

**Transcription: Charles “Chuck” Zemach Grand Canyon Historical Society Oral History Program
Part II**

Interviewee: Chuck Zemach (CZ)
Interviewer: Tom Martin (TM)
Subject: Grand Canyon Colorado River
Date of Interview: 1/14/2015
Method of Interview: Phone
Transcriber: Elaina Smith
Date of Transcription: March, 2016
Transcription Reviewers: Tom Martin, Chuck Zemach

Keys: Grand Canyon, High Water, River Management

TM: Today is January 14th, 2015. This is Part II of an interview with Charles “Chuck” Zemach, conducted between Chuck and Tom Martin. Chuck is in Los Alamos, New Mexico. Tom Martin is in Flagstaff, Arizona. Chuck, could you spell your name again for us?

CZ: Z-E-M-A-C-H.

TM: Great. And what year were you born?

CZ: September 15, 1930.

TM: Alright, thank you. Yesterday, we had ended our interview in the middle of a cliff hanger. It was 1981, your first Grand Canyon river trip, with Jim Beard and your wife, Mary. And you were, you had just gotten pummeled in Hance Rapid and the boat had made it into this small eddy where one of your spare oars was. Your wife, Mary, was back with you after being ejected from the boat. Can you pick up that thread?

CZ: Ok, well, let's see. From that point, we had a lot of bailing to do. Had a five-gallon bail bucket, and I remember counting, I estimated 2,000 pounds worth of water carried in our Maravia Williwaw 2. So we made it, we floated pretty well through that secondary rapid, Son of Hance, we used to call it. And, because it's very hard to overturn a boat when it's that full of water. In fact, the boat never overturned. We did lose Mary temporarily, but not the boat. And, a commercial trip came by and asked us if we wanted any help, and we didn't need any help at that point, but he did say that there was one of our oars floating downstream, and, if they found it, they could leave it on the bank somewhere, and they did that. So, we found, we eventually found it.

TM: Nice.

CZ: So, that was about the end of the experience and it wasn't all that bad. It was sort of a thrilling experience.

TM: Chuck, how did the rest of your trip participants do in the rapid?

CZ: Not too well. The first one is my friend, Dick Slansky, from Los Alamos. He was also at the lab. He did it just great. What he did, he stayed on the left side entirely and he went directly into that hole, but he was doing it at high speed, because he was rowing hard and the river was moving. So he crested it.

TM: How do you spell Dick's last name?

CZ: S-L-A-N-S-K-Y.

TM: Thank you.

CZ: So, that was Dick. Then there was our other friends who were not really experienced rafters. This was a little strange. Let me see if I can remember their names. I'm not sure. Anyway, a couple of people who we invited on the trip. And, it was a little curious. I had been told, when I was down in Albuquerque, that I should really talk about my prospective trip to Steve Maurer. Steve Maurer was an experienced river runner and had done the Grand Canyon and would be a great guy to invite along on our trip. I was advised by some friends. So, I called up Steve. It seems that he had his own Grand Canyon trip that year, so he wasn't interested. And, a bit later, I got a call from another guy, let's just call him Dave. I remember his name now. And he said he was talking to Steve Maurer and Steve Maurer recommended that Dave call me up about our prospective Grand Canyon trip. Well, that was a pretty good recommendation. And, so, I invited him and his wife along. So, it turned out that Dave was a carpenter who was doing some carpentry work for Steve. He had very primitive river experience, and so, he really didn't know really what he was doing. When he came to a rapid, two things would happen. First of all, his wife would burst into tears, that happened at Badger, and another thing would happen, he would slow down and would start rowing backwards to go into the hole. It took a while for us to, and what else? Oh yes, he had borrowed his raft from some friend and he had done one river with his friend, down Grey Desolation, which is not too challenging. And he had a, what he thought, was a very clever way of carrying all his gear. He had built what amounted to a bookcase in front his raft, with various shelves and things. And, he would place the various items on this thing for easy access. They weren't even tied down. Alright, so he went into Hance Rapid, and he got caught in the hole and it started tearing his boat apart. And, when he eventually emerged, his boat didn't have a bottom anymore. And, so, he continued the trip down to Phantom Ranch, rowing with no bottom on this raft, and that works apparently.

TM: Well, it does if it stays floating.

CZ: Well, yes, the tubes were ok, and then, that was the end of it. He decided to hike out at Phantom.

TM: What did you do with his boat?

CZ: Let's see, what did he do with the boat? I'm not sure. He may have just junked it. I don't remember what he did. Oh, no, he didn't hike out. He got a helicopter, I think. My memory isn't good on that.

TM: Ok

CZ: But, I remember, we piled up all, we contributed to piling up all his junk and so forth. Then, when Jim Beard saw, he was the last boater. When he saw what happened to us he just decided to portage.

TM: Wow.

CZ: So, that's how we got through Hance. Not a very glorious experience.

TM: No, but you made it.

CZ: Yes, yes we all made it one way or another. And, as I remember, that was the last difficulty we had. We made it through everything else. And, that was our first trip. We didn't really know what the canyon was like. I had read various books and they had the map. But, I remember being under constant tension all the way. I wouldn't say I was exactly scared all the time, but I was sure under tension. And, so it worked out ok.

TM: Did you go all the way to Lake Mead?

CZ: We went to Pearce Ferry.

TM: To Pearce Ferry, ok.

CZ: Yes. We had one of the, as I said, Jim had all sorts of friends that were coming in at various points and leaving at various points. And, one of them who came in at Diamond Creek to join us on the trip to Pearce Ferry, had brought along a motor, I think a three-horsepower motor, so we motored down.

TM: Ok. And, so, what were your sort of end-of-trip thoughts? Do you remember any of that?

CZ: End-of-trip thoughts. Well, first, I was glad we made it. Second, well, I don't know, let's call it a maturing experience.

TM: Yea.

CZ: And, I was certainly anxious to do it again.

TM: Interesting, ok.

CZ: And, hopefully at better water level. Our water level was something like 3,000 cubic feet per second, and the river moved very slowly.

TM: That's amazingly low. Was that like 3,000 the whole time? That's amazingly low. It must have been a dam...

CZ: It had something to do with the dam control. It was, I don't know if it, we launched at 3,000, and, I don't know, it may have varied thereafter, but it was always low.

TM: Ok

CZ: And the river moved very slowly, and we did an awful lot of rowing just to make distance. So, we missed, we had looked at the trail, at the map. And, there was a friend of mine in Los Alamos, who was actually a commercial Grand Canyon river boat guide. And, this guy was very helpful to me, and he looked through the river guide and he starred all the important hikes. So, starting from Badger, to Soap Creek, to Rider, and so forth. And, he put double stars on the good hikes and single stars on the lesser hikes. So, that was a good guide. We also had, Jim had gotten some sort of a set of photocopied pages from some other commercial river trip, which consisted of diagrams of all the major rapids. So, we had a certain indication of what the rapids would be like.

TM: Ok. Chuck, what were the dates of this trip, roughly? Do you remember what month you ran?

CZ: Well, I kept a log of all this. It was from October twelfth to October thirtieth. And, so it got dark a little early, that was also true, and it was a little chilly. And, it had a bunch of people on it who were very interesting people. One of the guys on it was a guy, what was his name? Well, I'm not sure what his name was, but he was in a high school, the Arizona high school wrestling champion. So, he was a very tough guy. He'd get up in the morning and do something like 50 push-ups. And, after that, he would run toward the bank and then leap into the river. It wasn't Frank Lucero, it was Frank Lucero's friend. Oh, his name was Tim something. And, so that was pretty impressive, that he'd swim back. A model for us all.

TM: Yes. Ok, so at the end of that trip, the Grand Canyon was kind of calling you back again.

CZ: Yes, it was. There was one other little incident that I remember, I'm sure whether this is... It sticks in my mind. When we were going from Diamond Creek down to Pearce Ferry, before we put on the motor,

we were going down to that passage of running water to separation. And there was this claw rapid mile 232, I think it is.

TM: Yes

CZ: Ok, so we had looked at that. And, I was in the boat. I had given up my boat by that time, and I was just riding with Frank Lucero, he was a guy from Arizona.

TM: How do you spell Frank's last name?

CZ: L-U-C-E-R-O.

TM: Thank you.

CZ: And, so he was rowing. And, I remember, I was in the front of the boat looking for, we were coming this claw, and so it was a pretty fierce looking rock, I guess you remember that.

TM: Yes.

CZ: Especially at low water.

TM: Especially at low water.

CZ: And, so, we were going straight at it. And, his friend, Tim, I could hear him say, "Go left!" And then, he kept going straight at it again, and Tim said, "Go left!" And then the third time, "Go left!" Finally, Frank did something, but what he did was go right. So, we were caught between the claw and the bank. There's a very narrow passageway there, not quite enough for a raft. We were just stuck there. So we had to get out and, but we were right on the bank. And then we had some trouble lifting the boat around, but we did do it.

TM: Wow.

CZ: So, that's how we did mile 232.

TM: Wow. So another, a little bit of portage there.

CZ: Yes, there was. Yes. What else? Oh, I don't know. Yes, I remember, Jim Beard had this Udisco, and a Udisco's not a very high-quality boat. And, at some place, I think it was at Unkar, he ran onto some rocks and really had a big tear in the bottom of his boat. A really major tear. Well, we spent the night repairing it.

But, I knew how to repair boats, and he did have enough equipment, and glue, and all that, so that worked. No big problem, but it was an incident. But, aside from that, everything was fine. Except for this poor carpenter and his wife, who were really sort of overawed by the Grand Canyon, who'd got on under all those false pretenses. I asked him if he'd had any previous river experience and he said, "Oh, sure." And he had only done this tame river in somebody else's boat.

TM: Did you come back to run Grand Canyon, then, in 1982?

CZ: No, but we did, the next time we'd gone, it was 1983. And that was the flood year.

TM: And the 1981 trip was just you and Mary? You didn't have any of your children along?

CZ: Oh, it had a large number of people. It had our friend Dave, Jim Beard and his buddy, Dave Ridell, and then it had Frank Lucero, and this guy, Tim something.

TM: I'm sorry, Chuck. I was meaning your children. Were any of your children on that '81 trip?

CZ: Oh, oh, no, no, no. No children on that.

TM: Ok, but there was a change, then, in 1983?

CZ: Yea. In '83, we had all of our children. We had our two boys, Art and Ken, from Lee's Ferry. Dorothy had some other commitments, and she walked down from Phantom Ranch, I'm sorry, from the south village to Phantom Ranch and joined us then. So, we did have all of our children. On that trip.

TM: So, '83, that was an interesting year for river running. Can you talk about that a little bit?

CZ: Well, yes. That was an awfully interesting year for.... There was this flood. However, it built up very slowly. We spent a long time planning the trip, and I was being especially careful about planning it because I had my two kids along, and Mary and I were going to use our Williwaw 2, which was a fifteen-foot, nine-inch boat. And then, for the two kids, Art and Ken, Art was going to run my Hopi, which was a twelve-foot boat. And, Art had been already a river guide on the Taos Box the previous season, so he'd had plenty of experience running that in Class IV, and there was actually Class V water on the Taos Box then. So, I felt pretty good about him. And, Ken was something like, what, twelve or thirteen years old. Well, it was 1983, so he was thirteen years old, and plucky. And, he had had some experience on local rivers with our Sea Eagles and Tahitis, which we had.

TM: How old was Dorothy?

CZ: Dorothy was, let's see, she was born in '63, so, she was about twenty. She was a college student and Art was a college student. And, as we, as I kept informed with the Grand Canyon River Office, the reports were that the river was rising and rising. And, typically, in past years, you'd expect the Grand Canyon flow through the dam to be something like, oh, 3 to 5,000 low, up to 20 or maybe a maximum of 25,000. This year, it had got up to 92,500 cubic feet per second according to the Bureau of Reclamation. I did talk to some USGS people at Phantom Ranch and they measured things differently. They thought that the peak was something like 100,000. More than 100,000. Anyway, some of the rapids were just washed out, and others, through narrow canyons, got quite intense.

TM: Like which ones?

CZ: The ones that got quite intense, well, there's 24 and a half. That was very intense. And, our kids flipped in the Hopi in that rapid. And, one of them drifted into an eddy on one side of the river, the other drifted into an eddy on the other side of the river and went 'round and 'round, and the boat went downstream, and I eventually, in my boat, caught up to the boat, and Jim actually rescued the kids. And, so, that was a bit of an experience. And, so we took out, later on, went a mile, just above South Canyon, and we had a layover then.

TM: So, so hang on a second. Now, now Art flips the Hopi in 24 and a half mile, and, this is a question I had. I keep hearing of the highwater. 90,000, certainly even 50,000 and above, the river picks up speed considerably, and stopping is difficult. So, so Art flips in 24 and a half and things are kind of corralled back together at 30 mile? Is that about right?

CZ: No, we...

TM: Kids are in the eddy, and you're chasing the boat downstream...

CZ: Kids are in the eddy. I did something, which, in later years, I would have said was a mistake. In later years, I would have said that, when somebody flips, the correct procedure is for all other boats to aim at the swimmers and let the gear just float down the river. And leave the gear to go until you've picked up the swimmers. Well, at that point, I was downstream of the flippers. I had gone through the rapid first. And, the Hopi floated by me, and Jim was right behind us, and, actually, there were several. And then there was another guy in a boat, who was behind us. That was Ralph. So I thought, with two boats behind us, we would certainly, they would certainly pick up the boys. Well, Ralph just freaked out and he went down without doing anything. And, it was left to Jim to pick up the boys, even though one was on one bank and the other was on the other bank. What I did was chase the raft. That took a while. I had floated down to, I think we went down to Cave Springs rapid, or so forth, before we finally got the boat over. If you're in a boat, and you're trying to pull an overturned boat into an eddy with you, that's a bit difficult. You can row into the eddy, but the boat you're dragging is still in the mainstream, and the force of the water will drag the overturned boat back into the mainstream and drag you out of the eddy. And, that

happened to us a couple of times before we finally managed... See, I was rowing the boat and Mary was holding on to the Hopi. It took us a while to get there. That took us to something like mile 26 or so. Alright. So, that was eventually done. And then, Jim shows up with the boys. And, so, they were a little shaken. I remember, Art told me that he was in this eddy and he was dragged around three times before he finally managed to swim to shore. He made the circuit of the eddy, and when he got to the eddy line on the far side from the bank, he would be dragged underwater. Lifejacket and all. Pretty fierce eddy. And so forth. I remember Ken was saying, "That was not a fun experience." So, but we survived, they survived.

TM: Ok. Yes, fortunately.

CZ: Yea.

TM: Yea. Ok, so down to south canyon, got the boat right side up, had a layover, and then, you know, you, and Mary, and the boys are ok, it was like. Well, let's keep going.

CZ: Yea, we were all ok. There was some repairing to do on the raft. Some of the, one of the d-rings had been wrenched partially off, or maybe it was wrenched all the way off. And, we had a spare d-ring patch, which we put on the boat. And, so, let's see. Yea, that happened. I'm looking through my guide to refresh my memory on the actual mileages here. Yea, ok, so here's this 24 and a half rapid. And then... Yea, I think we took out about a little before south canyon. There's, mile 29, there's a nice beach.

TM: You mentioned some of the rapids were washed out. What was Hance Rapid like?

CZ: Hance was, let's see. Hance was not at all washed out. Hance has a broad, is not in a narrow canyon, it's a steep canyon on the right side, but it's sort of broad on the left side. That was pretty fierce. But, that was... Oh, no! Wrong! We flipped in Hance, in our big boat. My memory's coming back on this now. And, we actually flipped. Everyone else made it.

TM: What happened there?

CZ: I don't remember what happened. I'm sorry? No... I don't remember. But, we flipped, and then we were upside down. And, we got on top of the raft, Mary and I, and we tried using our flip lines, but this was nearly sixteen-foot raft, heavily loaded. In fact, it was especially heavily loaded because, when we were in Pearce Ferry, I'm sorry, when we were about to launch from Lee's Ferry, we had distributed our gear as we thought fair, and we had given the Hopi of Art and Ken a certain amount. We let them have their gear and a certain proportion of their food. Now, Art was, at that time, a veteran of Explorer Post 20, which was this explorer post, boy scout, river running group in Los Alamos. This group had a high discipline for safety and precautions. And, one of their rules was, on the start of every big trip, every raft group, a pair of boys, was required to flip the boat and then, to overturn the boat in an eddy, and then practice re-flipping it with flip lines. I think it was Explorer Post 20 actually, and probably Stretch Fretwell, who invented the

idea of flip lines as we were using them. Which is a lot better than the gear recommended by some other guide books. Anyway, so, one of the things Art did at the beginning of trip was deliberately overturn the boat in the eddy at Lee's Ferry and see if he and Ken could flip it again, and, in fact, they had difficulty. They had, and so, I got disturbed about that, and I took all their gear and put it into our boat. So, their boat was pretty light, quite light, and our boat was quite heavy comparatively. And, so, but it flipped anyway and we couldn't re-flip it back when we climbed on top of it after Hance. And then Jim came after us. So, Jim tried to pull us into an eddy and the same problem occurred. He would pull his boat into the eddy, we would be holding onto his boat, but the river would pull on our boat and pull his boat out of the eddy. It just wasn't possible. We went on and on. We went through Sockdolager riding on the overturned, on the bottom of the boat. Somewhere, after Sockdolager, between Sockdolager and Grapevine, we finally figured out what to do. What we did was this, we had our boat sideways to Jim's boat. And, so, we stepped on to Jim's boat. And then Jim, and Mary, and I were pulling on our flip lines, but now we had a lot more leverage because we weren't standing on our boat itself, we were standing on his side tube. And, the three of us together could very easily turn our overturned boat upright. So, that was a good way of doing things. And, from then on, we were ok. But, so, I used to recommend that to people, this method of flipping the boat, of re-flipping an overturned boat.

TM: So, meanwhile, Ralph and Art are with you, the Hopi and Ralph's boat, you're all sort of moving along together.

CZ: Well, let's see. From Hance, that's right. They followed us through Hance and Jim and I were the lead boats at that time. And, we generally kept Art in between some of the bigger boats, with his Hopi, but he did alright.

TM: So, so arriving at Phantom, in comes child number three.

CZ: That's right.

TM: Mom and Dad having any anxiety at this point? You know, kids flip the Hopi back up there 24 and a half, you guys have had a pretty interesting time at Hance, the water's...

CZ: I wouldn't say had no anxiety. I would say that for the whole, I said I was under tension for the whole first trip. I was probably under tension for the whole second trip, too. Perhaps more tension.

TM: What were the dates of this trip? Do you remember?

CZ: Yes, let me look at my little list here. It was, we launched on June twenty-sixth and we arrived about, in Pearce Ferry, that I don't remember, but I estimate about twenty-one days later. And, at the time we launched, the flow was 70,000 feet according to a sign, at 70,000 cubic feet per second. A couple of days later, we were camped at mile 19 canyon, on the right and a helicopter came over us. And the helicopter

circled around us for a while and then dropped a packet. And the packet was a zip-lock bag, weighted with sand, and a red ribbon attached. There was a message inside. The message said that the flow would be increased to 90,000 cfs that evening, which was impressive. So, we immediately picked up all our gear and we moved it uphill, and made sure our boats were well-tied. And, so, that was, according to the Bureau of Reclamation, 90,000, and, subsequently, went up to 92,500. By the time we got to Crystal, it was already back to 70,000.

TM: Ok. So, when you got to Crystal, the water was back down a little bit. Was Crystal still under NPS control by that time? Or had they...?

CZ: Oh, it was very much under NPS control and it had present, a number of visitors, like Richard Marks, the Superintendent of the Grand Canyon National Park at that time and Senator DeConcini of Arizona, who was on the scene. And, all sorts of concern about what was going on because, previously, what had happened, on the day we were at Pearce [Lee's] Ferry, there were seven commercials which had overturned, and there had been one death from drowning. And, helicopters going back and forth, taking out the rather cold and wet passengers. So, it was a major event. Prior to that, when we were all ready at Pearce [Lee's], waiting to launch at Lee's Ferry, there was also some negotiation and arguments going on, in considerations by the park. At a certain point, the park had banned further launches. And, we were waiting at Lee's Ferry for a number of hours, and we had thought that we were actually banned, so, not sure what to do. And then, there was a commercial river operator, Dick McCallum, who was on the beach with us. Well, Dick McCallum was muttering around about they should find some river ranger who had been down the Grand Canyon as long as he had and let that ranger tell him not to launch. And, Dick McCallum was a pusher, and he got on the phone and he talked to the Superintendent. And, either from his pressure, or from other reasons, the Superintendent changed his mind. And, then he decided that boats would be allowed to launch from Lee's Ferry. And, as for Crystal is concerned, the passengers would have to walk and the boatmen could make up their own minds about how to deal with the situation. Oh, well yea. But, alright. So, that was the situation when we got there. So, we found that the rule was that the commercial boaters, the commercial guides, could take their own boats down Crystal, their passengers all had to walk. For us, the boatmen were allowed and passengers would have to walk, except they said we could take along one swamper. That was the first time I heard the word swamper. Well, a swamper's just a boatmate. And our boats, all our boats had two people, except Ralph's boat, which had three people, so one of those three did walk and was happy to do it. And, the rest of us went down Crystal.

TM: So, what was your run of Crystal like?

CZ: It was not too bad. The point was, that the big hole in the center was extra ferocious. But, the water had come up to the bank on the right side, and it'd come up to this modest grove of tamarisk trees. And, there was a fair amount of water over the right bank and, so, we could keep far to the right. And, the river did try to drag you toward the hole. That was the basic motion of it. But, if you worked hard, or decently,

you could keep far right and avoid the hole. So, it was quite a scene to watch, but we could avoid it, and it wasn't that hard to go around Crystal. And, the boys in the Hopi did that fine, except that, afterwards, there's this follow-on, the Son of Crystal, a shallower part. In that part, they both got thrown out of the boat, but they didn't lose their hold, and then they climbed back in. And, they were resilient enough to do that. So, that wasn't...

TM: How was your run in that...?

CZ: My run was quite easy.

TM: Lower Crystal?

CZ: I kept as far to the right as possible. The problem was not to hit the tamarisk trees. So, we had to dodge them. But, dodging the hole was fairly easy. There was one incident. We were standing on the side, looking at Crystal, with a lot of passengers watching us with us, and one of the commercial boats came by, and, when he got close to the hole, he turned his boat transverse to the river and he started gunning it toward the shore. And, he may have waited a little too long. And, he just barely kissed the edge of the hole. I remember remarking to one of the passengers, "He came a lot closer to the hole than I would have done." And, the passenger said, "And, he came a lot closer to the hole than he said he was going to do it." So, it was... And then, we went down past Crystal, and there were these huge boats, pontoons, marooned on the side. There was one of them that said "Georgie White" on it in big white, big black, letters. A couple of years later, I actually met Georgie White at the Marble Canyon Lodge. And, we had a very interesting talk about all her experiences and so forth. And, we talked about that year. And, I mentioned that, I guess, one of her boats had, that she had had a problem with one of her boats. And she just flat out denied it. She said, "No, I never had any problem in Crystal."

TM: Let's take this sidebar for a minute. What else do you remember of that conversation with Georgie?

CZ: Let's see. Quite a lot, I think, if I talk slowly. Well, let me finish this point...

TM: Ok, we'll finish Crystal then. Yea.

CZ: About how we passed Crystal and we saw this, I think was actually an upturned raft, overturned raft which said "Georgie White" on it. And, so, we suggested to her that she had had a boating problem in the Crystal. She flat out denied it. I talked to some other people later and I gathered that it might have been that the boat she was guiding did alright, but one of her other boats had overturned.

TM: That could be.

CZ: So, that might be a way. But, so, that was a point. She had a lot of bravado about her. But, we talked about past experiences. She told me that, in the early days, what she had done was plant markers on the banks, which she could cite as she was going down the river. And, they would tell her when, this was before, I think, Belknap and Stevens had published their guides. And, so she had her own personal markers as to when the rapids were coming, and so forth. She also told me about, maybe this was uncharacteristic of her because it revealed a mistake, she once went down with a crew of passengers down Bedrock on the wrong side, and the boat got stuck on the rocks. And then, there was a problem, the passengers and everybody getting out and hauling the boat over the rocks, and eventually getting past Bedrock. But, even Georgie White had experiences like that. Then, there's another story, which I've heard several times, so it might well be true, though I've heard it in various versions. And, the version that I heard, in the period after all these commercials had overturned and so forth, there was a scene where Georgie White was on the right, on the left bank with her arms folded and saying nothing, and she was watching this chaotic scene with helicopters flying back and forth. And, at a certain point, she says, "They sure don't make passengers like they used to." So, I was told this by someone who, by my friend Steve Maru, who used to be a personal friend of Georgie's, and I guess he got it from her. I've read, I think I've read the same story in Kevin Fedarko's book, but it comes out a little different. Slightly different. I'll follow Steve Maru's version. What else? Well, there was, there was a situation where there was one outfitter, one of his boats went into the hole and got stuck. And then, the following boat then bumped into the boat and knocked both boats free of the hole. I remember the ranger had told this story to us as an example of really clever maneuvering by the second boat. He adjusted his collision with the first boat and so that both of the got out of the hole. Later on, I was having lunch in Fern Glen Canyon and I was chatting with some other guides of this outfitter who had come down to pick up the debris and so forth. And, I mentioned this business of cleverly hitting one boat out of the hole, and the other guy denied that, he said, "No, nothing was that well planned. It was all an accident."

TM: Oh my gosh.

CZ: So, so that was Crystal at 7,000 [70,000]. Senator DeConcini was walking around introducing himself as Senator DeConcini and he was talking to all the passengers on the banks, on the right bank, and asking how they were, and so forth. And, he approached my wife, who was there while we were scouting, and, so he was very gracious to her. And, he asked her where did she live and she said, "In New Mexico." Well, at that point, he turned his back on her and walked away and approached some other passengers.

TM: Looking for constituents.

CZ: He was campaigning!

TM: Yea, yea.

CZ: So, those are some of the memories. Most of this I wrote up in that report which your River Runners for Wilderness kindly put on the website. But, I think I'm adding a couple of things that are coming to me.

TM: That's good. That's good. What do you remember of Lava Falls? Was it, was it pretty sharp?

CZ: Lava Falls reminded me of Hawaii. It had nothing to do, the pattern had nothing to do with the traditional bubble line, or rocks on this side, or this or that. It looked like a huge V-rapid and on the side, on the outside of the turn, that's the right bank, there was just a wall of water, which might be thirty feet, thirty yards long. It reminded me of pictures of surfers coming down big waves in Hawaii. And, so there's this great wave, and every once in awhile, the white caps would overcome it and the wave would collapse slightly, and then it would reform. And, the way to get down Lava, apparently, was to stick as close to the left bank. There was probably no chance to cross over the left V and get into quiet water. There was too much of that. But, the water flow was very much toward the right bank, trying to drive you into this wall of water. And, so, the game would be to struggle against that and to keep to the left bank as long as possible to delay your eventual encounter with part of the V in the right bank. And, so, I guess we all did that successfully. I did it first. Oh, I remember, I remember talking to Art. And, Art was sitting there, that's my older son, he was running the Hopi, and he was sitting there on a rock just watching this awesome scene. And, then Ralph comes up to him. And, Ralph says, "We'll help you portage it if you want to portage it." And, Art looks silent for a moment, and then he says, "I'd rather swim than portage it."

TM: Nice.

CZ: That was my boy! I really felt proud of him for that. Ok, and then I said to Art, I was going to lead, and I said to Art that if I get down there safely, we were going to aim at taking out, there's a little eddy at the bottom of Lava, on the right. I said, "If I make that, I could do two things. Either I could stay there, and then be ready to rescue you in case you flip in Lava, or I could walk up the bank, the right bank, to the midpoint of Lava and take pictures of you as you go down. What would you like me to do?" And, Art said, "I'd rather have you take pictures."

TM: Nice!

CZ: So, ok. So we did that. We had some pictures of him. Pretty impressive.

TM: Nice. I bet!

CZ: But, everybody made it.

TM: Do you have any other thoughts of what, between 3,000 cubic feet a second, in 1981, suddenly going to 70 to 90,000 two years later, any other things about the river at highwater that were remarkable?

CZ: That were remarkable? Well, the speed of the river. I remember, we timed ourselves from Lee's Ferry to Navajo Bridge. And, at that time, it was 70,000 cfs, let me consult my reports. I remember what I said about it. Because, by now, what I remember is mostly what I wrote then. It was something, I think it was... If you'll hold on for a minute. Yea, we got to Navajo Bridge at 8 miles an hour. And...

TM: So going fast.

CZ: So, that's pretty fast.

TM: Yea.

CZ: Other characteristics of the river were, it was difficult to get into an eddy. Because, if you... The eddy fences were very strong. If you tried, if you did manage to cross the eddy fence, you might still get carried down. So, that if you were aiming for a certain beach, well, there are two ways to do it. You could either start hugging the right bank, let's say if you wanted to get onto a beach on the right bank, you could start hugging the right bank kind of early. In which case, you would hit a previous eddy, and then you'd get trapped in the previous eddy, and then you'd have to go work your way around, and go to the upstream and to the eddy in order to get out of it. And then, if you try to go into the eddy appropriate to that beach, you might get into it and then be carried way downstream. And then, have to laboriously work your way up. So, the eddys were almost as big as the, as big of a problem as some of the rapids. Then there was this question about boils and whirlpools, which we had not met before. As some other river runner explained to me at the time, the boils and the whirlpools, and so forth, they are driven by, at highwater, by rocks which were far underneath the, rocks on the seabed [streambed], which were far underneath the surface of the water. And, they didn't actually cause rapids in that sense, but they caused turbulences of some kind. And, we were once going down the river, we were at a certain point. I think we were at mile 36 rapid, which was not a serious rapid. And, then we got past it. And then, upstream of us, a huge boil erupts. It might have been around three feet high above the level of the water. Quite a phenomenon. And, it sucked us back upstream. And then, it sort of captured our raft and it started spilling water into our raft. And, the raft didn't actually tip or anything, it didn't overturn, but the raft was mostly filled with water before the thing would let us go.

TM: Wow.

CZ: And, so, it wasn't actually dangerous, but it was an odd experience.

TM: And then you're back to bailing again.

CZ: And then we were back to bailing, yes.

TM: Oh my gosh.

CZ: Oh, yes. I was complaining about the eddys, but I, what Mary reminds me is that, whenever we would pull in, we would take out at some beach for an overnight or for lunch. Almost always, one of our party would overshoot the eddy and be pulled downstream.

TM: What would you do then?

CZ: Well, we just, they pulled over later. And then, if they could walk back up, they did.

TM: I see.

CZ: Otherwise they didn't.

TM: Wow.

CZ: I think this was mostly for lunch. Yea. I'm sorry? Oh, yes! We ourselves, we ourselves failed to make it into Bass Canyon on the right. And then, we overshot and we went down almost to Shinumo Wash, and, somewhere above Shinumo Wash, there was a take out, and we spent the night there.

TM: So, so, just lost touch with your party and pulled over where you could and spent the night?

CZ: That's right.

TM: Wow.

CZ: The rest of our party pulled in at Bass Canyon, I guess that's what you call it.

TM: Ok

CZ: And, we went down further and we spent the night in a little sandy part, just above Shinumo Wash. We found out that we could then hike over the ridge and get down into Shinumo Wash. So, we did that and that was kind of interesting. And, from Shinumo Wash, we could then hike up the, in the upstream direction, in that steep cliff, and we could get back to Bass Canyon. So, so, we did reunite with our people. And then, at the end, we came back downstream, we hiked up this ridge, and then down into Shinumo Wash, and then back. And, what I did there, there wasn't any particular trail, we just sort of figured out our own path to go zig-zagging, switchbacking, up the slope and then over the thing so that, what I did at that time was build a bunch of cairns, when I was working back to Bass Canyon. I built a bunch of cairns indicating what we found was a reasonable switchback path up to the top of the ridge and then over. And then, numbers of years later, I'd come back there and the cairns were still there.

TM: Oh! Huh.

CZ: So, there was some other people might have thought was a planned route to get from Bass Canyon to the base of Shinumo Wash.

TM: To Shinumo, yea. So, having, then, gone through Grand Canyon at very low water in '81, and very high water in '83, and then again at other levels on many other trips. What is turning out to be your ideal water level to...?

CZ: 18 to 20,000.

TM: Why?

CZ: Why? Well, it's high enough so that you don't find too many rocks in the bed of the river, and, once you're that high, you don't want it any higher. I think I've done it at all flows. There was a time I did a solo trip in that Hopi. And, it was at 18,000. It varied from 18,000 to 20,000, and I really thought that was the most comfortable level. It didn't have, there was enough water over Lava Falls so that you could go down the right bank. Well, it wasn't easy. I remember, I spent a long time on my solo trip going back and forth, looking, sort of memorizing, the rocks on the left bank before I actually went down, but it was doable. And...

TM: So, you ran left at Lava, then, on that trip?

CZ: Yes. Left or center-left. I remember there was some maneuvering to do.

TM: On that solo trip. Yea, that would be, that would make sense.

CZ: There was some maneuvering to do. And I spent a lot of time scouting it and sort of memorizing it. But, it worked out ok.

TM: What time of year was that?

CZ: Let's see. I can look that up again. That was in April. Let's see, when was that? That was in 1997 and it was from 14th April to 8th of May. That, I would say, is my preferred period of time to go down the Grand Canyon under any circumstances.

TM: Why is that?

CZ: Well, if you're there after the second week of April, then the redwood trees are in blossom.

TM: The redbud?

CZ: The redbud trees are in blossom and the various cactuses, the prickly pear cactuses, are in blossom. When you get down further the, what do you call those stringy cactuses?

TM: The opuntia, the cholla, or the prickly pear?

CZ: No, I don't mean the prickly pear. I mean the tall, single strands of things.

TM: Oh, the ocotillo.

CZ: Ocotillo, yes. And the ocotillo is just absolutely gorgeous in Indian Canyon, I remember. There was a special forest of ocotillo, and if you catch them in bloom, they're particularly gorgeous. So, that's a reason for doing it after the first week of April, but the second week of April is when the commercial season begins. Or, it did at that time. And, it's really nice to get there before the commercials begin.

TM: Why is that?

CZ: Because of all the noise. Well, that problem's been improved a great deal in recent years, but in those days, the noise of the two-stroke motors that the commercials used, you could hear them for a quarter of a mile downriver and upriver, perhaps, a half a mile. And then, if you're in the busy season, you've got a continuous train of commercials coming down. If you're trying to just relax on a beach or something, you hear these loud motor noises continuously all day, with all the boats coming. Now that's been significantly improved in recent years, 'cause they've were required to switch to these four-stroke motors, and I don't understand the motor technology too much, but they're much quieter.

TM: Correct. Yes, that's right.

CZ: And, I do remember one time, in a later year, I was fussing around on the beach and preparing dinner, or something, and all I heard was the sound of the waves on the river, and then I looked up, and there was this big pontoon going by me, which I hadn't heard, and the noise of the motor did not go over the noise of the river. The noise of the river was quite pleasant to listen to. So, but still, the idea of a continual parade of huge pontoons going down, it sort of contradicts your idea of a natural wilderness. I don't mind people on the river, but I mind... In modest quantities. I usually had good relations with the commercials that we did encounter. They were generally friendly. And, most of them were rather nice. There were a couple of exceptions, which I could probably should not mention.

TM: Sure.

CZ: But, when they get to be a crowd, it's quite a devaluation of a wilderness experience.

TM: So, your total runs through Grand Canyon by boat now are how many?

CZ: I counted through. My total is 16 times. Most of them from Lee's Ferry to Pearce Ferry. There was once we took out at Diamond, a couple of times we took out at Diamond Creek, for some special reason. Like, people had limits on their time, or something. And, let's see, there were a couple of times, more recently, went down to South Cove because Pearce Ferry was unreachable. And, then there was one time I went down in my Sea Eagle, no no, it wasn't a Sea Eagle, it was a Padillac inflatable, Padillac inflatable kayak. And, that time, I had another commitment. But, I did arrange for some friends of mine, including faithful Jim. I did launch with them at Lee's Ferry and, but then, I took out at Hermit. And, my friends took my gear down to, and boat down to Pearce Ferry, and I picked it up from Jim in Colorado later. So, I walked, hiked out. That was pretty interesting, hiking up Hermit and getting to the south village from there.

TM: How so?

CZ: Well, all of the Grand Canyon is pretty magnificent, and this is a part of it I hadn't seen before. And, part of it involves walking along the Tonto, which I hadn't done before. It was sort of another experience.

TM: Did you walk the Tonto up to Indian Gardens and then go out, or did you go up the Hermit Trail to Hermit Rest?

CZ: Let's see. I went up the, it was either the Hermit Trail, or Granite Trail, or maybe they're the same up there.

TM: Yea, that would be the Hermit Trail, sure.

CZ: There the same, ok. So, Hermit Trail. And then there's the problem of getting back to South Village, which I think I did by hitchhiking or something. Well, ok, wait a minute. Is there a road, maybe?

TM: Yea, yea, there is. It's, you know, it goes from Hermit Rest back to the village.

CZ: Yea, ok. So, I hiked up to Hermit Rest, that's what I did. I remember that. Ok.

TM: Alright. So, so when thinking about this, I mean, 1981, very low water. 1983, very high water. Solo trip, inflatable kayak trip, 17 trips, 16 trips total.

CZ: I think I told you 17 at one other time, but I recounted it and it's 16.

TM: Ok. What other river adventures do you remember having in the canyon that...

CZ: In the canyon.

TM: That really, really make you sit up and pay attention and go, "Oh yea, I remember that time."

CZ: Oh, there were lots of little incidents. Nothing ever, except for what I've described, nothing ever really went wrong.

TM: Right, that's good. What went right? What other little incidents do you remember that were?

CZ: Things that went right. Well, on my solo trip, there was only me. So, what I decided to do, instead of going through the especially illustrious canyon hikes, I tried to do all, a bunch of hikes I had never done before. So, that was interesting. For example, leaving Lee's Ferry. You come by Cathedral Wash, which is mile 3. So, it never occurred to me before that I should stop at mile 3. So, I did stop at mile 3 and it's a nice canyon, Cathedral Canyon, and it brings you back up to the road, the road that leads from Marble Canyon to Lee's Ferry. And, a very charming canyon, a little bit of effort to get up some of the steep sides here and there. And that was very nice. Another thing I did, you know, there are these triple alcoves and the Royal Arches, which we had always been just boating by. This time, I tried to walk into each of the arches and each of the alcoves. So for the triple alcoves, actually, I think that's misnamed, it's either two alcoves or five alcoves, depending on your definition of how deep an arch has to be to be called an alcove. And, I sort of went into nearly all of them and nearly all the Royal Arches. Some of them were easy, some of them were difficult, and I think there were one or two which I decided were beyond my ability, I didn't want to risk these, being alone. I saw the others. Have you been inside those arches?

TM: We have scrambled around up there. It's fairly sporty at some points. There's some springs up there that were really pretty and it's a challenge to get there.

CZ: Parts of it were sporty, parts of it were within... I was a little prudent, but not too...

TM: Good, good.

CZ: And, I think there were one or two that I failed to get into. And, what else? Well, going passed... What else? Oh, I can, yes, I can remember a couple of other incidents. For example, going passed Crystal. That was actually bothersome. What happened was, I got to Crystal, it was cold and drizzly, and I did a little scouting and then I came back and I was prepared to do Crystal. The rapid itself was no special problem, I had recognized that before. But then some, before I get started, some commercial comes by

and they stop to scout. So, they see me all alone there and the commercial guide, very charitably, says, offers that I could go down with them as an extra safety factor. So, that was very nice. I said yes. Happy to accept that. And then they go off to scout and they took something, they took an interminable amount of time, an hour or more to scout before they come back. And, during this time, the weather gets horrendous. The drizzle turned into a driving rain, the wind became very fierce, it was a very fierce sort of transverse wind. You could see the wind blowing the rain sideways over the Grand Canyon.

TM: Wow.

CZ: Over the river.

TM: And you were cold already.

CZ: In the wrong direction, toward the hole. And I became very sorry that I had said I'd wait for these people. Ok, so then they came and by that time I was pretty cold and wet. And, and then the rain had slacked somewhat and the wind had slacked somewhat. So, I was feeling a little more confident. I told some of the passengers that, if they wanted, I would stay on the bank and watch them go down and I would take their pictures, if they'd like. I'd mail them the pictures. They thought that was a good idea. And then, the guide comes back and says, " Oh, no, no, no! You're launching with us and you're going to stay in between our forward rafts and our backward rafts," and so forth. He just laid down the law to me. So, I did that. And, so we got through Crystal alright, but the experience of watching all this rain, and wind, and so forth was difficult. Then, after Crystal, I remember I was cold enough so that... Oh, I do remember that I was always, on this solo trip, I kept my wetsuit on all the time. And, that's fine for, that's pretty good. That kept me warm enough, but all this stuff, it was wearing on me. I decided I would take out immediately after Crystal and spend the night, because it was already pretty late in the afternoon. So, then got through the gems and it turns out in the gems there's very few, as you probably know, there's very few places to take out. There are no real campsites and hardly any places to just sleep on flat ground. So, eventually, I found one fairly far down. So, that was, I remember that incident. Then, let's see. After that, I got down to Stone Galloway and there was a commercial party there. And, one is not supposed to land on a beach when another party is already on that beach, but when I was a solo, I didn't follow that rule. I would just come up to the beach and politely mentioned that I was all alone, and I only had one boat, and would they mind if I stayed on the beach with them? They always said yes at the various times I tried that.

TM: Nice.

CZ: And, so I did this at Stone Galloway and that turned out to be quite interesting for two reasons. Or three reasons. One was, they were very generous and they kept offering me dinner and breakfast. So, I had some pretty good... This happened several times when I pulled this trick, so I really did very well on these times I joined. And, because my own food was pretty minimal. I was attempting to keep the boat as

light as possible. And then, but then I got these really good meals from these... Commercial people really give you good meals.

TM: That's right.

CZ: Some of them anyway. Georgie White, I heard, did not, but, aside from that, I think they give... And then, one of the passengers on the commercial trip was somebody, was a professor who I had known back at Berkeley at the University of California. He had been a senior professor when I was just a beginner and, by now, he had retired. But, I had been friendly with him then. We had some reminiscences about California in the old days, and so forth. And then, the other nice thing was that the trip leader on this commercial, he told me that, this was something that I had not known, that if I go down to Kanab, which I had been intending to do as my next take out, that three miles up Kanab Canyon, I'm sorry, three hours, he said it was a minimum of three hours, absolute minimum of three hours, I keep walking up Kanab Canyon, I get to a side canyon on the right, which was worth seeing. And it was. That was sort of the most magnificent, I mean, all the canyons in the Grand Canyon are magnificent, but this one was super magnificent. I think it was called Whispering Falls or something like that.

TM: That's right.

CZ: Yea, alright. So, this was the first and last time that I've been there, but that was really quite remarkable. I owe that to this canyon guide who advised me of it.

TM: Nice!

CZ: What else? Oh, I do remember one other thing which was a little uncomfortable. This is the one time in the whole trip that I was actually scared, and it wasn't on the river. I had stopped off at Staircase Canyon to hike up Staircase Canyon. And, I guess you must know that pretty well.

TM: That's Stairway.

CZ: Stairway Canyon. Yea. And, it is like that. You go up the canyon, and there's a blockage, and you go around it, and you climb up on the side, or you climb up the creek blockage, and then you go to another one which is a little harder, and you go to another one which is a little harder. You keep on going. And, I got to this point where there was a pretty steep wall. It seemed to be pretty much, as I remember it, white marble. And, there was no particular handhold or convenient foothold in this, more or less, fifteen-foot drop, except one and it wasn't good enough to get on. And then, I remember, on the side of the canyon there were a number of bulges as the cliff came down. And, on the one hand, it was kinda slippery 'cause there were no sharp handholds, there was sort of rounded bulges. I don't know whether I'm describing something that reminds you of anything or not. But, so I thought, "Alright, I'll climb up there and then, when I get ten feet up, I'll see what I can, whether I see any way of getting up this drop." So, I did that.

And then I spotted this convenient foothold in the direct drop before the ledge. And, it was a little far, but, it occurred to me, that if I really make a lunge with one foot, I could get onto that foothold and that would be close enough up so I could pull myself up. So, I did that and I was successful. And, as soon as I did that, I then got a real scare. I started asking myself, "Well, how do I get back down?" Because, looking down this nearly vertical drop, I couldn't see where this foothold was. And, the side stuff, which wasn't very easy to hold onto in any case, was out of reach unless I could step down in that foothold. Well, I had intended to go up Stairway Canyon as far as I could, but the next obstacle was needed to be covered by going up a scree slope on the right, which was very steep and would need a lot of care, and wasn't, didn't look dangerous or scary, but it was something that would need a lot of care. And, at that point, I was already scared. So, I decided to quit and better concentrate on how I got down. 'Cause, falling down a full, whatever it was, 15-foot height, was no joke. So, what I did was just, and I did, I always had, in my backpack, a rope of about 35 feet, but there was nothing, at that point, to anchor it to. It was just all flat rock. So, I laid down flat and I started inching down and feeling the wall with my feet. And, I spent some time just sort of memorizing the contour of the wall with my toes. And, I eventually did find that foothold. And then, so I came down to that and then I leaped over to the side. And, it turned out to be fairly easy. So, there was no problem. But, that was the one time that I remember I was really scared. 'Cause it, if I were trapped there, if I had a problem there, no one would find me for a month. Or a season.

TM: For a while, yea. Yea.

CZ: Let's see. That's all that strikes me. Oh, oh yes! I remember my first problem, at Cathedral, at Cathedral Wash, which only three miles down from the Lee's Ferry. I had a, what I thought, was the world's best porta potty, suitable for a one person trip. This was a plastic bucket with a plastic top, which screwed down on it, and it could carry twenty, twenty-eight days worth of waste. And, alright, so I was setting up for the night and I, so I tried to open up the bucket. However, what I had done, I had greased it so that it would be easy to open or close. But then, I had closed it too tightly. And I found I couldn't open it. That was a problem! And, so I worked at it for quite some time. And, the thing was made in such a way that there were no proper handles. I couldn't grab onto the body of the bucket and grab onto an edge of the cover and pull one against the other. It just wasn't constructed in such way to do that. So, I had a problem. And, what I did eventually was I wrapped a strap a number of times, a long strap, a number of times around the body of the bucket, and then anchored that to a tree.

TM: Huh, very clever!

CZ: So, that fixed the position of the body. Then, I took my, I guess, a pair of pliers or my lumberman's tool and I pointed a sharp edge of that onto one of the corrugations on the top but I started pounding that with a rock. The first thing that happened was I broke the corrugation. And then, I tried another corrugation and I broke that. Finally, I tried a third corrugation and the damn thing actually opened.

TM: Wow.

CZ: Alright, so then I did have a functioning porta potty. So, I suppose that might be considered a problem to be remembered.

TM: Well, you solved it. That's good.

CZ: I solved it and then I remembered, from then on, I advised all my friends, "When you're using this type of porta potty, you close it finger tight. Don't close it very tight."

TM: That's right.

CZ: I don't know if that's a lesson you ever taught yourself, but...

TM: Well, no, but you had a problem there and you solved it. That's good.

CZ: Yea.

TM: That was good.

CZ: Ok

TM: You know, Chuck, do you have any thoughts on Grand Canyon and the Colorado River as a, as a place to teach us, visitors to national parks, to teach us things that we might not necessarily learn in our ordinary, daily, busy-job lives?

CZ: Well, I suppose so. What I was taught, well, I was taught geology. Certainly the Grand Canyon is a textbook of geology. That's probably not what you're thinking. You're thinking about moral principles or ethical principles, or something like that.

TM: Or team building, or...

CZ: Alright, or human cooperation or so.

TM: Being small in a sense of, in a big land.

CZ: Yea. Well, I don't know. I had a more scientific approach.

TM: That's fine.

CZ: I appreciated the geology.

TM: Nice. Uh huh.

CZ: First of all.

TM: Uh huh.

CZ: I certainly appreciated the early part of the canyon, which sort of unfolds like a textbook. You got the names of all these layers. And, they're very easy to spot, at least in the beginning of the canyon. And, you learn them all and they each, each one has its own special characteristics. If you're trying to climb over them, then knowing those characters is a very good guide to what's easy and what's hard and so forth. And, and then there's the whole idea of evolution going back to the precambrian era and precambrian rocks. I remember, once I was trying to... What was I trying to do? I was trying to beat down an empty soda can by pounding on it with a flat rock, which was a redwall fragment. And I was pounding on this thing and the redwall broke, the redwall rock. And, I remember commented that, "They sure don't make rocks like they used to." Because a precambrian rock wouldn't have had that problem. Well, alright, as to other things, well, there's this whole idea of nature, which is really exalting. And, I've been exalted by it. And, you do get a lot of urban people who don't understand that. I think I partially understood that. I understood it a lot better after coming out to the Grand Canyon National Parks. And they're all good. There are no bad national parks. Or, there are no dull national parks or national monuments. Well, there are a few dull national monuments. I mean, Pipe Springs National Monument, something I once made an effort to go to and that some historical significance...to the Arizona, but it doesn't amount to much. But, the Grand Canyon is sort of the premier one of all of these things. So, it's worth saving this opportunity for exaltation, for challenge, and opportunity, and the feeling of liberation in all these rural areas, in these wilderness areas. But, and the Grand Canyon is just about the best of all. And, so that deserves the most effort and protection, and preservation, and so forth. As for the human aspect of teamwork and so forth, what I learned is you ought to be a little careful about what buddies you pick to go down a long trip in an isolated area.

TM: Can you speak to that a little bit?

CZ: Most of the people I've gone with did absolutely great. Especially my friend Jim Beard, who was sort of my special buddy. And, he and I, and Mary. And, he would always pick up a girlfriend by going to a supermarket the day before, or something, and meeting some nice young thing and bringing her along. And he was great. And I used to help him in some of his problems and he would help me with my problems. And then, he and I would have various friends and so forth, and so on. And that's fine. Every once in awhile, we picked a lemon. So, the moral is, you want to be careful who you pick. I could describe what the lemons did, but I'm not sure that's very edifying.

TM: No, but it's interesting that that today is still recognized as one of the most important things a person can do who is going to do a do-it-yourself river trip in Grand Canyon is choose your co travelers well.

CZ: That's, yes, I would certainly underline that. And, I've had pretty good luck at that, or at least good experience, with, as I say, a couple of lemons. Oh, so, but I don't want to discuss the lemons. That's sort of..

TM: No, no, but that point, I think, is a valid...

CZ: That point, yea, that's true. As far as public policy is concerned, overall, I did spend a fair amount of time trying to influence public policy on rivers, and river trips, and permits, and so forth. First of all, in my backyard in New Mexico, but, also, to some extent on the Grand Canyon. The Grand Canyon did have various events like the CRMP, the G, well, the Grand Canyon River Management.

TM: Right, the Colorado River Management Plan.

CZ: CRMP program. Yes, that was it. And, I wrote long essays, or lists of recommendations to them, both in, let's see. In front of me now, I've got one dated 1988, that was one process. And then, there was another one, when? In 19, in 2002. And, I spent a lot of time thinking of what to say to them about how to run their program. And, I don't think, I'm not sure whether they ever read it, and they certainly never followed my advice.

TM: What was that?

CZ: So, you know, it's one thing for the National Parks System or the National Forest System to be obliged to have their planning processes open to public comment, and so forth. And I've also had long experiences with these processes of public comment with our local Bureau of Land Management System. And, National Forest System of New Mexico. New Mexico, it was fairly successful, I would say. This actually did play a major part in affecting how they drafted their river regulations. The main issue always being on how you, well, one main issue is how you protect the environment. From overcrowding and overuse. On that part, we were generally on the same side as the management agency. The other issue, main issue, was the division of permit allowances between privates and commercials. And, on that issue, the commercials always had an overbearing influence, which, I would say, I managed to counteract in New Mexico. And I actually, but the commercials around New Mexico were actually pretty decent people on the whole. And, a lot of them were my good friends and we could cooperate in designing recommendation to the BLM or the Forest Service for our rivers. And, that worked pretty well I thought.

TM: Nice.

CZ: So, a long history of that. On the Grand Canyon, I gave a lot of noble thoughts and practical ideas. And, I haven't noticed response in anyway. I think it's gotten worse.

TM: Slow to change. Ok, gotten worse.

CZ: In the good old days, when I, in the 1980's. they had this double system for, double value system for how you get on the, how a private gets on the Grand Canyon. And, one way was to apply for a permit and then sit back and wait. In the early days, it was to wait for something like two or three years, and in the later days it was to wait for ten or fifteen years. And, the other way was, to get on the waiting list, and then call them up and ask for, see if there's a cancellation. 'Cause, in the nature of our society, if somebody is on the permit waiting list for two years, half the country doesn't know whether they're going to be married in two years, or divorced in two years...

TM: That's right.

CZ: Or quit their jobs, or move out of town. So, there were a fair number of cancellations when their number comes up. And, so I and my friend Jim would, we had this system. We would decide on some basic two-week period, usually in the middle of April, when we wanted to get on the Grand Canyon. And then, starting in February, we would telephone the dial-up number for cancellations everyday. I would do it, or every night, and, I would do it one night and he would do it the next night. We would share that, no to onerous, and sooner or later, we would get a message that there was a trip available, and we'd call the next day, and we'd have the trip. That method always worked. Now, the philosophy of the current system is, that this gives too much bias to old timers who know how to play the system. And, all the people who've been waiting ten years, need equal opportunity, or more opportunity with the people who've been waiting one year. And, they've got this goddamn lottery. In the beginning, when the Grand, when all the other permit systems had lotteries and the Grand Canyon had a waiting list system, I really thought the Grand Canyon system was the best of all the systems of the various other western river permit systems. And, I told that to the Grand Canyon people many times. Ok, so it's changed. What else? Oh, you were asking me what you learned. Well, if you're very ignorant, then you learn more. If you've, if you've been, if you've grown up in the TV urban area of New York, or Chicago, or Los Angeles, and you've never seen a river or a mountain before, then you can learn an incredible amount. It's very inspiring and exalting. And, I know some with that background, who just absolutely thrilled. And, that teaches them a great deal. And, the National Parks System, I guess it was set up by Teddy Roosevelt and, what's his name?

TM: Horace Albright and...

CZ: Yea. And, this was one of America's great ideas. The idea of national parks. And, the park management has always been more enlightened than the National Forest System, which has, which also supposed to cater to the appreciation of nature, but has other priorities also. And, one idea that I remember, I remember I once attended a conference. Let's see, it was a conference in 1990 in Flagstaff.

The Grand Canyon Futures Forum. It was organized by the Sierra Club. And, so I attended that. And, the Superintendent at that time was Jack Davis and he was there. And, Senator McCain was supposed to be the sort of featured, honored attendee and opening speaker at that. Last moment, McCain didn't come because he had some obligations in the senate. But, he sent a video clip, which was shown. And, it was pretty inspiring! I got the impression that John McCain really cared about the natural values of the Grand Canyon. It might be that that's the sort of speech he makes to a conference engineered by the, in part, by the Sierra Club. But, anyway, it was a good thing. And, all sorts of issues were discussed, and I had my say in it. And, so I thought that was pretty constructive. And, one of the results might have been that the limitations on airplane overflights of the Grand Canyon were increased. That was a positive development in that period and maybe that conference had something to do with that. But, one of the things that impressed me about the environmental speakers was that they were somehow wrong headed. The chief Sierra Club representative gave a talk at that. And, I must say I, it didn't, it didn't resonate with me. And, I wrote him a letter afterwards saying that. Which was pretty insulting, or he must have considered it insulting, because he never answered me. What he did was he got up and told a personal experience of his Grand Canyon river trip. Which must have been a trip with some commercial who was running the boat, and he didn't own the boat, and he didn't know much about the canyon. And, what he talked, he spent most of his address telling the people what a wonderful, therapeutic experience this was, that he was overwhelmed in his urban environment, I forget which it was, and then he was out in the nature, and solitude, and peacefulness, and his spirit relaxed, and his tensions ebbed away, and he became more human, and so forth. He started describing a Grand Canyon experience for an urban dweller and therapy for urban tensions. Oh, I don't know, I don't have any urban tensions. I haven't had urban tensions for ever. When I lived in the city, I enjoyed it. It was only afterwards that I decided I wouldn't want to live in New York. I think this idea of solitude as therapy for the tensions of civilization is just misguided. I have a different approach on that, which I wrote up. I would say that the Grand Canyon, that boating the Grand Canyon, especially if you're doing it on your own and you know what you're doing. It is an expression of freedom. Freedom is one of the basic elements in the American myth, but it's probably a good notion for the whole world. When you're going down the Grand Canyon, you have, you have both confrontation with the river and with nature, and involvement with nature, of enjoyment of nature. These are the two, two key elements of what you usually think of as the expression of freedom. There are other expressions of freedom that Americans can have of a similar type. You could go downhill skiing, you could go 5th and 6th class mountain climbing, you could go parachute jumping. It's unfair to call a boat trip down the Grand Canyon a recreational experience. 'Cause recreation is too broad a term. Going to the movies is recreation, going to a city park is recreation, watching television is recreation. Now, the Grand Canyon is something more than that, it's an expression of freedom. It gives you confrontation with nature and enjoyment of nature. And different people, according to their inner constitutions, might like one aspect more than the other. Like, I know some Grand Canyon river runner who don't pay any attention to the scenery, they're reckless kayaker who are going as fast as they can and the challenge of the rapids is what motivates them. Well, fine. But, then there are other people who are afraid, a little bit afraid of the water, at least they were afraid of being dumped in the water. But, they enjoyed the grandeur of the scenery. And, there's something for both those elements. And, the purpose of the Grand Canyon National

Park is to be a guardian of this very precious expression of freedom. And, to do that, they have to be very careful with the way in which they manage it.

TM: Yes.

CZ: Is it really, are there any legitimate reasons for a government management system to control people who enter onto the Grand Canyon, and the answer is yes, there are exactly three reasons, not two, not four, there are three reasons. One is for safety, because the Grand Canyon really is more challenging than some people, like, expect. And, it is dangerous to them. And, if they get in trouble, it's agony for them and it's expensive for the rescuers. A second reason is just preservation of the environment. And, the third reason is traffic control. Now, for the most part, the managers and the users agree on safety issues and, well, there may be some differences on how you apply them, but they agree on the principles of safety. And, they agree on the principle of environmental preservation. Though, that can come into conflict with commercial interests very early.

TM: Correct.

CZ: And, then you get down to traffic control. Well, in a place like the Grand Canyon, there really are too many, too many people who want to go down. So, then, with traffic control, when the volume or quality of traffic and stuff degrades freedom, then it needs to be regulated in some sensible way. Alright. And, then I would argue that if the managers keep these principles in mind, then all their regulations have to be consistent with those principles. And, some of them are and some of them aren't. So, there will always be contentions and, I suppose, there will always be conflicts between the commercial interests, which can conflict with environmental preservation and certainly can, and have been historically, conflicting with the notion of fairness to the private boaters, and so forth.

TM: So, so, Chuck, you've, you've, you know the resource very well and you know the issues very well. What would, what would you think is a solution to this conflict between the commercial concession interest and the do-it-yourself river runners, especially with regards to this vision of freedom?

CZ: Well, what can you say? I've met a lot of commercial guides. I would have to say that most of them are pretty decent people.

TM: Absolutely.

CZ: And, they are doing this not to make money or not for a living, well, yes, they are doing it for a living, but, they're also doing it because they love the canyon.

TM: That's right.

CZ: And, there are a lot of them of that kind. And, I've met some of them who are really very courteous to us on the river. And, would help us out in the, would be rather generous in situations. I remember once, for example...

TM: But, but does that, I guess I'm gonna jump in here and ask a question. Does, does courtesy and, you know, loving the canyon equate to a distribution of access?

CZ: Well, of course, sometimes you have the guides themselves, and then you have the owners of the company, who may also be guides. But, they're watching the bottom line in dollars.

TM: Sure.

CZ: And, the more access they have to the river, the less access the privates can have under the principle of protecting environment under traffic control and all that. And, so there's a conflict. You say, "What is the solution?" I'm not sure about a solution. Let me think about that for a second, 'cause I haven't, I've had complaints for a lot of, many years. I'm not sure I've had solutions. My personal solution was to get trips down by the cancellation route, which is no longer available, so my personal solution is no longer there. For the community, well, I just think you have to have a general principle of fairness which some authorities are willing to enforce. It eventually goes back to congress. The congress can and does make rules which affect the way the Park Service makes its rules, and so forth. I remember one... Here's an anecdote, I was once going down the river with some friends and we were going through the redwall region. And, early in the morning, there was an intolerably fierce uphill, upstream wind. I've never, only one time I've ever experienced this in the morning, in the redwall region. It was so bad we had to get off to the side of the road and wait a few, the side of the river and wait a few hours until it passed. Alright. A few days later, I was floating past Nankoweap. We weren't intending to stop at Nankoweap, but Hatch Expeditions had stopped at Nankoweap. So, there's this whole line of big pontoons saying "Hatch Expeditions" on them. So, it was a beautiful day and I was just floating down without rowing. And, one of the guys was in the back of the boat, toward the river, he was fussing with the motor, and so forth. So, we have, we exchange friendly words, "Hi." "Hi." "Beautiful day to be on the Grand Canyon." "Sure is!" And so forth, and so on. At a certain point, I say to him, "By the way, the next time you talk to Senator Hatch, will you please have him introduce a bill to ban upstream winds at the Grand Canyon." So, he laughed at that because he certainly must have experienced the winds too. He knew what I was talking about.

TM: Uh huh.

CZ: So, so he laughed at that. And then he said, " Well, you know, I don't think we can do that. We ask Senator Hatch for so much that I don't think he has any time to do anything else for us" I've heard Senator Hatch claim that he's perfectly neutral on this stuff, but there's some connection between Hatch Expeditions and the senator.

TM: Sure there is. Sure.

CZ: And, I think he was one of the primary agents in banning one of the reforms, which almost passed at the beginning of the 80s. You must know more about the history of this than I do.

TM: Oh, that's right. It's management by congressional fiat, and that, and that speaks to your issue of fairness. Which I think is, people have different visions of what is fair. So, but I think the bottom line is we all would agree that managing a resource, as you say, for safety, for preservation of the environment, for traffic control. That traffic control management needs to be fair, fundamentally fair.

CZ: Yea. Here's an example of, I said that most commercial guides are pretty good guys, here's an example, here's a counter-example. This is something I picked up from the internet from some private boater who had had a chat recently, this is the way the internet message went, he had had a chat recently with the son of a river company founder, and he didn't mention which company. This river guide had this to say. He says, "The commercial sector has and gives the park too much money for anything to change. Commercial boating has made the Grand Canyon what it is today. And his family, his river company family has me, quote, right to continue their family's, quote, traditional way of life. The current interest in private trips..." This is back in year 2002, "The current year interest in private trips," according to this guy, "Is a fad and interest will fade soon enough. And, he is not worried because the commercial interest is not worried because the commercial sector has too much money for the park to mess with them. The commercial sector has enough money to weather and win any in law court challenges. The commercials feel for the private boaters but they were the first. And, after all, if someone really wants to go, they can call his company." This is something that this guy said to the private boater and got onto the internet.

TM: It's not really a fair, in that case, not a question of...

CZ: I included this quote in my CRMP comments in 2002. And then I said that "evidently the commercial owner was speaking sincerely and giving a frank appraisal of the potential of this plan. Park office should be embarrassed that a climate exists, a climate of paying exists in the Grand Canyon river community, or in a part of the community, in which such views can be displayed as a matter of course. But, on the other hand, the commercial owner quoted above might be right, then park officers should be doubly embarrassed." So, that's the way it is. In New Mexico, there was this, for the interested commercials and the privates, there was a long period in the 1980s when the basic regulations and the overcrowding became evident and the regulations had to be formulated. There were a lot of meetings and there weren't that many commercials, maybe eight or ten, or something. And, a lot of activist privates, like me. I was president of the Adobe Whitewater Club in some of those years and, I did a lot of negotiating with both the commercials and with the BLM. And, after a certain amount of just plain involvement, and negotiation, and being together, there did seem to be and I've seen this in other processes when I was in the federal government, when a bunch of hostile groups negotiate with each other over a long period of time, and at least some of them have goodwill, then the antagonisms relax. And people begin to be willing to make

allowances for the other person's point of view. So, without proposing a solution, I would say that if somebody would engineer more interactions between the private boaters, say in Flagstaff, the Private Boaters Association, and your association, and the commercial guides. Possibly even involving the owners of the commercial enterprises. And the Grand Canyon managers. Then, in the fullness of time, things might, feelings might ameliorate. This is a very speculative sort of proposal. I don't know if it would come out well or not. You might, it might be that they've had plenty of these meetings and nothing ever came of them, I don't know.

TM: Well, we still are on a journey for fairness, so, I would say, yea, that's going to have to happen. We're all going to have to come back to the table, either through the courts, or through congress, or through a management plan to revisit this.

CZ: Well, the management plan process, in the past, has somewhat promoted this interaction, but not enough, I would say. And, I do have the feeling that the Grand Canyon managers, some of them I've talked to on the phone and argued about these points, but they are busy people and there are all sorts of people claiming their time, and they just don't feel that they have the time to waste on all these amateurs that don't really understand the subject and that sort of thing. I was just talking to one manager and he was complaining about something in his own Grand Canyon South Village organization. That his immediate supervisor who had, I don't remember the title of the immediate supervisor, but he was sort of third in line in the Grand Canyon hierarchy or something. And, he had control of the canyon regulations for hiking, for hikers who want to hike down to the, to Phantom Ranch and so forth. And, this river manager that I was talking to was complaining that this important supervisor, who really did determine the rules, he had never been below the rim. He had never bothered to take a walk at all down the Grand Canyon. So, there's also a question of the character of the people that the government appoints to be park superintendent and the character of the people who the park superintendent then appoints.

TM: That's right, that's true. So...

CZ: And, that's a political problem.

TM: Yea, one of many. So, Chuck, we've been, we've been interviewing here for almost two hours.

CZ: Wow.

TM: It's probably time...

CZ: My phone has held out.

TM: Time flies when we're having fun. Probably going to go ahead and wrap this up now. Thinking, is there anything else you'd like to touch on briefly before we wrap this up?

CZ: Touch on briefly. Oh, I'd just like to repeat the guiding principle, which I've already stated. And, in all the meetings I was in in New Mexico, and I became famous for this, I'd get up in these conflicting groups, and so forth, and I'd say, "River running is an expression of freedom. It's a business of American regulators and American participants to preserve and promote that expression of freedom for as many people as can, as have the ability to enjoy it." I guess that's my final word.

TM: Nice. Very good. Alright. Well, on that note, thank you very much Chuck Zemach.

CZ: I'll hold it for a second, yes.