



CATARACT CANYON, BIG DROP II 1997

Photograph by Neal Herbert

from the Canyonlands National Park Web Pages: http://www.nps.gov/cany/river/reports.htm

Black Scorge (007)
Volunteer Ranger
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FATALITES

Canyonlands National Park River Accident Report

Case Incident Report Number: (none)

Date of Accident: August 30, 1967

River: Colorado

Section of River: Cataract Canyon

Location on River: Spanish Bottom (Mile 213.0)

Relative Flow: Low

Gage Reading: 5,140 cubic feet per second

Difficulty: Flat Water

Type of Accident: Swimming

Injuries: Drowning

Type of Trip: Commercial

Type of Boat: None

Description: A 26 year old man was a passenger on a 40-person commercial expedition from Moab, through Cataract Canyon to Hite. On August 30, most of the group was ferried across the river from its camp to Spanish Bottom to participate in a hike to the Doll House. Upon completion of the hike a few passengers rode back to camp in a boat, but the day being warm and the river low and quiescent, most swam the narrow channel. Life jackets were not required in this part of Cataract Canyon at that time.

A 12 year old girl had just swum across the gap when the victim entered the river. A few seconds later he called for help and a motorized and manually powered pontoon was launched immediately. The man's body had a high specific gravity and was found below the surface of the water about 90 seconds later. CPR was administered for 4 hours without success, and a subsequent autopsy attributed the death to drowning.

The rafting party continued through the rapids in Cataract Canyon the following day, carrying the victim's body. A help call was signaled during a pre-arranged rendezvous, and a pontoon plane landed at Dark Canyon to retrieve the body.

The victim was a swimmer and it is unlikely that he simply drowned while trying to negotiate 25 yards of flat water with a slow currant. It is speculated that he suffered debilitating cramps when he entered the cooler environment of the river after the hot hike. This should be a consideration for anyone "cooling off" in the river on a hot day.

Source of Information:

Times-Independent, Moab, Utah Raft Expedition Ends In Tragedy Near Moab September 7, 1967, p. A-5.

Case Incident Report Number: 19730531

Date of Accident: May 31, 1973

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Rapids

Relative Flow: Moderate

Gage Reading: 34,800 cubic feet per second

Difficulty: Class IV

Type of Accident: Capsize

Injuries: Drowning or hypothermia

Type of Trip: Private

Type of Boat: Raft

Description: A 60-year old man was one of six persons thrown into the river when their raft turned over in "Big Drop Rapid". Five of the group swam to shore, but the 60-year old, who was wearing a life jacket, was swept downstream. His body was found several miles away at the head of the Powell Reservoir the following day by another boating party. The cause of death was not determined. One report stated that the victim was seen alive along the shore after the accident.

Source of Information:

Times-Independent, Moab, Utah Boater Dies On Trip In Cataract Thursday, June 7, 1973, p. A-5.

Case Incident Report Number: 740011 (Glen Canyon Case No. 740438)

Date of Accident: August 7,1974

River: Colorado

Section of River: Cataract Canyon

Location on River: near Mile 206

Relative Flow: Low

Gage Reading: 6,740 cubic feet per second

Difficulty: Flat Water

Type of Accident: Swimming

Injuries: Cardiac arrest

Type of Trip: Commercial

Type of Boat: N/A

Description: Passengers on a commercial river trip were having a "swim break" about 3 miles downstream from Cross Canyon. A 56 year old man wearing a life jacket was swimming with a companion when the former apparently fainted. The victim was affixed to a rope thrown by a guide, and was pulled to a boat 30 feet away. One witness stated that the victim lost consciousness as he was being pulled into the boat. The same witness administered mouth to mouth resuscitation while the trip leader applied compressions (closed heart massage), and receiving no response, the body was transported to the duty Ranger at Hite.

In Retrospect: From the meager information recorded, it is impossible to determine if this accident could have been avoided. The victim was swimming under safe conditions. No information is available regarding his physical condition or if he had present or past medical problems. The conclusion of the reporting parties was that death was due to "natural causes," which presumably could include a heart attack or a stroke.

No account of this accident appears in the Times-Independent for August 8,15,22,29, or September 5. It would have been interesting to learn the victim had a past medical history which the victim coulc have taken into account when planning his trip, and the results of an autopsy, if one was performed. However, the principal item which stuck in my craw was the nine days which elapsed from when the Canyonlands Ranger received this report until his investigation. I am not knocking him for this because all kinds of reasons may have existed, but **IN RETROSPECT**, this shocks me more than the DEATH.

Case Incident Report Number: 750017

Date of Accident: June 20, 1975

River: Colorado

Section of River: Cataract Canyon

Location on River: Rapid 3

Relative Flow: Moderate

Gage Reading: 47,700 cubic feet per second

Difficulty: Class II

Type of Accident: Log Riding

Injuries: Drowning

Type of Trip: Private

Type of Boat: None

Description: Two men, age 24, were in the Needles on a multi-day trip, which included a night at Spanish Bottom where they explored and camped. At 14:00 on Friday, the second day in Cataract Canyon, the men decided to ride the first few rapids on a log. According to the survivor the first two rapids were negotiated easily and they paused to scout the third (Mile 211.6) before swimming and pushing the log into the channel. The current proved stronger than expected and they abandoned the log in favor of a nearby island. One swimmer reached the island and the other, determining that he could not, was last seen attempting to regain the log. Neither man wore a life jacket.

After an hour or two the survivor swam the narrower channel between the island and the shore (river-left) and hiked back to camp where he contacted a commercial river party. The group searched along the banks of the river for the missing companion, and on Saturday and Sunday the survivor rode with the river group to Hite where the accident was reported. Subsequent searches by land parties, boating groups, and fixed-wing aircraft yielded no result. The victim was finally sighted by a visitor on Friday, June 27, in the Glen Canyon Recreation Area, at the mouth of Sheep Canyon (Mile 177.0). The site is near the end of Cataract Canyon where it is inundated by the Powell Reservoir.

In Retrospect:

A lack of experience, knowledge, and life jackets are a poor combination for survival in the rapids of Cataract Canyon.

Case Incident Report Number: 790143

Date of Accident: June 12, 1979

River: Colorado

Section of River: Cataract Canyon

Location on River: Brown Betty Rapid (Rapid No. 1)

Relative Flow: Medium

Gage Reading: 49,200 cubic feet per second

Difficulty: Class III

Type of Accident: Capsized Boat

Injuries: Drowning

Type of Trip: Private

Type of Boat: Inflatable Raft (6-man Udisco)

Description: The victim, age 20, was one of two men in the eighth day of a voyage which launched at Ouray, Utah, on the Green River, with an undetermined place and means of exit. Their river running experience was limited to one river in Texas, and their only reference guide was a road map. The survivor stated that they saw the warning sign at the confluence with the Colorado River, did not intend to run Cataract Canyon, and were looking for a Ranger Station and a road out of the canyon. The survivor claims they did not see the Ranger who tried to contact them at Spanish Bottom. The Ranger was attracted by their not wearing life jackets and other concerns.

The survivor stated that they adorned life jackets before descending Brown Betty (Mile 212.3) in mid-morning, but that his was pulled off by the river after the boat capsized. He survived by grabbing a plastic bag which kept him afloat until he swam ashore. The victim was last seen in the rapid. Within the hour a commercial boatman found the empty raft below Rapid 2 (Mile 211.9) and secured it to shore. The survivor was found at Rapid 4 (Mile 210.9) searching for his companion. The operator of the commercial boat picked up the survivor and they continued searching downstream. The victim's body was not in a life jacket when it was discovered on July 3, near the mouth of Dark Canyon in the part of Cataract Canyon which is inundated by the Powell Reservoir (Mile 182.8) and in the Glen Canyon Recreational Area.

- 1) The accident was the result of ignorance, improper equipment, and inexperience.
- 2) The Type II life preservers used are inadequate for white water, and the two were fortunate to have navigated Gray and Desolation Canyons on the Green River without an accident.

Case Incident Report Number: 800027

Date of Accident: May 25, 1980

River: Colorado

Section of River: Unnamed canyon of the river

Location on River: The Slide (Mile 1.6)

Relative Flow: High

Gage Reading: 38,400 cubic feet per second

Difficulty: Class II

Type of Accident: Capsized Boat

Injuries: Drowning

Type of Trip: Private

Type of Boat: Dorsett Cabin Cruiser

Description: Four men, ages 52, 27, 24, and 22 were thrown into the river without life jackets when their boat turned on its side after hitting a wave at The Slide. The channel of the river is constricted there and during high water a rapid occurs which is not present at lower flows. The men were part of the annual Friendship Cruise, a flat water trip which proceeds singly or in groups down the Green River from Green River, Utah, to the confluence with the Colorado River, and then up the Colorado to Moab, Utah. The eldest man succeeded in holding on to the boat, but the other three were thrown away from it and from time to time were forced under water by eddy currents. Rescue boats reached the 27 year old and the 22 year old who were pulled aboard, but the 25 year old sank in the tail of the rapid and did not surface. Subsequent searches by boat, land parties, and a helicopter proved futile. The body was recovered 13 days later in Cataract Canyon below Rapid 10 (Mile 208.0), 10.5 miles downstream from the site of the accident.

- 1) Flat-bottomed power boats are not designed for running rapids. To navigate them in such an environment is dangerous.
- 2) Always wear life jackets when boating through a rapid, even if it is the only rapid on the river.

Case Incident Report Number: 820312

Date of Accident: November, 10, 1982

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Three

Relative Flow: Low

Gage Reading: 12,480 cubic feet per second

Difficulty: Class IV

Type of Accident: Two successive immersions in cold water resulting from capsizes

Injuries: Drowning

Type of Trip: Private

Type of Boat: Inflatable row raft (Army 10-man)

Description: A 32 year old woman was one of fourteen members in a group with six boats. Seven were experienced boatmen, but only one had previously navigated Cataract Canyon (twice). The party had been warned of a cold front moving into the area and on November 9 the range of temperature in Moab was from 58 to 38 degrees; the temperature of the river in Cataract Canyon was 46 degrees. Some of the boaters were equipped with wet suits, but the woman was not. In addition, she did not know how to swim.

The boats reached the head of the Big Drops at 15:00, and after scouting, ran Big Drop One and scouted Big Drop Two. The raft, in which the woman was the only passenger, turned over in Big Drop Two, and she and the boatman were in the water for two to three minutes before gaining the shore on river-left above Big Drop Three. By the time the boat was righted; the woman was given dry clothing; and Big Drop Three was scouted; it was dusk. The woman was now wearing a wool sweater, long-sleeved turtle neck sweater, down vest, jeans, socks, sneakers, and a life jacket; she declined a wool hat, saying she was not cold.

The same boat flipped again in Big Drop Three (Mile 202.2) and the woman and the boatman clung to it while it drifted about a half of a mile until it struck a rock 20 feet from shore. The woman was stripped from the raft and climbed on the rock while the boatman swam ashore. While seeking a throw-line, the boatman could hear her weakening calls for help. The woman slipped into the water and the boatman was unsuccessful in reaching her. The body was found about 30 minutes later, after dark, on river left at Mile 201.5, face up, head out of the water, and still in her life jacket. CPR was initiated and continued for more than four hours by a qualified EMT with negative results.

- 1) The ability to swim is a definite asset for boaters, particularly where the possibility of capsizing in rough water exists.
- 2) Wet suits are advisable for passages through rapids when the water and air temperatures are low. Also, one should readily admit when he/she is cold, and take proper action and accept assistance.
- 3) In judging when to run difficult rapids, one consideration should be to navigate at an early enough time of the day that a recovery from an accident may be effected during daylight. This is particularly important in Cataract Canyon where many of the larger rapids occur in close sequence and complications starting in one rapid may continue into others.
- 4) The autopsy lists the cause of death as drowning. However, hypothermia was undoubtedly a major contributing factor.

Case Incident Report Number: 832111

Date of Accident: May 20, 1983

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Two or Big Drop Three

Relative Flow: Moderate

Gage Reading: 32,600 cubic feet per second

Difficulty: Class IV

Type of Accident: Floated through about two miles of rapids in cold water

Injuries: Drowning

Type of Trip: Private

Type of Boat: Motorized Four-tube J-rig

Description: A 48 year old male was one in a party of 22 in two motorized rafts. The two boatmen were experienced, but their exposure to Cataract Canyon was limited to a previous commercial trip on which they had been passengers. The party hadexperienced difficulty in determining its location and entered the Big Drops unexpectedly, unprepared, and with the two boats widely separated. The first boat completed its runs and waited for the second boat near thmouth of Imperial Canyon.

While being positioned for a run, the second boat struck a submerged rock or log which displaced the motor (it was never determined if this was at Big Drop Two or Big Drop Three). The boatman lost control of the boat and it hit a hole which buckled the raft. Four people were thrown into the river and others aboard sustained minor injuries from loose equipment. One of those in the water clung to the boat until it reached shore; two swam to shore; and the fourth, a non-swimmer, floated downstream about two miles. Although face up in his life jacket, the victim was lifeless when recovered 15 to 20 minutes after the accident. CPR was administered for a short time to no avail.

- 1) Knowing your location on a dangerous river is vital, and if your experience in a canyon is limited, having maps which you can read is necessary.
- 2) Severe rapids should always be scouted. Boat operators who are familiar with Cataract Canyon, even commercial boatmen who make many trips annually, always scan Big Drop Two and Big Drop Three before running them.
- 3) Gear which is not in use should be secured wherever rough water may be expected.
- 4) The ability to swim should be a consideration for passengers. The two swimmers had no difficulty in reaching shore; the non-swimmer drowned.
- 5) Wet suits are advisable where a possibility exists for being dunked in cold water. The temperature of the air was estimated as 70 degrees, but that of the water was variously estimated as between 50 and 55 degrees. Being in water of that temperature without a wet suit for 15 to 20 minutes is conducive to hypothermia, and the latter undoubtedly contributed to the drowning.
- 6) When more than one boat is present, they should be positioned far enough apart so as not to interfere with each other, but close enough to render support in case of an accident. The first of two boats should pull near a bank or into an eddy as soon as possible after running a difficult rapid.

Case Incident Report Number: 937004

Date of Accident: April 27, 1993

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop III

Relative Flow: Low

Gage Reading: 18,840 cubic feet per second

Difficulty: Class IV

Type of Accident: Capsized Boat

Injuries: Drowning

Type of Trip: Private

Type of Boat: Ryken White Water Raft

Description: A 46 year old male in poor physical conditions was in a group of 18 which was navigating Cataract Canyon in seven rafts and a whitewater canoe. After the Big Drops were scouted at 13:15, he was one of two passengers in the fourth raft entering Big Drop II. There, the boat was carried into Little Niagara and both passengers were ejected; one regained the raft quickly and the 46 year old was picked up by his boatman in the tail waves. Being out of position, the raft then washed into the hydraulic known as Satans Gut in Big Drop III (Mile 202.2) where it capsized. The same passenger who quickly regained the boat in Big Drop II, here swam to shore while the boatman climbed atop the overturned boat. The 46 year old floated into Rapid 24. Being in close proximity, the boatman heard him say he could not swim anymore. The victim drifted through Rapid 25 and his body was recovered in an eddy above Rapid 26 (Ten Cent Rapid, Mile 201.1) at 13:30. Efforts to revive the victim were futile and the group carried his body to Hite and reported the accident.

- 1) This boating group was experienced, well equipped, and knowledgeable. Thus, the accident accents the inherent danger in boating through Cataract Canyon.
- 2) The poor physical condition of the victim and his exertion at Big Drop II contributed to his exhaustion and inability to struggle for his life.

Case Incident Report Number: 937010

Date of Accident: May 29, 1993

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Two

Relative Flow: High

Gage Reading: 69,900 cubic feet per second

Difficulty: Class V

Type of Accident: Disintegrated Boat

Injuries: Two Presumed Drownings

Type of Trip: Private

Type of Boat: Cabin Cruiser (1968 Chrysler Tri-hull with jet drive)

Description: Three men, ages 41, 70, and 77 were thrown into Big Drop II (Mile 202.5) without life jackets when their boat broke apart in the part of the rapid known as Little Niagara. The 41 year old survivor was able to hold onto a loose jacket when the boat disintegrated. The men were part of the annual Friendship cruise, a flat water trip which proceeds singly or in groups, down the Green River from Green River, Utah, to the confluence with the Colorado River, and then up the Colorado to Moab, Utah. The junction of the rivers was not recognized and the boat turned right, into Cataract Canyon. The warning sign for dangerous rapids was not seen, and the fact that they were in Cataract Canyon was not realized until the boat reached the South Sea (Mile 206.5), at which place the boat had insufficient power for navigating upstream. The wreck occurred at about 17:30, weather conditions were not a factor, the temperature of the water being about 60 degrees and that of the air in the 80's.

Parts of the boat were perceived by a commercial boating group and nearby Rangers were notified in their camp at Ten Cent Rapid (Mile 201.0) at 17:40, and a search was initiated immediately. The survivor was found below Big Drop Three (Mile 202.0) at 18:10. Numerous searches by helicopter for several days and boats for several weeks failed to find the missing victims.

- 1) Life Jackets are the law in Cataract Canyon, but legalities aside, they should always be worn in rough water.
- 2) Appropriate equipment, including boats, is necessary for white water; Cataract Canyon is no place for a cabin cruiser.
- 3) When discerning you have erred and are in a dangerous situation, stop and wait for help, or make other arrangements for your welfare. Do not proceed.
- 4) If unfamiliar with your surroundings, keep track of your location on a good map.

Case Incident Report Number: 937011

Date of Accident: June 3, 1993

River: Colorado

Section of River: Cataract Canyon

Location on River: Between Mile 205.0 and Mile 201.8

Relative Flow: High

Gage Reading: 63,300 cubic feet per second

Difficulty: Class V

Type of Accident: Swimming

Injuries: Drowning

Type of Trip: Private

Type of Boat: None

Description: On Thursday, June 3, 1993, a 51 year old male drowned while attempting to swim through the rapids in Cataract Canyon. He was last seen alive at the head of Mile Long Rapid at 12:00 where he stopped and ate a sandwich with a friend who was leading a one boat commercial raft trip. The friend offered passage aboard his boat, but the swimmer declined, indicating that he was enjoying his activity and had always wanted to swim the canyon at 60,000 cfs. The victim's body was sighted by Rangers in an eddy at river-right below the tongue of Rapid 24 at 13:58. The temperature of the water was approximately 65 degrees; the high temperature for the day at The Island In The Sky was 75 degrees, but it was somewhat warmer in Cataract Canyon.

The victim had 25 years of experience as a boatman and was an expert swimmer, having swum Cataract Canyon several times, including a passage in 1983 when the river was flowing 83,000 cfs. He was also well outfitted for his trip wearing: two full length wet suits under a wet suit top, wet suit hood, Type III life jacket, swim fins, and boaters gloves. He carried a small flotation bag containing emergency supplies, warm clothes, concentrated foods, and even maps of his ingress route and intended egress. The bag and one fin were missing at the time of his recovery, but the bag was found against the bank of the river at Mile 198.7 at 18:25.

This type of accident is impossible to prevent. The man was aware of the danger inherent in swimming through Cataract Canyon and wished to accomplish the feat at what some consider its most dangerous stage. Canyonlands National Park does not encourage or condone swimming in the canyon, but has no regulations forbidding it.

From Black George's Diary of Canyonlands for 1993:

Cataract Canyon---Ten Penny Camp Thursday, 3 June 1993

New radio: receives OH, transmits on local channel OH, but will not hit the repeaters

1130 With Steve in Zodiac to Mile 201.5 to check welfare of expected boating groups

1215 2 Holiday triple rigs

1223 1 Navtech

unexpectedly is a surprise, but not a shock. And when the purple life jacket belonging to Stanley Robert Hollister drifted into the eddy near the head of Rapid 24, I had no idea that Mr. Hollister was still wearing it. Steve was the first to suspect this, I just thinking the life preserver contained a log. Inspection revealed a body wearing it. I was unable to lift the cadaver into the boat, and as the currents in the eddy continually shifted the boat, requiring Steve's attention, Steve could help only sparingly. However, when Steve and I simultaneously attempted to lift the body we were unsuccessful. So, I secured Mr. Hollister's jacket to a D-ring with a karabiner, and secured Mr. Hollister's body with a rope around his shoulders and torso with a throw line for extra security. Steve reported to Jim Braggs (520). Steve tows body to camp.

Collect information describing body and gear he was wearing. Remove remaining swim fin and jacket (evidence). Steve takes 5 pictures.

Helicopter to come for body, Steve = Incident Commander.
Attempt to bag body. Zipper broken. Thank god for duct
tape.

Chopper arrives. Jerry of Two Jays (and Oklamoma) the pilot.

Mike [Hill] 93

with Jerry, he is to replace Steve.

Adrift boat hailed ashore. Steve talks to group leader. No information.

Moki Mac boat hailed ashore. Under private questioning by Steve, Heith, the group leader reveals much---knew the dead man.

Difficult loading body into chopper.

1800 Radio report from Moab: Dead man had a black bag.

Mike and I return to eddy where body was found. Check eddies from there down stream. Looking for bag and Friendship bodies.

1930 Mike spotted the black bag & we retrieve same at Mile198.7 river right., i mile up stream from mouth of Waterhole Canyon.

Cataract CanyonTen Penny (Friday, 04 June 1993	Camp		
	belonging to	dead man,	Stanley

Case Incident Report Number: 957004

Date of Accident: May 17, 1995

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop II, Mile 202.3

Relative Flow: Moderate

Gage Reading: 33,900 cubic feet per second

Difficulty: Class IV

Type of Accident: Thrown from boat

Injuries: Drowning

Type of Trip: Commercial

Type of Boat: Raft

Description: Two rafts of a commercial river company were running the Big Drops when one raft, containing a boatman and a 41 year old helper, struck a rock in Big Drop II. The helper was dislodged from his position and grasped the boatman for security, and as a consequence both men were pitched into the river. The boatman swam to safety, and latter reported that his helper bobbed through the rapids making no effort to extricate himself from the water.

The second boat reached the victim near the mouth of Imperial Canyon (Mile 200.1) where a physician administered CPR, and later pronounced him dead. The group was subsequently encountered by the Canyonlands River Patrol which, in separate trips, transported the passengers and the victim to Hite.

In Retrospect:

Canyoneers should recognize the danger inherent in navigating Cataract Canyon. That one's life is safer in his living room while watching television than it is while cruising through rapids on the Colorado River is self evident. Even when all known precautions are taken, as in this instance, fortuitous events may occur. The safety record of commercial boating companies in Cataract Canyon is excellent, far better than that of private groups, however, they are not immune to accidents.

Case Incident Report Number: 977027

Date of Accident: September 27, 1997

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Two

Relative Flow: Low

Gage Reading: 16,890 cubic feet per second

Difficulty: Class IV

Type of Accident: Capsized Boat

Injuries: Drowning

Type of Trip: Private

Type of Boat: 14-foot Paddle Raft

Description: A 40 year old male was a member of a rafting group consisting of 22 people in two paddle rafts, two row rafts, and two inflatable kayaks, and at Big Drop II he was in a crew of seven in a paddle raft. His wife later reported that he was in poor physical condition at the time of the accident. This was the trip leader's eighth run through Cataract Canyon. The extremes of temperature at The Island In The Sky were 73 and 49 degrees, but it was warmer in the canyon. The temperature of the water was about 63 degrees.

The captain of the paddle boat and perhaps the entire party, was unaware of its location when it reached the Big Drops at 13:30, and nobody scouted the rapids. Much of the experience of the captain was as a passenger. She had been through the canyon four times, but only when the river was flowing about 5,000 cfs. She rated herself as an intermediate boater, and stated that she neither had paddle-captain experience, nor wished to direct the raft through the Big Drops. In addition, after running Big Drop I her attention was distracted by a swimmer whose kayak had capsized there, and as a result the course of her raft was over the crest of the feature known as Little Niagara and into the hole below where it overturned.

Regrouping and rescue operations were complicated by the flipping of the second kayak at Little Niagara with the consequence that three boats were upside down and eight people were in the river simultaneously; three of the eight sustained injuries in addition to the victim. The victim floated for a mile and a half and through four rapids before he was reached at 13:50 below Ten Cent Rapid (Mile 201.0). He was face up and in his life jacket, but lifeless, and attempts to revive him with CPR failed. A passing commercial trip transported one of the injured to Hite from where she was flown by helicopter to a hospital for treatment of possible concussion.

- 1) Being an Olympic champion is not a prerequisite for boating through Cataract Canyon. However, if you are such an athlete, then your chance of surviving a wild float through cool rapids in a life jacket are much better than that of a person in poor health.
- 2) "Where am I," is not a question for a boatman to be asking AFTER he has entered the Big Drops. Bring a good map and use it.
- 3) The Boy Scouts have Laws. A safe river trip has Scouts. Always study Big Drop II and Big Drop III before running them.
- 4) Experience is the best teacher. Have an abundance of it before navigating the Big Drops.

Case Incident Report Number: 0007000009

Date of Accident: May 12, 2000

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop II and Big Drop III (Mile 202.5 and Mile 202.3)

Relative Flow: Moderate

Gage Reading: 27,000 cubic feet per second

Difficulty: Class IV

Type of Accident: Capsized raft

Injuries: Drowning and near drowning

Type of Trip: Commercial

Type of Boat: 18-foot Row raft

Description: Five boats containing 17 boatmen and passengers made a rendezvous for mutual support near the head of Cataract Canyon. The assembly represented three separate trips sponsored by the same company and coordinated for the purpose of safety. At 14:30 an 18-foot oar raft capsized in the Ledge Wave, the first large wave in Big Drop II, and the boatman and four passengers were dumped into the 58-degree water. As they drifted through the tail waves, the boatman clambered onto the overturned craft, helped one passenger aboard, and then the two attempted to assist the other three passengers who were clinging to the sides of the raft. A motorized J-rig which had preceded the oar boat through the rapid was unable to provided assistance because of the proximity of the overturned boat to Satan's Gut, a large hydraulic at the top of Big Drop III.

The capsized raft then became high centered on a rock at the top of Satan's Gut where it remained for 30 or 40 seconds, and during this time all five original occupants were flushed into Satan's Gut. While the raft was stuck, the operator of the J-rig ran Big Drop III and was able to maneuver below Satan's Gut where he retrieved three of the passengers; one was a 74-year old male in cardiac arrest, and another was a 54-year old female in poor condition. CPR was initiated on the 74-year old with difficulty owing to the victim's clenched jaws and clogged airway, but was continued while the J-rig proceeded to Ten Cent Camp (Mile 201.0). There, the medical technician was replaced by a physician and a critical care nurse, both passengers from another boat, and the latter the daughter of the victim. CPR was continued as the J-rig continued downstream to near Gypsum Canyon (Mile 197.2) from where the Park Service was contacted by radio and to where a helicopter was dispatched. The nurse indicated that her father was dead, and the doctor concurred and pronounced him such at 15:08.

The helicopter reached the scene at 16:21 and two Park Service patrol boats, one from Glen Canyon and the other pertaining to Canyonlands, arrived a minute later. The 54-year old woman was in mild distress, having swallowed much water during her swim; she was transported to a hospital by the helicopter at 17:00. The victim, his daughter (the nurse), and one of the boatmen were taken to Hite by the Glen Canyon Patrol, and the Canyonlands Patrol returned upstream to assist in the regrouping of the three commercial trips.

In Retrospect:

This accident occurred in spite of strict adherence to safety considerations and depicts the inherent danger of rapids. In addition it points out that one's age should be evaluated in determining his/her suitability for white water river trips.

This accident was discussed by Christopher Smith in the Salt Lake Tribune, May 19, 2000 (Once Extreme, Rafting Is Now A Family Sport)..... "The physiologic stresses are severe when a person, especially someone older and not in prime physical condition is immersed in turbulent, cold water." Smith supported this statement with a quotation from Dr. Tom Meyers (coauthor of Fateful Journey Injury and Death on Colorado River Trips in the Grand Canyon)..... "There's the involuntary gasp when you fall in, the tendency to hyperventilate, to panic if you cannot anticipate the wave train, and the likelihood of immersion hypothermia, slipping into unconsciousness after you get a few slaps of water in the face."

CANYONLANDS NATIONAL PARK RIVER FATALITIES—Summary

Date	Incident	Location	River Flow (CFS)	Victim		Type of
				Age	Sex	Trip
08/30/67	Swimming	Spanish Bottom	5,140	26	М	Commercial
08/07/74	Swimming	Mile 206	6,740	56	М	Commercial
06/20/75	Log Riding	Rapid 3	47,700	24	M	Private
06/12/79	Capsize	Brown Betty Rapid	49,200	20	M	Private
05/25/80	Capsize	The Slide	38,400	25	M	Private
11/10/82	Capsize	Big Drop III	12,480	32	F	Private
05/20/83	Thrown from Boat	Big Drop II or III	32,600	48	М	Private
04/27/93	Capsize	Big Drop III	18,840	46	М	Private
05/29/93	Disintegrated Boat	Big Drop II	69,900	70	М	Private
05/29/93	Disintegrated Boat	Big Drop II	69,900	77	M	Private
06/03/93	Swimming	Mile Long to Big Drops	63,300	51	М	Private
05/17/95	Thrown from Boat	Big Drop II	33,900	41	M	Commercial
09/27/97	Capsize	Big Drop II	16,890	40	M	Private
05/12/00	Capsize	Big Drop II & III	27,000	74	М	Commercial

INJURY-ILLNESS

Canyonlands National Park River Accident Report

Case Incident Report Number: 830283

Date of Accident: August 17, 1983

River: Colorado

Section of River: Cataract Canyon

Location on River: Mile 208.4

Relative Flow: N/A

Gage Reading: N/A

Difficulty: N/A

Type of Accident: Collapsed Silt Bank

Injuries: Fractured Spine

Type of Trip: Commercial

Type of Boat: N/A

Description: A 50 year old woman was sitting by the river at the base of a cut bank at Rapid 10 when the bank collapsed on her. The woman was in pain and could move neither her arms nor her legs. The incident was reported to Park Rangers camped at Rapid 1 by the woman's son at 16:30. A Flight For Life helicopter was summoned and the woman was evacuated at 20:50. Officials at the hospital stated the woman had suffered a compression fracture of the spine. **In Retrospect:**

The depth of silt and sand deposited by a falling river can be many feet, and when the river rises again, the deposits, being slightly indurated, may be eroded in vertical faces more than 10 feet high. A considerable weight is involved when tall faces founder, which commonly occurs in the spring when rising water in the river saturates and weakens the base of the deposits. Although unusual in August, the banks may give way at anytime and perhaps from other causes. It is never

safe to be immediately below them.

Case Incident Report Number: 850181

Date of Accident: June 13, 1985

River: Colorado

Section of River: Cataract Canyon

Location on River: Mile 207.0

Relative Flow: N/A

Gage Reading: N/A

Difficulty: N/A

Type of Accident: Airplane Crash

Injuries: Abrasions, Contusions, Fractured Collar Bone

Type of Trip: Private

Type of Boat: N/A

Description: At 11:00 a Cessna Turbo 210 airplane crashed into the Colorado River and sank within 15 minutes on the eddy line just below Rapid 12 (Mile 207). Ice cream in a blue life jacket had been dropped from the aircraft to friends in a private river party. The airplane made three passes which were witnessed by a commercial group of 66 people who were less than a mile downstream, and the last two passes were at elevations estimated between 35 and 50 feet above the water; the group felt it was being "buzzed." The commercial group did not witness the crash from which the pilot and passenger, both men, crawled onto the sinking airplane. The latter were rescued by their friends from the private trip. The pilot and passenger sustained abrasions and contusions, and the passenger a fractured collar bone. The pilot stated that the crash occurred when the plane developed an engine problem and he tried to switch fuel tanks.

The injured were treated by an EMT in the private group and shortly afterwards they were transferred to a larger boat of a second, fast-moving commercial trip. The second commercial group transported the victims through the remaining rapids to the mouth of Clearwater Canyon which is in Cataract Canyon (Mile 192.1), but in the segment inundated by the Powell Reservoir. There, the victims were again moved, this time to a private speed boat which carried them to Hite. At 17:00 a small commercial aircraft in Moab, Utah, was contracted to carry the men to a hospital in Grand Junction, Colorado.

The pilot was guilty of violating Federal Aviation Regulations forbidding aviators to fly lower than 500 feet above open terrain except during take offs and landings. He was also thoughtless and unreflective for the safety of himself, his friends and others in the canyon. Although the ice cream drop was anticipated, the boaters and passenger in the plane may not be held responsible for unfamiliarity with aviation laws. However, they must have recognized the peril of the flight, and should have refused to condone it. If any did have such knowledge, then they were accomplices.

Case Incident Report Number: 90R007

Date of Accident: July 6, 1990

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop I

Relative Flow: Low

Gage Reading: 7,150 cubic feet per second

Difficulty: Class III

Type of Accident: Fall Overboard and Cut by Propeller

Injuries: Cut Buttocks, Thigh, and Ankle

Type of Trip: Commercial

Type of Boat: 2½-Tube J-Rig

Description: At 11:30 a woman and her husband, were bounced from the J-Rig in which they were passengers by the tail waves of Big Drop One (Mile 202.7). The woman was swept under the boat and cut by its motor which was running at full speed. The boatman positioned his craft downstream from the swimmers while the husband assisted the woman to shore. She was there bandaged, placed on a backboard, and loaded onto the boat from which she had fallen. All passengers had been instructed to hold on firmly with both hands and to give the boatman the universal sign if somebody fell overboard. Following a complex shuttling of the group's other boats and passengers, the J-Rig proceeded through the remaining rapids into the flat water of the Powell Reservoir at 12:20.

The J-Rig contacted a small boat capable of high speed at Rock Creek in Narrow Canyon (Mile 172.6) at 16:30. This craft carried news of the accident to the Park Ranger at Hite, Utah, shortening the length of time in waiting for a helicopter to transport the victim to a hospital.

In Retrospect:

A secure position is necessary for passengers who are riding in rough water. The plunge into the river would not have occurred had the victim complied with instructions to hold tight. The injuries were incurred because the boatman was not immediately aware that passengers were overboard so he could turn off the motor. The second or two which may elapse from when one falls in the river until the boat is on top of him allow little time for a boatman to react; any signal given must be instantaneous.

Case Incident Report Number: 927021

Date of Accident: June 1, 1992

River: Colorado

Section of River: Cataract Canyon

Location on River: In Dark Canyon

Relative Flow: N/A

Gage Reading: N/A

Difficulty: N/A

Type of Accident: Jumping

Injuries: Fractured Pelvis and Vertebrae

Type of Trip: Commercial

Type of Boat: N/A

Description: At 17:45 a 21 year old male was hiking in Dark Canyon with fellow passengers from a river trip. He decided to jump from a rock into a pool of cloudy water, and when he did, he landed on his rump in six inches of water. The young man had been warned about jumping into unknown bodies of water and afterwards accepted full responsibility for the accident.

Response to his cries for help was immediate and EMT's in the group treated for shock and secured him to a backboard. Two hours were required to carry the victim a mile and a half to a camp at the mouth of Dark Canyon. In the meanwhile another boatman was dispatched to Hite to initiate a rescue. The Park Service Ranger at Hite contacted a Flight For Life helicopter at 20:30, and the patient was evacuated at 23:00. Officials in the hospital reported that the victim's injuries included a fractured pelvis and a compression fracture of one of the lumbar vertebrae.

In Retrospect:

When you are anxious to start an adventure it may be difficult to absorb and respond to all of the advice in preliminary safety lectures. This accident was a consequence of a failure to do so.

Case Incident Report Number: 937001

Date of Accident: March 7, 1993

River: Colorado

Section of River: Cataract Canyon

Location on River: Rapid 5, Mile 210.5

Relative Flow: Low

Gage Reading: 6,840 cubic feet per second

Difficulty: N/A

Type of Accident: Boating

Injuries: Malnutrition and dehydration

Type of Trip: Private

Type of Boat: Fiberglass Canoe

Description: A semiconscious, 37 year old man was found beside Rapid 5 in Cataract Canyon by a river training group. He was suffering from dehydration and malnutrition and was unable to see or speak. First aid was administered by the group which included a registered nurse, and a boat was dispatched to report the incident to a Park Ranger at Hite. A helicopter was summoned and the patient was picked up at 02:50, March 8, and transported to a hospital. A day later the man was released in satisfactory condition.

The victim sought to escape his personal problems by traveling through an unpopulated area which he selected from the sparse appearances of towns on a road map. He sold his car, bought a fiberglass canoe, a little food, and a rifle with which he intended to live off of the land. He had no knowledge or map of the area. He embarked at Green River on February 2, and after several days without seeing any game, continued downstream to the confluence with the Colorado River, arriving on February 19. He was unaware that he was in a National Park or that dangerous rapids existed downstream. The following morning his canoe was inundated in the first four rapids, and when he reached the fifth, he determined it was impassable. Leaving his canoe tied along a rocky bank, the man attempted to climb out of the canyon unsuccessfully, and upon returning to his camp found the canoe badly damaged from banging on rocks. Thus, from February 20 until March 7, he subsisted on six cans of green beans, some noodles, coffee, and a mouse.

- 1) Occurrences like this are impossible to prevent.
- 2) Although the victim had some outdoor experience, his lack of specific knowledge prevented his obtaining more adequate equipment. Had he made inquiries, he might have changed the locale for his isolation.
- 3) The man was fortunate he was found. One in difficulty may anticipate the frequent passage of responsible river groups during the boating season, but they are uncommon early in March.

Case Incident Report Number: 955057

Date of Accident: June 7,1995

River: Green

Section of River: Labyrinth Canyon

Location on River: Fort Bottom

Relative Flow: High

Gage Reading: 24,600 cubic feet per second

Difficulty: Flat Water

Type of Accident: Capsize and Fire

Injuries: Hypothermia and Burns

Type of Trip: Private

Type of Boat: Canoe

Description: A father and daughter, ages 47 and 18, embarked at the Mineral Bottom Boat Ramp (Mile 55.4) on June 7, after receiving a safety lecture from the outfitter from whom their equipment was rented. The father assessed his ability as "lower intermediate" The temperature extremes at The Island In The Sky were 72 and 46 degrees, accompanied by high winds; the temperature of the Green River was about 55 degrees. At 14:30 the canoe turned sideways in the strong wind-caused waves and capsized The two boaters were rolled into the river without life jackets near Mile 41.0 in Fort Bottom. The daughter grabbed a gear bag for floatation and swam to the west bank of the river; fortunately the bag was the one containing her equipment and she set up a camp. The father was swept to the east bank where he had difficulty in climbing ashore and spent a long time in the water. The two established visual and verbal contact at 17:30, and at 21:00 the father said he was cold and was building a fire. Wishing to be as close to his daughter as possible, he did this in dense tamarisk near the river. The daughter woke at 22:30 to see a huge wildland fire on the east bank of the river. The fire eventually burned for two miles around Fort Bottom and covered 120 acres.

Rangers detected smoke at The Island In The Sky during the wee hours of June 8, and shortly after light were dispatched to locate the fire. A ranger in a boat found the daughter at 09:00, and learned of the accident. The father was found at 09:27 (in Fort Bottom at Mile 40.0), soaking his extremities in the river to ease pain. Forty five percent of his body was covered with second degree burns. A medical helicopter was summoned from Grand Junction, Colorado, at 09:31, and at 10:55 the victim was transported to the hospital. He lived to tell the story.

In Retrospect:

- 1) Don't strike matches in a tinder box.
- 2) When high winds whip up waves on flat water so you are having difficulty in controlling your canoe, you are essentially in white water. At the least don your life jacket, and consider pulling ashore.

From Black George's Diary of Canyonlands for 1995 Spring:

Island In The Sky, Canyonlands National Park Thursday, 08 June 1995

Steve [Swanke] had said, "This is the time of the year when crazy things happen. Many of the people who come here in the Spring know what they are doing. But now we get those Krauts and Kansans who don't know shit from nothing." I believe him.

This morning at 0140 I heard Steve shout as he went out of the front door, "There's a fire somewhere." I immediately dressed, ate a bowl of Cereal, and prepared for whatever. My first thought was Mary Beth's iMaynard! computer must have caught on fire. She has had so many things happen to the poor thing in recent weeks. Steve determined that no buildings were burning, and then drove to Grays Pasture, some six miles away, and could smell smoke and see a few small particulates settling from the atmosphere. After calling the Grand County sheriff and advising that office, he called Denice (who is now staying in Moab on nights before she must work), who is responsible for such things at the Regional Fire Center. No reports had been received. We guessed that a fire was burning some where along the Corridor of the Green River as the wind was from the west.

At 0700 we could still smell smoke at the house, and Steve sent Shawn (McCorkick) to the Green River via Mineral Bottom, and me to scout from the mesa. I planned to visually locate the fire if possible or to triangulate from several vantage points if only smoke was visible over an area. I drove to the Green River View Point near Cottonwood Campground, and seeing no indications of a fire, talked with several campers, none of whom smelled smoke during the night This would place the location to the north, in the vicinity Shawn was investigating, or further north. I also talked with two photographers who had arrived this morning, and who had smelled smoke about a mile north of the entrance station. So, I surmised that the smoke was coming up Taylor Canyon which would indeed place the fire in the area to be checked by Shawn.

A few minutes later Shawn called to report that he had met visitors on the Mineral Canyon road who stated there was a fire downstream, probably at Hardscrabble Bottom, but on the opposite side of the river, and that it was probably caused by lighting, of which there had been quite a bit during the night. Steve rather doubted this cause as lightning rarely occurs in the river bottom.

Other reports regarding the location of the fire were received. A Chance overflight by Redtail Aviation yielded a call saying the fire was at Fort Bottom and on both sides of the river. Soon thereafter, Craig Hauke of Resource Management called saying he was on the river in the vicinity and would proceed to the location of the fire and also to a rendezvous with Shawn at Hardscrabble Bottom. While spotting the fire, Craig spotted an 18 year old girl, Meghan, on the west bank of the river, and upon picking her up learned that she was on a canoe trip with her father, that they had turned over about 1430 yesterday, and that her father was missing. She had retrieved or perhaps caught a bag floating from the boat, and as it contained a tent and her sleeping bag, had spent the night under cover.

Our chief concern about the fire was possible damage to a historical site, an old cabin in Fort Bottom, but a higher priority was now at hand --- finding the missing man. Craig spotted a man sitting beside the river, in a burned area, and with his legs in the water. He was almost opposite the site where Megan was found, but being behind an island in the river, each was unaware of the other's presence. Dan Flanigan was a lawyer from Hansas and He was seriously burned, 45% of his body with much of it and degree. As soon as this was recognized a helicopoter was summoned from St. Mary's Hospital in Grand Junction (Colorado). The helicopter picked up Rich Perch, and they flew to where Mr. Flanigan had been carried in Fort Bottom. One hour and twenty four minutes elapsed from the time Flanigan was recognized as being burned until the helicopter departed from Fort Bottom. Flanigan said he had been in the water about two hours and near midnight started a warming fire which escaped from and burned him.

Now attention returned to the fire which had burned about 50 acres in a mile long stretch of the river, and had spread to an island, and to the disposition of the property left by Mr. and Miss Flanigan. I drove to Harscrabble Bottom with gear enabling Shawn to spend the night watching the fire and to pick up Rich in order that he could continue preparations for his new assignment at the Grand Tetons. Rich wished to drive his last trip on the White Rim Road.

On the way back we met a truck from Red River which came to retrieve the company gear left by the Flanigans. We carried the Flanigans' personal gear to The Island In The Sky.

We learned later that MR. Flanigan's life was in danger, and he was flown to the Burn Center at University Hospital in Denver.

Island In The Sky, Canyonlands National Park Friday, 09 June 1995

Mr. Flanigan is in an intensive care unit, but is expected to live. I was planning to depart today, but am now at least two days behind in preparations. I am backing up my Travelmate. Rich left for the Tetons this afternoon.

Case Incident Report Number: 977022

Date of Accident: July 24, 1997

River: Colorado

Section of River: Cataract Canyon

Location on River: Between Big Drop II and Big Drop III, Mile 202.3

Relative Flow: Low

Gage Reading: 11,250 cubic feet per second

Difficulty: NA

Type of Accident: Attempted Suicide

Injuries: Lacerated Wrists

Type of Trip: Commercial

Type of Boat: Row Raft

Description: A 20 year old woman, who was a passenger on a commercial river trip, attempted to commit suicide by slashing each of her writs approximately six times with a Swiss Army knife. Immediately following her act, the woman called for help. Her wounds, which were not serious, were treated by the trip guides and she and her father were taken to the Park Service Camp at Ten Cent Rapid (Mile 201.1). Arrangements were made by radio to meet an ambulance from the nearest community with a hospital, and Rangers transported the woman and her father in the Park's patrol boat to the Hite Marina.

A speculation based on interviews indicate that the woman was moody and had difficulty in adapting socially with her contemporaries. Her father planned the boat trip as an opportunity for them to strengthen their own personal relation.

- 1) Most commercial guides in Cataract Canyon are well trained and versatile. They must be to contend with the unpredictable emergencies which arise.
- 2) The Park Service maintains a camp at Ten Cent Rapid during high water, but only passes through Cataract Canyon once a week during the boating season when the water is lower. The coincidence of the Park Service's presence expedited the transfer of the victim to a medical facility.
- 3) The great outdoors is often touted as a cure all for mental problems. Don't count on it.

Case Incident Report Number: 9807000013

Date of Accident: May 26, 1998

River: Green

Section of River: Labyrinth Canyon

Location on River: Opposite Beaver Bottom, Mile 34.5

Relative Flow: High

Gage Reading: 21,600 cubic feet per second

Difficulty: Flat Water, but with waves up to 2 feet high as a result of high winds

Type of Accident: Capsized Kayaks

Injuries: None

Type of Trip: Private

Type of Boat: 2 Scupper Pro Kayaks

Description: A husband, 38, and wife, 40, were in the second day of a four day kayak trip from Mineral Bottom to the confluence of the Green and Colorado Rivers when they encountered high winds and waves two feet high near Potato Bottom (Mile 37.0). Striking a tree near shore, the wife tipped over and swam until she was swept into another tree where she became entangled. In attempting to free his wife, the husband's kayak also turned over. Both parties then hung onto his kayak until they were able to gain shore opposite from Beaver Bottom on the Maze-side of the river.

The latter stage of the incident was witnessed by a private biking party on The Island In The Sky-side of the river, and this group established voice contact with the pair who requested assistance. Attempts to summon aid by cell phone through a commercial biking party were unsuccessful, and the kayakers were told help would arrive the following day.

A Park Ranger on White Rim Patrol became aware of the situation on the morning of May 27 when informed by the witnessing groups of bikers. The Ranger made voice contact with the kayakers, solicited aid from a private boating group in transporting the stranded to the opposite side of the river, and arranged transportation to Mineral Bottom and Moab.

The wife suffered minor abrasions and a bruised knee; the husband was uninjured. The lost kayak and other equipment were valued at \$2,100. The kayak was found about six weeks later, pinned and partly submerged in Rapid 5 in Cataract Canyon; half of the missing equipment was recovered by a commercial boating party, and subsequently returned.

- 1) Flat water trips become white water trips in high winds. These kayakers were not experienced in white water and should have beached their kayaks as soon as they realized they were in difficulty.
- 2) The couple did wear its life jackets, the lack of which might have had serious consequences.
- 3) It should be noted that the Green River in Labyrinth and Stillwater Canyons is shielded by the topography from repeaters which handle the traffic of cell telephones. Perhaps the best of what little communication that is ordinarily possible is the Park's radio, satellite telephones not yet being affordable for the general public.

Case Incident Report Number: 9807000024

Date of Accident: June 3, 1998

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop I, Mile 203.2

Relative Flow: Moderate

Gage Reading: 45,400 cubic feet per second

Difficulty: Class IV

Type of Accident: Capsized boat

Injuries: Hypothermia

Type of Trip: Private

Type of Boat: 14-foot raft

Description: A boatman, age unknown, and two passengers, one age 44 and the other unknown, were thrown into the river when their raft flipped in Big Drop I. The boatman was able to swim ashore above Big Drop II, but the passengers were swept downstream.

A Park Service Patrol Boat was operating above Big Drop II at the time of the accident, and the Ranger followed the swimmers through Big Drops II and III, and retrieved them near Ten Cent Rapid (Rapid 26, Mile 201.0) at the head of the Lake Powell Reservoir. One of the passengers was in good condition, but the 44 year old was exhausted and hypothermic; he was treated and monitored at the Park's nearby campsite. The overturned boat was recovered at the mouth of Imperial Canyon (Mile 200.2).

The party had planned to row down the canyon until the current diminished and to solicit a tow into Hite from a good Samaritan who might chance by. However, the boat's oars were lost and upstream winds of 20 to 30 miles per hour rendered downstream progress impossible. So, the Ranger contacted the Hite Ranger Station and made arrangements for a Glen Canyon concessionaire to transport the group to the Hite Marina.

In Retrospect:

1) This party was too weak for its undertaking. A 14-foot raft is a small one for the Big Drops at 45,000 cps, and upsets are common. Attempting this trip under this condition with only one boat is risky to foolhardy. More boats and more boatmen make it possible for a group to protect itself. 2) Fortuitously, the Ranger and the Park Service Patrol boat were present to render the support which the private group lacked.

Case Incident Report Number: CANY9807000021

Date of Accident: July 26, 1998

River: Green

Section of River: Labyrinth

Location on River: Island at Mile 41.5 near Fort Bottom

Relative Flow: N/A

Gage Reading: N/A

Difficulty: N/A

Type of Accident: Jumping

Injuries: Broken Leg

Type of Trip: Private

Type of Boat: N/A

Description: At 13:15 an eleven year old girl was jumping four vertical feet from a sand bank into the river. She was a member of a party of seven in three canoes at the island in Fort Bottom (Mile 41.5). As she made her final leap the bank gave way, and she lost her balance. She landed in an awkward position, breaking her left leg in two places. Another member of the party crossed the river and hiked 12 miles to Mineral Bottom where the incident was reported to the BLM Ranger at 19:03. A Flight For Life Helicopter was summoned and the girl and her father were evacuated at 20:58. Although not pertinent to the accident, but germane to the subject of safety, it should be noted that the victim was wearing a life jacket. The depleted group was unable to continue its trip, and the members were transported from the canyon by Park Rangers.

In Retrospect:

Because they are vertical, cut sand banks appear stable when in reality they are not. One has only to watch them crumble from the waves of a passing boat to recognize their fragility. It is unsafe to stand on the brinks of high banks or to sit beneath them.

Case Incident Report Number: 9807000026

Date of Accident: August 15, 1998

River: Green

Section of River: Labyrinth Canyon

Location on River: Mile 42.5

Relative Flow: Low

Gage Reading: 4,600 cubic feet per second

Difficulty: Flat Water

Type of Accident: Illness

Injuries: Miscarriage

Type of Trip: Private

Type of Boat: Canoes

Description: A 30 year old woman, a member of a canoe party, suffered a miscarriage extending from 01:00 until 08:30. Members of the group were sent for help at 05:00, and they hiked one mile upstream until they could cross the river to Hardscrabble Bottom, and then hiked 9 miles on the White Rim Road to Mineral Bottom where the incident was reported to the BLM Ranger at 10:15. The BLM Ranger relayed the information to the Moab Fire Center and the Park Service was notified.

Of the two helicopters in the region, one was on another call and the other was unavailable. Thus, the first helicopter solicited arrived with a Park Ranger at 12:45. Meanwhile, a Park Patrol boat with two Rangers was dispatched from Moab, arriving at the scene at 13:15. The helicopter departed at 13:10 with the patient and her husband, and the Rangers retrieved the couple's canoe and equipment transporting it to Mineral Bottom by boat and to Moab by truck.

- 1) Medical helicopters respond to requests in the order in which they are received. In this case the reply to the need of the river party was delayed by an hour. Even so, the patient was fortunate that her group was located in a position from which it could request assistance.
- 2) The rapid response of the Rangers is made possible by the policy of the River Patrol to consider no incident complete until all boats and equipment are prepared for another.

Case Incident Report Number: CANY9907000005

Date of Accident: May 27, 1999

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Three

Relative Flow: Moderate

Gage Reading: 40,400 cubic feet per second

Difficulty: Class IV

Type of Accident:

Injuries: Near Drowning

Type of Trip: Private

Type of Boat: Row Raft

Description: At 15:30 a woman passenger and her boatman were thrown from their raft by the large wave at the Frog Hole, a massive hydraulic in Big Drop Three (Mile 202.1). Although slightly suppressed at low flows, and partly drowned at high flows, the Frog Hole is most sinister at a Moderate stage when a wave as high as 25 feet may develop. The boatman regained the boat, but the woman drifted down stream. The two were in a group including 17 people, and were in the first boat in a sequence of seven rafts and two kayaks. Prior to the trip the group leader investigated reports of the flows of the Green and Colorado Rivers for the purpose of determining if the combined waters in Cataract Canyon were within the range of experience of the boatmen. They were, but the rates increased rapidly after the expedition was launched. The passengers were offered the opportunity of walking around the Big Drops and some accepted while others declined. The temperature of the water was 55 degrees.

The victim was swimming when last seen, but when reached at Ten Cent Rapid (Mile 201.1) she was face down in the water, breathless, and without a pulse. CPR was initiated and after 20 minutes the woman was revived. At 17:30 contact was effected with a nearby commercial boating group which possessed a radio. By scaling a wall of the canyon, a member of the commercial group established liaison with a small aircraft which in turn communicated with a Park Service Ranger at Hite, Utah. A Flight For Life helicopter was summoned and the woman was evacuated. After three days in the hospital she suffered only short term loss of memory (regarding her swim) and complete recovery was expected.

The trip leader or boatman could have insisted that the victim walk around Big Drop III if they considered the margin of safety small, but after safely negotiating Big Drop II, such a decision would seem unlikely. The lesson of this near tragedy is that unexpected emergencies are inherent in the navigation of dangerous rivers.

Case Incident Report Number: 990700006

Date of Accident: June 10, 1999

River: Colorado

Section of River: Cataract Canyon

Location on River: Near Spanish Bottom, Mile 213.3

Relative Flow: N/A

Gage Reading: cubic feet per second

Difficulty: NA

Type of Accident: Hiking fall

Injuries: Broken Arm

Type of Trip: Private

Type of Boat: Canoes

Description: At 14:00 a woman, age unknown, fell and broke an arm while hiking down the Doll House Trail near Spanish Bottom. Her party had just completed a multi-day canoe trip on the Green River and was to be picked up by a boating service and taken to Moab the following day. About 15 minutes after the accident the woman was found by three boatmen of a commercial river party who were equipped with two portable radios and a cellular telephone. The boatmen administered first aid and called by radio to the Park Serice for assistance.

- 1) This incident was quickly concluded because of the presence and communication equipment of trained boatmen.
- 2) Although not a life threatening situation, a helicopter was determined the best means of transportation because of the remoteness of the area. The patient's discomfort was a major consideration in deciding against the length of time necessary for a boat trip.

Case Incident Report Number: CANY9907000005

Date of Accident: May 27, 1999

River: Colorado

Section of River: Cataract Canyon

Location on River: Big Drop Three

Relative Flow: Moderate

Gage Reading: 40,400 cubic feet per second

Difficulty: Class IV

Type of Accident:

Injuries: Near Drowning

Type of Trip: Private

Type of Boat: Row Raft

Description: At 15:30 a woman passenger and her boatman were thrown from their raft by the large wave at the Frog Hole, a massive hydraulic in Big Drop Three (Mile 202.1). Although slightly suppressed at low flows, and partly drowned at high flows, the Frog Hole is most sinister at a Moderate stage when a wave as high as 25 feet may develop. The boatman regained the boat, but the woman drifted down stream. The two were in a group including 17 people, and were in the first boat in a sequence of seven rafts and two kayaks. Prior to the trip the group leader investigated reports of the flows of the Green and Colorado Rivers for the purpose of determining if the combined waters in Cataract Canyon were within the range of experience of the boatmen. They were, but the rates increased rapidly after the expedition was launched. The passengers were offered the opportunity of walking around the Big Drops and some accepted while others declined. The temperature of the water was 55 degrees.

The victim was swimming when last seen, but when reached at Ten Cent Rapid (Mile 201.1) she was face down in the water, breathless, and without a pulse. CPR was initiated and after 20 minutes the woman was revived. At 17:30 contact was effected with a nearby commercial boating group which possessed a radio. By scaling a wall of the canyon, a member of the commercial group established liaison with a small aircraft which in turn communicated with a Park Service Ranger at Hite, Utah. A Flight For Life helicopter was summoned and the woman was evacuated. After three days in the hospital she suffered only short term loss of memory (regarding her swim) and complete recovery was expected.

The trip leader or boatman could have insisted that the victim walk around Big Drop III if they considered the margin of safety small, but after safely negotiating Big Drop II, such a decision would seem unlikely. The lesson of this near tragedy is that unexpected emergencies are inherent in the navigation of dangerous rivers.

OTHER

Canyonlands National Park River Accident Report

Case Incident Report Number: 820165

Date of Accident: May 29, 1982

River: Colorado

Section of River: Cataract Canyon

Location on River: Rapid 10

Relative Flow: Moderate

Gage Reading: 36,500 cubic feet per second

Difficulty: N/A

Type of Accident: Impaired Judgement

Injuries: None

Type of Trip: Private

Type of Boat: Fiber Glass Motor Boat

Description: Two men and a woman, who were members of the Friendship Cruise, did not recognize Mineral Canyon (Green River, Mile 52.2), their destination for the day. The Friendship Cruise is an annual event, a several-day trip in which motorized boats descend the Green River from Green River, Utah, to the confluence with the Colorado, and then ascend the Colorado to Moab, Utah. The trio continued to the confluence which it did not notice, and turned downstream into Cataract Canyon and past the warning sign for dangerous rapids, instead of upstream toward Moab. The boat shipped water at Brown Betty (Rapid 1, Colorado River Mile 212.3) and after running it the members put on their Type II life jackets. After running Rapid II an unsuccessful attempt was made to return, and the participants decided to continue downstream. At 22:00 they stopped at the camp of a party which was descending Cataract Canyon (Rapid 10, Mile 208.5), and there they spent the night. The party had missed its intended goal by 60 miles!

A hiker reported the location of the erring group at 18:30 on May 30, and it was reached by a Park Service search party at 10:15 on May 31. On June 1 the men, woman, and their equipment (including numerous empty beer cans) were hauled to Hite on a Park Service J-Rig. In a subsequent interview with a member of the group which was descending Cataract Canyon, it was reported that the trio was intoxicated when it arrived at camp.

- 1) If you drink don't drive. In this instance it led to not knowing or caring about location, and the inability to perceive a dangerous predicament. That nobody was injured is miraeulous.
- 2) Two wise actions were taken by the three boaters: although inadequate for white water, they put on the Type II life preservers which were available when they realized they were in rapids; and when the full recognition of their situation occurred they did not proceed but waited for assistance.

41.5

Case Incident Report Number: 977029

Date of Accident: October 29, 1997

River: Green

Section of River: Labyrinth Canyon

Location on River: Potato Bottom

Relative Flow: Low

Gage Reading: 6,490 cubic feet per second

Difficulty: Flat Water

Type of Accident: Involuntary Swimming

Injuries: Mild Hypothermia

Type of Trip: Private

Type of Boat: N/A

Description: At 14:30 a 16 year old boy, a member of a biking trip traveling on the White Rim Road, jumped into the Green River with the intention of a brief swim. His entry was at Mile 36.2 in Potato Bottom at which place the main current of the river is on the left (his) bank and was flowing at a rate of about three miles per hour. He was attired only in swimming trunks. The temperature of the water was 60 degrees, and that of the air was 45, with the air temperature predicted to drop into the 30's that night. The lad was swept downstream and he extricated himself on the opposite bank near Mile 34.2 after a two mile swim. He was without means of rejoining his group and of protecting himself from the cold.

The incident was reported to a passing commercial outfitter who contacted Park Rangers at 16:56 by a cellular telephone, and a rescue operation was initiated. It was necessary to bring a canoe from Moab which entailed driving over the rough road and steep grades of Hardscrabble Hill. Thus, the operation was executed after dark, and the victim was reached at 20:24. He was treated for hypothermia and transported back to his friends.

In Retrospect:

Never jump or dive into an unknown or untested body of water. This adage is particularly applicable to muddy rivers where the bottoms cannot be seen and the danger of striking submerged rocks or logs exist, or as in this instance, of encountering a current too strong to swim against.

From Black George's Diary of Canyonlands for 1997 Fall:

White Rim, about I mile south of Potato Bottom
Wednesday, 29 October 1997

Alyssa and John left camp at 0815 for their ascent of Moses and attained the summit at sunset. I was able to watch most of the climb, which I did through Alyssa's binoculars. The clear morning sky clouded during the day, but a short break at sunset, lit the tower in brilliant red, silhouetted against a dark gray sky.

During the day I dried the other's tents and sleeping bags, washed dishes, and packed camp into the truck in the event they wished to move to another site. The only other people seen were a young German Couple, backpacking up the Alcove Spring Trail.

At 1545 I received a radio call from 500 (ISHY) advising that a person was stranded on the west side of the Green River near Potato Bottom, and that if possible I should drive there to tell the members of his party that assistance was on the way. 524 was dispatched for that purpose also, and to assist with the rescue later. After difficulty in communicating with Alyssa, I decided my principal responsibility was to Alyssa and John who would be descending in the dark. Having no boat or other means of effecting a rescue, all I could do would be to alleviate the worry of the party about 45 minutes sooner than 524.

A member of a biking group camped at Potato Bottom Site B had jumped into the river from a rock. The current carried him to the opposite bank about a mile down stream. The subject was uninjured, but was attired only in swimming truncks. The night's temperature was expected to be in the low 30's; so, his succumbing to the cold was a possibility.

Steve (520) and Dave Walton (522) brought a canoe, life jackets, etc. from the river cache in Moab. Steve and Mark Yeston (524) launched the canoe at Potato Bottom while Dave flagged the egress route some 3 miles downstream, the White Rim there being near the level of the river and passable. The recovery was made, and the victim, a lad of 16, was in good condition despite 6 hours in cool air and 4 in the dark.

John and Alyssa completed their last rappel in darkness, I being able to follow their progress by their head lamps. They reached the patrol truck at 1915 and by the time we reached the area of the accident, the rescue was complete.

We pitched another late camp and have a long distance to drive tomorrow.

Case Incident Report Number: 9807000016

Date of Accident: June 15, 1998

River: Green

Section of River: Junction of Labyrinth and Stillwater Canyons

Location on River: Anderson Bottom (Mile 31.5)

Relative Flow: cubic feet per second

Gage Reading:

Difficulty:

Type of Accident: Illness

Injuries:

Type of Trip: Private

Type of Boat: Canoes

Description: At 22:30 the Park Service in Moab, Utah, received a 911 call from a man at Anderson Bottom stating that his wife, 49, was very ill; symptoms: headache, nausea, weakness, tightness of chest, tingling and numbness of hands, and the opinion that death was near. The woman was in a group canoeing on the Green River.

Two Rangers were dispatched by helicopter the following morning, arriving at Anderson Bottom at 06:20. The patient's symptoms had improved slightly during the night, but she required transportation to a hospital, which was effected by the helicopter at 06:35.

- 1) Boating groups on the Green (and Colorado) River are remote from assistance, and prompt reaction to an accident or illness cannot be relied upon. The quickest possible response with a means of evacuation was by the helicopter, and eight hours elapsed before daylight when the helicopter could depart.
- 2) Modern communications systems are a great asset in reporting emergencies. However, they are of little use in most of Labyrinth and Stillwater Canyons where the walls of the canyons block transmissions. Anderson Bottom is an exception to this generalization, and being in a large open area, messages are more likely to be received.

Case Incident Report Number: 9807000027

Date of Accident: August 22, 1998

River: Green

Section of River: Stillwater Canyon

Location on River: Water Canyon, Mile 4.5

Relative Flow: Low

Gage Reading: 4,170 cubic feet per second

Difficulty: Flat Water

Type of Accident: Strayed Conveyance

Injuries: Bruised Ego

Type of Trip: Private

Type of Boat: Canoe

Description: Camped near the mouth of Water Canyon, a visitor and his companion awoke to find that their rented and unsecured canoe had abandoned them in favor of the Green River. The couple, leaving most of its equipment at camp, hiked toward the confluence with the Colorado River, 4.5 miles distant. About half of the way to the junction they encountered and recovered the undamaged canoe, and paddled to their scheduled meeting with a commercial boat operator. The visitor reported the accident to The Island In The Sky and two days later the equipment was retrieved by the Canyonlands River Patrol and dispatched to its owners.

During the night of August 21-22, a local storm not suspected by the canoeists, raised the level of the river somewhere upstream from their camp. While they slept the river rose and subsided, and during the interim the River Gods furtively escaped with floating booty.

In Retrospect:

Canoes, like dogs of low fidelity, may drift from home when not restrained by careless masters. Most boatmen tie their boats upon landing and generally improve security before turning in for the night. Some even sleep across their bow or stern lines in order to be wakened by any undesired movement.

At night all boats should secured beyond any reasonable doubt of dislodgement. Canoes, kayaks, and small boats may be carried high above the water line, but being light and vulnerable to the wind, it is safer if they be tied even there. All larger craft should be secured by at least one line, preferably a high line, and where exposed to currents, two and even three lines are appropriate.

Case Incident Report Number: 9905000096

Date of Accident: June 19, 1999

River: Green

Section of River: Labyrinth Canyon

Location on River: Upheaval Bottom

Relative Flow: High

Gage Reading: 26,700 cubic feet per second

Difficulty: Flat Water

Type of Accident: Hiking and Involuntary Swimming

Injuries: Dehydration and Hypothermia

Type of Trip: Private

Type of Boat: None

Description: A 51 year old man, weight 275 pounds, was hiking on the Syncline Loop Trail with a companion, another male of unknown age. At 17:00 the 51 year old felt he could not proceed because of dehydration and heat exhaustion. The companion instructed his friend to wait, left his remaining water, and started up the trail for assistance. However, the companion also became fatigued, and each spent the night on the trail at different places. The temperature at The Island In The Sky ranged between 88 and 60 degrees, but it was much warmer on the Syncline Loop Trail.

Both men started hiking at first light the following morning: the companion to The Island In The Sky where he reported the situation to a Park Ranger; and the 51 year old, leaving a note on a trail sign, walked three miles down the Upheaval Canyon Trail to Upheaval Bottom (Mile 44.0) on the Green River. While thrashing in the thicket along the bank, the victim fell in the river. Whenever the current carried him close enough to shore, he attempted to hold onto tamarisk branches, but the force of the water prevented him from extricating himself. He continued this activity while he was carried five miles to Tent Bottom (Mile 39.0) where he attracted the attention of a canoe party. The victim was rescued and revived, and then from 14:00 to 16:00 rode with the canoe group to Beaver Bottom (Mile 35.0). There, a vehicle on the White Rim Road was solicited, and the victim was driven to the top of the Mineral Canyon grade and contact with the Park Service at 17:32.

Meanwhile, the Park Ranger dispatched to find the victim at his overnight site found his note instead. He was able to track the 51 year old into the tamarisk near the river, but no further. The search was then expanded, which activity included the use of a helicopter. The helicopter was signaled by the canoe group which had effected the rescue, and news of the victim's impending arrival above the switchbacks at Mineral Canyon was relayed to Park Rangers.

- 1) Take advantage of available information before starting a hike. The victim was in good health, but not in good condition and was grossly overweight. The Syncline Loop Trail requires strenuous exertion. This information was available at the Visitor Center at The Island In The Sky.
- 2) The quantity of water carried was inadequate. One gallon is recommended for this hike at this time of the year; a large person may need more. This information was also available.
- 3) When one is partly incapacitated, in a secure position, assistance is being sought, and is told to remain in place, he should do so. To hike three miles toward an uncertain objective was unreasonable and indicative of a confused state of mind.
- 4) Carelessness accompanies confusion, and the plunge into the river was the consequence.
- 5) The victim was fortunate.

Case Incident Report Number: 0007000005

Date of Incident: April 6, 2000

River: Colorado

Section of River: Cataract Canyon

Location on River: Brown Betty Rapid (Rapid 1, Mile 212.3)

Relative Flow: Low

Gage Reading: 8,460 cubic feet per second

Difficulty: Class III

Type of Accident: Flooded and lost canoe

Injuries: None

Type of Trip: Private

Type of Boat: 17-foot Grumman aluminum canoe

Description: A 46 year old man and his 44 year old wife were flushed into the 54-degree water of the Colorado River when their canoe flooded in Brown Betty Rapid. The man floated through two additional rapids and the wife through three before they gained shores on opposite banks. The canoe with their food, water, and most of their equipment, an investment of \$2,100, continued drifting downstream. The couple then hiked downstream to Rapid 5 before realizing they were in Cataract Canyon. They then reversed direction and hiked 3 miles upstream to Spanish Bottom where they encountered a motor boat operated by a Park concessionaire. The latter reunited the uninjured couple and evacuated them from the canyon. Subsequently, some of the equipment was found by other boating groups, and the heavily damaged canoe was recovered below Rapid 8 (Mile 209.0) by a Canyonlands River Patrol.

The victims launched at Mineral Bottom on the Green River on April 4 with the intention of being picked up at the confluence with the Colorado River, 52 miles downstream, on April 7. They failed to recognize the confluence of the rivers, mistaking it for the abandoned channel of the Green River at Anderson Bottom, 31 miles upstream. When they saw the large sign warning of the dangerous rapids $2\frac{1}{2}$ miles ahead in Cataract Canyon, they thought the sign had been vandalized and that a $\frac{3}{2}$ was intended to precede the $\frac{2\frac{1}{2}}{2}$. Two minutes before entering the mill race above Brown Betty they heard the rapid, but too late to paddle ashore; they did, however, don their life jackets, which act may have saved their lives.

This mundane account belies the fact that it is the most shocking of the incidents reported on these web pages. That two competent and well-intended people could be mis-located by 31 miles in distance and an entire day in time is incredulous in itself. Even more astounding are the facts that one of the two victims is not only a former Park Service Ranger with 10 years of experience in Glacier and Yellowstone Parks, but is also a canoe instructor and had previously navigated this same route.

Rangers fight futility in determining how this accident could have been prevented. Even more frustrating is the fact that well trained and knowledgeable people make such gross mistakes. They do, and they did. So, how can better performances be expected from those less qualified and less informed?

Case Incident Report Number: CANY0107000013

Date of Accident: August 7, 2001

River: Colorado

Section of River: Cataract Canyon

Location on River: Side canyon upstream from Rapid 13, river-right, Mile 205.2

Relative Flow: n/a (Low)

Gage Reading: n/a (5,150 cubic feet per second; Colorado, 3,730 + Green, 1,420)

Difficulty: n/a (Class I)

Type of Accident: Flash flood

Injuries: One Ego

Type of Trip: Commercial

Type of Boat: 18' row raft

Description: It had been drizzling during the night of August 6/7 and the heavy clouds observed by a commercial boatman/guide should have suggested the possibility of rain; he and his two passengers were camped by the mouth of a side canyon upstream from Rapid 13 (the head of the Mile Long Rapids) in Cataract Canyon. At 00:30 in the morning their camp was inundated by a flash flood emanating from the side canyon. The boatman was knocked down by knee deep water, and after recovering, futilely attempted to alert his French-speaking guests. The linguistic problem was resolved when flood waters hit the tent of the latter, and the three then salvaged the tent and sleeping bags. The 18' raft in which the party was traveling had been secured by one line to a sand stake in the flood zone, and the boat, much of the camp gear, and some personal property was washed into the Colorado River. As the raft drifted away, the boatman considered swimming to it, but with life jackets and oars ashore, he made a wiser choice.

Two other commercial groups assisted the following morning, leaving food and water, establishing communication via satellite phone, and promising to look for the lost boat and equipment. During the afternoon a boat from the company of the stranded group picked up the distressed party for the continuation of its journey. The lost boat was retrieved at Rapid 18 (Mile 204.1, at the foot of the Mile long Rapids).

In Retrospect: The accident was entirely the fault of the boatman/guide on two accounts:

1) The selection of the camp site was poorly considered. Camping at the mouths of side canyons is never advisable, and in damp weather during the time of year when thunder storms are common, it is absolutely dangerous; and 2) One mooring line is adequate for tended and watched boats, but at least two lines are recommended for overnight docking.

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