

# MERIDIAN

Summer 2020



The Quarterly Publication of the Mountain Rescue Association

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# Treating Lightning Strikes

**A Cold Canyon Rescue  
Surviving Rope Failure**



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## Summer2020

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**ON THE COVER:** Lightning strikes at a rope rescue training weekend at Cloud Cap Inn. Photo by Hugh Brown, Hood River Crag Rats, August 2019.

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## President's Message Summer 2020

By Art Fortini, MRA President



MRA President Art Fortini

Being a member of the SAR community is a wonderful thing—you're part of a professional, supportive community that works to make the world a better place, one rescue at a time. We all derive some sense of benefit from what we do, but it takes a lot of time, and we all incur a financial burden. Being a member of the MRA, though, helps defray some of those costs.

[MRA Small Stores](#), which can be accessed through the Member Services link on the [MRA web site](#), allows you to buy t-shirts, beanies, belt buckles, coffee mugs, etc.—all with the MRA logo. The goal of the small stores is to break even, not to turn a profit, so things are sold essentially at cost. You will, however, need to know the password to get in, and you can get that from either your team leader or your region chair. If you have thoughts on new items that we should stock, feel free to contact the [Small Stores manager](#).

Perhaps bigger benefits of MRA membership are the pro deals that various gear manufacturers offer to MRA members. The [Pro Deals](#) page of the MRA web site lists the various vendors with whom the MRA has pro deals. In addition to many of the big-name companies such as PMI and Petzl, it also includes several one-stop-shopping sites such as Expert Voice and Outdoor Prolink. Each of these latter sites offers pro deals for dozens of individual companies. Discounts on these sites typically range from 20 to 40 percent off retail.

Many of the big-name companies are also sponsors of the MRA. In addition to offering MRA members discounts on gear and equipment, they also provide cash donations to the MRA, which help enable the national organization—your organization—to perform its mission.

The MRA also provides funding to the regions via two different mechanisms: scholarships and discretionary funds (or what I affectionately refer to as *kickbacks*). For the past several years, the MRA has been allocating

funds to each region for scholarships that will enable region members to attend the MRA June conference. The discretionary funds that are available to each region are less restrictive than scholarships. The original intent was to help defray the cost of region accreditations and reaccreditations, but it's up to each region to decide how best to use the funding.

Speaking of free money, if you're the sort of person that likes to break things, the MRA is willing to support you—well, sort of. Research grants for up to \$3,000 are available to MRA members to cover the cost of equipment and consumables in support of mountain rescue-related research projects. In addition to covering those costs, the MRA has load cells and other equipment that can be used to support your investigation. If you have an idea for a research project—whether it be backyard science or studying some fundamental principle—you should check out the [Research Grants page](#) or contact the [Research Grants chair](#) to get things started.

Many of the benefits of being an MRA member revolve around personal growth, training opportunities, and enhancing your ability to do your job better and more safely, but the benefits mentioned above are focused primarily on your wallet. We all do what we do because we want to, and I suspect the vast majority of us would continue to do it even without these perks. Nonetheless, it's nice to know that the MRA is working for you in that area too.

Yours in service,

*Art Fortini*

Art Fortini  
President, Mountain Rescue Association  
[president@mra.org](mailto:president@mra.org)





## Caught in Cucamonga: An Icy Search in San Bernardino

*By Bob Gattas, West Valley Search and Rescue*

*San Bernardino Sheriff's Department, San Bernardino County, California*

*Art Fortini, Sierra Madre Search and Rescue*

Sierra Madre, Calif. - They were only two members of a four-person hiking group that had planned to summit Cucamonga Peak on Saturday, April 6. But when they returned early, having turned around due to icy conditions on the trail, they arrived at the Icehouse Canyon parking lot late in the afternoon and returned home. They had not heard from their companions, so they returned to the trailhead around 2000 hours to find that their hiking companions' car was still in the lot – but their companions were missing. West Valley Search and Rescue in San Bernardino County, California, which is part of the San Bernardino Sheriff's Department, was notified.

The trip from Icehouse Canyon to Cucamonga Peak is a heavily trafficked out-and-back trail located near Mt. Baldy. It is a strenuous route with more than 4,000 feet of vertical gain and a top elevation of 8,859 feet. It is rocky and steep, with a sheer drop to the bottom of the

canyon. The trail is the second of six southern California summits. Done in sequence, they are the training ground for bigger hikes, like Mt. Whitney or Half Dome, with each hike achieving a progressively higher altitude. West Valley team members interviewed the reporting party, or RPs, for information about the overdue hikers. We sent one team up Icehouse Canyon to make their way to Cucamonga Peak, traveling in alpine conditions. In summer conditions, the 11.6-mile round-trip hike to the summit is considered difficult, but in the winter months, icy conditions — particularly on the north-facing slopes — require additional skills and equipment, which the missing hikers did not have.

The team made it to Icehouse Saddle and talked to campers in the area. But they only saw one individual coming out of the trail from Cucamonga Peak that evening. Several tracks were found on the trail, but that trail is a popular one on weekends; almost all of the tracks had micro spikes or crampons.

Snow and ice conditions were bad in the higher elevations, from about 5,000 feet to over 8,000 feet on the north-facing slopes, and most of the search areas were on the north-facing slopes where a poorly equipped or poorly trained hiker would end up if they slipped on the ice.

Additional San Bernardino County teams were requested for alpine conditions on Saturday evening and early morning Sunday. SAR members trickled in on Sunday, and two teams were air-lifted Sunday morning to the Bighorn Saddle area. One team headed from Bighorn Saddle to Cucamonga Peak, while the other team worked from the Bighorn Saddle area to the Icehouse Saddle area.

Icehouse Canyon was well covered with two teams on Sunday, from the trailhead where the subjects' car was located to Icehouse Saddle, but no clues were found.

Additional teams also made it up to the snow and ice areas: Kelly's Camp, Ontario Peak and Bighorn Peak areas were searched, but again, no clues were found. By Sunday evening, we were 36 hours into the search, with not a single clue as to the whereabouts of our two subjects.



Additional county resources were requested for Monday morning. A call also went out to the California Office of Emergency Services (Cal OES) asking for out-of-county resources. Several teams from around the state arrived on Monday. Local teams, including Montrose SAR, San Dimas Mountain Rescue Team, Sierra Madre SAR, Riverside Mountain Rescue Unit, San Diego Mountain Rescue Team, San Diego County SAR, Orange County SAR, and Kern County SAR all participated in the search from Monday to Wednesday. Additional teams from Ventura County SAR were ready to come in on Thursday.

### "I DON'T FEEL LIKE DYING TODAY"

Winds affected us every day, from Monday to Wednesday, requiring the teams to hike in to their search areas. Some teams had to hike anywhere from six to eight miles just to get into their search areas. Some teams put in 16+ miles by the end of the day. The search area was expanded, but due to the high winds, extremely gusty conditions, and terrain that aggravated the wind conditions, we couldn't get teams into some of the areas that we needed to search.

We didn't fare well on Monday when we tried to insert the teams via air ship. The notorious Santa Ana winds were kicking up; as the pilot on SBSD's Air Rescue 306 said, "I don't feel like dying today."

Despite the weather and the lack of air support, a number of search areas were cleared on Monday by ground crews that hiked into the search areas from the trailhead. Also, on Monday the SBSD detectives worked the other side of the search and came up with some valuable



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information: boot size and brand, and the fact that new crampons had recently been purchased by the hikers. Still, no clues were found by the search teams on Monday.

Tuesday started out well, with much-need SAR members ready to go. But the winds again prevented any air insertions. The hikes in were grueling and most teams were spent by the time they got into their search areas, with very little time left to search, followed by a difficult hike out. Some teams didn't get out till 2200 hours.

Search dogs were used in the lower elevations where ice was not an issue. All of these lower-elevation areas were searched from Sunday to Wednesday: Middle Fork of Lytle Creek, San Sevaire area, South Fork Lytle Creek, North Fork Lytle Creek, Joe Elliot Tree Memorial area, to name a few. Still, the teams found no clues.

Patrol ships never stopped searching; if the weather permitted, they were in the air.

On Tuesday afternoon, the overhead team put our heads together for assignments on Wednesday. Two areas we needed to search were more than eight miles in. One extended from Cucamonga Peak east to Etiwanda Peak and beyond, to Joe Elliot Tree Memorial. The other area was Cucamonga Canyon.

## DOWN CANYON: OUR FIRST CLUE IN FIVE DAYS

Cucamonga Canyon was in the search plan from the beginning—hikers tend to think the canyon is a shortcut to Cucamonga Peak. Airships scoured the area at least twice, but it had been impossible to get search teams in due to weather that wouldn't cooperate. We did get a crew in on Tuesday, but the long hike in left little time to search. They did what they could, but found no clues. Darkness was coming fast, so at 1730 hours they were ordered to return.

The area was still high on our list of priorities. So we did our homework. We researched canyoneering information on the web and sought the input of our experienced SAR members.

Two teams were formed for these difficult, technical assignments, which would require more gear than a search team normally carries.

Cucamonga Canyon has a long drop of about 200 feet, requiring the search team to take 400 feet of rope. It's also wet; the Cucamonga Canyon crew needed to be set up for multiple rappels in water in order to make their way down the canyon. That meant they needed wet suits. Finally,



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because of the length of the hike and the amount of equipment they would need, it had to be an overnight assignment. So in addition to everything else, they had to bring overnight gear.

The plan was that the Cucamonga Canyon team would spend Wednesday night in the canyon and do additional searching on Thursday. The Cucamonga Peak crew also was set up for overnight from Wednesday into Thursday.

Again on Wednesday, the winds didn't allow any air insertions. All of the six crews assigned that day had to hike in. Four of the teams searched areas that were more accessible; some areas were searched a second time. The Cucamonga Peak crew made it to the start of their search area by 1600 hours, as did the Cucamonga Canyon crew.

The sun was setting as the Cucamonga Canyon team descended. And though this area sees little traffic due to its remote location, the team found tracks heading down canyon. It was our first clue in five days.

The SBSD aviation bureau was notified, and a patrol ship headed to the canyon. The search crew followed the tracks and just ahead, further down canyon, they saw a campfire.



The Command Post went bananas. The airship was able to drop in a deputy. But due to the steep terrain and surrounding trees, the pilot requested an air rescue ship for the hoist out.

The deputy confirmed that these were our missing subjects and that they had no injuries. The air rescue ship came in, hoisted the subjects out and delivered them to the landing zone at Cow Canyon Saddle. They were brought to the CP, where they were united with their families.

The rescue ship went back and retrieved our two overnight crews. We completed this search that night by 2400 hours with a great outcome.



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## When Lightning Strikes: Managing Injuries in Strike Victims

*By Roger Matthews, Park County Search and Rescue, Bailey, CO*

Lightning has always been one of the Earth's most powerful and awe-inspiring forces. The massive energy released from a bolt of lightning is hard to comprehend, with a peak temperature hotter than the surface of the sun at over 50,000°F, and an electrical discharge up to a whopping 1 billion volts.

Although the human eye cannot register it, there are actually around 30 separate impulses of electricity in a single strike. While lightning may stay within the clouds, our concern is when it makes contact with the ground. The electrical current may peak at 200,000 amps. Although we typically associate lightning strikes with summertime thunderstorms, lightning activity can occur in any season, day or night. The highest risk for lightning activity is midday, from 10 a.m. to 2 p.m., in areas directly underneath passing cumulonimbus clouds – the mountainous thunderheads that signal thunderstorm or heavy rain.

According to the U.S. National Oceanic and Atmospheric Administration, about 400 people are struck by lightning yearly in the United States, leading to around 50 deaths annually. Lightning can affect the human body as a direct strike, contact injury, side flash, or ground current. Injury from ground current is most common. Side-flash injury, in which the victim is hit by current arcing off of a nearby object such as a tree or rock, is the next most common. Direct strikes are rare but are more likely to be fatal.

As the electrical current from a strike passes through our bodies, it is conducted with the least resistance through nerve tissue, followed by blood, muscle, skin, fat, and bone. The better the conduction of the tissue, the more likely it will be injured. Peripheral nerves, the brain, spinal cord, heart, and muscle tissue are the most likely to be injured. Considering the extreme energy levels, it seems impossible that anyone would survive a lightning strike. Fortunately, the discharge of energy occurs over an extremely short duration, lasting at most 1/10<sup>th</sup> of a second.

When the electrical charge of a lightning strike passes through the body, it stuns the brain and heart simultaneously. Brain tissue is slow to recover from the electrical impact. Unconsciousness can lead to temporary cessation of breathing. Initial brain impairment can last for several minutes. Meanwhile the heart, although temporarily shocked into



cardiac arrest, typically restarts due to intrinsic cardiac pacemaker cells. This leads to a post-strike scenario in which the heart may be pumping blood, but the patient isn't breathing. Ultimately, death can occur from lack of oxygen.

It is common for lay rescuers to be concerned that the victim of the strike is somehow able to conduct electrical energy to the rescuer. This incorrect concern has led to a delay in the care of victims.

## CARE FOR A VICTIM

If a strike has been witnessed, rescuers should immediately perform an assessment of airway, breathing, and pulse. If the victim is in respiratory arrest, but a pulse is present, initiate rescue breathing. Providing rescue breathing allows time for the brain to recover until there is a return of spontaneous respiration. If there is no pulse, initiate cardiopulmonary resuscitation (CPR) in the usual fashion. If an automated external defibrillator (AED) is available, it should be used. When there are multiple

victims, priority is given to non-breathing victims and to those without vital signs before the care of awake and responsive victims.

Numerous other injuries can affect victims of lightning strikes. Over half of lightning victims suffer eardrum rupture. This may make communication difficult, especially if the injury isn't initially identified.

Burns can be a consideration in a lightning victim. Typical lightning-related burns are linear or punctate – marked with small dots. Most burns are not severe, but significant burns can occur due to current passing through skin that is in contact with metal conductors. *Lichtenberg figures* are impermanent flowering skin marks sometimes found in lightning strike victims. The figures are thought to be related to vaporization of sweat at the point of electrical impact and are not burns.

While immediate life-threatening cardiac arrhythmias may occur, less serious arrhythmias such as atrial



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fibrillation may also result from a strike. An autonomic neurologic complication called *keratunoparalysis* can lead to reversible vascular spasm in which a limb may be pulseless and appear pale or blue and appear paralyzed. This condition typically resolves spontaneously after a few minutes to hours.

Blunt trauma may occur if the victim is knocked from a height due to involuntary muscle movement or by a strike-related blast force.

Injuries should be suspected and treated in victims when a fall from standing or from a height is suspected. Performing a thorough secondary survey and obtaining accurate vital signs, performing a head and neck exam, spine and neurologic exam, musculoskeletal exam, and skin exam is important in these patients. Long-term complications of lightning injury may include personality changes, depression, post-traumatic stress disorder, chronic pain, and permanent neurologic disability.

Preventing lightning injury to mountain rescuers is critical. While we often find ourselves in exposed terrain

during high-risk summertime hours, there are some steps we can take to reduce the risk of a strike. Although strikes can occur “out of the blue”—when a bolt of lightning emanates from a cloud a long distance away and travels horizontally before making ground contact in an area with clear skies—most strikes happen when a storm is overhead or nearby. Portable lightning strike warning devices have improved and are affordable. These small pager-sized devices, which can detect lightning strikes as far as 75 miles away, may provide a helpful early warning signal if carried by field teams.

Signs of an imminent strike include hearing crackling noises, hair standing on end, or the presence of a blue-violet coronal glow on nearby rocks or other ground objects indicating highly charged particles in the area, a phenomenon also known as St. Elmo’s Fire.

## SEEK SHELTER FROM THE STORM

Seeking appropriate shelter during a lightning storm can be confusing. Sheltering under overhanging rock features or

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near the opening of a cave does not protect from a strike. Overhead shelters with open sides, tents, and lean-to shelters also offer no protection. Aside from being inside a building, which is generally impossible in the field, being in a metal-skinned vehicle with closed windows, including a grounded helicopter, may be an option. Getting into a thick stand of tall trees, deep into a cave, or deep in a ravine is better than hunkering in the open or being near taller solitary objects.

Immediately assuming the lightning-crouch position may be the only option if a strike is imminent. To assume the lightning-crouch position, remove your pack or insulating pad and place it on the ground, then crouch on top of the pack with legs tightly touching together and hands over the ears. The goal of the lightning position is to reduce the risk that the current from a ground strike (the most common form of lightning injury) will pass through the body.

Rescuers in the lightning-crouch position should be separated by at least 50 feet if terrain permits. Conductors such as watches, metal belt buckles, radios, carabiners,

crampons, ski poles, and ice axes should be removed and stashed away from the body, if possible.

If a strike is not imminent, moving away from the at-risk area is better than remaining stationary. The rule of staying in the safest possible location until 30 minutes after the last thunderclap has been heard is still considered the best practice. The flash-bang ranging system to measure storm distance, where one counts the seconds between flash and thunderclap and divides by 5 to determine the distance between you and a storm, is unreliable.

Lightning is clearly a formidable force we are sure to encounter in mountain rescue. Every effort should be made to avoid a preventable tragedy. We should use scenario-based medical training to practice managing victims, and we should focus on reducing our own risk by offering lightning education to our team members.

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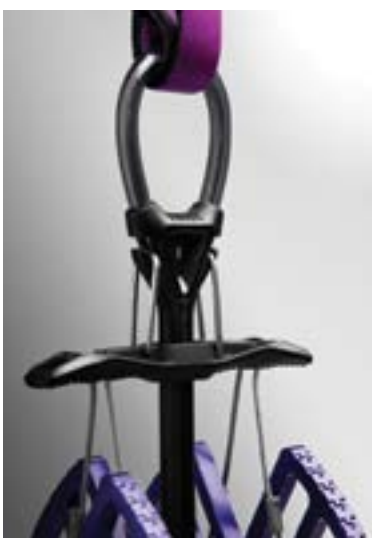
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## In Memoriam: Andrew "Drew" Richard Davis

OCTOBER 10, 1955 - JULY 10, 2019

Andrew "Drew" Richard Davis, 63, of Fort Collins [passed away peacefully](#) on July 10, 2019. Drew was an active participant in search and rescue and emergency services from an early age, as a member of Arapahoe Rescue Patrol in high school, the Western Mountain Rescue Team in college, and Larimer County Search and Rescue Team (an MRA team).

Following college, and for many years, he was a seasonal Ranger and wildland firefighter for the National Park Service, serving in several of the larger Western parks, and with the Colorado Division of Wildlife and Colorado State Forest Service before joining Larimer County Sheriff's Office as an Emergency Services Specialist.

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Drew was widely involved in various organizations, including Larimer County Search and Rescue, the Mountain Rescue Association, Colorado Search and Rescue Board, National Association for Search and Rescue, County Sheriffs of Colorado, Colorado Association of Road Supervisors and Engineers, Larimer County Incident Operations Command, National Incident Management Team, GIS-T, as well as being an instructor for search and rescue, fire, and incident command.

Drew will be best remembered as a loving, caring, generous husband, father, son, brother, uncle, and friend. He never met a stranger, never hesitated to lend a hand, or share a story, advice, or a laugh. He will be much missed among his colleagues in the MRA.



## Canyon Rescue Resources

By Jason Bowman

Search & Rescue Program Supervisor, Lane County Sheriff's Office

Board of Directors, Coalition of American Canyoneers

Photos Courtesy of Eugene Mountain Rescue

Canyoneering, or “canyoning” depending on where you live, is the sport of exploring canyons, ravines, gorges, and other watercourses, usually from the top down, and often requiring technical rope and climbing skills. While the sport isn’t new, and has been quite popular in areas such as Zion National Park for several decades, social media has triggered an explosion of new interest and participation in canyoneering. With that has come increased pressure on search and rescue organizations to foster awareness and develop strategies for responding to rescues in technical canyons.

The Coalition of American Canyoneers (CAC) works to promote and preserve access to public and private lands through conservation, education, and safety outreach. As part of this mission, the CAC partnered with the Southern Utah University in February 2015 to conduct a survey of canyoneers in the United States. The full results of the survey are available [here](#).

Notably, the survey quantified the rapid growth of the sport, with more than half of the respondents having descended their first canyon in only the preceding five

years. It can also be safely assumed that there has been considerable growth in the sport in the four years since the survey.

Perhaps most concerning for the mountain rescue community is the finding that 62 percent of respondents reported to have led a group into a canyon, while only 48 percent considered themselves to be advanced or expert canyoneers. Canyoneering can seem deceptively simple, often leading beginners to feel confident in leading other beginners into increasingly hazardous situations.

These factors have unfortunately led to an increase in accidents ranging from minor to fatal. The CAC created the *International Canyon Accident Database (ICAD)* in early 2019 to better document and understand the causes of canyon-related accidents, with the goal of avoiding future accidents. While the ICAD is still growing, it is hoped that it will serve as a resource for SAR and mountain rescue teams, similar to the American Alpine Club’s *Accidents in North American Climbing* database and publications.

The ICAD could enable rescue teams to monitor trends in canyoneering accidents and be better prepared to







respond to an emergency in a canyon, in addition to providing a direct learning tool for the recreating public. To ensure the ICAD is as complete a resource as possible, it is also hoped that responders to canyon-related accidents will facilitate or encourage submissions to the database.

The rapid growth of canyoneering, fueled by easy access to equipment and route information, cannot be ignored by the mountain rescue community. Teams should

seek to understand the extent of activity in their area of operation and to have members trained to respond to these unique environments. It is reasonable to assume for all MRA teams that canyoneering is occurring in your team's area and its popularity will continue to grow. The CAC is available to work with teams that are being impacted by the sport's growth to minimize the challenges you will face.



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## Mountain Sense: Salvaging a Catastrophic Rope Failure

By Nathan Chaffee, climber

*The following account of a rock rescue is adapted with permission of the author from a post that appeared on social media in April, 2019.*

This is a difficult, but necessary post to write. If you are a climber in any capacity, please take the time to read and reflect. There are lessons to be learned here, and those lessons should be shared.

Yesterday I was involved in a rock rescue due to a catastrophic rope failure. The climber involved has given permission to post on social media, but they will remain anonymous until they come forward themselves.

Let me also preface this by saying that, despite a relatively happy ending, it was only happy because of a tremendous amount of luck and a series of conscious and well-informed decisions that were based upon professional training and experience. This was not a “we figured it out, and it was all okay” situation, and I do not want the final outcome to reflect such a cavalier attitude.

### NOW, THE STORY.

We had climbed as two parties of two—a total of four persons—on a sparsely traveled multi-pitch rock route. The climb had been completed, with three rappels needed to reach the ground. Following the rappels, an unstable talus gully must be descended to a maintained trail.

We successfully completed the climb without issue, and had elected to rappel in series with generous spacing to minimize the risk of

rockfall. My party of two was completing the final rappel and moving to the far side of the gully while the second party of two was just beginning the second rappel.

The second rappel calls for a line descender’s left. This line, however, is not obvious. What is obvious is a gully to descender’s right, which starts with a transition over a large block into a mostly free-hanging state. The nature of quartzite is such that sharp, jagged, blade-like edges often develop along fracture planes. One of these edges was present where the transition took place.

The first member of the second party to rappel realized they were not descending the proper direction, with





no rappel station or anchor in sight. They made the decision to swing to descender's left to look for a station.

During the swing the rope was in contact with the aforementioned edge and severed, in a single clean cut. The rappeler free-fell approximately 15–20 feet into the gully, then continued to tumble for about an additional 30 feet before coming to rest on a few large blocks. Immediately following the resting point was approximately 100 feet of vertical terrain.

The falling climber brought down with them several dozen softball sized pieces of rock, which showered the descent and landing area. Note—when I say “landing area,” I am very much referring to the “hang out” spot that climbers use to shed gear and re-pack after a rappel.

Luckily, I had moved to the far side of the gully in anticipation of rockfall and my partner was in a sheltered position at the time. Had we been in that area at the time, multiple serious injuries would have been very likely. Neither I, nor my partner, witnessed the actual fall. We only heard and saw the rockfall.

The injured climber was able to climb to a protected ledge. The second climber in the second party was able to re-rig and descend the severed rope down to the climber. The second climber then constructed a trad anchor and secured the injured climber to the wall.

Attempts were made to communicate between the two parties, which led to a complete misunderstanding of the situation. This was not resolved until a cell phone call was made—it was one of many miracles that we had reception. I instructed them to sit tight and call search and rescue (SAR) while I ascended the wall to them.

I had elected to leave our rope in the final set of chains instead of pulling it, knowing that until the other party reached that station, its utility going up the wall was far greater than sitting in a coil on the ground. With this, I was able to employ the other climber from my party for belay and top-rope most of the way before leading about 60 feet of easy but unprotectable terrain to where the second party was sheltered.

The uninjured climber in the second party was, by yet another amazing stroke of luck, an EMT. They tended to the injuries while I prepared the technical systems to get everyone down. While bringing my rope up, it became



snagged on the wall below, preventing an effective lower. The uninjured climber indicated that they were comfortable with a single strand rappel, and would free the snag on the way down. This went as planned.

I was able to bring the rope up, tie the injured party in, and build them a chest harness for comfort. I proceeded to lower them to the ground uneventfully. After which, I recovered the damaged rope and re-built the anchor using nuts and slings. During

this time, SAR had arrived at the trail below and began ascending the talus field to us. Two rappels brought me to the ground about the same time that SAR personnel arrived at the scene.

This concludes the technical aspects of the rescue. From here, SAR took over and hiked the injured climber down the gully before using a helicopter to hoist them out. The rest of us were able to hike out, and were given rides to the base site. The climber was driven to a local hospital and released the same night.



Again, let me reiterate that while it is nothing short of miraculous that the climber sustained only the injuries that they did, it is absolutely a combination of luck, technical expertise, and mountain experience that prevented an already bad situation from becoming much worse.

Mountain sense, including positioning ourselves out of the way of rockfall and leaving resources in a place of highest utility, contributed to myself and my partner being able to act quickly and ascend the wall. EMT training helped the injured climber's partner make a well-informed survey of the injuries and field dress the trauma. Self-rescue training afforded me the technical skills to bring all climbers safely to the ground.

I know that the culture of climbing is very much a "figure it out" sport—that you address challenges spontaneously and somehow it all ends up okay. This incident is an example of why I have not accepted such culture—why I have sought professional training and encouraged all of my climbing partners to do so.

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Despite this, I know of only one person in my climbing circle, besides myself, who has been trained in multi-pitch self-rescue. It is not because I'm a safety freak, but rather because accidents happen. They happen because of the smallest oversights, even when you're doing everything by the book. This could have happened to anyone on this

climb, and it could also happen to you or your climbing partner.

If your climbing goals involve multi-pitch, I implore you to learn self-rescue. The degree of success of this rescue is absolutely attributable to such training. If your climbing goals involve alpine terrain or wilderness, please consider what you would do in a similar situation with only two people, a severed rope, and no cell service. Use this opportunity to remind yourself that, while we all live for this sport, continuing to live for it often rests on numerous decisions based on knowledge and experience. Please do not leave such things to chance and spontaneity.

*Thank you.*

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## In Memoriam: Tim Staples

*West Valley Search and Rescue Team, San Bernardino County, California*

Tim Staples, a 32-year-old member of the West Valley Search and Rescue Team in San Bernardino County, California, died December 14 while searching for a lost hiker on Mt. Baldy. He was a nine-year veteran of the team, and a teacher at Damien High School, an all-boys Catholic school in La Verne, California.

Staples was part of an extended search for 52-year-old Sreenivas Mokkalpati, who had gone missing December 8 when his hiking companions turned back due to weather and Mokkalpati decided to attempt the 10,000-foot summit. Mokkalpati was described as an experienced hiker but was only prepared for a day hike.

Conditions of the search were considered extremely dangerous, especially to untrained, ill-equipped hikers. Authorities ultimately closed the mountain trails December 11 after additional rescues of injured and stranded hikers took time, attention, and personnel away from the

search for Mokkalpati. The emergency closure affected recreation sites, hiking, cross-country skiing, and other recreation trails. Residents and anyone who owned or leased land were exempt only to the extent necessary to access their homes and properties. The search was in its seventh day and had been intermittently hampered by weather – high winds, snow and ice on the upper

reaches of the mountain. A statewide call for assistance brought 126 people from SAR teams in 10 counties into the area, enabling the CP to field 23 search teams. At about 1300 Staples' search partner contacted the Command Post to report that the two had gotten separated and that Staples was missing. A Los Angeles County Sheriff Department helicopter later found him unresponsive, apparently having fallen down an ice chute.

After Staples' death, all search teams were recalled, and the search was suspended indefinitely.





Rescuers search on Dec. 14, 2019, for a hiker who went missing near Mount Baldy on Dec. 8, 2019.  
(Credit: San Bernardino County Sheriff's Department West Valley Search and Rescue Team)



"Today is an example of what they're willing to give to help to try to save some of the citizens who unfortunately get lost and get hurt in some of the most dangerous parts of this state," said San Bernardino County Sheriff John McMahon.

Bob Gattas, a West Valley team member and one of the ICs on the search, remembered Staples as an exemplary team member. "He was just a great guy. In training you could look at him and tell he was absorbing it, asking questions, and learning and getting better. He was like a sponge. He was humble, too. He didn't have an ego. He was there to learn and get better. He was one of our rope technicians, and was working his way toward being an

operations leader. Tim was the guy you want on your team. When the pager goes off, you say, 'Oh Tim's there. Cool.' You know he's going to get the assignment done, and that he's going to get it done in a safe and efficient manner. This is a terrible loss for us. He will be missed."

Staples, who had been married only six months, was a beloved and well-respected social science and English teacher and a track and field coach at his alma mater, having graduated from Damien in 2006.

Staples was honored at a vigil hosted by relatives of Mokkalpati, the man Staples was trying to find, at Damien High School December 15. "I'm very sorry for this, and very sorry for the family," Shavran Mokkalpati, son of the missing hiker, said. He went on to say that he never expected a search for his father would result in tragedy for "one of the volunteers that we so dearly respect."

A prayer service was held December 16. Hundreds of community members, friends, relatives, and fellow SAR team members and sheriff's department personnel gathered for a standing-room-only service in the school's gymnasium.

According to Damien High School Principal Merritt Hemenway, Staples was passionate about the volunteer search-and-rescue work he performed during his free time. Hemenway said Staples often showed up on Monday with a telltale sunburned face. "He'd come in on a Monday with



a red face, and we'd joke with him: 'You went to the beach huh?'" Hemenway told ABC7. "And he goes, 'No, I was up in the mountain trying to find someone.'"

Relatives remembered Staples as an "exceptional human who gave his life serving others. He was a brother, uncle, nephew and friend to so many. During his teaching career, he gained the respect and love of his students as he was an exceptional role model who cared deeply for them." Staples death "left a hole in our hearts that may never be filled."

Staples gave 100 percent to everything he did, added Rory Daly, a classmate and fellow cross-country teammate. "We ran many miles together, and as we ran together, we'd talk about life," said Daly. "He was always a strong leader, a born volunteer. He was always the guy at the end of an event offering to clean up. He was sincere and kind, who was loved by all his students. More than anything else, he was a genuine person and got on with everybody."

Daly recalled that during the prayer service a student read a Bible quote that Staples had written in his yearbook. It was from John 15:13: "There is no greater love than to lay down one's life for one's friends."

"That sums up the spirit with which he lived his life," Daly said.

"Tim personified what it means to be a search and rescue professional," said West Valley SAR Team Commander Tom Henderson during Staples' December 28 memorial service. "A dedicated and loyal teammate willing and able to answer the call for help at any hour and in any conditions. He will forever be missed by his West Valley Search and Rescue family."

Staples is survived by his wife, Katie, and parents, Dan and Barbara Staples.

## QUOTES FROM SOCIAL MEDIA:

*"Hugs and prayers for our SAR volunteers and Tim's family. I know how valuable and dedicated these volunteers are. They are our quiet heroes who have dedicated their service to help others."*

SBSO/Twitter

*"Thank you, Timothy. I have witnessed heroism at levels most will never know. These unpaid professionals are some of the most highly train[ed] dedicated and skilled people I have ever had the privilege to work alongside."*

Karl Hegel, 30-year member of the search and rescue community

SBSO/Twitter



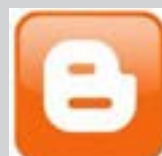
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