely hit 23 a little low, Then I hammered it. I blew the ferry into 29 and ended up only 2 seconds faster.

The whole thing wasn't hyper at all. At the bottom Davey and I were talking about our runs. It felt just like a workout. We didn't worry about anyone else. I asked how he did: "Gee, I had a 5." I said I thought I'd been a little faster. Davey said, "Well, I guess you got me then." It was just that I had set out to do something and I had done it, that's all.

Team Race

The American C1 team runs at Bala were the greatest team runs in any class ever at the World Championships. Jon, Davey, and Ron in that running order, would have finished second in the kayak class, had they been entered there instead of C1. As it was, they missed first in kayak team by 4.5 seconds.



Jon Lugbill during his winning run at Bala, Note the extension on his stroke.
Photo by Stuart Fisher of "Canoeist" (incorporating "White Water Magazine")

Jon describes the team race:

On the first run, we set a conservative game plan. After the run, we just looked at each other and we knew that we had been clean -- we'd gone so much slower than the day before.

This was the first clean C1 team run in history and there was no doubt now as to who the winner would be. We turned our attention to beating the kayaks, because here was that rare opportunity when you can go for a world record without fear of jeopardizing the outcome of the race. The C1s were in first against the kayaks after first runs, but we knew they would have to be a great deal faster to compare against kayaks when it was all over. Everything would have to be superb.

On the second run they did several things differently. First, at 28 and 29, the double upstream, they saved a lot of time by "loading" the left upstream, that is going in one right behind the other -- no weaving. Jon explains "that required that I hit that right upstream really high and fast, which I did." Secondly, they really gunned it down the course. I had asked everyone to yell at them, to cheer them on down the course. We always do that but this time there was something different. This time we yelled at them in the gates, too. Normally, we don't do that for fear of causing a little distraction which might result in a penalty. They were an unbelievable 14 seconds faster, this after the best C1 team run in history, based on first runs!

When we got to the bottom we thought we had done it. We didn't know that Ron had had a penalty.

In talking about successful team runs, Jon makes a couple of interesting points.

When you do upstreams, all the members of the team have to be good enough so everyone feels totally safe. No one can do anything that will cause the others anxiety -- you don't start throwing your bow around or anything like that. Then, you have to plan it really well. The team members have to have complete trust in each other.



"Beat the kayaks!" Ron Lugbill during the winning C1 team run at Bala. His team's score would have placed second in K1. (David Jones Photo)

Cholinergic Urticaria

For two weeks after Bala, Jon did practically no physical exercise. When he started up again back home, he was shocked at the outcome: he broke into hives and had an allergic reaction. This happened every time he exercised hard.

It meant that Jon couldn't paddle hard in practice, which was immensely frustrating to him. He saw doctors, but they didn't know what to do. Their only advice: Wait it out, it might disappear as quickly as it had come on.

I would see Jon on weekends when he'd come home from college (he had now transferred to the University of Virginia, 2 hours away from the Feeder Canal), to train with the others. But every time he got to the bottom of the course, I could see his face was swollen and his sinuses blocked up. Still, he'd try to do another run, until finally he just could not do any more.

By December, 1981, things had gotten pretty desperate. It looked like Jon's paddling career was coming to an abrupt close because he simply could not work out hard. He talked about just going to races and taking all-out runs, knowing that the reaction would come after the run, but doing only long distance endurance training, nothing really intense. He was grasping at straws and we knew it.

Finally, my wife suggested I call a classmate of mine who was now a physician at the National Institutes of Health, near where we live. He arranged for a specialist to see Jon. The specialist quickly diagnosed the problem as "Cholinergic Urticaria" -- Jon was allergic to exercise -- and prescribed some pills to be taken before each workout. They worked. Jon could train hard again.

A month or two afterwards, Jon stopped taking the pills entirely but the reaction still did not return.

Jon Lugbill was back again, ready for another shot at the Worlds.

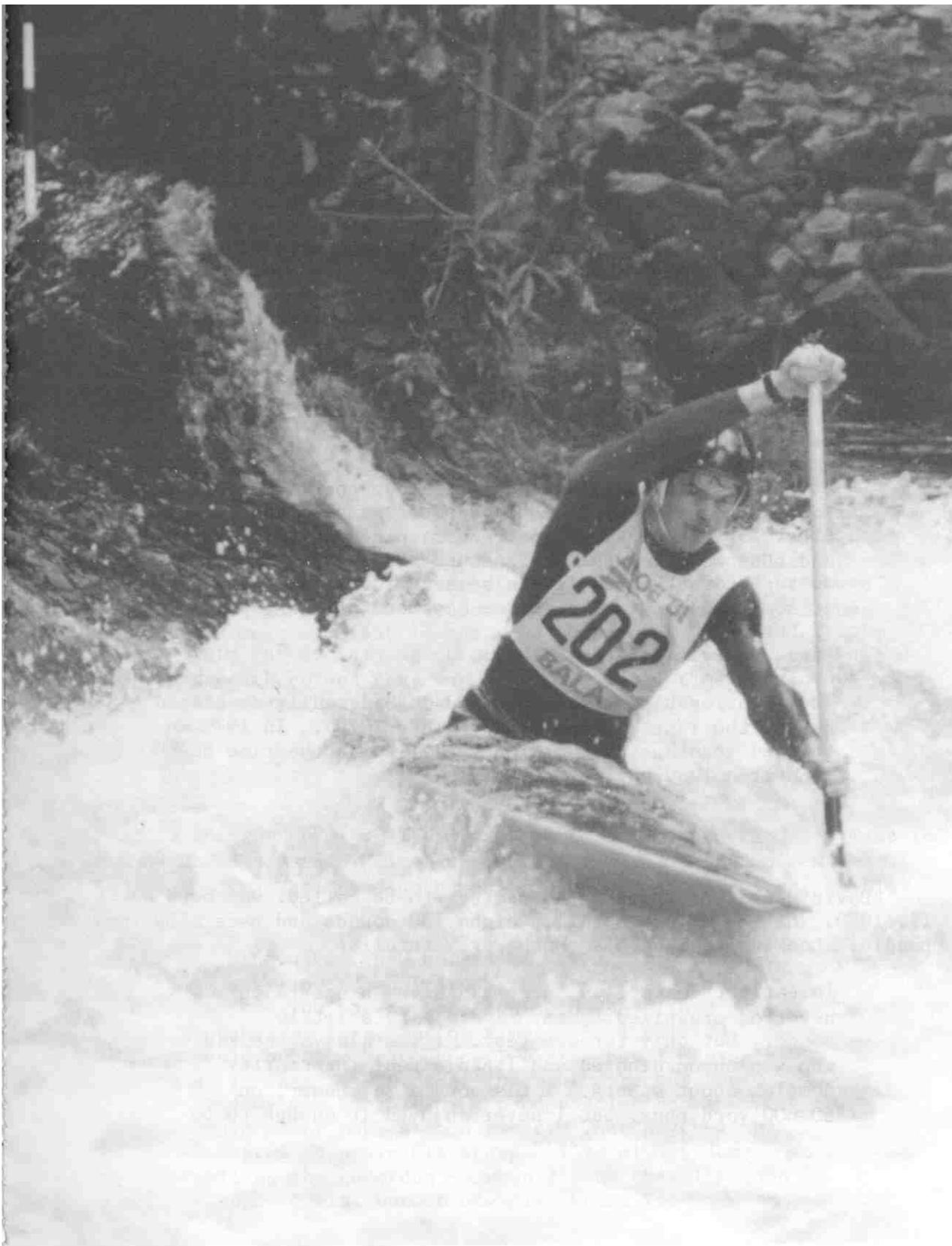
Europa Cup 1982

Unlike 1980, Jon was "psyched" to win the Europa Cup in 1982. However, he wound up placing second to teammate Davey Hearn.

After recovering from Cholinergic Urticaria, Jon had an understandable resurgence of interest in paddling. "I was just glad I could do it again; for a while I thought I'd never be able to train

hard again." He did a lot of endurance work in gates during the spring, much of the work against the stopwatch, and much of it done at different locations for variety. He won the team selection trials -- for the first time ever.

But in the first race of the Europa Cup -- Tacen -- Jon came in third, due to several factors, the most important of which was his showing up late at the race site after a bad trip from the U.S. At Lofer, Jon was slow on one ferry and placed second to Davey Hearn. But in other races that summer, he won: Merano, Goumois, Berne, and Noce. Finally, in the last Europa Cup race at Augsburg, Jon had a brilliant run, which would have placed third in the K1 class.



Davey Hearn had the fastest running time on all three of his runs at Bala.
Photo by Stuart Fisher of "Canoeist" (incorporating "White Water Magazine")

PART II -- MR. CONSISTENCY GETS FAST:

THE STORY OF DAVEY HEARN

When you compare the careers of Jon Lugbill and Davey Hearn, the most striking thing is how different they were in the beginning but how similar they are now. They really approached the sport from two opposite perspectives. Jon, on the one hand, as we have seen, always emphasized speed. Davey, on the other hand, concentrated on smoothness, consistency and endurance. In the early days, Jon would usually be faster, but Davey would have the clean runs and therefore win. By Bala, however, the two of them were in a virtual dead heat, with Jon winning by 3 tenths of a second, and, ironically, Davey having the fastest running times on all three runs but a penalty on the last one while Jon was clean.

According to Jon:

At first, Davey and I didn't get along too well. Davey was more strict and I was more easy-going. After 1979, though, we started training more alike, and thus we became close friends. Davey has helped me to become the best I can be and vice versa. Now it sometimes scares me to see how much alike we think.

And from Davey's point of view:

The relationship between Jon and me has really developed during the last 3 years or so (since 1979). In 1979 we trained together but we didn't realize at the time how much it helped us.

Early Days

David Hearn, or Davey as he prefers to be called, was born April 17, 1959. He is 70 inches tall, weighs 160 pounds and uses a 59 inch paddle. Looking back on his youth Davey recalls:

In earlier years I was pretty active in sports but never on organized teams. I did play a little soccer, but only for one year. I was always the kid who was uncoordinated and I had a real inferiority complex about sports. I was good as a runner, on 60-600 yard runs, but I never enjoyed it enough to be

on the track team. I got into a pattern of not seeing myself on a team and that continued through high school.

Then Davey got interested in paddling. The news of Jamie McEwan, a resident of the greater Washington, D.C. area, winning a bronze medal in the 1972 Olympics was a great source of inspiration for Davey and his sister, Cathy. But for a number of years, Davey was interested in paddling strictly from the fun point of view:

It began as a totally recreational thing, not putting the emphasis on winning or beating the other guy. Much later I thought about that.

Later on, Davey saw Cathy beginning to train seriously and "I began to think how neat it would be to get good at it." In addition, she got a driver's license "and that was key" because it was then much easier to get to the river.

I remember that Cathy would do flatwater sprints with Jack Brosius on the canal above the Washington Canoe Club but I wasn't interested in that. Our training was very different from what Brosius wanted us to do. We were having fun and he wanted us to work. Most of our training then was river playing. In 1975-76, there were a few gates on the Feeder Canal, but we had more of them upstream at Offutt Island. At this point Cathy and I got into the social aspect of it. The Lugbills and others were there and that was good. We would time each other and really try to beat each other.

Madawaska

In the summer of 1975, Davey went to the Madawaska Canoe Camp in Canada and had Bernie Heinemann and Gisela Grothaus, two members of the West German team and both World Champions in wildwater, as his coaches.

At Madawaska, they called me "the drifter." We were trying to qualify as "expert racers" and to do that you had to get down a course with 3 touches or less, but no times. So I drifted. I could put the boat where I wanted but I couldn't do it fast. I remember that the director there told my mom that I was a good paddler but I would never make a good racer. That psyched me! I wanted to prove him wrong. I've always done well as the underdog --- when I know that I'm good enough to win, but no one else knows it.

Heinemann also got Davey to work on his forward stroke, teaching him to get more extension on it. For a number of years this was the chief characteristic of Davey's forward stroke: reach right out on the catch and then take the blade substantially past his hip. This stroke was very good for speed in a direct line, especially over a longer distance. Later, however, when he was looking for more speed in the gates after 1979, I felt that taking the paddle so far behind him during the stroke made for a slower recovery and thus a slower over-all stroke rate. The lower stroke rate hurt his acceleration in the gates, and when he learned to cut his stroke off a bit shorter, he got faster.

Gisela taught Davey to warm up really well:

We'd do an exercise routine before we got in our boats -- all kinds of stretching and calisthenics. In one exercise she had us reaching up in the air pretending to pick fruit off trees. Everyone had to do the exercises before boating in the morning.

1976 Season

The 1976 season was the first one for which Davey trained seriously, and he won the Senior Nationals that year, although neither Jamie McEwan nor Angus Morrison was there; they were focusing instead on trying to make the U.S. flatwater Olympic team.

I don't know why I did so well in my first serious year. I suppose I could have been in the team trials in 1975, but I was a junior and I sort of used that as an excuse not to compete. The fact that Jamie and Angus weren't around in 1976 was good because it gave us a chance to compete against ourselves. If they had been around we might have gotten discouraged.

The Lugbills were generally faster than Davey in practice and races but they had more penalties. Most of the races that year were on small water and Davey won a lot of them.

Kid (Lugbill) would get really mad: "Wait 'til I get you on bigger water!" Finally, we got on some bigger stuff for the North American Cup and I won that, too.

Speaking about the training then, Davey says:

We probably went on gates a few times a week, but training consisted more of river playing.

Training Log

Ever since 1976, Davey Hearn has kept a very detailed training log. Like his sister, Cathy, Davey started doing it to satisfy a gym teacher that an independent study program wouldn't be just a waste of time. The story of how this occurred is interesting.

Cathy was already doing an independent study then, so I asked the guy in charge of men's gym classes if I could do one, too. He said no! So I went to see Mrs. Stout, who was in charge of the women's gym program and asked her if I could do it through the women's phys ed program. She said yes.

Davey kept a log of all his activities "because Mrs. Stout wanted proof that we were actually doing something." He kept track of his hours and the nature of the exercise. He had to hand it in every two weeks or so.

I started to like to do it because there's a little reward in filling out the log. It's a reward in the sense that if you don't particularly enjoy the workout for its own sake, you still "get credit for it." Also it's more concrete when it's written down. At first I didn't figure out too much from it, but after gym ended, I still kept doing it.

Weights

Besides paddling every afternoon, Davey ran and lifted weights. "I didn't like the weight lifting," he says now, "but I did it. I wasn't very strong then and it helped some. But it didn't help me anywhere near as much as Cathy says it helped her. It didn't help my speed."

I think weight lifting has been blown way out of proportion. In other sports they have a definite season and in the off-season they expect you to get into shape by doing things other than your event, like weight lifting. But that concept -- the concept of a seasonal activity -- is not really applicable to paddling. We do it all year round.

1976 Nationals

Davey raced C1 and C2 (with Ron Lugbill), at the Nationals and it was in this race that he learned about controlling anxiety:

We took a C2 practice run just before C1 race runs. We broke the boat and I was thinking about that before my C1 run. I didn't have time to get nervous. I just jumped in my C1 and went. That run won the race. I learned from this that you have to relax, take your mind off what mistakes you might make and just do what you can do.

By the end of the 1976 season, Davey saw that the Lugbills would usually beat him on time, especially on short courses. In reflecting on this he says:

I think a lot of it was that I wasn't anywhere near as strong as they were. I had to rely on smoothness and not making mistakes.

And of the evolution of "canoe macho," Davey makes the following interesting comments:

Even though we always said time was all that counts, I saw that the fastest guy (Jon, often had penalties and wouldn't win. Thus, I wasn't forced to go faster. The fastest guys weren't coming up with the clean runs often enough to force me to change my training and racing strategies. I think that's often the case. If someone is racing well with clean runs and o.k. times, he doesn't feel the need to go faster. That's why training with other people helps, because they squeeze the fast times out of you.

1977

The message that was reinforced for Davey Hearn in 1977 was that racers make too many mistakes in competition, not that they have to have a brilliant run to do well. "That season showed me that it was people screwing up that was the problem, not others doing really well." Unfortunately, while he didn't exactly "screw up," Davey Hearn, like Jon Lugbill, failed to qualify for the U.S. slalom team that went to the Spittal World Championships. Like Lugbill, however, Davey did qualify for the downriver team and won a bronze medal in the C2 team race (with Ron Lugbill).

This season was the first one for me as a coach. Of Davey Hearn, I distinctly remember that impressive forward stroke whenever it came to any straight ahead paddling. He always won that sort of thing. Although I don't remember it now, Davey tells me that in those days I kept telling him and the other C1s that they needed to do less river playing and more gate work. "We thought you were wrong," he says, "but later on it turned out that you were right."

I think that while river running and playing certainly was helpful to their development as slalom racers, it really was a substitute for whitewater gate training and more of this would have been the best thing for them for slalom. But we were only just then starting to set up whitewater gates and make up workouts for use on them, so much of the C1's paddling in those days continued to be river running and playing.

Davey makes the other following comments on my coaching at that time:

We thought it was good that you wanted to coach us. But it took us a while to get used to you. Your attention to detail was good but sometimes it was frustrating to us. You would spot a little flaw in what we were doing, but you didn't always know what the solution was. That just showed me that it takes a long time for a coach to get really good.

Team Trials

Davey summarizes his feeling about the team trials by saying, "I just wasn't in all that good shape back then. He raced C2 first in the trials and was "very tired" by the time the C1 class rolled around. "I didn't do many sprints then," he adds, "and no running, although I started it in the fall."

In his race runs, Davey was somewhat slow and sloppy: "no big errors," but enough to keep him off the team. "But while I was mad at not making the team, I didn't lose confidence in my paddling ability. I figured I just hadn't prepared properly."

Spittal

In watching the World Championship slalom, Davey saw his friend Bob Robison, age 15, who had qualified as the fourth man on the U.S. Team, post the fastest running time (but 50 penalties), and take fourth place, the highest U.S. C1 placing in the Slalom Worlds at that time. Robison's run gave Davey and the other C1s great confidence in themselves:

I didn't feel that "Bumbo" (Robison), had hit poles because he was going too fast. It was just because he was a little sloppy in his first Worlds, It made us realize that speed was really important -- although we saw then, really for the first time, how necessary it was to be clean, too. After that, we never had any doubts about our speed; we knew we were going to be the fastest.

Davey goes on to remember that "none of the Europeans was really stellar," and the winner's score was "not impressive."

Our guys had blown it. They could easily have gotten medals, even won. But I wasn't about to let them beat me again. I felt that I deserved a shot at it.

Cross Draw

One problem the Washington Cls had not solved in 1977 was offside moves. They hadn't started the widespread use of the cross draw which was to characterize their paddling in later years. In 1977, they did not do cross bow sweeps, cross bow stern draws or even normal cross draws very well (no one else did, either). Part of the problem then was that it wasn't readily apparent whether perfecting cross bow moves was necessary:

Morrison, Bumbo (Robison) and Kent (Ford) switched sides then so there was confusion as to whether the cross draw was the way to go.

1978

In the fall of 1977, Davey started college at Carnegie Mellon University, where Kent Ford was also a student. Davey didn't have a car so he had to depend on Kent to drive him to the training site. Unfortunately, they had no gates nearby so most of the training was weight lifting and distance paddling in downriver boats. Davey paddled only three times that September.

In the winter he was in a swimming pool for gates three times a week, and did some cross country skiing, as well as weight lifting. "I paddled about one third as much as I do now in the winter," Davey summarizes.

Spring 1978

When he was able to get outdoors again, Davey did two weeks of distance paddling. The good slalom races were hard to get to from

school, but he went to them. "I got a lot of 3rds and 4ths" but he won at Tariffville. "I didn't have good training and it showed." In the race he won, he was 3 seconds slower than the winner, but clean.

Then he got out of school and went home to Washington. He was second at the Nationals. Following that he went to a training camp at Jonquiere in June and after that he went out west for the North America Cup, traveling with Eric Evans, who was America's top K1 at the time.

The workouts I did with Eric were always the same: 30-50 second courses on moving water. We timed each other. Towards the end of this training, Eric was worried that he was getting weaker. He didn't think paddling kept up his strength, so he wanted to lift weights.

This made a deep impression on Davey and for some time thereafter, he, too, wanted to do more weight training.

But in retrospect, that wasn't the best thing to do. It would have been better to go harder in practice. I don't think the gate workouts I had with Eric were hard enough physically. Neither the length of the course nor the moves on it were demanding enough. Also, we didn't have anyone in our own classes to compete against, so we weren't going all out.

Eric did something else that made an impression on Davey: He did a lot of running. Later, Davey started doing that, too.

I began to think that a running workout was almost as good as a slalom workout. Now I'd laugh if anyone told me that. It's wrong, because running doesn't use the muscles that you use in slalom. Just getting your legs and heart in shape isn't enough, but that was the prevailing wisdom then. The idea was that if you developed a high $\dot{V}O_2$ Max with your legs, you could transfer it over to the upper body. But that's attacking the problem from the wrong end: the paddling muscles have to be developed through endurance paddling in gates so that they can process the oxygen.

Jon Lugbill won the North America Cup that year, and at one race, Wenatchee, his running time was faster than Eric's. But Davey still didn't feel any great need to "do something radical about my speed." He felt "Jon was too erratic, and besides, sometimes I'd have the fastest running time."

Pre-Worlds 1978

Davey won the Pre-Worlds in both C1 slalom and C2 downriver. He thought "slow and clean would win the slalom race," and that is how it turned out. "I felt I could have gone faster, but I didn't. I knew it wasn't a great run, but it still won. I did feel, however, that I would have to do a lot better to win in 1979."

Fall/Winter 1978-79

Davey went back to school that fall, and paddled in the downriver boat and ran a lot. He paddled about 4-5 times a week in the fall.

He went to Texas for 3 weeks in January to run the Rio Grande - "not that great for slalom." It was good for endurance, but the intensity was not high. All the paddling was done in the downriver boat, and since he had to carry all his camping gear in the boat it was very heavy. "We'd paddle 20 miles a day and then I'd do a workout after that."

Davey's training log for the year before the Jonquiere worlds is found on the following page. He did only 24 slalom workouts from the beginning of September to January 21. In the ensuing 4 weeks, however, he did 23 slalom workouts.

In the early spring races that year, he did not win and that upset him. "I was paddling as well as I could, but I wasn't fast enough. I was pretty close, though." But he won the following two races, took a second at Tariffville, and another first right before the team trials -- "a good note to go into the trials on." In the trials, he and Jon split races.

Preparing for the Worlds

Davey felt that if he kept going as he was he would be "in good shape" to win the Worlds. But unlike Jon Lugbill, Davey was also going to be in the C2 downriver race. He now felt that he had not put in enough time in wildwater and that now he should do more.

The wildwater training started to eat into the time that was available for slalom. For at least a week right before the Worlds, he didn't have any slalom training at all. He and his C2 partner, Ron Lugbill, had set up some gates near the downriver course, but they weren't very good. "This turned the tide for me and contributed to my being second in slalom."

David Hearn

1978-79

(Training time in minutes per week)

Week No	Date	Total Training	Water Training	Athletic Training	Whitewater Gates		Flatwater Gates		Downriver Training	River Play	Strength Training	Swimming Skiing Running
					Timed	Untimed	Timed	Untimed				
1	9/4 -9/10	235	210	75	90					120		75
2	9/11-9/17	410	260	150	60	60			80	60		150
3	9/18-9/24	465	240	225					240			225
4	9/25-10/1	615	335	280					335			280
5	10/2-10/8	681	435	246					435			246
6	10/9-10/15	422	250	172					250			172
7	10/16-10/22	490	200	290					200			290
8	10/23-10/29	500	390	190	150				240			190
9	10/30-11/5	710	450	260		60			390			260
10	11/6 -11/12	552	375	177	135				240			177
11	11/13-11/19	485	230	255		150			80		45	210
12	11/20-11/26	580	310	270		220				90		270
13	11/27-12/3	601	255	346					255			346
14	12/4 -12/10	542	150	392					150		135	257
15	12/11-12/17	545		545							180	365
16	12/18-12/24	598	120	478		120					100	370
17	12/25-12/31	845	390	455			300		90		30	425
18	1/1 -1/7	373	75	298			75				75	223
19	1/8 -1/14	1372	1140	232					360	780	120	112
20	1/15-1/21	1028	950	78					230	720		78
21	1/22-1/28	1093	825	268			375	100	350			268
22	1/29-2/4	520	520	350			370	60	90			350
23	2/5 -2/11	1120	560	560			60	300	200		120	440
24	2/12-2/18	740	420	320			220	200			40	280
25	2/19-2/25	594	390	204			190	110	90		90	114
26	2/16-3/4	965	750	215			255	225	120	150	85	130
27	3/5 -3/11	718	610	108		120	250	90	60	90		108
28	3/12-3/18	502	410	92	45	205			250			92
29	3/19-3/25	895	770	125	120	240		60	230	120		125
30	3/26-4/1	692	570	122		195		105	270			122
31	4/2 -4/8	765	690	75	225	180			255			75
32	4/9 -4/15	444	335	109	60	135			150		30	79
33	4/16-4/22	660	660		120	200			40	300		
34	4/23-4/29	265	265		45	105			115			
35	4/30-5/6	634	560	74	330	75			155			74
36	5/7 -5/13	930	930		380	170			270	110		
37	5/14-5/20	963	870	93	395	190			225	60		93
38	5/21-5/17	357	300	57	240	60						57
39	5/28-6/3	460	430	30	240	80			50	60		30
40	6/4 -6/10	580	550	30	100	80			370			30
41	6/11-6/17	750	750		460	210			30			
42	6/18-6/24	685	685		330	190			165			
43	6/25-7/1	605	565	40	160	130			275			40
44	7/2 -7/8	220	220		60	60			100			
	TOTAL	28636	20400	8286	3775	3235	1720	1625	7495	2660	1050	7236

But mainly Jon was a lot more aggressive. Even though "Go for it!" was our password, Jon went for it more than I did. For example, I was more afraid of the hole after gate 13 than Jon, even though I never had that many problems with it. But when I went into it on my off-side, I'd just sit there with my paddle in the air. It's better to have that cross-bow sweep ready like Jon did.



Davey Hearn won his first silver medal at Jonquiere. (Will Summers Photo)

Practice Runs

Jon looked a lot better than the rest of us. I was clean, but he had a better handle on it. It was as though the river was controlling me rather than vice versa. A little more aggressiveness would have done the trick. But I didn't realize it at the time.

Race Runs

I was clean on my first run. I felt I could go faster, though. Everyone was saying "that's great!" But I didn't think we had it in the bag at all. I expected a bigger challenge from the Europeans.

On my second run, I went faster, but I lost time around the hole and around the bridge I hit a couple of gates.

I felt really disappointed afterwards. All year it had been "winning is everything." But I had lost. I felt I had blown it. Even in retrospect I feel I only had a good first run.

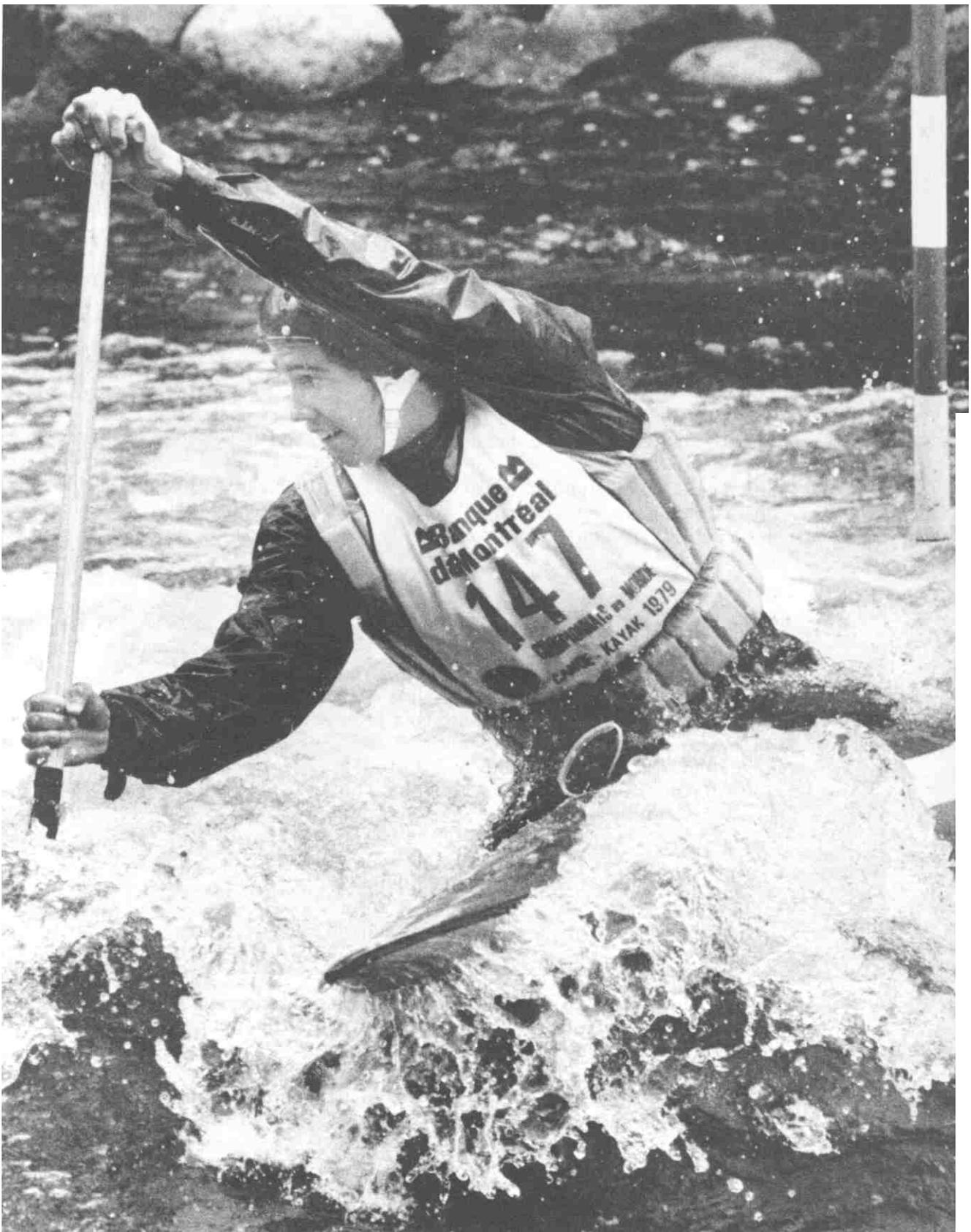
Team Race

Before the race we felt we'd win as long as we didn't make a major error. On the first run we hit each other in the hole and had 10 penalties. (We had 10 on both runs.) We went out on a fairly slow pace to clean the course -- which wasn't too hard. After the run, we felt we'd won it. On the second run we just went a little faster, and didn't screw up in the hole. This made us faster. I used my Ultramax for the first time on this run.

Reflections on Jonquiere

In the months after the World Championships, Davey Hearn formulated the following thoughts and strategies for the future:

- * I felt I needed to get more consistent. I needed to be better able to duplicate my best practice performances in races.
- * I finally figured that trying to go slow and clean wasn't good enough any more.



Bob Robison on his way to a bronze medal in the Jonquiere World Championships (James M. Thresher Photo)

- * I realized that going both ways wasn't possible if you wanted to do well in one or both events. Slalom and wildwater involve two entirely different types of boats and people. Good paddlers are the ones who take advantage of subtle differences in strokes and in order to do that you have to paddle one event a lot. For example, coming into an eddy in slalom: If you do it right, you can grab it better simply by getting a different slant on the paddle, without having to paddle harder. This gives you an extra boost.
- * I needed to change my stroke to cut it off earlier and thus be able to get a higher stroke rate.

Europa Cup 1980

In the fall of 1979, Davey transferred to the University of Massachusetts. "Training wasn't too good then. I did wildwater paddling and weight lifting." Davey paddled 4 times a week in the fall, two-thirds wildwater and one-third slalom. He ran 3 times a week as well.

During the winter, Davey paddled 5 times a week. He got it up to 8 times a week in the spring. From the end of April to May, just before he left for the Europa Cup, Davey had five weeks with more than 10 workouts a week. "This was the only good training I had that year and it wasn't enough. Martyn Hedges beat us in the Europa Cup because we didn't have good training. Also, there was a mental let-down after the Worlds."

I tried to do a lot of 3-a-days right after I got out of school, a crash program to try to make up for all the training I hadn't done.

Davey finished second in the Europa Cup that year, the highest placing ever for an American up to that time (he won the Europa Cup in 1982, the first American to do that.)

Preparation for Bala

In the fall of 1980, Davey went to the University of Montana for a semester. "All fall long I was working on getting stronger and more aggressive." He did the following training:

- * Heavy weight lifting.
- * Running: 30-50 minutes pretty hard.

David Hearn

1980-81

(Training time in minutes per week)

Week No	Date	Total Training	Water Training	Athletic Training	Whitewater Gates		Flatwater Gates		Downriver Training	River Play	Strength Training	Running
					Timed	Untimed	Timed	Untimed				
1	9/22-9/28	920	690	229					420	270	130	99
2	9/29-10/5	736	475	261	90	135			250		150	111
3	10/6-10/12	777	555	222		185			190	180	125	97
4	10/13-10/19	700	430	270	60	175			195		170	100
5	10/20-10/26	769	440	329		50			390		175	154
6	10/27-11/2	782	450	332	90	170			190		195	137
7	11/3-11/9	865	490	375		225			265		235	140
8	11/10-11/16	671	328	343		70			258		230	113
9	11/17-11/23	799	347	452		215			132		230	222
10	11/24-11/30	707	345	362	65	60			220		245	117
11	12/1-12/7	663	260	403					260		250	153
12	12/8-12/14	687	259	428					259		285	143
13	12/15-12/21	621	282	339		45			237		265	74
14	12/22-12/28	410	390	20	190	170			30			20
15	12/29-1/4	729	640	89	230	245	120	45				89
16	1/5-1/11	537	500	37			90	170	205	35		37
17	1/12-1/18	788	562	226	165		135	55	117	90	50	176
18	1/19-1/25	520	470	50			65	90	315		30	20
19	2/16-2/22	923	790	133	80	210		70	370	60		133
20	2/2-2/8	848	746	102	145	30			206	365		102
21	2/9-2/15	623	596	27	170		160	40	226			27
22	2/16-2/22	1031	1031	485	300				206	40		
23	2/23-3/1	1004	965	39	420	190			286	70		39
24	3/2-3/8	1005	965	40	370	395			183	25		40
25	3/9-3/15	1275	1275	560	280				240	195		
26	3/16-3/22	1046	1015	31	400	290	60	60	202			
27	3/23-3/29	825	825	240	265	60			125	195		31
28	3/30-4/5	1044	1012	32	640	60			105	207		32
29	4/6-4/12	940	940	680					180	80		
30	4/13-4/19	925	925	440	365				75	45		
31	4/20-4/26	705	705	320	385							
32	4/27-5/3	960	960	512	230				100	115		
33	5/4-5/10	1233	1233	810					283	140		
34	5/11-5/17	1320	1320	1075	60				85	100		
35	5/18-5/24	625	625	570					55			
36	5/31-5/31	560	560	120	245					195		
37	6/1-6/7	845	845	530	130				55	110		
38	6/8-6/14	1080	1080	740	75				165	100		
39	6/15-6/21	945	945	825	60				60	60		
40	6/22-6/28	995	995	560	45				150	240		
41	6/21-6/5	945	945	650	205				60	30		
42	7/6-7/12	1090	1090	700	120				75	197		
43	7/13-7/19	520	520	260	45				60	155		
44	7/18-7/26	175		155	20							
	Total	36168	30996	5172	13370	5750	630	530	7425	3299	2765	2406
	Change From 1979	+26%	+52%	-38%	+254%	+78%	-63%	-67%	-1%	+24%	+163%	-67%

* Paddling: every day except the last month he was in Montana. 50:50, wildwater:slalom.

* Timed himself on a 10-gate slalom course.

In December of 1980, Davey (and Jon Lugbill) went to Australia to train. There he paddled a lot -- twice a day on flatwater gates, for time.

In Australia we did a lot of quantity although the quality wasn't that good. I raced in two slaloms (Jon won both). One of them (Nymboida), was similar to Bala. We could do three workouts a day sometimes, so compared to what we would have been doing back home, it was very good.

When Jon and Davey came back from Australia, Jon was winning races by impressive margins. "This took me by surprise," Davey recalls, "and I was playing catch-up for the rest of the spring." Then, he won at Tariffville, "and I had the fastest time, so I thought I was still in it if I raced well." After that he won all 4 of the team trials races.

But after I won the first one, there was no pressure on me so it was easier to win the others. I knew Jon was capable of being faster, so I certainly didn't think I had the Worlds in the bag.

Bala Worlds

"On first runs," Davey recalls, "we were paranoid -- had to get that clean run."

So I was backed off. It took a lot of the pressure off when I had a clean run and was ahead after first runs, about two seconds up on Jon, and 14 ahead of Hedges.

On second runs, I kind of felt that my first run might win. I wasn't really going all out. Then I hit gate 8, lost my head and really turned it on for the middle third of the course. I thought I had blown it because of the penalty but in retrospect I should have focused more on gate 28. I didn't realize I had to get in there really high. I lost 3 seconds there, but I thought it was more like 5 and if I had done it well, I could still have won, even with the penalty. That was the most exciting race I have ever been in. But I knew I'd blown my



Davey Hearn does a reverse gate during the Bala Worlds. Photo by Stuart Fisher of "Canoeist" (incorporating "White Water Magazine")



Davey Hearn lunges through gate 13 at the Bala World Championships.
(Abbie Endicott Photo)

run. I was disappointed but it was different than Jonquiere. This time I'd put up a better fight, I had still done something I could be proud of.

Team Race

We were a little backed off on first runs in order to get the feel of the course. When we had a clean run, we knew we had it in the bag. Then we pulled out all the stops. I remember only parts of it. I remember going into the upstream at gate 15 fantastically well. It worked perfectly without us having to do anything. On the second run I felt about as fast as I had been on my first individual run. I was 235 or so on the first individual run, probably about 235-240 in the second team run.



Ron Lugbill, C1 World Champion in 1981, on the cross draw. (Kevin Clifford Photo)

Europa Cup Champ

In 1982, Davey again made a bid for the Europa Cup, this time doing it right and winning. The differences this time compared to 1980 were: He had better training the year leading up to it; and most importantly, in Europe, he had good training and good places to stay, courtesy of the French National Team and the hosts of the Noce race in Italy, in particular.



Kent Ford, shown here on the cross draw at Bala, was third in the Europa Cup of 1980 and 1982. Photo by Stuart Fisher of "Canoeist" (incorporating "White Water Magazine")

Advice to Up and Coming Racers

Davey Hearn offers the following advice to young boaters on the way up:

- * Work on producing your best performance on race day. It happens so often at races that only one guy performs up to or near his level of ability and everyone else screws up.
- * When you get good at that, you can think about super human efforts once in a while, but not before.
- * Do a lot of whitewater playing so you can be totally at home in it. Lots of people try to sidestep being really good in whitewater -- partly because they're scared of it. We always look at the travel to the whitewater as fun because paddling whitewater is the most fun of all.
- * Focus less on repeating particular stroke patterns than on simply finding a faster path. Keep the boat straight on that path, but it has to be done smoothly.
- * Anyone can be strong, but the trick is to learn how to apply the strength to slalom.
- * If you look at my training, you'd see periods when I wasn't in the gates for a long time. Maybe that was good in that it gave me a good base and therefore made me ready to do slalom when the time came. But it probably delayed my getting good.
- * I think my technique hinges on a good forward stroke. Once you have that you can work on turns and so on. All that work paddling distance gave me the good forward stroke.
- * You have to figure out a way of regarding the race as not so important, reducing the importance of it in your mind. You have to make it an everyday occurrence, something you're used to doing with a cool head. You can practice this in training sessions, training with a group. Having been in the Worlds helps. Before the race, being the underdog helps.

- * You need to be able to feel in the race the same as you feel on a good day in practice. For example, for some people, their stroke falls apart when they're going hard in a race. But if they were aware of how things feel, they would notice this. You have to look for discriminative cues.

- * It's not good enough just to have a good run, you have to figure out why it happened so you can reproduce it. Part of this is developing a good sense of pace. For example, you should have a good sense of how fast you are and be able to guess accurately what your running time is. In the past I used to err on the side of going slower than I guessed. But lately I've been pleasantly surprised by going faster than I guessed.

THE MAX: THE SIGNIFICANCE OF BOAT DESIGNING

Beginning in 1976 with the Max II, David Hearn, Jon Lugbill, and Bob Robison created a series of C1s which soon became the best in the world. The line so far consists of:

- * The Max II
- * The Supermax
- * The Ultramax
- * The Cudamax
- * The Batmax

The story behind the evolution of the boats is important, I feel, because it illuminates several points. First, many of the best characteristics of the Maxes -- namely ability to do pivot turns -- were discovered by accident. Initially, Hearn, Lugbill and Robison were simply seeking lower ends to facilitate sneaking. But the lower ends made pivot turns possible --an added bonus. Secondly, it is important to see how their C1 technique developed in large part as a response to the newly discovered characteristics in the boats. Finally, it is impressive to see that three young people could have the determination to go through all the work necessary to make five different plugs and molds in order to come up with these boats, each one of which has been a resounding success. David was 17, Jon 15 and Bob 14 when the first Max project was undertaken.

Max II

Jon Lugbill says that the original impetus behind designing the Max II, the first of the Max series, was to have a good boat for the Spittal World Championships in 1977. "We didn't want to wait to see what would come out of Europe." Bob Robison explains it in more detail:

We wanted to close the performance gap between the kayak and C1 of that day. We needed a boat of superior performance compared to the cut-down Rook-Schmidt we had been paddling. Undercutting was the big concern in boat design in those days. Our aim was to have a very low C1.

The Max II was made by widening a Sanna kayak. Says Hearn ironically, "Kent Ford was really interested in this and talked me into helping. However, he was away at college, so I ended up taking over!"

In the process of widening the Sanna, the lines of the kayak were completely changed and there was nothing left of the original design. Imperfections in the new plug were fixed up, according to Hearn, by using body putty and "a lot of elbow grease." He goes on to say, "We ended up with 2 inches of body putty on the hull." Then, they painted it with resin and sanded it smooth.

The name "Max II" was arrived at by borrowing from a popular phrase of the time, "to the max(imum)." There never was a Max I. Hearn explains why:

We realized that if we called the boat the Max II everyone would think we had already made revisions and that this boat was a refined version! People did think that!

Looking back at the result, Robison recalls:

My reaction the first time I paddled it was amazement at the incredible difference between the Max II and the Roock-Schmidt. Our boat spun twice as fast and could undercut anything.

Robison paddled the boat to a fourth place finish (at age 15), in the Spittal World Championships that summer.

The Supermax

"It wasn't long before we were thinking 'we didn't make this low enough,'" adds Robison. "We began the Supermax in the fall of 1977,"

The Max II was cut down even more. They felt the boat needed to spin faster so they made the ends more shallow. They also took a good inch out of the seam line in order to lower the boat more. The original plug was used for the modifications and then shipped to a company which had bought the molding rights. The company put some finishing touches on it before molding. The Supermax was paddled for one year, starting in the spring of 1978.

Ultramax

"But by early 1979," recalls Hearn, "we were not satisfied with the Supermax. We ground down the ends of a Supermax to make them even thinner and shallower and changed the deck slightly. We took nothing out of the seam line this time. The Ultramax shows the least model change."

The finished boat was delivered three days before the World Championships in Jonquiere. I remember being terrified that the C1s would try to paddle that boat in the race without having time to test it first. But Jon and Bob's Supermaxes were not in good shape and the "Ultra" performed well in practice at Shipshaw a day or two before the race, so they used it in the World Championships. Davey used it only for the second team run. He describes the performance of the Ultramax:

The thinness of the ends allowed us to do
pirouette turns we'd never considered before.

While warming up before his first race run at Jonquiere, Jon discovered that the boat could do bow pivots, too, although it was only after the Worlds that this move was perfected.

Cudamax

The Cudamax was built in 1980. Hearn explains the motive: "We came back from the Pre-World Championships at Bala where all the poles were low, and we wanted a lower boat, still,"

The hull was left more or less the same, but the deck was lowered and a "bottle neck" form incorporated in the bow.

The Cudamax was able to do bow and stern pivots even better than the Ultramax, It placed first, second, fifth and sixth at Bala, and first, second, third and fourth in the 1982 Europa Cup.

Batmax

The most radical boat in the line is the Batmax, built in November of 1982 in preparation for the Merano World Championships. More speed straight ahead was its objective, but once again there were some bonuses. The boat was narrowed two inches to closely match the width of a kayak. "Wings" were added in the sides to meet the 70 centimeter width requirement and still keep the boat narrow at the water line. The Batmax turned out to be 4% faster in a straight line than the Cuda.

The bow and stern deck of the Bat were also lowered a bit more and flattened a bit with the result that the boat does superb bow and stern pivots, and spins the fastest of all the Maxes because the ends are so shallow that there is little resistance when they slice through the water on turns.

Evolution of Technique

The following is a discussion of the major techniques that evolved in large measure in response to the beneficial characteristics of the Maxes. Davey talks about it first:

Not long after we got the first Max 11 we discovered we could run reverse gates differently than before by coming in very close to the gate from one side or the other, then dunking the entire stern under the pole and immediately throwing our weight forward and sweeping the entire bow out from under the other pole, thus clearing the gate much more quickly. The old technique for running a reverse gate had been to turn above the gate, back through, then turn again to advance to the next gate. As our boats became lower, our skills better developed, we were able to work on optimum boat position and not worry about getting the boat under the poles.

Bob explains the evolution of pivoting:

The Max series is responsible for the pivoting found in boating today. The narrow bow and stern made it possible to sink either end so deep in the water that the other end would stick way up in the air. Today you can do an actual back ender in flat water. This sort of goofing around adds amusement on a river run or training session, but it also has very practical applications in racing. With one end down and the other up, the water line is shortened and the boat spins faster.

Davey elaborates:

The stern pivot also enhances turning ability when doing offsets and reverses. We discovered the pivot pretty much by accident after we got the Supermax. At first only Bob could do a stern pivot. Later we would have these contests in the Model Basin when we got tired of intense gate work. We would charge up to a gate and see how high up on the pole we could touch with our bows,

Davey gives an example of how new techniques are evolved:

In the course of paddling very hard while maneuvering, you notice a tendency, say, for the stern to bury. So you intentionally try to make it go down even more by accentuating the move that caused it to bury in the first place. Then later you modify the boat design with that move in mind, knowing what design characteristics allowed the "trick" to be performed. The Supermax could pivot some if you worked at it. When we trimmed down the ends for the Ultra it was easier to pivot so we simply continued the trend when designing the Cuda. As we modified our designs we tried to enhance the desirable performance characteristics as well as add any new ones we thought would be advantageous.

Another feature of the Max designs is having the widest point of the boat behind the paddler rather than in the center, at the cockpit. This feature has enhanced the ability to pivot and has a great influence on the way the boat handles -- but this was also by accident, according to Davey.

When we made the cross-cut darts to widen and stretch the boat, a "bump" was created on both sides. We didn't want it to interfere with our paddle stroke so we wanted it behind us; yet we didn't want it towards the end where it might affect the spinning or handling of the boat. So we put it right behind our paddle stroke where we could control it. This feature -- having the width behind the cockpit -- has turned out to be a concept good for forward speed and for keeping the bow down in a sprint as well as for turning and pivots. Previous to our design, some designers had tried to enhance performance by building boats with wide "beaver tail" sterns, but these were hard to control and didn't prove very successful.

Paramax Argumax

There is also a C2 series that came out of the Max concept. In 1980 I felt that a C2 which was basically a blown up Ultramax might be a better boat than what existed at the time. I suggested to Davey Hearn that he undertake this project, both to add to his prestige as a boat designer and to help our C2s. He, of course, was also encouraged by the C2 paddlers.

The result was the Paramax, which was paddled in 1980. The Paramax, however, was later improved (largely by lowering the deck around the cockpits and narrowing the bow a bit), by the Garvis

brothers, Carl Gutschick and his partner Paul Flack, and Paul Grabow and his partner Jef Huey. All six of these individuals later won medals in the Bala World Championships paddling the new product, the Argumax, named to commemorate one of the prime characteristics of most C2 teams!

Significance of Boat Designing

To my mind, when a paddler, as opposed to a company, undertakes the vast amount of unpleasant work associated with designing and building a new boat, it is an indication of his very deep involvement in the sport. I think the outcome of the design is less important than the fact that the boater has cared so much about improving that he is willing to look at everything. Consequently he will be very familiar with the characteristics of his new boat. Davey Hearn once made a telling point when he said to me, "Many times we came up with a boat first and then developed ways to make it work. We had a vested interest in the outcome."