The Sunshine Mine Fire: A Rescuer Remembers

By Bill Hawes

The Sunshine mine fire of Monday, 2 May 1972 was the second worst metal mining disaster in the country, surpassed only by the Granite Mountain fire in Butte, Montana, on 8 June 1917. The Granite Mountain fire killed 163, the Sunshine fire, 91. The worst metal mine disaster in the world killed 355 at a mine owned and operated by Braden Copper Co., a Kennecott Copper Co. subsidiary in Chile, in 1945, when a barrel of oil exploded in an underground shop located in an intake airway. It is noteworthy that all three of these disasters involved fire.

At the time of the Sunshine fire, both metal miners and companies had gotten rather complacent about mine fires. They complied with the rather minimal mine rescue requirements of the time. Prior to the fire, Sunshine considered the most vulnerable place in the mine to be the timber-lined, 3,700 foot-deep Jewell Shaft, which the company protected by installing water sprinklers in the shaft. (These were usually tested at noon, when a cage-load of samplers, geologists and engineers was coming to surface.)

When the fire broke out, all mines in the area responded with their teams. ASARCO operated the Galena Mine, Bunker Hill the Bunker Hill Mine, Hecla the Star–Morning and Lucky Friday mines, and Sunshine had its own team. However, manpower was woefully inadequate for the immensity of the fire. Out-of-state mine-rescue teams arriving from Kaiser Resources in Fernie, British Columbia, Cominco, from Sullivan, British Columbia, Anaconda from Butte, Montana, and Kennecott from Eureka, Utah, basically doubled the available rescue capability until additional personnel were trained.

Having worked at Sunshine as the mine engineer from late 1965 until the spring of 1967, when I first heard about the fire, I naturally thought of people I knew and wondered if they were among the missing. At the time of the fire, I was working as the planning engineer at Kennecott's Tintic Division, a hot, high-grade lead-silver-zinc-cadmium mine near Eureka, Utah. Communications were pretty poor at the time of the fire. From first knowledge of the fire—which started when almost all of Sunshine's brass were out of town at a stockholders' meeting—Don Rausch, Kennecott's general manager at Tintic, tried several times to get through to Sunshine to offer the services of Tintic's mine rescue team.

Finally, on Wednesday, 4 May, contact was made and Sunshine gladly accepted the offer of aid. Two planes were charted to fly half of the team up from Provo (the nearest airport) to Kellogg on Thursday, with the other half of the team to follow the next day. At the time, I was not a member of the Tintic rescue team, but Rausch didn't want Tim Hannifin, the mine's general foreman, to leave, so a vacancy existed on the team. I had been on the U.S. and Lark Mine rescue teams prior to joining Kennecott, so I was asked if I'd go. I accepted and was nominally in charge of the second half of the team. Having worked at Sunshine would also prove to be advantageous.

The first half of the team left for Idaho on Thursday, 5 May, with Joel White, the division safety engineer, in charge. I left the next day,

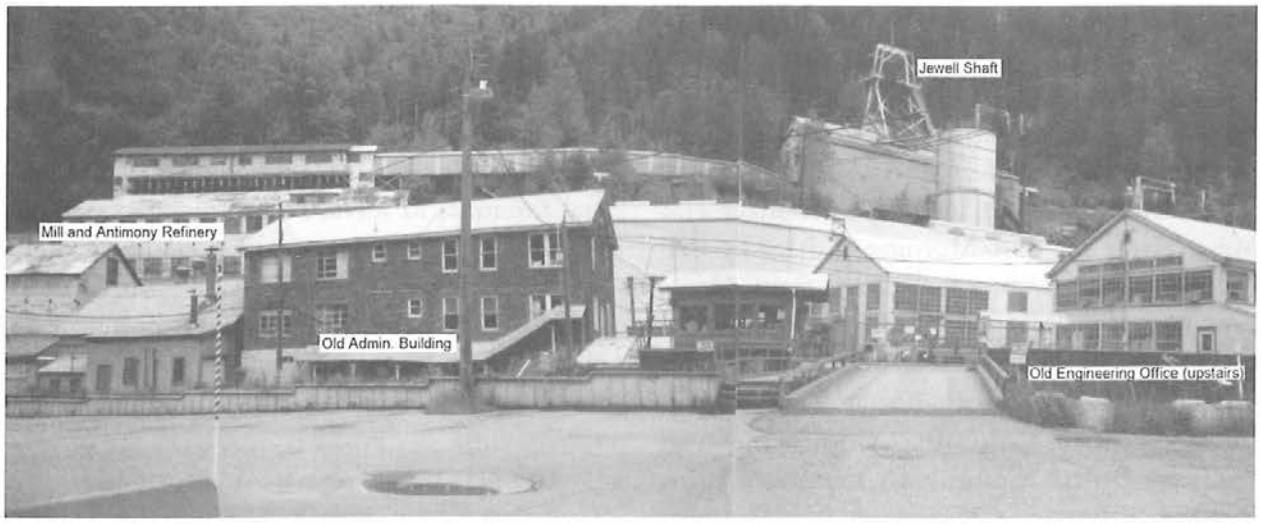
leaving my wife and two small children at home in Payson. All members of the second rescue team, except one, traveled in one plane, while a second, somewhat slower plane carried our bags, the rescue equipment, and team member Fred Hansen. A couple of the hands on our flight had been to the Eureka Elks Club's regular Thursday night meeting and had partaken of too much liquid courage. Feeling somewhat the worse for wear, they scarfed down a Tums every time the plane hit any turbulence.

It was an interesting flight, as we flew over the Great Salt Lake and weren't so high that things were obscured by the altitude. As we approached where Kellogg should have been, the pilot asked where Kellogg was, not exactly instilling a lot of confidence in me. I told him to look for smelter smoke, which he did find. He next asked if the strip below was the only one around. I thought, "Suffering succotash, can't he land the damn plane?" I told him it was the only airport around, and he put down just fine.

We were met by a Sunshine van at the airport at Smelterville and transported to the mine. As the van got close to the mine, I could smell the unmistakable odor of a mine fire. This convinced me of how bad the fire was, to be able to smell it on the surface.

We received some orientation in the engineering office where I used to work, located on the second story above the warehouse. As we went down to the mine yard after this orientation, I ran into Leon Barr, the mill superintendent. After exchanging greetings, he got us transportation: a white Ford station wagon. We went on into Wallace, where Sunshine had gotten us a room at the Best Western Starlight Motel. We had a big room, with enough cots for all of us. One thing we didn't exactly like was that we were split up—two of my crew were taken almost immediately for swing shift. I was to come out on graveyard, the only one of the crew to do so. The next night, Fred Hansen, who arrived a couple hours after us on the second plane, was also assigned to graveyard. This depressed him enough that he drowned his sorrows to the point that I had to report him off as sick the next night.

Sunshine had made arrangements for rescue crews to eat at a Wallace restaurant, so we stopped by and got a bite to eat minus Mindy Peterson and Loy Thomas, the two guys that Sunshine had grabbed for the swing shift. I reported for graveyard and found myself on a team from Hecla's Lucky Friday Mine. I was issued a new MSA one-hour self-rescuer, with minimal directions on its use. It should be remembered



The surface plant of the Sunshine Mine. (Author's photo.)

that in those days self-rescue devices were virtually unknown in metal mines. Sunshine was one of the few that did have them—the half-hour "bluebirds"—cached at shaft stations. The only ones trained in their use were those who had been trained in fire fighting. (Strangely, every member of the Tintic teams received one of these, and we all neglected to turn them back in after we were released to go back to Utah.)

We went down the Jewel Shaft to the 3700 level. It was somewhat smoky, but not too bad, thanks to the efforts of the swing shift. Later, Peterson and Thomas reported that when they went down on swing shift, it was so smoky they had held onto a lifeline from person to person and shuffled down the rail until they bumped into a bulkhead being built. Swing shift finished the bulkhead, which stopped the smoke from pouring down to the 3700 level.

The instructions given the team I was on seemed rather unclear and little happened. After about half an hour, a call came from the surface for a team member with a helmet—the common miners' term for the self-contained breathing apparatus. The Lucky Friday Mine general foreman who was the team captain—Tintic crews would later nickname him "General Patton"—said that he had an engineer he could spare, so I went up to the surface. There I joined a team from the Bunker Hill Mine assigned to dismantle a temporary headframe over a newly drilled vent hole and to install a fan on it. The night evolved into a waiting game; the fan and adapter were being made at Bunker Hill's shops and were far from ready. The crew spent most of the night in the small hoist house for the vent hole hoist. The only things I remember about this hoist house were that it was small, cold, and was completely wallpapered with girly pictures.

Apparently, the vent hole had been completed and was being rock-bolted. The "headframe" consisted of a large-diameter pipe (about five or six feet) with a sheave wheel at its top. It probably had a door near its base, but I can't recall for sure. Periodically, the team leader would call for a progress report on the fan and adapter, or would answer a call from the Sunshine fire control leader. Finally, near daybreak, a very small P&H crane—with a mast that, I swear, had no member larger than one inch light angle iron—picked us up in a steel basket and swung us out over Big Creek some five hundred feet below.

This was, without a doubt, the scariest experience of all my time at the fire. I don't like heights, and the crane's mast looked like it could snap. If it had, it would have been televised, as a Spokane TV station had its spotlight on us. I helped unbolt the stack, then, since I had been up for a long time, left by about 10 a.m., while the rest of the crew awaited delivery of the fan and adapter. What was rather ridiculous was that this crew needed another person like it needed a hole in the head. The fan and adapter didn't arrive until that afternoon.

The next night, I reported again on graveyard and had an easy shift, going down once to take some air samples before and after the fan I had worked on earlier was finally put into operation. The most excitement was the tantrum Gordon Miner, Hecla's V.P. of operations, threw over one person being off. (At the time, Hecla had a one-third interest in the Unit area, from which most of the Sunshine mine's production came.) That person was Fred Hansen, whom I had reported off as sick. In all fairness, the uncertainty of the situation and a lack of sleep were responsible for Miner's display of temper.

The Tintic crews objected to being split up; it comes down to the fact that you want to work with people you know and trust. On the third day we were there we did get reorganized into our own team and assigned to work on swing shift. When we got to the mine, the first thing asked of us was who was our team captain. No one had discussed this before, but we looked around and pointed to Fred Hansen, a shift foreman on the upper levels of the Burgin and also the biggest member of the team, standing about

six feet, four inches.

Sometime after I had taken the air samples on the second night, a setback occurred on the 3700 level. Some of the haulage drift caved in, which, among other things, blocked access to the main underground substation. This Strand Substation was named for Floyd Strand, chief electrician at Sunshine. (When I quit Sunshine, in March 1967, excavation for this substation was complete.)

My crew reported for swing shift at the Silver Summit Mine, which connected into the Sunshine on the 3100 level. We traveled in the mine by rail to an internal shaft, were caged down to the 3000 level, walked back to an eighty-foot-long raise, which we climbed down. This put us on Sunshine's 3100. We walked on this level to the end of the fresh airway. On the other side of some steel vent doors was the #10 shaft collar and hoist room. We knew that there were dead miners there.

As no one knew how we would react to handling bodies, it was agreed that each team would go into the bad air and bag one body in a rubber body bag. It wasn't too bad doing this, since we were in oxygen breathing apparatus—most of the apparatus were the McCaa two-hour units; Bunker Hill had four-hour Draeger's—and couldn't smell the decomposing bodies, and we had also been equipped with heavy rubber gloves. Perhaps one thing that helped was that the bodies were so discolored and bloated that they didn't seem human.

One noticeable thing was that each team member used ten atmospheres of oxygen every time we bagged a body. (The McCaa machines held 135 atmospheres of oxygen.) Generally, the entire team worked on getting a body into the bag. Not only was this exhausting work, but care had to be taken to prevent dismembering the decomposing bodies. After going back to the fresh air base a couple times, we and the other rescue team decided we would bag several bodies and only return to the fresh air base when we were tired. This worked a lot better, and we would bag four or five before returning to the fresh air base, then the other team would take over and do likewise.

Some impressions from that night: It seemed like most of those who died didn't realized they were in danger. Many bodies were lying against the rib in the old hoist room, lunch pails and thermoses open, having a cup of coffee and some of their lunch. Another odd thing: Virtually every body lying on the ground was lying in a brown liquid, which we surmised to be blood, though no wounds were visible. Apparently, they had bled from the eyes, ears, or pores.

At the end of our shift, we returned to the surface, showered, and returned to Wallace. We stopped at Sweets, which was the only place open, to grab a bite to eat, then on to our motel. Our room was on the second floor. As we climbed the stairs, we tossed our bags of dirty diggers under the stairs so that they wouldn't stink up our car or room. Next morning we would grab breakfast, then go to the laundry and wash our diggers with a box of bleach and one of soap. A light lunch followed, then back to the mine for swing shift. We would eat our main meal after shift; generally a steak, although we would kid Fred Hansen, our six-foot, four-inch captain, about having his usual—a T-bone smothered in pork chops.

There weren't a lot of people entering the Sunrise from the Silver Summit, as I remember about four teams. When the mantrip would bring us to the portal at the end of our shift, we would crowd into whatever transportation was available for a ride down to the small mine dry. One night, about twenty of us, virtually everyone, piled into a Ford Ranchero. I don't know who made the tires, but they were good, being subjected to many times their load limit!

While we worked from the Silver Summit side, about halfway through the shift, a support member not wearing a helmet would bring us some drinks at the fresh air base. The citrus-based

soda pop like Squirt, Wink, or 7-Up would go the fastest; last to be consumed was Gatorade.

I earlier mentioned the high oxygen consumption whenever we handled a body. This carried through even to when we would move sacked bodies to a different location to facilitate work or their recovery. Other miscellaneous observations: One night, as we cleared the area near the top of Number 10 Shaft, we could see lights coming down the drift from the direction of the Jewell Shaft. Even though we realized what it was, it was a decidedly eerie feeling.

Much work was going on elsewhere to reestablish power to the Number 10 Hoist, following the loss of the Strand Substation. Westinghouse had some of their field engineers assisting. About the time we ceased coming in via the Silver Summit and started coming down the Jewell Shaft, power had been reestablished and the hoist was usable. This enabled us to explore beyond 3100, and more importantly, to see if there were any survivors on lower levels. The Number 10 Hoist room became the fresh air base.

At one time, and I don't remember the circumstances permitting us to do so, we had dinner with the rest of the Tintic team that was on day shift. One of the day shift members was a very talkative mine foreman, whom we named "Super-Foreman." His constant bragging and general mouthing off relegated his team to always being the back up, waiting at the fresh air base. This continued until the last shift, when they got an opportunity to bag bodies. This did quiet things down a lot!

I will always remember one humorous incident involving the day shift crew. As mentioned earlier, Joel White, the division safety engineer, was in charge of this crew. Aside from his safety duties, he also served as bishop of the Goshen Ward of the Church of Jesus Christ of Latter Day Saints, commonly known as the Mormons. Unfortunately for him, there were quite a few rowdies on his team. White recognized that he would have to accept some conduct that he didn't approve of personally, but his patience was tried to the breaking point one night, when most of his team decided to check out Wallace's well-known houses of prostitution. As the night progressed, Joel became anxious to get his crew gathered up and back to their motel in Kellogg so they could make day shift. He and Ron Bray, another straight arrow, honked the horn of the vehicle a few times outside the house. No luck. White said something to the effect of "Ron, go in there and round up the crew!," to which he received an answer very definitely in the negative. Finally, one of the crew came out and said, "Bishop, they don't have curb service here, you will have to come in."

One week after the fire broke out, word circulated that two survivors had been brought to safety from the 4800 level using the pilot hole for the Number 12 Shaft. Work at this approach was being done by a few good U.S. Bureau of Mines personnel, most of whom were known to the rescue teams as they all had experience in industry prior to going to the government. This news was like a shot of adrenaline to all the rescue teams, giving us hope that our efforts might save additional lives. There was hope that some miners might have barricaded themselves safely, as one of the crew on the 5200 level reportedly had coal experience and had survived a mine fire by barricading.

The circumstances which made the survival of the two men possible are not widely known. As the mine was being evacuated on 2 May, Harvey Dionne, a shift foreman whose area included the area around the Number 12 Shaft pilot hole located near the Jewell Shaft station on the 3700 level, had the cover removed from the pilot hole, enabling fresh air to get down. The Bureau of Mines personnel had the hard work of scaling the hole down so that it would be safe and large enough for the capsule used. These Bureau personnel, all of whom had industry experience, deserve the highest respect. Many

other U.S.B.M. personnel, inspectors in other parts of the country, would only go with us after the area was safe, and they contributed nothing to the rescue effort.

It is worth noting that all the time the rescue teams were working, additional men were being trained in mine rescue. This requires forty hours, meaning five days, of training. By the time of the news of two men being rescued, additional rescue personnel began to appear. It's a good thing, as the original responders were stretched pretty thin, plus we'd booted one off the rescue team. This person, one of the local hands, would always find his helmet low on oxygen when it was his team's turn to go into the smoke. This resulted in either a short-handed team, or someone from another team filling in and thus getting shorted on rest. We caught this person bleeding oxygen off of his apparatus. He professed not to know what the knob he was turning did!

Once power was restored to the Number 10 Hoist, reconnaissance of the lower levels was possible. We were assigned to go to the 3700 level. It was truly eerie seeing the abandoned and darkened "Blue Room," which served as the shift bosses' lunchroom and office. As we explored the area of the "chippy" (auxiliary) hoist room, we thought that we were going to find a lot of bodies, as there was the brownish liquid that we had observed where the bodies lay that we had picked up before. It turned out to have been something else, probably oil, as there were no bodies. We found seven bodies behind the #10 Shaft, by the loading pockets, but none at the Blue Room or in the chippy hoist room, where we had expected to find them.

We next had to explore around the station area of the 3850 and 4000 levels, and make some electrical connections at the station. When we got here, via the #10 Shaft, we couldn't find the electrical box on the 4000 level. Our guide, a Hecla geologist, was at a loss as to where this box was as well. Fortunately, I remembered that when I worked there, the last underground task I had performed prior to tramping out was to give lines for a breakout to a service raise. In order to increase the hoisting capacity of the #10 Shaft, the service compartment from the 4400 level up to the 3700 level was stripped out, and the utilities placed in vertical raises driven by an Alimak raise climber so the service compartment could be used for hoisting. In addition to designing the chippy hoist installation on the 3700 level and selecting the hoist, I had laid out all of these raises and saw all except the last one to completion. So I knew where the breakthrough should be. I took the team to where the breakthrough was and we found the box and made the changes.

On what turned out to be our last night of rescue work, we went to the 4400 level, along with a team from Hecla's Star Mine, where there were seven bodies to be bagged. The heat was pretty bad down there, and the Star guys went up after bagging one or two bodies. The Tintic team, used to the very hot Burgin Mine, stayed down and finished the job. The men whose bodies we bagged here had known that they were in danger. I remember one with a "bluebird" self-rescuer in his mouth, another with the hose from a set of cutting torch bottles in his mouth. What was so sad about these dead was that escape had been possible by going down two nearby raises to the 4800 west lateral, where the two survivors were found. Unfortunately, escape plans never considered very many of the possibilities.

It was on this night that we heard that other rescue crews had found and accounted for all the Sunshine's remaining miners. None was alive. There had been hope that the twenty-six men on the 5200 level might have barricaded themselves and be found alive, as these men included the one who had survived a previous fire by barricading. However, they were all found dead by a partially constructed barricade.

At the end of our shift, we went to the surface and were herded away from the main dry to showers in the basement of the old brick ad-

ministration building. It seems that someone had contacted the health department to see if any precautions were necessary for those handling corpses. The upshot of this was that our diggers were taken and burned. We had a thorough shower with disinfectant soap and were given new clothes (one room in the building looked like a J. C. Penney store). Before we went back to Wallace for dinner and bed, we stopped for a last drink of Gatorade—and for the smokers, a last free pack of smokes—courtesy of the Red Cross, and talked among ourselves. The let down was rough; all of the hard work and the hope for more survivors had been in vain.

A day or two earlier, I sensed that the end wasn't too far away, so I went into the state liquor store in Wallace and bought a fifth of Jim Beam to consume when the rescue effort was over. A bunch of U.S. Bureau of Mines inspectors were staying at the same motel and they asked us to stop by for a drink, which we did. I brought my bottle down, opened it and tossed the cork away. Fred Hansen questioned my wisdom, but later saw that I was right—not a drop was left! (Fred could hold a bit.)

That day we turned in later than usual: around 3 or 4 a.m. We called Tintic around 8 a.m. and requested that they make arrangements to get us home the next day, as we needed the day to rest and sort of come back to normal. The dayshift crew left for home that day on a regular airline flying out of Spokane and was greeted by Salt Lake TV and press when they landed at Salt Lake International. Fortunately, the following day, the only ones who met us at Salt Lake International were family and a couple mine people. During the extra day we spent in Wallace, we made statements to the board of inquiry on the fire. We also assigned Fred Hansen the additional duty of being our "designated drinker." Several of the Hecla team members with whom we had worked came by to have a drink with us and wish us well. Fred did the social bit quite well.

As an aftermath of the fire, Kennecott's Tintic Division ordered one-hour self-rescuers for all personnel and trained them in their use. These devices were used several months later when an underground transformer caught fire and filled the mine with smoke. Whether they were necessary, I can't say, but we suffered no injuries or deaths in that incident.

Kennecott also went to bat for its salaried personnel who participated in the Sunshine rescue. Initially, all Sunshine wanted to do was reimburse Kennecott for our salaries straight across, which would have meant that hourly personnel would have made more than salaried ones. Kennecott successfully got Sunshine to pay overtime for all, and also double-time whenever bodies were handled. The outcome of all of this was that I had enough money to take the family on a vacation that year, something that had looked unlikely prior to the fire.

Perhaps the biggest effect that the fire had was to shatter metal miners' belief that fires only happened in coal mines. It also was responsible for much legislation concerning metal and nonmetal mines, including requirements for more mine rescue capability, and that everyone underground carry an approved one-hour self-rescue device and be trained in its use. ■

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