



## AAC Publications

---

### **River Crossing – Fatigue**

Alaska, Brooks Range, Arctic National Wildlife Refuge

**Four friends—Dave, Edward, Greg, and Jill—planned to attempt Mt. Itso (8,975 feet) in the Brooks Range. The group flew to the upper Jago River landing site and crossed the river without incident. After five days of strenuous effort, via two different sides of the mountain, the group turned around on June 18, about 800 feet below the summit, in poor weather.**

The retreat was exhausting, part of it spent post-holing to their thighs in soft late-afternoon snow along a creek described by Greg as “much swollen in volume due to precipitation and the time of day.” After a 16-hour day they reached camp, soaked and exhausted.

They slept in late on the 19th and began hiking around noon toward the Jago River Valley, from which they planned to call for a flight out from the more accessible lower Jago River landing zone. In his account of the day, Greg noted that, “The middle fork of Trident Creek had been a pretty easy crossing two days ago, but was now quite the raging stream. We crossed it OK without ropes, but Dave and I talked to each other afterward, noticing that Edward seemed rather tentative and shaky as he made his way across.”

After the crossing, Edward led the way most of the day. At the final talus slope, Greg came upon Edward sprawled on his back on a large, flat rock. Greg asked if he was OK. Edward replied, “barely,” and explained that a rock had given way and he’d fallen. Greg reported that he seemed fine after a few minutes. The group examined his head for injuries and carried his pack across a few more yards of talus.

Dave told Greg he wanted to get the Jago River crossing done that evening, “so we’d have it over with.” Edward concurred. Jill and Greg didn’t object, although Greg mentioned that river levels were lower in the mornings.

At about 6 p.m., Edward spotted an 80-foot-wide, rapid-free stretch of river that looked promising. According to Greg, “We all agreed, either verbally or by lack of dissent, that this place seemed like our best bet.”

They tied a 100-foot rope and 50-foot rope together with a double fisherman’s knot. Greg put on his harness, tied into the end of the 50-foot rope, and set off. He reported, “There had been talk of the followers using a prusik knot, which would secure them to the rope, but the double fisherman’s knot in the middle made that impossible. So the idea was to use a carabiner on a sling instead, which would pass over the knot but not connect the person to the rope firmly.”

Using an ice axe for support, Greg successfully crossed the river, but the current forced him downstream with each step. The deepest part was about 2.5 feet, and he was forced to crouch to keep his stance, so the water was nearly to his waist. When he reached the other side he moved upstream to secure the rope directly across the river from his partners. Greg placed a sling around a rock, connected his harness to the sling so he could use his body weight to keep it in place, then attached the rope to his belay device.

Edward was ready to go first and clipped in to the main rope with a carabiner on a sling. He set off at about 6:15 p.m. He buckled the chest and waist straps on his frame pack for more load stability. His sleeping bag was attached to the outside bottom of his pack. Also using his ice axe for stability, Edward took a more direct route than Greg had, as he was forced to follow the taut rope. When he reached the deepest point, about two-thirds of the way across, he stopped and began to struggle. Edward was in almost waist-deep, and most of his pack and the sleeping bag were soaked.

Greg remembered, "After 30 seconds we were concerned for Edward. He was still upright but did not seem to be able to stabilize himself, and he was clearly in trouble. I was powerless to do anything and just sat there watching him, hoping he would somehow start making progress. I don't know if giving him some slack would have helped, but it didn't occur to me—unconsciously, I may have thought that a taut and stable rope would be the best solid anchor for him.... He made no attempt to unbuckle his pack, and it may have been dragging him down.

"The next thing I recall is seeing Dave, on the opposite bank, walk over to his big rock anchor and undo the coils holding the rope in place. I instantly grasped that his idea was that Edward would then be caught in the flow, and my anchor would then pendulum him over to my side of the river, where he would come ashore. Freed up, he could also perhaps ditch his pack or swim ashore.

"My recollection is that when the rope went loose, Edward suddenly went from his semi-upright stance to face-down in the water, under his pack, and started floating downstream like a log. He stopped briefly when I felt his weight on the rope in my belay device, and I held him for a second. But then the rope went suddenly slack, and I knew immediately that his sling carabiner had gone off the end of the rope. Under the weight of his pack, he was now sailing down the river in the current. I was shocked most by his lack of motion—he was not swimming, thrashing, or moving at all."

Dave ran along his side of the river and got downstream from Edward, swam out to him, and managed to pull his body to shore almost a mile below the crossing site. Edward had been in the water approximately 10 minutes. Dave and Jill began CPR immediately and took turns trying to save Edward's life for two hours, until 8:30 p.m. Greg used a satellite phone to call pilot Kirk Sweetsir, who notified county authorities, who then arranged for a helicopter.

## **ANALYSIS**

Several factors contributed to this tragedy:

**Group fatigue and possible injury during Edward's talus fall.** There were indications before the river crossing that Edward was not functioning either physically or mentally at his optimum. During the crossing, he moved very slowly, lengthening his exposure to the cold water and possible hypothermia.

**Lack of preparation for rigorous Alaskan river crossings.** While the group had experience as climbers and mountaineers, they didn't know or use the best river crossing techniques.

**Desire by the group to "get the crossing over with."** Heuristics and poor group decision-making appear to have played a significant part in the choice to cross the Jago River immediately instead of waiting until morning. Edward and Dave drove this decision, and Jill and Greg "didn't object." If they had re-evaluated the situation, the group may have changed where, when, or how they crossed the river.

**Use of the rope.** The group did not have a plan for how the rope would be used in case of an accident. Roped river crossings are an advanced technique, with the potential to increase hazards if not executed skillfully. The taut rope, which angled upstream during the second half of the crossing, may have made it more difficult for Edward to make progress.

**Failure to loosen the hip belt and sternum strap of the pack.** The group had briefly discussed the merits and demerits of unbuckling their backpacks, but decided to leave them buckled for greater load stability. Experts generally recommend that hip belts and sternum straps be unbuckled during river crossings, so the pack can be jettisoned more easily in an emergency. (Source: Compiled by Dick Dorworth, with input from the team members.)

**Below are some resources for climbers wanting to learn more about managing wilderness river crossings:**

- A good general article from the Trailspace website.
- Tips from the Section Hiker website.
- Advice from the Alaska Division of Parks and Outdoor Recreation on crossing cold, glacier-fed rivers and streams, including an instructional video.

## Images



The heavily loaded climbers of the 2015 team near the Jago River.



Jago River from the air.



A climber crossing the Jago River near the scene of the 2015 accident.

## Article Details

Author	Dick Dorworth
Publication	ANAM
Volume	11
Issue	69
Page	28
Copyright Date	2016
Article Type	Accident reports