

MERIDIAN

Summer 2022



The Quarterly Publication of the Mountain Rescue Association

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Stuck and Freezing

Teams Rescue Riders
on Alpine Tram

The Journey of K9 Training
MEDCOM: Drowning



MOUNTAIN
RESCUE
ASSOCIATION

Summer 2022

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***ON THE COVER:** Rescuers climb a tower to rescue people stuck in a tram near Albuquerque, N.M. on January 1, 2022.*

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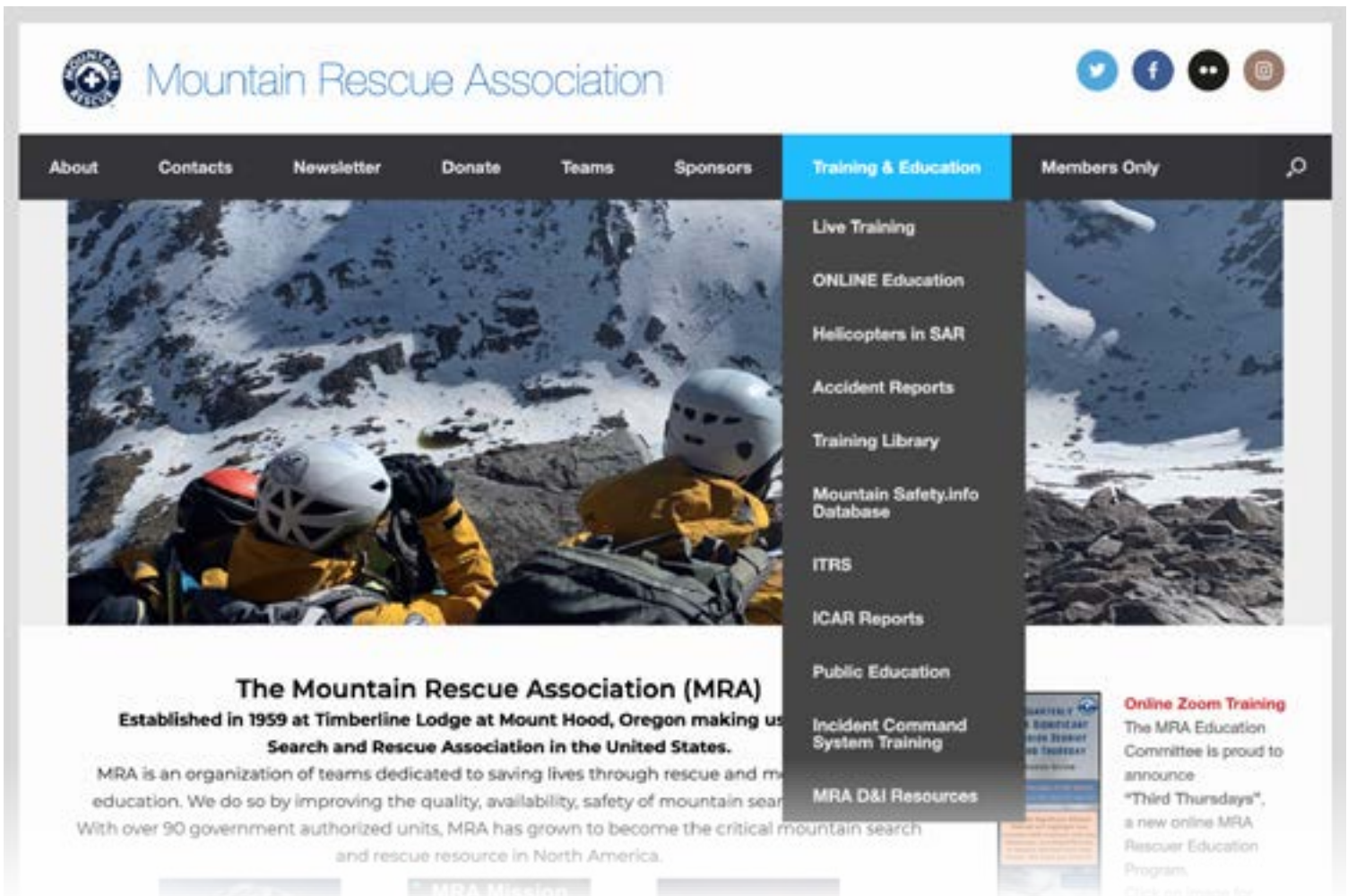
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President's Message

PROFESSIONALISM WITHIN OUR COMMUNITY

What is professionalism and how does it apply to Mountain Rescue? This is a question that I've been pondering lately. I think we all would consider ourselves as experienced mountaineers, climbers and backcountry travelers. Likewise, I think we all consider ourselves skilled rescuers which is demonstrated and backed up by your MRA accreditation. What does it mean to be a professional and what opportunities do MRA teams have to learn from professional organizations? When I think of professionalism I think it is a combination of excellence in the what and the how a job or function is completed.

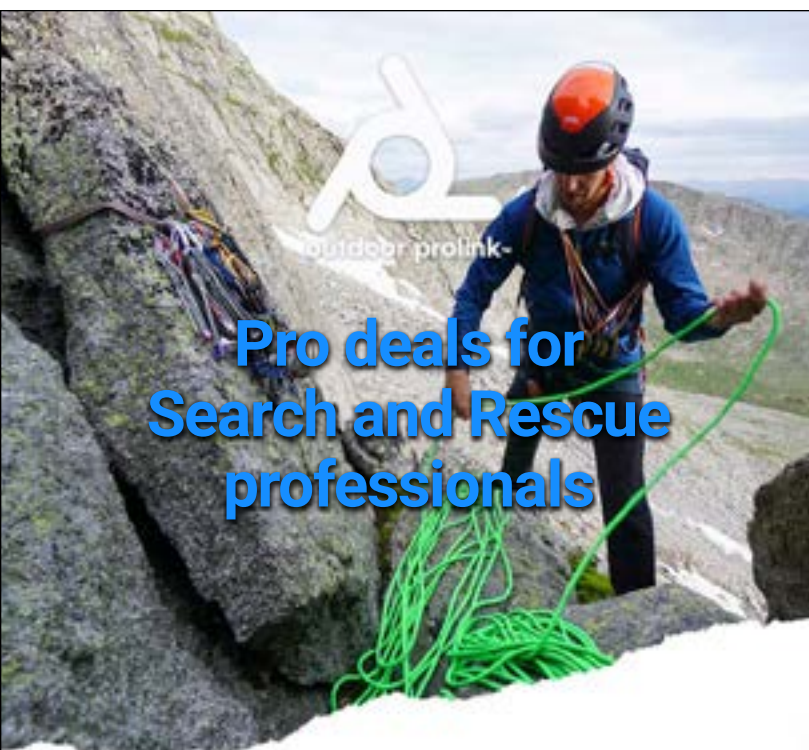
Wikipedia's definition of professional is:

"A **professional** is a member of a profession or any person who earns a living from a specified professional activity. The term also describes the **standards of education and training that prepare members of the profession with the particular knowledge and skills necessary to perform their specific role** within that profession. In addition, **most professionals are subject to strict codes of conduct, enshrining rigorous ethical and moral obligations.**^[1] Professional standards of practice and ethics for a particular field are typically agreed upon

and maintained through widely recognized professional associations, such as the IEEE.^[2] Some definitions of "professional" limit this term to those professions that serve some important aspect of public interest^[3] and the general good of society^{[4][5]} (source: <https://en.wikipedia.org/wiki/Professional>)."

Reviewing this definition I believe that Mountain Rescue members and teams align quite well with the exception of "earns a living." We train rigorously for every aspect of Mountain Rescue and we hold ourselves to a high technical standards. Further, MRA teams have been on the leading edge driving new rescue techniques, equipment, and training. While I may quip that most of this development has been focused to finding gear and developing gear (or reduction of) to make us "light and fast," the amount of thought and testing that goes into this development can not be trivialized. When it comes to "what" technical backcountry rescue there is no question that MRA teams are the most experienced, most capable, and most professional.

The Wikipedia definition also elaborates saying that, "most professionals are subject to strict codes of conduct, enshrining rigorous *ethical* and *moral obligations*." While this makes sense, I didn't really expect ethical and moral obligations to be part of the definition of a professional. When I hear the term professional an example I often think of is a carpenter or wood worker who takes exceptional care and pride in the fine details of their work. Rarely have I considered what that person's ethical or moral character might be. However, the more I think about it, the persons ethical and moral character is very much reflected in their work product. In fact, every aspect of the work product is reflected in how they conduct themselves, "on and off the field." While ethical and moral character is more subjective than demonstrating technical capability, I believe MRA teams are constantly demonstrating these traits. By our very nature as volunteers, we are already giving back countless hours to our communities. We wear the MRA patch and logo with pride because we know that it represents the high standards we hold for ourselves as well as what it means to be part of a national organization that holds its members to a higher standard.



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One aspect of professionalism that paid workers have access to is the continuing education training. Many businesses require specific training and certifications simply to reduce risk. The MRA has been working to provide education opportunities (leadership, diversity and inclusion and resiliency) with the focus of building even stronger teams. These help us build our skills, challenge old ways of thinking and help us grow as professionals. One of the strategic pillars that were identified in 2022 was further development of professionalism Mountain Rescue and I am glad that we will continued to provide education opportunities for any team or individual that wishes to participate.

Finally, as I approach the end of my term as president, I wanted to communicate how much of an honor it has been to serve in this capacity. I am so thankful for each MRA member, MRA team, the MRA committee chairs, MRA committee members and the MRA officer's committee. I love this organization, its mission and everything it stands for and represents. Thank you for the opportunity to represent this organization. Thank you for all you do to bring family members home.

Doug McCall
President

RESCUE WORD SEARCH

C	G	N	T	I	I	M	N	M	R	E	T	I	I
U	N	E	T	T	C	E	O	I	G	S	O	S	A
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Rescuers guide a Bernalillo County Sheriff's Office helicopter to a landing zone.



New Year's Save: 21 Rescued from Stuck Tram Cars

By Steve Larese - Meridian Editor

Albuquerque, N.M. - At 0400 on January 1, 2022, Albuquerque Mountain Rescue Council members were awakened by their callout tones and blinked blearily at their phones:

"MSN #1. TRAM STUCK AT TOWER 2. 21 PATIENTS NEED SUPPLIES...NEED RESPONDERS ASAP."

"I assumed there was a typo in the pageout at first because a mission with 21 patients seemed impossible," said AMRC member Jay Johnson, who would lead the second of two teams into the field. "But then I realized

the severity of what was happening and started running worst-case scenarios through my head."

It isn't difficult to think of several worst-case scenarios when it comes to emergencies involving the Sandia Peak Aerial Tramway. The 2.7-mile long "jig-back" tram is the world's third longest single-span tram. Two cars carrying as many as 50 people each travel between the tram base at 6,559 feet and the top terminal at 10,378 feet atop the Sandia Mountains just east of Albuquerque. The cables are supported by two towers in-between the terminals, and each 15-minute "flight" passes over canyons that can plummet 1,000 feet below the cars. The towers are

in such rugged terrain that they were erected piece by piece via helicopter in 1966.

AMRC Rescue Leader Craig Tenney and EMT Jesse Olson were among the first four AMRC personnel to reach the incident base at 0500. They learned that the 21 people were all tram employees or worked at Ten 3, a restaurant next to the top terminal. A car of 20 employees was descending at about 2200 on December 31, and a car with one employee prepared to spend the night per standard procedure was traveling up. Ice had built up on an emergency cable, and weighed it down into the track cables. A safety system engaged and stopped the tram. Tram workers were able to inch the tram car to Tower 2, at which point the car was only 60 feet above the small piece of land surrounded by inhospitable mountain wilderness. Still, employees were dressed for work, not mountaineering in a snow storm. Some employees were dressed for a hot kitchen, with some even wearing Crocs. Aboard the unheated car was a portable toilet and some Mylar blankets, and employees began sharing and rationing candy. Despite 20 bodies backed together in the space, temperatures in the 20s quickly chilled the car, and condensation began dripping from the ceiling.

The car was illuminated by the glow of phones as employees posted about their predicament on social media and half-heartedly welcomed the new year. At



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0200 January 1, Sandia Peak Aerial Tramway owner Benny Abruzzo called 911.

"So, I'm at Sandia Peak Tramway and we have a situation here," he told the 911 operator. "We can't get them all the way back to the terminal. We're in a situation where we may need some ground help. It's not practical to do the air help which is what we've all been training for. It's, of course, nighttime."

Spencer Moreland, an incident commander for New Mexico Search and Rescue, received a call from the New Mexico State Police at 0300. He was on the scene by 0400 and the callout was made.



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By 0500, the four-member AMRC Team One was trudging up four miles of steep terrain in a snowstorm joined by Abruzzo, himself an accomplished outdoorsman, and another capable tram employee. Snow streaked through headlamp beams as the six picked their way to cloud-obscured Tower 2.

"One good thing was that all of the cactus spines were covered in ice, so that afforded us some protection," Tenney optimistically recalls. "We appreciated any advantage we had."

Team One deployed with technical gear and a few pairs of boots for the employees. With helicopters grounded, Tenney began developing a plan. His team would scale Tower 2 and lower patients to the ground 60 feet below. A Cibola SAR and AMRC team led by Johnson were carrying more boots, clothing and supplies. They would lead the lowered employees out, setting up hand lines along the way. It would be arduous, but it was the safest plan to get everyone home. Employees were getting desperate, temperatures in the car were dropping, and it would be days before the tram would be safety checked and operational again.

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After several hours of picking a four-mile route with 2,100 feet of elevation gain through snowy outcrops and canyons, Team One reached the base of the 200-foot sloped peak, the last 30-feet of which are a Class 4 climb. Above that stood Tower 2 and the stranded employees.

"Throughout the hike to the tower, we were gaining information on what to expect," Olson said. "We had carefully chosen the equipment we were each carrying to ensure we had the right mix of gear. We knew the final approach below the tower would likely require some ropes to safely ascend, and we would obviously need another rope to lower people from the tram car."

Olson made the icy climb and anchored a rope to help the others. Looking up, the team saw the icy 80-foot tower disappearing into cloud cover. Making it over to the base of the tower, Abruzzo took the lead in climbing it, showing the other team members the best approach.

"The tower was coated in ice, and the first rung of the access ladder was over our heads," Tenney says. "It took

some gymnastics with bulky gloves and heavy packs to just get on the ladder. We used two points of attachment on our harnesses, like a via ferrata, to climb the rungs to the platform where we could enter the car from the top emergency hatch.”

The team carefully spanned the gap between the icy tower and the top of the car and opened the hatch. Cheers went up from the employees on board.

“The patients were very excited to see us,” Olson says. “The car was highly crowded and everyone was in good spirits. We performed medical assessments on everyone. Most people were a bit cold and hungry, but there were no immediate concerns.”

“The condensation was just raining down from the ceiling,” Tenney says. “I was concerned we’d have wet patients before we even left the car.”

The rescuers had made it in, but now how would they get everyone out? None of the AMRC members on scene had set up a lowering system in a tram car before, but using the fundamental principles of safe rope rigging, they were quickly able to set up a safe system. They tied an anchor to the structural beams on the tram roof. These anchor ropes draped over the edge of the roof and dangled in front of the double sliding door, eye level to a person in the tram. This anchor supported two belay devices and ropes that allowed rescuers to safely lower patients out the door. Inside the tram car, floor-to-ceiling poles served as safety points for tie-ins. Rescuers turned restaurant service on board onto their sides to make barriers to ensure only those tied to the poles would be near the open tram door.

“Many people are scared of heights, and the door of the tram car is not necessarily an easy exit for someone without experience going over an edge,” Olson says. “Two members of AMRC were lowered first to show the patients how to exit the car and to ensure there were assisting personnel on the ground as the patients were lowered. Some of the patients expressed minor fears, but after being trapped in the car for 15 hours they were so eager to leave that they were quickly overcome. The safety margins on the rescue rigging are incredibly high, so a simple demonstration and explanation of the system put minds at ease.”

In the hour it took to rig the lowering system, luck continued to improve for the rescue. A lull in the storm lifted the cloud ceiling, making safe enough conditions to use helicopters. What was going to be possibly the most dangerous part of the rescue—an hours-long hike with subjects



Rescuers with Albuquerque Mountain Rescue Council climb a tram tower to reach people in a stuck car.

through bad weather in demanding mountain terrain—was now going to be a 5-minute helicopter ride.

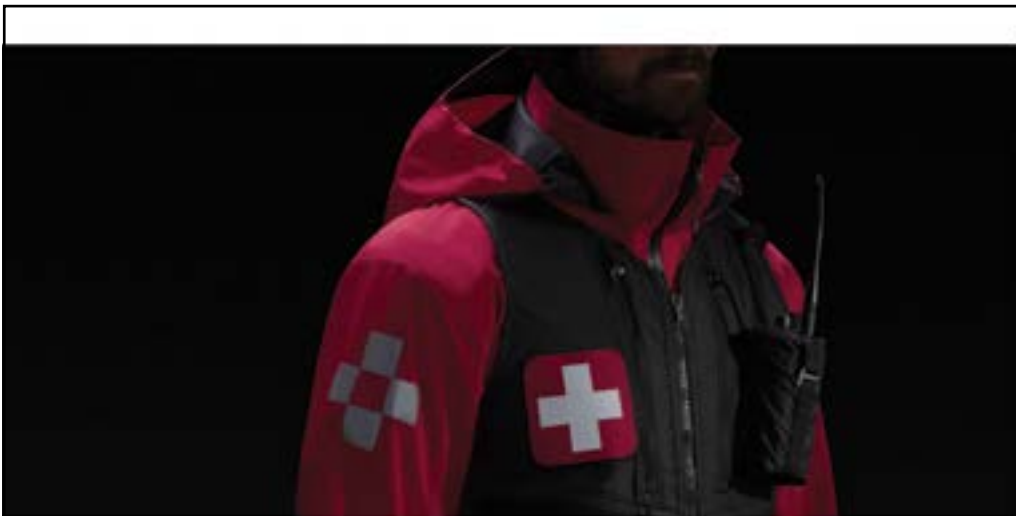
A small, relatively flat area about 200 feet from the tower was designated as a landing zone for a Bernalillo County Sheriff's Office's helicopter piloted by Undersheriff Larry Koren. Employees donned harnesses in helmets, then the rescuers gently lowered them out of the car to the ground where AMRC members took them off harness and transferred them to the helicopter's flight medic. Employees were clipped in two at a time for the quick flight back to Incident Base, allowing enough time for two more employees to be lowered. After an hour, all of the 20 employees were safely back at the incident base. Focus shifted to the lone employee of the second car, who was rescued without incident.

With all of the subjects safe, rescuers began making a long but upbeat hike back to incident base. The route was better defined in the tramped snow, and morale was high knowing the mission was successful. The two other teams carrying gear, while not used, linked up with the main group and were happy that all of the subjects were safe.

By the time all teams were out of the field, the media had picked up the story. Videos taken by the employees from inside the tram car, observers using telephoto lenses to take video and photos and even body camera video from the Sheriff's office were soon being shared by media outlets nationwide. ABC and the New York Times ran articles.

Tenney says that while there's no way to completely train for a mission such as this, the dedication of AMRC members in their training and adventures on their own in winter conditions contributed to the mission's success.

"I was surprised at how much attention this mission received, but I guess a dramatic, successful rescue mission made for a great feel-good piece for the start of 2022," Tenney says. "But compared to some of our other missions, this one was pretty straight forward. It's a real testament to our training, having the basics dialed in, being able to improvise and to work well with other agencies. It's what we do to get people home safe."



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Ellie Training - K9 Ellie and Rick during December, 2020 training in Lane County Ore.

Training a K9 in 1,076 Simple Steps

Rick Lindfors - Meridian Editor in Chief

At the start of the year 2022, my dog and I tested and received our certifications for search and rescue in Oregon. Training a search and rescue K9 was a unique, demanding and ultimately formative challenge for the both of us that brought us closer together and opened up a very enjoyable avenue of SAR service for me. K9 training is a time-intensive affair, and I took it on just a few months before pandemic restrictions kicked in. Fortunately, K9 training is something that can be done in small groups outside. This is my journey in a nutshell. The steps were simple, but the journey certainly wasn't easy.

Step 1. Dog

Many people are surprised that there's a short list of dogs that *aren't* good candidates for search and rescue. The ideal dog for backcountry search and rescue is a pooch that is smart, athletic and has a drive to work. That can cover most working, herding, and sporting breeds. There are some obvious breeds that aren't up to the task, like pugs. Of course, it comes down to the individual dog but as far as ideal breeds go, the list of good candidates is expansive. My K9, Ellie, is a border collie/newfoundland mix. That's a pretty rad combination when you think about it;



the super smart herding breed combined with the big bear dog that has a history of water rescue. I adopted Ellie from the Greenhill Humane Society in Eugene, Oregon before I started volunteering for SAR. When I first got involved in SAR, I was working overnight as a TV news producer so my schedule wasn't conducive to much outside of work, mountain rescue and family commitments. At the time, I didn't think much of K9 training and wouldn't until four years later when I got promoted and moved to a different shift.

Step 2. Talk to your K9 Team

By 2019, I had done several training exercises where K9's had been part of the scenarios and also run some missions encountering K9 teams from assisting agencies.

The discipline had caught my interest and I figured why not check it out? I contacted the president of the K9 team and she gave me a personal demonstration on how she and her trailing dog worked together, and had a conversation about the various disciplines of SAR K9 work including trailing, airscent and human remains detection.

Step 3. Start Training with your K9 Team

After applying and getting into the K9 team, I started training with them and going to team meetings. Training involved following handlers in their scenarios as well as hiding for their dogs. When following the handlers, I paid attention to how they were interacting with their dogs during various stages of a search. Each handler does things a little differently with their dogs. One team for airscent may use different alerts when finding their subject, and each dog has different preferences for their reward. Reward is a huge factor in continued success for a K9 team; if the dog is having a fun time, then they're more likely to keep wanting to train for that reward outcome. For K9 Ellie, ball is life and cookies are great. Some dogs like their tug toys and others scarf down a bag of chicken after finding someone.

Step 4. Start Training your K9

After going through a specified amount of training with the K9 team, I received approval to start training Ellie. We began with simple drills where she found someone at short range that she also saw hide from her. With those drills she learned that finding someone and bringing me to them earned her a reward. The distance of these drills increased over time. We progressed to searching small areas of a few acres in light terrain, then increasing the size of the area and terrain variety. We trained rain or shine and each exercise yielded new learning points. Other handlers often

followed me to give me pointers on my strategy, dog interaction and pacing.

Step 5. Keep it Fun

At its core, SAR is a game for the dog. The process can be distilled down to the idea of find the person, tell the human, get the reward. At the end of the exercise, it's all about the reward. Making the exercises and outcomes as fun as possible for Ellie ensures that she wants to keep doing the SAR game even if it's done in tough terrain or weather. If she's having fun and succeeding in training, the better chance we'll succeed for our subjects. Fun is not optional - it's required!

Steps 6-1,074. Realize your K9 knows what they're doing, and you need to catch up with them.

The dog already knows how to find people - the human is there to help and refine things. One common issue for me was talking to my dog too much, a habit I had built while jogging with her. "Shut up and let your dog work" was a common tip through my training. I was talking to her too



Parade Pic. K9 Ellie and Rick during the 2021 Christmas Parade in Springfield, Ore.

much thinking I was helping, but what I really needed to do was watch her and adjust to the signals she was giving off (or not giving off) and adjust my actions to her, rather than trying to force her to follow a plan from start to finish. Ellie already knows how to find things with her nose, I'm the one who needs to use my eyes and ears to help her. Over time, I figured out how to make my vocals and physical movements more deliberate, meaningful and less of a distraction for her, and to pay close attention to our movement, terrain, weather and other factors to ensure our success. I also made changes to my equipment to make sure I was squared away and eliminated things that would distract me from Ellie.

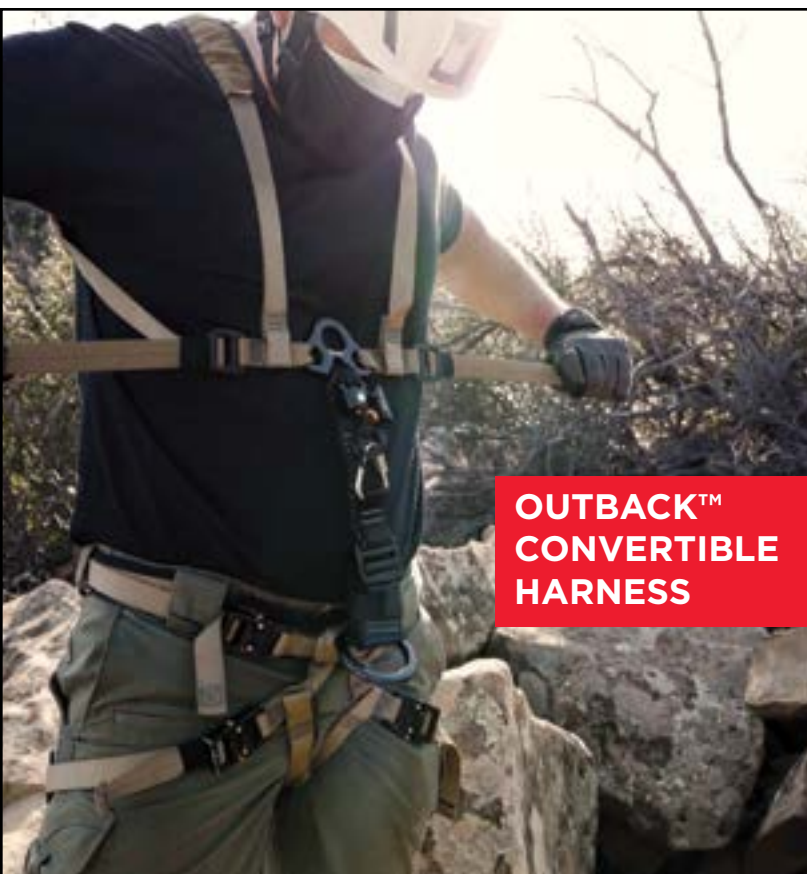
Step 1,075. Test for Certification

After about a year and a half of training evolutions and consulting with team leadership, I scheduled a test for state certifications. I met an administrator at an area in Douglas County. Before the test, I made sure to understand

the area, what was included within the boundaries and the time limit for finding our hider. The area we were in presented its own challenges, as does any section of terrain. But, Ellie did her thing and we found our subject within our time limit, earning our certifications. As usual, she was very happy to see her subject and play ball with her on the way back to our trucks.

Step 1,076. Keep Training

Like all skills, K9 proficiency must be maintained to be effective. The dogs themselves have the instincts they need to do the task, but going long stretches without missions or training can result in reduced performance. The same applies to the handler. If I do nothing but rope rescue training for a few months with no K9 work in between, I'm not going to work as well as I need to with Ellie. These skills are in need of the upkeep to make sure we're always being observant and applying the right tactics. I still make a point to try to run scenarios twice a month with Ellie.



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Drowning

by J. Pearce Beissinger, MS, PA-C, DiMM

Is the snow melting yet? Any floods in your neck of the woods? Spring is upon us and with the change of season comes more rain and melting snow. During these times a refresher on the topic of drowning is in order. It is especially relevant for the MRA as many of our teams are involved in field duties beyond the normal scope of technical mountain rescue, engaging us in even more hazardous environments such as swift-water, canyons, and even submerged vehicles all the while in an effort to reach and appropriately treat our intended subjects.

In this article, we will cover the topic of drowning in 3 sections:

Part 1: Background

- A. Epidemiology of fatal drowning.
- B The definiton of drowning.

Part 2: Rescue

- A. Drowning relevance in rescue.
- B. SAR approach to the drowning patient.

Part 3: Considerations in Drowning Resuscitation



PRO DEAL REMINDER

Search and rescue pays... in good stories, good teammates and plenty of scars from blackberry bushes. Another souvenir we get from SAR is the wear on equipment that comes from miles of climbing, bushwhacking and hard landings in the back of trucks. MRA's pro deal page is designed to help take some of the pain out of the eventual need to replace equipment that ends up being beyond repair from the rigors of training and missions. MRA pro deals link volunteers to outdoor equipment, technical apparel, home gym needs, nutritional supplements and other necessities that support our roles as volunteer first responders. The list of affiliated companies and portals is also growing, meaning better likelihood of you finding the ideal kit or replacements for better prices. Log in to the members section of the MRA web site to learn how to apply for company pro deals and pro deal portals.



Part 1: Background

Drowning can occur in the front-country or the backcountry. Worldwide, drowning causes about 300,000 deaths annually.⁶ This accounts for roughly 3500-4000 deaths per year in the United States, an average of 10 fatal drownings daily. It is the leading cause of unintentional injury-related death for children ages 1-4, mostly related to swimming pools, with an incidence of nearly 5 times greater in the African-American population compared to Caucasian children. Adolescents and young adults in natural bodies of water make up the second most prevalent group of drowning by age. Overall, males account for nearly twice the number of drowning fatalities compared to females. As is often the case with recreational outdoor activities, there is an association between alcohol use and drowning; a blood alcohol level of 0.10 g/dL is associated with a roughly 10 times greater risk of death in boating activities compared to an undetectable blood alcohol.³

Key to the discussion of prevention, treatment, and rescue related-activities is a proper review of drowning,

which is often mistakenly described as a single event but is actually a **"process of experiencing respiratory impairment due to the submersion or immersion in liquid."**^{5,6} Drowning has also historically been inaccurately categorized as near, wet, dry, secondary, freshwater, saltwater, and secondary. Concisely stated, these categories lack physiological relevance and as distinctions serve only to cause confusion to the precipitating issue of mortality - hypoxia and eventual cardiopulmonary arrest.

Part 2: Rescue

Rescuers should be careful in aquatic environments for their own safety. The ubiquitous euphemism of "Safety First" often brashly underestimates the importance of scene safety in an objectively dynamic environment. Water rescue is inherently unsafe, particularly for poorly prepared or poorly trained rescuers. Acknowledging, evaluating, and mitigating risk in a thoughtful way should be second nature to rescuers. This concept has been described as "Safety Third,"² which intentionally acknowledges the paradox of evaluating risk while still engaging in it.

Personal flotation devices (PFDs) and floating extrication devices (rescue tubes, backboard/ SUP, etc) should be used in water rescue. Similar to "edge zones" in technical rope rescue, demarcating the "barrier" to the water-related rescue activity is appropriate. Even for proficient rescuers trained in water rescue equipped with appropriate extrication devices, rescue is best accomplished from outside the water. The life guard industry, scouting associations, and the U.S. Army all use the vernacular "Reach, Throw, Row, Go" in which the emphasis is placed on an out-of-water rescue with tools such as rope throw bags or shepherd's crooks. If water entry is required, the use of adjunct rescue devices and system redundancy with downstream rescue attendants and spotters should be used.

Part 3: Considerations in Drowning Resuscitation

On reaching the patient, rescuers should promptly address life-threatening conditions. By standard convention a patient without vital signs would prompt the rescuers to initiate CPR however is likely to be futile until the patient has been removed from the water. Chest compressions cannot effectively be performed on a submerged victim. While some skilled and trained water rescuers may possess the ability to perform breathing, in most circumstances

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it may be both appropriate (and timely) to remove the patient from the water prior to beginning any treatment.

Rapid reversal of the main physiologic insult will have the greatest success in reducing morbidity and mortality (injury and death). Rescuers should immediately attempt to correct hypoxia in a drowning victim with rescue breathing as soon as able. Instead of compression-only CPR or following the current general standard order of Circulation, Airway, Breathing (CAB), the traditional order of A-B-C should be implemented. The first step is control of the airway and ventilation with room-air supplementation, mouth mouth (preferably with a barrier or family member), or ideally supplemental oxygen if available. If no pulse is detected, add in chest compressions following your established guidelines e.g. a ratio of 30:2 for adult 2-person CPR without an advanced airway. More detailed and up to date guidance is available in the "Cardiac arrest in special circumstances" section 4 of the 2021 European Resuscitation Council Guidelines for Resuscitation.

Other considerations in the rescue response include the topics of: drowning prevention, AEDs, mitigation of hypothermia, cervical spinal injury, Heimlich maneuver and decisions for cessation of resuscitation. A concise review of these issues is briefly addressed below⁵:

- **Ventricular Fibrillation:** "VFib" in the drowning victim is quite rare (approximately 10%). While it is not inappropriate to procure and apply an AED, such resource acquisition and application should not hinder the performance of high quality CPR in any cardiac arrest patient.
- **Heimlich maneuver:** Use of the Heimlich maneuver (abdominal thrusts) does not reduce mortality in drowning victims and can cause aspiration. The Heimlich maneuver should be used only if there is evidence of airway obstruction with a solid object.
- **Rewarming:** Hypothermic drowning victims in cardiac arrest should be rewarmed, if possible, once high quality CPR is in progress. Rewarming may be employed with passive warming techniques addressing the methods of heat loss such as conduction, convection, evaporation, and radiation. Such efforts should not hinder the priority of high quality CPR.
- **Spinal Injury:** is a complex topic to address in the drowning patient. The incidence of spinal injury in drowning victims is low (0.5%-5.0%).

If there is a history of blunt trauma or a mechanism with a high risk for cervical spine injury such as a fall or dive from height, Spinal Motion Restriction should be considered if it will not interfere with performance of high quality CPR especially since respiratory compromise from a drowning process may occur minutes to hours after removal from the water. If immediate evidence of focal neurological deficit, impaired consciousness (i.e. alcohol intoxication), or significant distracting injury are present *without* respiratory or cardiac arrest, this should prompt attention to SMR following stabilization of the ABC's. MRA Rescuers are encouraged to review and comply with their local medical protocols in coordination with their medical director(s) on this rapidly changing topic.

- **Transport vs release from care:** A victim of drowning without any of the following signs may be released on scene: abnormal lung sounds, frothy sputum or foamy airway, *severe* cough, decreased level of consciousness, or decreased blood pressure (systolic BP <90). All other patients should be transferred urgently to a higher level of care.

- **Cessation of rescue efforts:** This is a complex decision and should be made, when possible, in coordination with the medical director or online medical control. The greatest determining factor on mortality is the duration of submersion. Generally speaking, cessation of resuscitation (and rescue) may be discontinued if meeting one of the following: failure to resuscitate after 30 minutes of high quality CPR with water temp > 43°F, after 90 minutes of high quality CPR with water temp < 43°F, or any unacceptable risk of



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safety to rescuers on scene. There are always exceptions, for example in the presence of primary hypothermic or traumatic arrest, and best judgement should always be employed.

Conclusion

1. Drowning is a process of respiratory impairment due to the submersion or immersion in liquid.
2. Drowning missions are inherently unsafe so mitigate rescuer risk, e.g. !Reach, Throw, Row, Go” .
3. Prioritization of the airway is the priority for a drowning victim during CPR.

As mentioned above, the process of drowning may exhibit symptoms hours after water extrication. Foreknowledge of this possibility, through even a superficial understanding of drowning physiology, may help guide the timing and methods of evacuation. As seasons change, so often do our rescue environments and patient epidemiology. The performance of water rescue and treatment of drowning patients is highlighted by both the issues of attention to rescuer safety and a prioritization of patient oxygenation and ventilation. Finally, community engagement to prevent drowning drowning is in alignment with the mission of the MRA - !saving lives through rescue and mountain safety education.”

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Letter from the Editor

As I'm writing this letter (mid April) there was just a healthy dose of snow on the Oregon Cascades, which made for an enjoyable weekend of snowboarding, my first since the 2020 closures. It was much needed.

However, before going into the snowy weekend I had just finished reading over a series of briefings on fire season along with the new challenges the year will bring, particularly staffing shortages among wildland fire agencies. With drought conditions being a consistent factor in the west, I have no doubt that wildfires will be a pressing issue once again in our late summer and require some volunteer SAR commitment to help evacuees.

Like all seasonal things, it's best to prepare now and be ready for that eventual callout. Fire evacuations are a challenge of logistics. Roads, supplies and locations for safe haven need to be known, stocked and accessible. It's a classic exercise of the incident command courses we've taken over our volunteer careers. From that macro perspective of preparedness, we can get down to the personal or micro view. Is our quick response gear kept up and in the right places? Do we have all the batteries we need for our electronics? Do we have the materials ready for sustaining an overnight callout quickly accessible? I'm sure just about all of us will give thumbs up answers to those concepts, and I bet some of us will realize the energy bars in our 48-hour duffles are long overdue for replacement. I am in that boat.

Cheers,

Rick Lindfors

Meridian Editor in Chief

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