

**THE GREAT BEAR WILDERNESS DISASTER:
Lessons in Team Learning**

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Seven Team Decisions, Flight Operations & Search and Rescue Events
September 20–22, 2004

Mon Sept 20	
1:00 pm	Flight delayed; low clouds & obscured mountain peaks
3:00 pm	1. Pilot and chief-of-party make decision to take off in storm. Flight departs Glacier Airport en route to Schafer Meadows.
3:08 pm	Pilot reports through “the canyon” & “switching to backcountry frequency.”
3:15 pm	Pilot reports location as “Essex, inbound for Schafer.” Estimated time of arrival: 330. Forest Service employee observes aircraft flying above ridge top going west to southwest and pilot report “over Essex.”
About 3:30 pm	2. Pilot and chief-of-party disagree on plane’s location. Two bow hunters glimpse plane & hear airplane engine “laboring, then two pops, then nothing Fort Collins Dispatch Center attempts radio contact with negative results; begins radio and tel search.
Approx. 4:10 pm	3. Jodee returns to burning plane and rescues Matt.
4:45 pm	4. Matt and Jodee rescue chief-of-party Ken Good.
Est. 5:25 pm	5. Ken & Jodee convince Matt that team should stay at crash site.
Est. 11:00 pm	Forest Service employee provides map of plane’s location to Forest Service dispatch. Search helicopter flies 200-300 yards from crash site. Aerial search suspended due to weather and obscured mountain peaks. Ground search called off for the night.
Tues Sept 21	
Approx. 7:05 am	Briefing conducted by Forest Service and Montana Aeronautics Division.
7:45 am	Air search resumed
Est. 8:00 am	6. Chief-of-party dies; Matt & Jodee decide to hike off mountain.
9:45 am	On route to assigned grid, helicopter flies Tunnel Creek drainage
Approx. 1:15 pm	Bow hunters report their sighting of plane; they direct Forest Service to general area where air
Approx. 1:45 pm	Suspected aircraft wreckage spotted from ground by Forest Service.
Approx. 2:00 pm	7. Unable to signal search and rescue, Matt & Jodee continue hiking out of the wilderness
2:12 pm	Search helicopter confirms intense fire at site.
2:22 pm	Crash site confirmed with report of no survivors.
2:30 pm	Ground teams recalled
Est. 3:10 pm	Deputy Coroner Chuck Curry and Helicopter Manager/ EMT Hardy Delafield reach accident site
3:21 pm	Deputy Coroner observes aircraft consumed by fire; announces five fatalities.
Weds Sept 22	
Approx. 11:45 am	Sheriff, under sheriff and evidence technician transported by helicopter to accident site.
Approx. 2:30 pm	Matt & Jodee walk out of Tunnel Creek drainage onto Highway 2.

Exemplars of the Role of Dialogue and Reflection in the Transfer of Knowledge and Efficacy Formation:

5. Staying at the Crash Site

Matt wanted to leave the site right away and had to be convinced by the others to stay:

Jodee Hogg: *And immediately Matt wanted to start walking because we were so high up, and he didn't feel like we were going to make it through the night. And Ken said that, no, we had to wait because he wasn't able to walk.*

Matt recalls his state of mind at that moment:

I remember thinking immediately that I needed to leave the site. I think I was in a little bit of shock myself, and I was like, I gotta go. I need to leave. So I was pretty confused on what to do. And Ken was like, No, you can't leave me. I'll die if you leave me. So I think I came to my senses. Jodee and I realized that we had to stay with him, you know, and the fact that we didn't know how long we needed to go to be – like how far it would be to be rescued or anything like that. So we decided we would stay there that night.

Much confusion concerned whether there would be a rescue attempt. Ken, the most experienced, was an army veteran who had 35 years tenure with the Forest Service. Although severely injured, Ken's knowledge and experience was essential to the two younger workers:

Matt Ramige: *I remember asking Ken about the rescue. And, you know, he assured us that there would be a rescue since we never made it to our destination, that they would know the plane was missing and that they would start a rescue effort that night. I was really concerned like what the probability was that that would happen, that they would find us. And he said, Yes, they will start the rescue. You know, he was convinced that that would happen. There wasn't much daylight left that night. But I remember Ken, you know, he had had a long career with the Forest Service, and he had a lot of knowledge about that stuff. So I kind of asked him a lot of questions. And he gave me some confidence that we would be rescued.*

Jodee Hogg: *He was the chief of the party, so we were kind of looking to him to figure out what to do.*

6. Deciding to Hike off the Mountain

After Ken died the next morning, Jodee and Matt sized up their situation. No one was coming to get them and conditions were deteriorating:

Jodee Hogg: *Ken stopped breathing, and I took his pulse one more time and he didn't have a pulse. So I said to Matt, Matt, we need to go. We can't stay here. You'll freeze to death and I can't keep you warm... We won't survive another night. If they don't find us, it's not a risk we can take, because it was snowing and we didn't have any ground tarps to sleep on to keep us out of the wet rain – or wet ground... And so I said, Let's go, Matt.*

Matt recalls that their lack of confidence in the search convinced them to leave:

Matt Ramige: Jodee and I were concerned about the rescue, that we didn't know if we would be rescued, if they would be able to conduct a rescue that day because of the weather, or even if they did try, if they would find the crash site. It was really cold, and we didn't want to just sit around there exposed to the elements. So we decided it was in our best interests to try and get help and do what we could. So we decided to leave.

The episode reflects how awareness of changing environmental conditions including the death of the senior member of the team, led to a reconsideration of the efficacy for being rescued. The detailed survivor accounts (not presented here) convey how dialogue contributed to their efficacy for pursuing another course of action.

In agreeing to hike out, the two survivors initially disagreed on the direction to hike. Jodee wanted to hike toward their original destination and Matt wanted to hike in the direction from which the aircraft had flown. Matt convinced Jodee that the distance to Schafer Meadows was an unknown. In addition, Matt thought that their situation would improve if they dropped their elevation, rather than hiking farther up the mountain. He reasoned that by hiking back they would eventually meet the Middle Fork of the Flathead River and intersect Highway 2. Ken had told Matt that Highway 2 was between 3 miles or 30 miles before he died.