

Pikes Peak River Runners

Grand Canyon Evacuation May 2004



By Christina King

Photo Credits: Christina King, Scott McCollough & Bob Marley ([his trip journal](#))

This Grand Canyon trip started out well. I had a great run in House Rock and was enjoying a fun start to this trip.

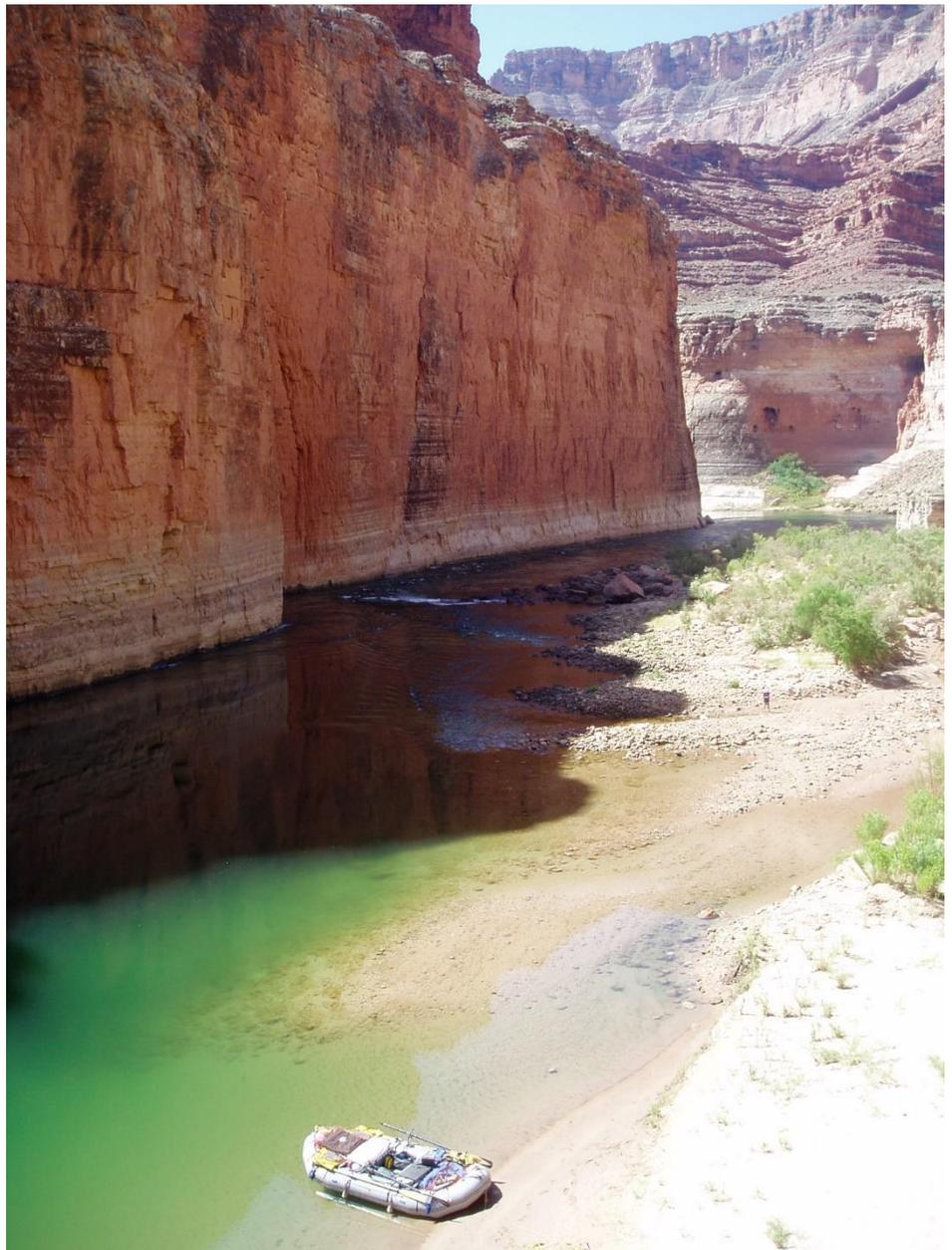






On Day 3 (May 6, 2004) of an 18-day Grand Canyon trip, I had an accident resulting in a broken leg. I am writing this account to share my experience with others and help them know what to expect for a medical accident (in a remote area). Lastly, to share how my evacuation process played out. I am deeply disappointed that the accident happened and am grateful to our river group for first aid and helping me get out. I am also grateful to those who helped take care of me afterwards.

Our trip started out uneventfully and we had just stopped at Nautiloid Canyon (on Day 3) to have lunch and hunt for those pesky Nautiloids. We have stopped at this particular canyon on most of our trips and I was familiar with the slick rock walls and short walk to the fossils. Right after lunch we started up the trail and reached a slick rock area. I tried to be extra safe in crossing the slick rock area by scooting on my behind to avoid falling. No sooner had I started to slide down a short incline (with my legs in front to catch me) when I caught my rubber (grabby) Teva sandal on the slick smooth rock. My lower leg (tibia and fibula) bone gave a loud snap as it bent in front of my eyes. In fact, those in front and behind me heard it also. My leg kept going straight but my Teva brought my ankle around and to the right. There was no doubt that my leg was broken in an instant. My first words were "I broke my leg" and second comment was to apologize to Bob for allowing this to happen.



I know what a medical problem and evacuation does to a group and knew it would shock our entire group. [Several years ago, we had to evacuate one of our Grand Canyon participants for a dislocated shoulder.](#) That experience convinced us that we had to have a satellite phone on future trips. I just never thought it would be me that would need the evacuation!



I moved my broken right leg to get out of the awkward position I was in at the bottom of the incline and saw that the leg moved independently of my foot. Not a good sight. Fortunately, nothing was poking out of my leg and in fact there was not a scratch on me. Andrew (our EMT) quickly got to my side and with Richard's help was able to stabilize and line up my leg and foot for comfort. A backboard was quickly gotten from the Canyon REO boats to provide shade (and later drop me down to the beach

area). Andrew proceeded to monitor my vitals (relying all to Suzanne our doctor) and apply a SAM splint to my leg. Andrew asked me the pain (1-10) question but at this time it was only in the 2 range or so. I am sure I was a bit shocky, but the pain was not bad. It did hurt when the foot and leg were not moved together but everyone had a soft touch and moved slowly and carefully. Once the splint was on it was much more stable. I was not given any food, water, or medications for pain. I had just eaten and drunk a lot of water for lunch, and it was best that I do not have anything by mouth until help arrived. The rest of the group began coordinating my evacuation with the Grand Canyon National Park Service (NPS). *Note: 911 does not connect to a local*



dispatch on a satellite phone. Always have the local dispatch numbers located with the phone (with the satellite phone number clearly labeled). [I have put the emergency numbers on our website for reference.](#)

The accident happened at 1 pm. NPS was notified quickly, called us back saying that they would delay 20 minutes due to strong gusting winds. While waiting for the helicopter the group strapped me to the backboard and lowered me down the slickrock (about 15-20 feet) and carried me to the shade near our designated landing zone. I know it was an awkward and difficult traverse for the group (over

ankle busting rocks), but they got me safely to the shade. The NPS helicopter arrived at the perfect landing zone (selected by Richard – our former Fire hotshot jumper) about 1:45 pm. It was a relief to see the helicopter land and know that my evacuation would happen. They shut off the helicopter while assessing me, documented my vitals, attempted a few IV's until they finally got an IV in my left hand for the ride out. The NPS crew changed my rollatable legs/SAM splint/duct tape splint to a vacuum splint that they had on board (for comfort reasons) as they were planning on flying me to the South Rim and then by ambulance (1.5 hours) to Flagstaff.



Suzanne warned me that I might have to have surgery (yes, I did) and smiled with me when the pilot went through the crash-landing safety talk. All I could think of was how impossible it would be to wriggle out of anything, much less a small rectangle window. They did allow me to take a dry bag which was great news. Susan had already gotten my wallet/backpack but having a dry bag with clothes made it a lot easier when I was in the Flagstaff hospital. I cannot tell you how proud I am of our group that made my rescue a perfectly coordinated (and calm) event. It made such a difference.

I am a believer in the satellite phone (worth every penny). The group later told me that no one else (commercial or private) had passed that day. If we would have had to rely on the signal mirror my bet would be that I would have spent the night in the canyon with a broken leg. That would have been awful!

Right before we took off, someone (Susan or Lorie?) handed me my camera and I was able to shoot some pictures on the flight out. The paramedic told me that the ride would be bumpy (it was) and that we would take the scenic way out. I told him that the quickest would be okay and he smiled and said that the quickest was also the most scenic. I am usually the first one to feel carsick, seasick, etc.... so the pilot gave me an air sickness bag just in case. I surprised myself by not feeling sick at all, especially since I was riding backwards. The paramedic pointed out the different viewpoints, features, etc.... and I even spotted the Tonto trail, Clear Creek, Phantom Ranch, remains of the smoking forest fire near the South Rim, Grapevine and Sockdolger rapids. After the 25-minute flight we landed at the South Rim. The helicopter ride was exciting, but I would NEVER pay to do this for fun.



As I was being moved by gurney into the ambulance the helicopter crew got a serious call describing a man on the Bright Angel Trail (not breathing) and rescue breathing had been occurring for 10 minutes. They threw my dry bag out of the helicopter, started up the rotors and left immediately. I was their 2nd rescue of the day. That really put my accident in perspective for me. At least all I had was a broken leg! The ambulance started the 1.5-hour drive to Flagstaff. The pain level escalated to about 5 and the paramedic recommended a morphine dose in my IV since he wanted to be sure the pain was managed appropriately. I agreed and the morphine really did work. Once again, I was happy that I was not feeling sick. This was the first pain medication I had up to this point but was ready for it. About halfway to Flag, we stopped, and I was transferred to another ambulance (on the side of the road). They only have one ambulance permanently stationed at the South Rim and wanted to decrease the travel time for the primary ambulance. I can just imagine what the people in the cars that whizzed by us thought when they moved me from one ambulance to another.

I got to Flagstaff around 5-6 pm or so and immediately had x-rays. They had called a surgeon in and after reviewing the x-rays, he quickly recommended surgery (rods/screws) as the best way to repair the break. My right tibia (big lower leg bone) and fibula (puny lower leg bone) were shattered completely through. After quick phone call messages to Pete in Woodland Park, the surgeon took me into surgery. The surgeon called Pete and gave him an update. Supposedly I got on the phone after the surgery and in a brief conversation, told Pete I broke my leg, asked him to drive safely and then informed Pete that it was time for me to go to bed, then hung up on him. Funny what that anesthetic does to you. I do not recall any of this.

Pete arrived the next day just before lunch about 3 minutes before I threw up my first Percocet pill. True love prevailed and he gave me a hug and took me home the next day in a two-day (drug- enhanced) drive home with my leg up. Thank goodness for sleeping pills and Pete! I never had a cast put on and the bruising is quite lovely. The scaring is only a few inches (where the rod and screws were inserted). I wore a walking boot (but was not allowed to walk on it) and spent the next 10 days giving myself anti-blood clotting shots in the stomach and lying-in bed with my leg above my heart for 23 out of 24 hours a day. Physical therapy for range of motion in my ankle and knee started two weeks after the injury and I went back to work 18 days later.

Our Grand Canyon group continued with the help of everyone, and Bob was able to use our satellite phone to get his (boatman) son to hike in at Phantom and run my boat.

Richard did a great job of teaching Andrew how to row my boat until Phantom Ranch. However, Richard had only so much vacation and had to keep to his original plan on hiking out at Phantom. I think it was a relief to the group to have Scott hike in at Phantom. Bob called a few times to see how I was doing and let me know that they made it through Lava okay. It also helped with coordinating plans to get our vehicle and boat home. My insurance processed the numerous claims with minimal hassle, and I am truly fortunate to have great primary and secondary insurance.



Scott McCullough rowing my avon raft through Lava Falls

FYI: The Flagstaff hospital stay (including surgery) was \$21,000 and ambulance ride was \$1,800. I never did get a NPS helicopter evacuation bill (probably because they came and did not send their outsourced helicopter service). This was not an inexpensive accident.

In December 2006, more than two years after the accident I voluntarily had my rod removed. The total insurance expense for that surgery is approximately, \$10,200.

I cannot thank the river group, NPS, Flagstaff Hospital, family, friends, and coworkers enough. Everyone has been immensely helpful from first aid, rescue, surgery, dinners, favors, waiting on my hand and foot and sympathy. Most of all I thank Pete for waiting on my hand and "foot" for the past months.



Moral of the story: Be EXTRA careful when in remote areas and most injuries happen OFF the river.

Helpful Hints for a medical emergency and evacuation:

- Change of clothes, wallet (includes insurance cards) and car keys.
- Know what medications you take. Better yet, keep an updated list in your wallet.
- Phone number list for emergency contacts off the river, keep in wallet
- Call your shuttler and let them know what happened so they can relay the info to your group at the takeout.
- Make sure your medical insurance covers the helicopter evacuation. If not, buy [Divers Alert Network \(DAN\)](#) evacuation insurance
- Make sure your first aid kit includes SAM splint, strong painkiller, and antibiotics.
- Purchase or rent a satellite phone for any trip that you go on – avoid using it for personal calls. Batteries last 2.5 hours but are quickly used up when used for one evacuation. Idle chit-chat for personal use can really impact battery life and you may not have an emergency phone when you really need it.