Observation On The 2025 Rolling Thunder Mine Rescue Attempt

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When members of the American sump rescue community gathered in Tennessee on November 8th, 2025 to practice their skills, we didn't know that we'd get a chance to put them to use a day later.

After finishing practice for the day, everyone traveled to the local Mexican restaurant for dinner. As we were walking out of the restaurant, Chris Garguilo received a phone call from Zeb Lilly, the diving coordinator for the National Cave Rescue Commission (NCRC). The Rolling Thunder coal mine in West Virginia had flooded that afternoon, and one of the workers was missing. The incident management team had requested the support of cave divers. They believed the worker was trapped in a dry portion of the mine beyond the flooded tunnels. They wanted divers to swim through the flooded portion of the mine to look for him. The whole group started driving to West Virginia.

The story of the rescue attempt appears in the March 2026 issue of NSS News and in other news sources. The summary is that the group was joined by Jon Lillestolen and several other rescue-trained cavers at the mine. We made two dives to search beyond the flooded tunnels, but did not find the missing person. His body was later recovered after the water was pumped out of the mine. In the remainder of this article, the author will discuss several observations he made during the incident. These are his opinions alone, and readers should expect them to be biased and disjointed from reality due to his only observing a small portion of the overall incident.

Things That Went Well

We were fortunate that a guideline already existed through the grid of intersecting tunnels. Visibility for the first group of divers was almost zero. It had improved to around one foot for the second group. Modern mines run a high-quality cable along their tunnel ceilings so that workers can find their way out even with no working lights. These cables are secured to the mine ceiling with wires that attach to bolt anchors in the rock. There are markers on the cable every few feet so that people know which way leads out of the mine. These are colored reflective markers and small cones. The cones point into the mine, the opposite of cave arrows. This is so that someone running his or her hands along the cable and leaving

the mine will run their hands right over the cone, while someone accidentally going deeper into the mine will run into the flat end of the cone and know to turn around.

If it were not for these cables, finding our way through the sumped tunnels would have been very difficult. There were train tracks along the tunnel floor. We might have been able to follow these, but track intersections might have proved too confusing to be navigable. In one of the parallel tunnels headed in and out of the mine, there was a conveyor belt for moving the coal. It is possible that we could have followed this as well. It is also possible that there were entanglement hazards near the conveyor belt, but the author does not know.

The author noted three other positive elements to how the rescue attempt was run. First, one worker at the mine had been investigating taking cave diving lessons, and he influenced the incident leadership to request the support of cave divers. In a quest for all possible assets, the leadership also requested support from the U.S. military, who while very skilled at warfighting, has no teams trained for this kind of incident. We were contacted by a military pararescue unit, and after learning more about the situation, they pledged their support but did not try to take things over.

Secondly, we had sufficient waterproof packaging materials to move equipment beyond the sumps. We needed to bring a multi-gas detector with us to help us stay away from areas with toxic gasses or low oxygen. We needed to bring a paper map of the mine tunnels. We also needed to bring initial-response materials to help warm up and feed the patient if we found him. Fortunately, someone had a brought a Darren Drum, which is generally water resistant down to one atmosphere. This protected all our fragile materials. We have people bring their initial response kits to each Sumposium, so we had those available as well.

Lastly, someone coordinated with the incident leadership to have a fire truck on scene. This truck was equipped to fill fire fighters' breathing gas cylinders, and they had a DIN adapter with them. Fire fighters' cylinders use a different coupling, and we had feared they would not be able to support us. Most divers arrived with limited amounts of breathing gas after the day's practice session. The truck was able to supply everything needed for the two trips we made. It is important to note that the truck had onboard breathing gas storage but could not compress new gas. After the fire fighters filled tanks for the second dive trip, they had to depart to refill their onboard storage. In the future incidents, management of this resource needs to be carefully controlled by the command team's planning section. There was no air analyzer available to check what was being put into the scuba tanks, though perhaps we could and should have used the mine's multi-gas detectors.

Room for Improvement

While the author feels that the sump rescue community has made improvements in individual knowledge, skills, and equipment, he feels that there is room for improvement in how we organize during incidents. The author was the last diver to arrive and missed many of the initial briefings. Partly because of this, it was unclear what the overall chain of command was. There was no chain of command within the group of divers. Because no one was in charge of the divers, no one made sure that detailed planning or briefings were done. This led to poor information dissemination, resource management, and support for the rest plan.

Within the *Guidelines to Sump Rescue* manual, there is a section on planning which includes a collection of suggestions for incident commanders. Problems with this include that few people outside the sump rescue community know the manual exist, and once an incident occurs, no one has time to read the sixty-odd pages. We plan to produce a condensed booklet with the key concepts, flow charts, and checklists that incident commanders need.

Managing the expectations of leaders not used to cave rescues had other challenges. In mine rescues, the incident leadership are accustomed to almost continuous communication with rescue personnel. In a sump rescue, and in some dry cave rescues, the rescue team(s) may be out of reach for hours at a time. Both sides had to compromise. The incident management team accepted that we had to break their regulations about continuous communication. The divers agreed to try lay new communication wire along the tunnel; the reel jammed quickly. The divers also spent significant time beyond the sump attempting to use the mine's telephone system. When one of the dive teams missed their callout time, a lot of effort went into reassuring the incident leadership that things were OK. We told them the late divers were very skilled and were handling whatever the temporary issue was.

The author would be remiss to not mention a few of the bad decisions he made. Since I had flown to the prior day's sump rescue practice session, I arrived at the incident site with no tanks or lights of my own. I was able to borrow these from other divers. The tanks I received were the heaviest steel tanks I had ever used by a wide margin. I was unhappy about doing a no-vis dive with significant equipment I had never used before. I had to be shamed into joining the group swimming through the sumps.

During one of the traversals, one of the tanks popped out of my shoulder bungee and the bottom clip came off my waist belt. It only stayed attached to me because it also had a

neck clip. Swimming along the ceiling of the mine while following the guideline, avoiding other cables, and managing the loose tank was an adventure.

My worst decision nearly killed me. I got limited sleep on Friday night, and spent most of Saturday night driving to the incident site before getting a few hours of sleep in my car's back seat. My very early Monday morning flight home from Knoxville was a five-hour drive away. I didn't want to miss it. I didn't know how to change the flight reservation, didn't want to pay for whatever fee might have been involved, and pretended to myself that I didn't need to ask someone to help me drive. Therefore, when I exited the mine late Sunday night, I started driving to the airport right away. I got an hour of sleep in a gas station parking lot. Even so, I fell asleep at the wheel and almost went off the road. I chose the only option I thought I had available, and almost died because of it.

Conclusion

During the Rolling Thunder rescue attempt, the dive teams were able to accomplish their objectives because everyone was able to adapt. We adapted equipment, procedures, and to each other's needs. Everyone came into the incident with years of experience, and motivation to try to save the missing party. I hope that by reading this article you are better prepared to do your own part the next time the community is called upon.