

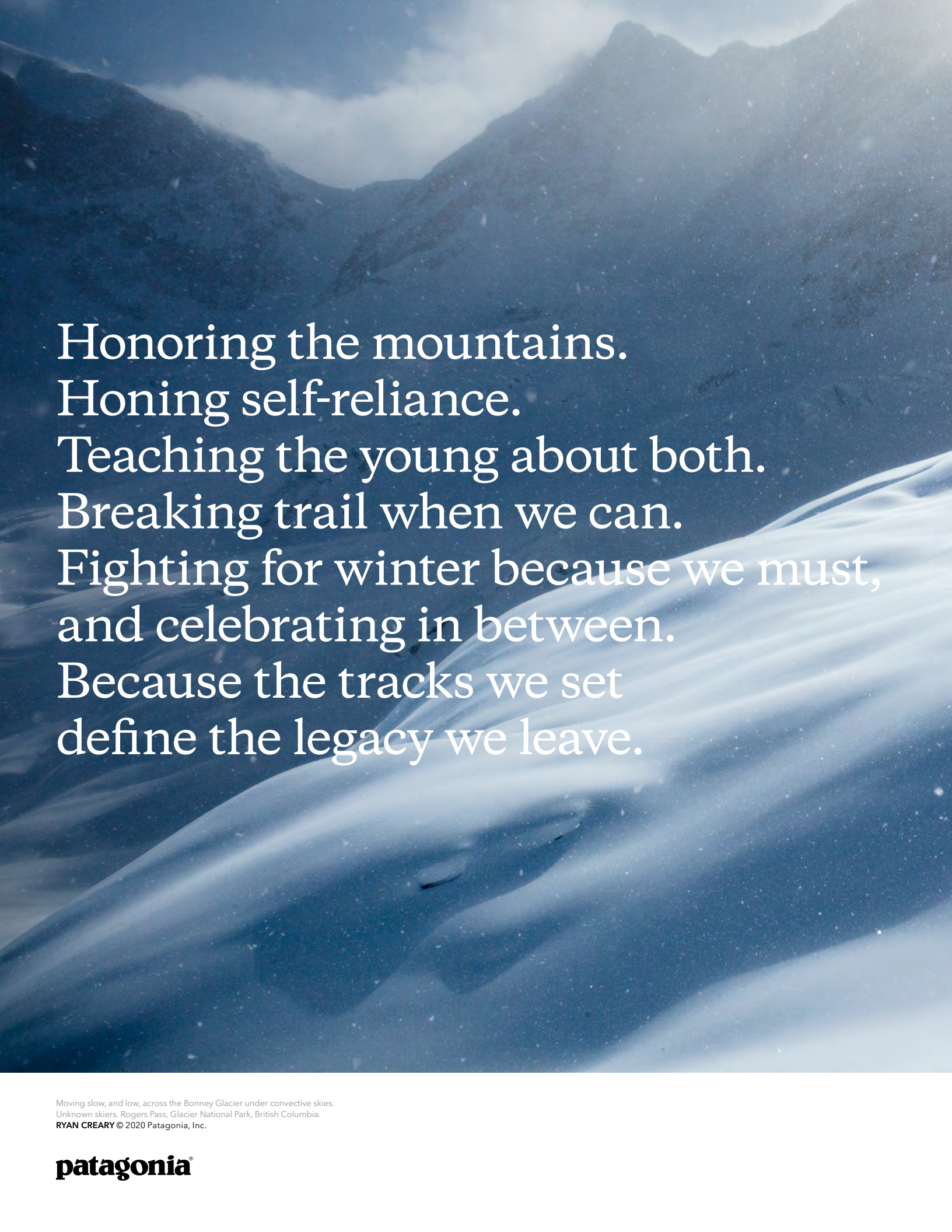


ski patrol

Official Publication of the National Ski Patrol
nsp.org + Summer 2022 + Volume 39 Issue 3



**MENTAL HEALTH FOR PATROLLERS
YOUNG ADULT PATROLLERS**



Honoring the mountains.
Honing self-reliance.
Teaching the young about both.
Breaking trail when we can.
Fighting for winter because we must,
and celebrating in between.
Because the tracks we set
define the legacy we leave.

Moving slow, and low, across the Bonney Glacier under convective skies.
Unknown skiers. Rogers Pass, Glacier National Park, British Columbia.
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40 PATROLLER MENTAL HEALTH

BY TERRY RITTER

Mental healthcare for first responders has been an issue of growing concern, and it has only been exacerbated by the pandemic. It is an area that has lagged in many patrols, but more and more is being addressed as patrol leaders recognize that sometimes the scenes that patrollers respond to can have long-term negative affects on their mental health. Terry Ritter writes about this issue and how to utilize critical incident stress debriefing to help.

52 YOUNG ADULT PATROLLING

BY CLAIRE LANDBERG

Patrol recruiting is always a topic of discussion each season. One thing that can help with recruitment is a thriving young adult program. Claire Landberg, a young adult patroller in Minnesota, writes about her experiences as a young adult patroller and why and how patrols can benefit from using young adult patrollers.

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BY AMY WEST

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BY CANDACE HORGAN

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59 EVERY DOG HAS ITS DAY

BY ERICA CLIFFORD

Dispatches from the Wasatch Backcountry Rescue International Dog School, held in Alta, Utah.

Cover photo: Erica Clifford
Left photo: c/o CAIC
Photo above: Charley Shimanski





DOUBLE
BLACK
DIAMOND

PATAGONIA
SUBARU
WEATHER TECH
WESTON
TIN CUP

SINGLE
BLACK
DIAMOND

HESTRA
SMITH
YAKIMA

BLUE SQUARE

BLACK DIAMOND
CASCADE RESCUE
ICEBREAKER
FIRSTNET

GREEN CIRCLE

BCA
BOLLE
MARKER/DALBELLO/VOLKL
EMERGENCY MEDICAL PRODUCTS
HEAD WINTER SPORTS
KEEN
KULKEA
LEKI
LENOVO
BRACELAYER

BLUE SQUARE

DYNASTAR/ROSSIGNOL/LOOK/LANGE
TECNICA/ NORDICA /BLIZZARD
TERRAMAR
SWANY

GREEN CIRCLE

SPOT
RUDY PROJECT
SCOTT SPORTS
SLINGSHOT SPORTS
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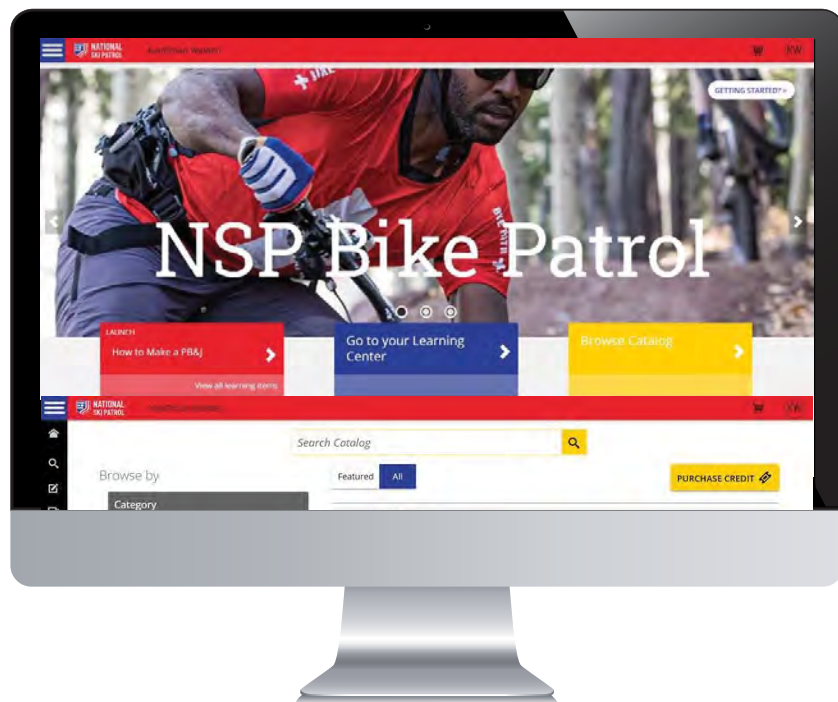
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NSP EDUCATION PROGRAMS

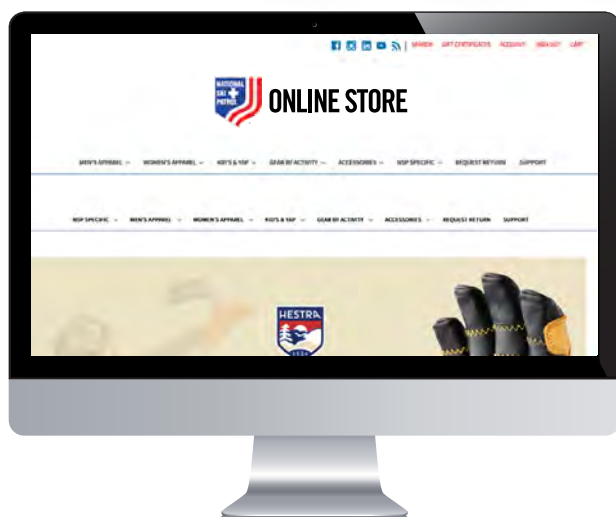
GOLD-STANDARD CONTENT, STATE-OF-THE-ART TECHNOLOGY

Coming in June, NSP members will access education programs through the new NSP Center for Learning, which will improve and expand NSP's educational offerings. Look forward to experiencing NSP educational content in a new and exciting way.



SKI PATROL MAGAZINE

Stay up-to-date with the latest trends, techniques, operations, industry issues and local patrol happenings. Every NSP member receives 3 issues a year.



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ski pa+rol magazine

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Letter

from the Editor

By Candace Horgan, Editor



Another season is in the books, and despite challenges, it was a success at most resorts. The snowpack was down in many parts of the country, and the snow fell later in the season than normal as well. For instance, Denver didn't see any snowfall until January, and most of the Colorado resorts struggled to open terrain early in the year. Perhaps in part due to the lower snowfall, avalanche deaths decreased substantially from the previous season, although as we were preparing to go to press, there were two in-bounds avalanche deaths within a week, one in Oregon and one in Canada.

Regardless of snowfall totals however, avalanches are always a concern, and avalanche incidents offer lessons to be learned. Longtime avalanche educator Dale Atkins returns to the pages of *Ski Patrol Magazine* with an article about the avalanche deaths and snowpack from 2021-22, including the in-bounds deaths. As previously covered in the magazine, avalanche forecasting is also changing due in part to the effects of climate change.

Speaking of managing difficult conditions at the resort, new Outdoor Risk Management Program Director Mark Petrozzi has an article in this issue addressing the ways to sign hazards at your resort and what the difference is between a hazard and an obstacle. Risk management is increasingly a major part of patrol work, and we look forward to more articles on this topic from Mark and his team in the future.

Deaths at ski resorts seemed to be in the news a lot this season, though it is unclear if the total this year is in line with historical averages. An article on [Snowbrains.com](https://www.snowbrains.com) on Feb. 14, 2022, mentioned 10 deaths in the few weeks before the article. Regardless of whether the numbers are normal or up, a death at a resort is always a difficult event for a ski patrol to cope with, and it can affect patrollers for years afterward.

The mental health of first responders is becoming a topic of increasing discussion among leaders and educators in the field. According to the Centers for Disease Control, EMS providers have an elevated risk of suicide compared to the general public, with a suicide risk 1.39 times higher. EMS providers are also at elevated risk of depression and post-traumatic stress disorder.

In the EMS profession, the availability of critical incident stress

debriefing is common, but not all ski patrols avail themselves of this tool. In a feature article in this issue, Terry Ritter, a career firefighter-paramedic, outlines the ways that patrols can utilize critical incident stress debriefing to help their patrollers after a critical or traumatic event. It is a complex topic, and one that patrols should examine and work on. Being proactive on this can help prevent small concerns from becoming larger, more complex problems for patrollers.

Is recruiting a topic among your ski patrollers? It was definitely a topic of discussion at Powderfall 2022 in Breckenridge, Colorado. Replacing aging or retiring patrollers should be considered sooner, rather than later. Currently, 32% of NSP members are over the age of 65; that number is more than double what it was just six years ago.

One way to address recruiting and replacing aging patrollers is through a young adult patroller program. In this issue, Claire Landberg writes about joining a young adult program at her local resort and how it has changed her life. While some worry that young adults are short-term patrollers, many young adults find ways to patrol at other resorts when they go to college, and they also often return to their home patrols as adults. Patrolling also introduces these young people to medicine, and as Claire recounts, it inspires some to pursue careers as paramedics, nurses, physician assistants, and doctors.

We do have returning contributors in Brett Gehrke, who shares his twisted takes on patrolling with another Patrol Penguins cartoon. Brett's cartoons were available for purchase at Powderfall and proved very popular. Also back is veterinarian Kim Henneman with an article about how best to use supplements to treat arthritis in your dogs.

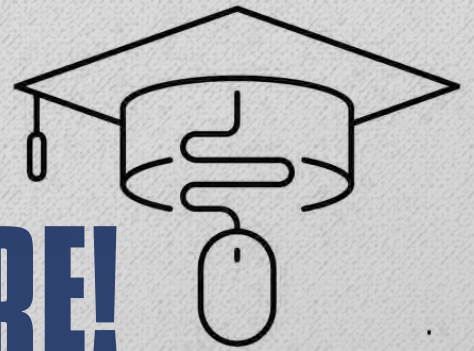
Our "From the Director's Chair" column is also back, but with a new author. Amy West will be writing the column from now on. Amy recently became a patroller in Colorado and splits her time between Colorado and California. She is also an experienced journalist with many credits to her name. For her first column, Amy interviews Allan Rabbitt, the patrol director for Great Falls Ski Patrol, which patrols at Showdown Montana. The GFSP was named runner-up for NSP National Outstanding Large Alpine Patrol in 2021, and Allan talks with Amy about that and more in the interview.

We welcome Amy to the ranks of *Ski Patrol Magazine* contributors and look forward to working with her in coming issues.

If you are a bike patroller, your season should be heating up as this issue hits your mailbox, and we have an interview with NSP National Bike Program Director Jeremy Verbeke in this issue. He highlights the successes of this growing program, and as someone who has built a bike patrol from scratch, he will be a valuable resource to patrollers around the country who are looking to start a new bike patrol.

Powderfall 2022 closed just as we were going to press, so we don't have an article on it in this issue, but fret not, as we will have a full recap with many photos in the fall issue. In the meantime, enjoy the summer! +

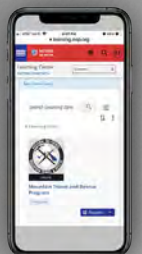
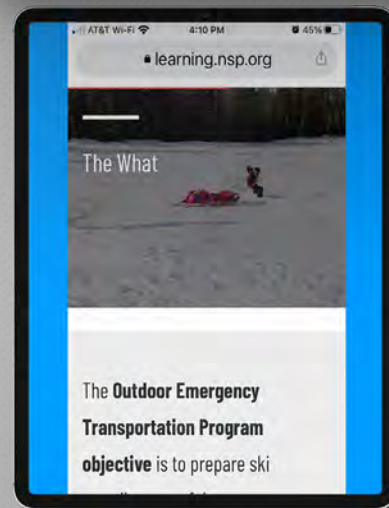
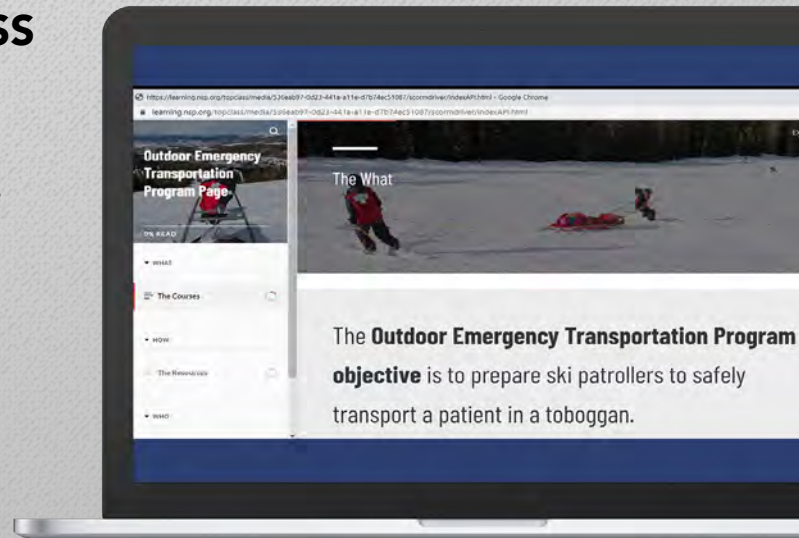
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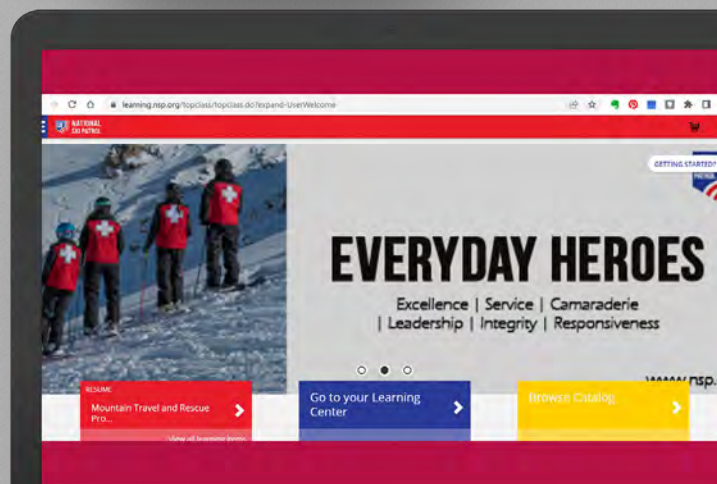
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All NSP members will experience this new learning environment as part of the fall OEC refresher.

Visit nsp.org to access the new system and for links to training videos and other resources.



Letters

to the Editor

▶ Rookie patrolling

I just finished reading the “Rookie Patrolling” article authored by Richard Basile in the winter 2022 *Ski Patrol Magazine*. It brought back a lot of memories.

52 years ago, I was a rookie in the era of Red Cross first aid, rope tows, Head metal skis, and sure-stop toboggans. Many of the feelings and observations Mr. Basile referred to were alive and well in that era.

Though much has changed in the past five decades, much remains the same. Dedication, teamwork, lifelong friendships, and the spirit that moves people to volunteer remain constant.

Thanks for the article.

Bob Starr
Liberty Mountain Ski Patrol, Eastern PA Region

▶ Why we patrol...

“Do you know if they’re opening that trail today?”

The question came as a stranger and I rode the lift together. As a new patroller, I shifted into public relations mode, eager to share my knowledge of the mountain.

“They’re racing on that trail today, so it’s closed. The good news is that the run next to it is open. Personally, I like that one even better.”

I expected enthusiasm. He looked away, and disappointment flashed briefly across his eyes. I tried again, selling harder this time, saying, “We have plenty of good trails, and that one will be open again tomorrow.”

“Oh. OK.” His voice tailed off. “It’s just that my brother and I used to take our last run of the day on that trail.”

“Your brother.” I fumbled for the right words, watching his face as he quietly looked down into the passing trees. “Is he still here?”

Eyes downcast, his voice soft. “I understand. I just came up for the day. Some other time then.”

I hesitated before continuing, “Tell me about your brother?”

“I found out that he died last week. It was unexpected.”

And out it came, in the minutes that remained. How they’d been

coming to the resort for years. How his big brother helped mom raise the family after dad died. How that last run of the day had always been reckless, really, two brothers trying to push one another off their skis.

I looked over my shoulder repeatedly, waiting for him to follow as I led the way to the next lift, en route to the race course. I had been a police officer for a little while, and a medic before I started patrolling. I’m ashamed to admit that in the back of my mind I wondered if he was playing me. I thought about the other patroller that I knew we’d be meeting at the top of the course. She’d been on the mountain for years. She could be hard-nosed sometimes. I wondered if I’d be able to keep my promise.

Her face softened as she listened to his story, before they melted into a hug together, this guest and my coworker. “I want you to come back here in an hour,” she told him. “I’ve got to check with the manager on duty.”

Later that afternoon, I heard the unaccustomed voice of the resort manager come over the radio. The run in question would be completely closed for a bit, the race suspended, while ski patrol conducted a “special detail.” He made his last run.

I can still feel that guest’s handshake when we parted. No longer total strangers. It was one of the best things I did this season.

Jay Brombach
Snowshoe Patrol, West Virginia

▶ Nike missile

There is a “significant” error on page 31, lower left corner, in the winter 2022 *Ski Patrol Magazine* “From the Director’s Chair” article about Arctic Valley.

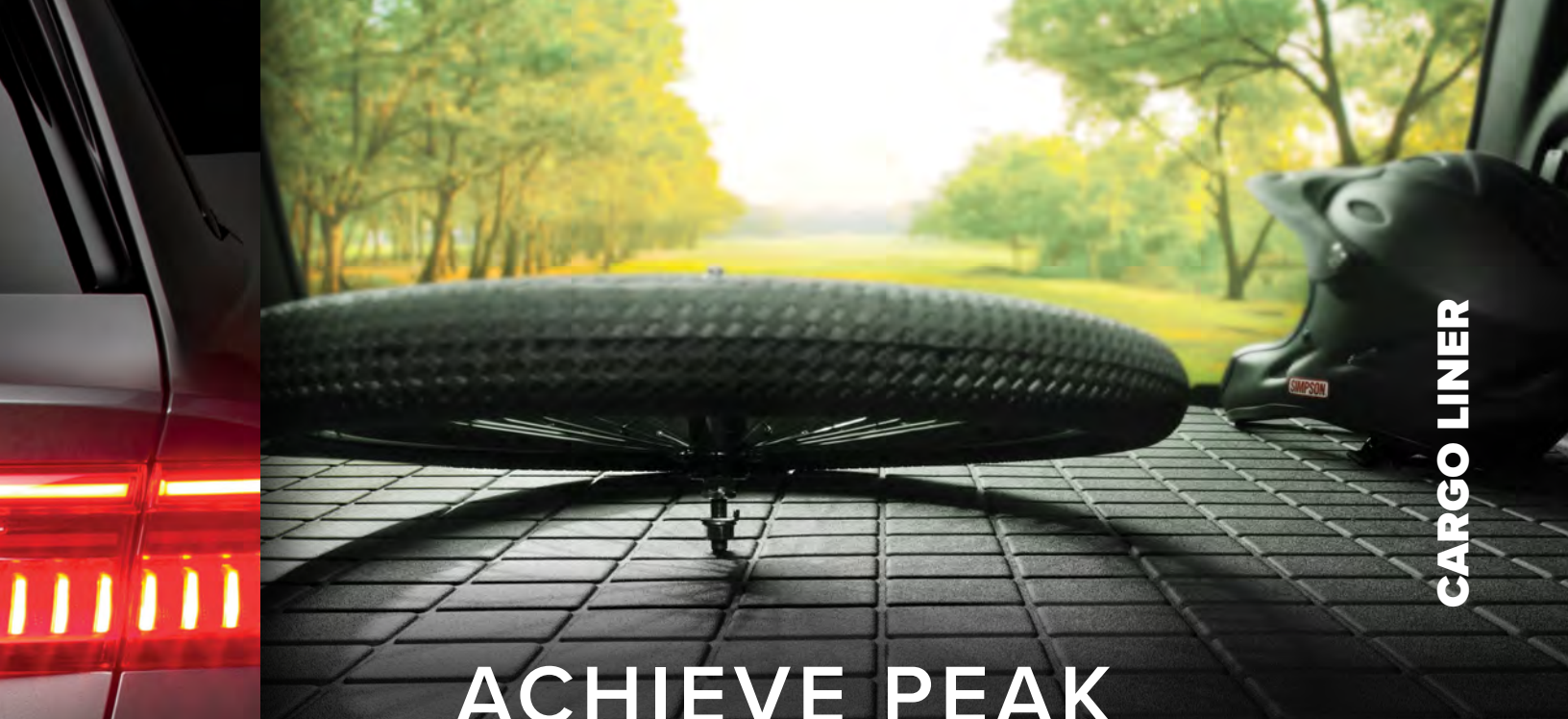
Specifically, the article states “A Nike is an intercontinental ballistic missile that ...,” which is factually incorrect.

Actually, a Nike Hercules is a two stage, solid propellant, air defense missile that could carry either a high-explosive or low-yield nuclear warhead against aircraft or inbound short-range cruise missiles up to altitudes of about 150,000 feet and up to about 75 miles distant. They were decommissioned in the United States beginning in 1974.

The Nike was never an intercontinental ballistic missile for use against ground targets.

PS: I was a U.S. Army Air Defense Artillery Officer in the late 1960s.

Richard Omar Hansen
Alumni

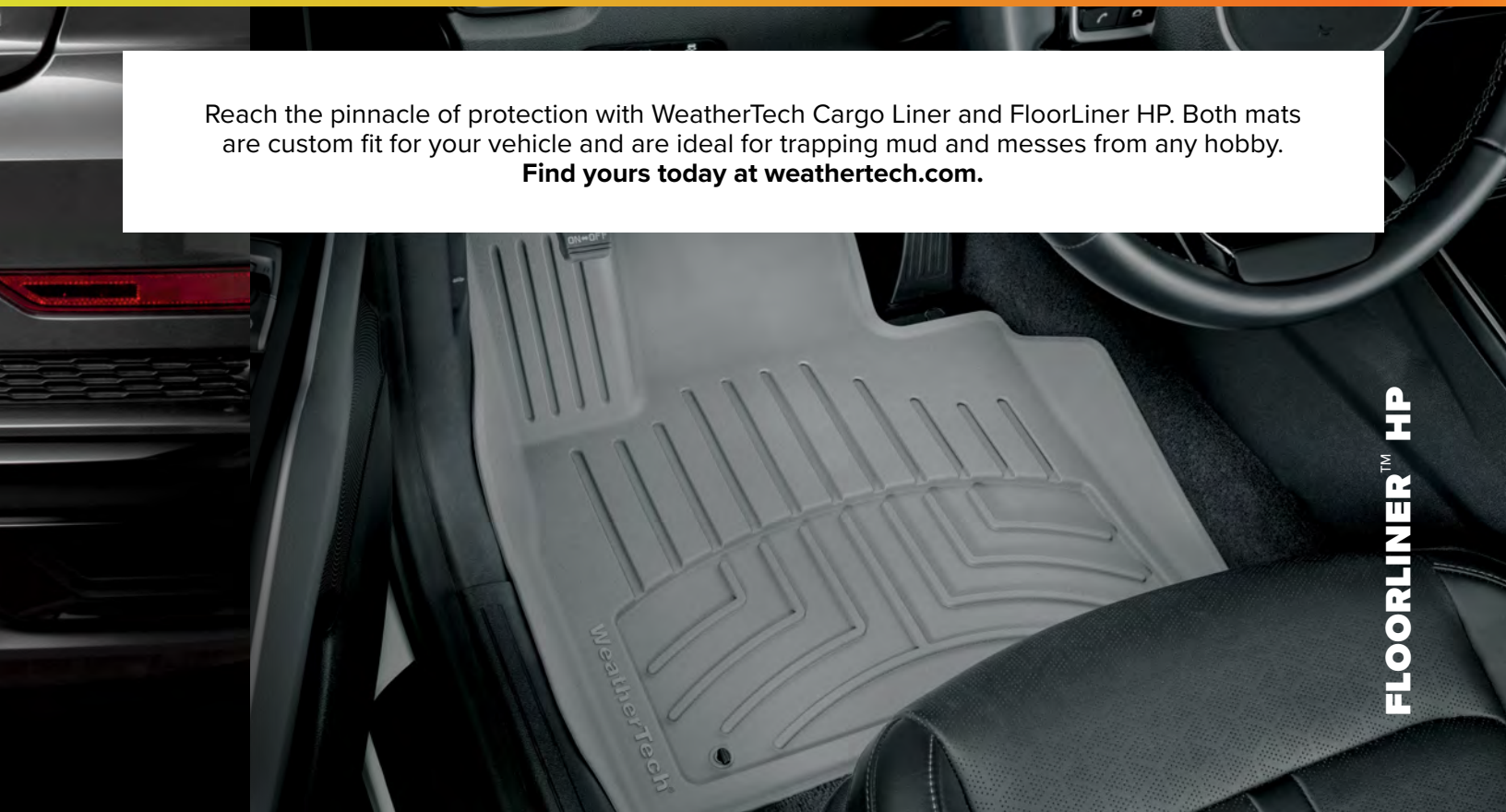


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Dale Atkins

With five decades of mountain rescue experience and working with avalanches, Dale Atkins trains avalanche professionals and mountain rescuers around the world. He has extensive avalanche knowledge and experience as a rescuer, forecaster, researcher, and educator. Many skills were fortified with 20 years spent working at Loveland Ski Area as a part-time professional ski patroller. Along the way, he has also participated in more than 40 avalanche rescues. Currently, Dale works for RECCO AB. He is a past vice president of the Avalanche Rescue Commission for the International Commission for Avalanche Rescue and a past president of the American Avalanche Association.



Kim Henneman

Dr. Kim Henneman is a Utah Wasatch Range native. She tolerated the Midwest for four years to get her veterinary medical degree from Purdue, but moved back to Utah for the outdoor life. She became certified in acupuncture and chiropractic in the early 1990s and worked on her first avalanche dog shortly thereafter. She has helped form the new specialty discipline of canine sports medicine and rehabilitation. As the only veterinarian who is board-certified in both dogs and horses, Dr. Henneman currently writes and gives workshops all over the world, consults regularly with avalanche and SAR dogs, and helps canine athletes competing in numerous disciplines, including as a multi-year Iditarod trail veterinarian. Her goal is to bring knowledge from every discipline to help active dogs everywhere.



Douglas Hill

Doug Hill has served for 35 years on the Big Bear Ski Patrol in Southern California. He is the current Instructor Development Program administrator for the Southern California Region and serves on the NSP National Instructor Development Committee. He is also an Instructor Development instructor and instructor trainer. He served as the patrol representative at Snow Summit for six years. Hill, a contributor to *Outdoor Emergency Care*, 4th ed., was the Outdoor Emergency Care Program supervisor for the Far West Division for five years and the OEC Program administrator for the Southern California Region. He received an NSP Distinguished Service Award in 2007.



Claire Landberg

Claire began patrolling at Wild Mountain in Taylors Falls, Minnesota, at 15 years old. Originally from St. Paul, Minnesota, she was inspired to join after seeing the patrol in action during her ski racing-induced injury that almost ended her season. Following a life-changing experience while completing her certification, she began to advocate for the expansion of young adult patroller programs locally and nationally. Claire is heavily involved with her patrol, organizing YAP events, teaching Outdoor Emergency Care, and serving in leadership positions. She is also an avid ski racer, competing with her high school and club teams. As a graduating senior, she plans to attend the University of Utah to major in kinesiology and aims to grow her patrol career in the mountains that surround Salt Lake City.



Terence Ritter

Terence “Terry” Ritter is a career fire officer and has extensive volunteer community service with an emphasis on total societal impacts. He is a ski patroller and firefighter-paramedic and the author of “Communication: Definitive Care in Tactical Emergency Medical Situations,” “Communicating and Effective Damage Assessment (Disaster Response),” Madison Fire Department Loss Prevention through Data Analysis Initiative sentinel research (nfa.usfa.fema.gov/pdf/efop/efo49223), and numerous emergency service trade journal articles with topics ranging from leadership to community-based initiatives. He has received commendations from the U.S. Senate, the Department of Homeland Security, and the Wisconsin Office of the Governor. He is a recipient of the University of Wisconsin Police Chief’s Award and the Meritorious Service Award from Fitchburg Police. Contact Terry via LinkedIn or Facebook Messenger.



Amy West

As a Durango, Colorado, native, Amy grew up skiing on the slopes at an early age and then switched to snowboarding in 1988. She joined the National Ski Patrol in 2021. Though relatively new to NSP, she is no stranger to working at a ski resort, including teaching snowboarding. Her professional life has sent her living around the world and near the ocean, where she has been working as a marine scientist since the 90s. Her other profession is a science communicator, breaking down science through audio, writing, and video. She splits her time between San Luis Obispo, California, and Durango, enjoying mountain biking, climbing, and surfing while living with her snow-loving dog, Skye, and husband, Rich, who is a patroller at Purgatory in Durango.

From the of Chris Castilian



Happy summer! I hope you are all enjoying some sunshine and warmer temperatures, even if you are already missing the snow and getting ready for next season.

As you all have been winding down on the hill, here in the office we remain focused on our members. The National Ski Patrol exists to serve our members by providing education, training, connections, pro deals, and service. We believe that your NSP membership is a great deal — you can easily make up what you pay in dues with one or two pro deal purchases — and we strive to extend the value of your membership every day.

As we look forward, we must recruit and retain new members to ensure our future. We are humbled to serve the thousands of members who've dedicated 10, 20, or even 50 years to being part of the NSP, but we must also continue to evolve by providing relevant content and services to our membership. Our focus this summer will be on building a strong foundation to meet the needs of a rapidly evolving industry.

We've built up our member services team so we can provide you, our members, with the platinum-level service you deserve. We are upgrading the technology that our members use most often to access education programs and manage their NSP membership. We are continuing to learn how we can be more inclusive and welcoming to people who do not fit our traditional membership mold. Further, we are always looking to expand and improve the partnerships that provide outstanding deals and programs.

When you return to your refreshers and start to put together your rosters in the fall, you'll see our new NSP Center for Learning. Our team of dedicated volunteers and staff are confident it will enhance your lives as patrollers. With all our education systems and resources in one place, registering for courses, managing those registrations, accessing materials, and participating in forums with other NSP members will be much more intuitive and streamlined. We are extremely grateful to two of our volunteers who have generously given of their time and significant expertise to bring this new system to all of you. They are our NSP Board Chair Rick Boyce and NSP National Instructor Development Program Director David Hemendinger. Their direction and involvement in every step along the way have made a critical difference in the success of this important project.

We will also begin upgrading our Member Management System (MMS) by this fall, providing new features, easier-to-use tools, and facilitating a long overdue website upgrade. Our team hopes that our members and leaders, from patrol directors to region and division leadership, will find this upgraded system beneficial, saving everyone time in front of a screen so you can spend more time focusing on training and on the hill.

Speaking of summer, our growing bike patrol program is picking up speed under the capable leadership of NSP National Bike Program Director Jeremy Verbeke (profiled in this issue), who is ready to take the program in exciting new directions. Bike patrols are not only part



of an ever-growing portion of resorts' summer operations, but many of them support urban and suburban trail systems as well. The Bike Program provides us with a new and distinct constituency in the broader outdoor recreation industry, one that is arguably more accessible and broad-based with plenty of room to grow.

The most common thread among us, wherever you patrol, is your passion for serving others and the love of performing challenging, exciting, and unpredictable work. Each of you brings distinct experiences and interests to your patrol life, whether as a volunteer generously giving of your time or performing this noble work as a career. You all share a deep connection to the outdoors, to serving others, and to your sport, regardless of whether you are lifetime skiers or snowboarders or discovered these sports as adults.

Our differences are as important to defining us as individuals as are our shared experiences. Each of our nearly 32,000 members make our organization richer and more resilient. Our team here in the national office is committed to supporting each and every one of you, improving our service and honoring our rich history as we strengthen our future. Onward! +

MEET *Haley and Kira* HOWARD

You'd be hard-pressed to find two more impressive young women than Haley and Kira Howard, or to find a mountain that feels more like family than their home mountain, Windham Mountain in New York. Kira is a freshman at the Coast Guard Academy; Haley graduated from the Academy and now attends flight school with the Coast Guard. Both are talented and accomplished lacrosse players. They are also both still active members of the ski patrol at Windham, where they are happy to return when they are home on vacations and even weekends.

Kira and Haley are third-generation skiers whose family has been heavily involved at Windham. They call their grandmother — who is 84 and still working as a ski instructor — “Skima,” and their parents are also longtime ski instructors and coaches. Their mother now volunteers with the adaptive skier program there, and their father coaches the girls’ ski team for the local high school and Windham’s U-14 program on weekends.

“Windham is very family-based,” Kira remarked. “There are lots of us whose parents work and volunteer at the area. It would be great if we can keep the tradition going.”

NSP met Kira and Haley through Henri Rivers, president of the National Brotherhood of Skiers, who along with his wife Karen coached ski racing at Windham with the Howards. Kira and Haley remember Henri and Karen as close members of their ski family at Windham.

Asked about their experience being women on ski patrol and in a military academy, Haley and Kira said they never felt that they were treated differently on their patrol. Kira pointed out that Windham’s patrol director is a woman, Maggie Brabazon. “She is a great leader,” Haley said. “Having women in leadership is so important.” (<https://www.windhammountain.com/mountain/stories/second-post/>).

Kira added, “Seeing women in leadership positions brings in more women and makes it evident that women are capable of doing anything.” They are both excited that President Biden nominated a woman, Admiral Linda Fagen, to be the next commandant of the Coast Guard. She became the first woman ever to lead a branch of the U.S. military when she was unanimously confirmed by the U.S. Senate on May 11 (<https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/12/statement-from-president-biden-on-the-confirmation-of-admiral-linda-l-fagan-as-uscg-commandant/>).

They continue to patrol when they are home on winter vacations and the occasional weekend. “We have so many friends [on the patrol], it’s fun to be there over break,” Kira said. Haley said that right from her Outdoor Emergency Care course, being on patrol has been about learning, fun, skiing, and friendship. “It is a happy place; it doesn’t feel like work,” she said.

Asked what the best part of patrolling has been, both cited the friendships and camaraderie. “And first tracks on a powder day,” Kira added.

You can read more about Kira and Haley on the NSP blog at <https://nsp.serves.org/meet-kira-and-haley-howard/>. +



Patrol Penguins

BY BRETT GEHRKE



ALASKA DIVISION

SHE Shreds the Moose Women's Event

On Saturday, March 12, the Moose Mountain Ski Patrol of Fairbanks, Alaska, held its first-ever women's event. Named after Moose Mountain Ski Area's catchphrase "Shred the Moose," this first event was small, but a smashing success!

We had 13 women participate: three candidates, six patrollers, and four non-NSP participants. The day started with check-in at the base lodge at 10:30 a.m., where everyone got their event swag, snacks, coffee, and water for the day. They also signed their event release forms. After introductions and announcements, everyone went outside to load-up for our warm-up run.

Moose Mountain does not have a chairlift, so management typically contracts out to have their tricked-out ski (school) buses shuttle riders from bottom to top. Due to COVID-19 precautions, the past two winters have been a hike-up or bring-your-own-driver situation. Therefore, we got a 12-passenger van donated/discounted from Northern Alaska Tour Co. for use during the event that was driven by one of our alumni patrollers. Our second vehicle was another patroller's truck, which we used to haul skis and gear to the top.

After our warm-up run, we stayed together as a group to practice drills for edge control and side-slip techniques over the course of two runs. Next, we broke off into two groups to send the candidates on a toboggan skills run while continuing ski skills and touring the mountain with the non-NSP women, most of whom had never been

to Moose before. In what seemed like no time at all, it was time for our lunch, which we had scheduled for the end of our event.

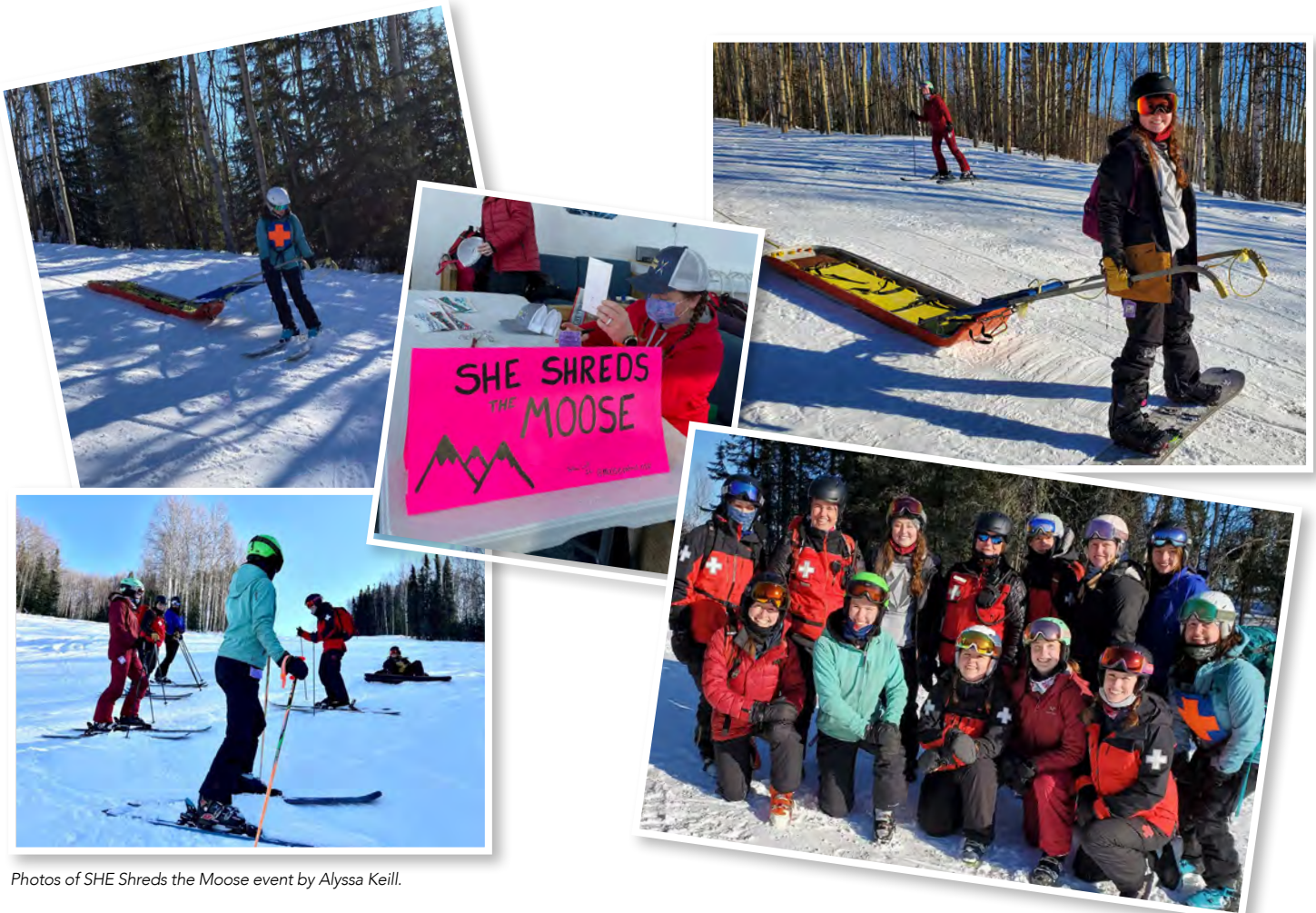
During the weekends in March, the Moose Mountain Ski Patrol runs a barbecue fundraiser at Raven's Roost — our patrol hut at the top — this was our reward for the day! Nothing tastes better than a hot sandwich after some good spring skiing! After eating, we went through some trivia questions on the history of the hill and then did prize drawings for items that were generously donated by REI and Beaver Sports.

SHE Shreds the Moose was So. Much. Fun. As the day progressed, you could visibly see everyone's smiles getting bigger and bigger. Everyone wished the day had been longer. Perhaps the coolest part was how jazzed the non-NSP women were; one asked to have ski clinics like this every month, and two of them asked for information on what it looked like to train and join!

We want to give a big shoutout to our patrol members who took on the other duties of the hill so that we could run our event, as well as Moose Mountain management for donating day passes and allowing us free range for our event needs.

Alyssa Keill

Alaska Division Women's Program Supervisor



Photos of SHE Shreds the Moose event by Alyssa Keill.

INTERMOUNTAIN DIVISION

Guardian Pebble Creek ski patrollers give a half-century of service



Ski patroller Joe Lehman has done avalanche control for 48 years at Pebble Creek Ski Area. Photo by Dianna Troyer.



Mike Kirkland, 68, joined ski patrol when he was 16, following in the tracks of his father, Max. Photo by Dianna Troyer.



Jerry Waters, 71, is in his 52nd year of working on ski patrol. Photo by Dianna Troyer.

Even on overcast days, the mood in the ski patrol building at Pebble Creek Ski Area is radiant from high-energy ski patrollers reminiscing about their half-century of service to the volunteer organization.

They have rescued countless injured skiers, some with life-threatening injuries. They also have felt the triumph of rescuing avalanche victims and the tragedy of recovering fatalities.

"We're just doing what we love," said Mike Kirkland, 68, who became a ski

patroller as soon as he was old enough at age 16. "You never know what's going to happen here."

Kirkland grew up skiing at Pebble Creek and followed in the tracks of his father, Max, who was a patroller.

"He died of a heart attack the day after helping some kids caught in an avalanche, so we named a run, Max Out, in his honor," Kirkland said. "Every time I come up, the first run I make is for him. I tell him, 'This one's for you, Dad.'"

At the ski patrol building during a break, Kirkland laughs with Joe Lehman, 76, a patroller since 1974, and Jerry Waters, 71, in his 52nd season on the patrol.

"We have hundreds of stories," Lehman said, laughing. "They're even true."

"Remember the early days of avalanche control and what they gave us?" said Waters, triggering more laughter.

They are among 85 ski patrollers at Pebble Creek who intentionally put themselves at risk to keep skiers safe. Before lifts open, they set explosives to dislodge potential avalanches, mark obstacles, and rope off areas that lack snow coverage.

Instead of being paid, they pay yearly dues to National Ski Patrol, a nonprofit dedicated to service, safety, and education. To keep their skills honed, they take annual refresher courses in first aid, avalanche mitigation, and lift evacuation.

"I'm sincerely blessed to lead this patrol and to ski here," said Stefan Berkel, 52, ski patrol director since 2006 and a ski patroller since he was 20. Before working at Pebble, he was ski patrol director at Utah Olympic Park near Park City, Utah.

"When I heard about this job at a summer instructor training, I jumped," Berkel said. "The ski area is a gem with the terrain. Plus, the patrol here is like family."

Generally, Berkel schedules six patrollers on weekdays and 12 on weekends.

"I never have trouble staffing the shifts because patrollers are dependable and love their jobs," he said.

When Berkel was hired, Kirkland, Lehman, Waters, and others shared their insights about the ski area with him. With the steep terrain, avalanche mitigation is crucial.



A run was named after Mike Kirkland's father, Max, who died of a heart attack a day after rescuing skiers caught in an avalanche. Photo by Dianna Troyer.



Mike Kirkland grew up skiing at Pebble Creek. Photo by Jenna Krasa.

Poignant avalanche

Avalanches are poignant for Kirkland. Riding up the lift on Jan. 7, 1995, with his dad, they were dispatched along with other patrollers to help teens who had hiked above the lift to find fresh powder and had triggered an avalanche. One teen went for help, while two were partially buried, and one had vanished.

All 12 ski patrollers made a line.

"We were elbow to elbow and started pushing our avalanche probes 6 feet down," Kirkland said. "Then we moved 1 foot forward and did it again. I hit the buried skier on his head. We dug him out in time. He was lucky to have survived."

Meanwhile, Max and others dug out two teens who were buried to their waists.

"Dad rode down the lift with them to reassure and calm them," Kirkland said. "He died of a heart attack the next day. He was only 64. I think the exertion of responding to the accident impacted his heart. The skiers he helped came to his funeral."

Not all avalanche rescues are triumphant. Three fatalities have occurred, the most recent in 2020 near the end of the season. Patrollers recovered the body

of Phil Bregitzer, 60, an experienced backcountry skier, who was skiing out-of-bounds with friends.

In 1963, an avalanche class instructor and his wife perished.

"They were probing snow and triggered an avalanche," Waters said. "My brother was in the class with them. When they were found, they were upside down and vertical."

Although serious about avalanche control, patrollers laugh about how avalanche mitigation has evolved. In the 1970s, they trained with a prototype of the Avalauncher, a fickle device that launched charges and was challenging to calibrate.

"Sometimes we overshot our target," Lehman said. "Other times, a charge wouldn't detonate, so I was voted to deal with it. You'd tape a new cap and fuse to it, then light it and run. Other times, I was the one lowered by a rope to put a charge at a certain place. Why was it always me for those jobs?"

They all laugh.

"These days, our charges and detonation methods are safe and stable," Berkel said.

Astounding injuries

Some accidents were unforgettable. One skier going off a cat track near the Ridge got his ski pole stuck into his femoral artery when he landed. A patroller rode the toboggan down with him and applied direct pressure to the artery so he wouldn't bleed out.

"It was the first time a LifeFlight helicopter landed in the parking lot to evacuate someone," Kirkland said. "He lived to ski again."

Then there was a speeding skier in South Bowl who overshot the cat track, landed on rocks, and ruptured his spleen.

"We had to move fast on that one to get him to the ambulance," Lehman said. "He survived."

During a shift, no matter what happens or whether the mountain is enshrouded in clouds in the morning, Kirkland predicts skies are usually clear by late afternoon.

"It's always golden here by the end of the day," he said.

Dianna Troyer

Reprinted with permission from the Idaho State Journal

INTERMOUNTAIN DIVISION

Intermountain Division Women's Program Event



Enjoying learning during a clinic. Photo by Kristen Barlage.



Clinic group photo by Kristen Barlage.

As the new Intermountain Division Women's Program supervisor, this past winter I had the honor of inviting all IMD women to become even more involved in all our program curricula. The people of the Intermountain Division are very knowledgeable and enjoy sharing with all patrollers wanting to advance their patrolling careers. Over the years, I find I learn something new every time I attend a program event, becoming a better patroller as a result. I hope to share what I have learned and bring my enjoyment of patrolling to our new program.

During the annual Snow Sports Trainers Workshop on January 8 held at Pine Creek Resort in Wyoming, our goal was to get new women involved in teaching and evaluating Outdoor Emergency Transportation (OET) skills. Women from five resorts in the IMD came to learn how to finesse toboggan handling, evaluate their peers, and teach new tricks they could take back to their own areas. All activities and lectures were held outside with a group of 25-plus patrollers engaging with their peers. The weather was chilly, with a blue sky that extended forever, and most participants stayed and helped with closing sweeps.

In the future, I hope to empower more women to become involved in the NSP.

Kristen Barlage
*Intermountain Division Women's
 Program Supervisor*

TIPS *from the* VET!

ARTHRITIS AND JOINT SUPPLEMENTS

KEEPING YOUR WORKING DOG ACTIVE

KIMBERLY HENNEMAN DVM, DACVSMR (EQ, K9), FAAVA, DABT, CVA, CVC

Keeping working dogs fit and active, both in season and off season, is a full-time job for any handler. A handler/owner needs to keep up with fitness, wellness, and nutrition, not only for current needs but in anticipation of future ones too. We know as dogs age (as with us) that joint tissue becomes worn out and damaged, possibly leading to arthritis that can affect job longevity and even quality of overall health.

In previous articles we have covered some basics of nutrition and fitness to help keep avalanche and SAR dogs functioning at peak health for as long as possible. Supplements for joint health can be another source of hope for good health but can also create confusion. There are so many products advertised as beneficial for arthritis and joints, but how to decide? Each one claims to protect and help sore joints while improving performance and flexibility. So, how does a dog caregiver know what to get and whether it will work?

This article will provide a quick review about joints and arthritis, then explore some of the more common supplements available to handlers. We'll discuss how to sort out product ingredients and dosing. First however, it is important for handlers to understand joint anatomy and how arthritis occurs. When the joints and arthritis are understood, it's easier to know what to look for and how to give it.

Joint Anatomy and Function

A joint is a movable junction that occurs when two bones come together. The ends of the bones are covered in special articular cartilage that sandwich either side of a space full of synovial fluid — a thick, viscous, gel-like fluid. The joint is encased by a thick covering of connective tissue called a joint capsule that has a special lining (synovial membrane) rich in blood vessels and nerves. Joints are stabilized on the exterior by the joint capsule, ligaments, and tendons.

Joint cartilage is mostly made up of water, proteins, and

specialized cartilage cells that create a specialized and nearly friction-free gliding surface. The cells are interspersed within a lattice of collagen fibers (the most common protein in the body) and proteoglycans (molecules of proteins and sugar) with very small amounts of other, non-proteoglycan proteins. Proteoglycan compounds include glucosamine, chondroitin, heparin, and hyaluronic acid, to name the more common ones. Proteoglycans like to hang tightly onto water, thus giving joint cartilage a smooth, nearly frictionless surface that is very resistant to compression. "Glycosaminoglycans" (sugar-protein-sugar) are a type of proteoglycan and are commonly found in the body, especially around joints. Cartilage doesn't have its own blood supply, so it relies on the pumping of synovial fluid from joint movement to deliver nutrients and carry away cellular metabolic waste.

Synovial fluid is the very viscous (thick) fluid that is in-between the two (articular) cartilage surfaces. It helps to lubricate and reduce friction between the joint surfaces, absorb the load of landing during movement, protect the lining of the joint capsule during the pressure of landing, and nourish the cartilage of the joint. It is very rich in hyaluronan (hyaluronic acid — HA) and is made by specialized cells in the synovial lining along the inside of the joint capsule. In inflammation, the composition changes and the synovial fluid becomes thinner and less protective.

The joint capsule is the connective tissue covering on the outside of the joint. It is lined inside with a special layer called the synovial membrane. The membrane has specialized cells that produce



the viscous joint fluid and store immune cells ready to clean up any damage, fight off infections (joints should be sterile), and mitigate any inflammation. Another important component of the synovium is vitamin C, which plays important antioxidant and protective roles in joint health. Nutrients in the bloodstream diffuse through the synovial membrane and enter the joint fluid, providing support for the joint cartilage.

Joints are obviously designed to allow an animal to move around. Since movement includes balancing against gravity, joints must protect themselves from the forces that occur when the animal's limb hits the ground or the body bends as it changes direction. Shock absorption occurs when the loading of the cartilage squeezes out the water trapped in the proteoglycans. That cartilage water is pushed into the synovial fluid when the leg is weight-bearing; the presence of that extra fluid in the joint helps to resist compression and dampen vibration. When the joint is unloaded and swinging through the air, the water-loving (hydrophilic) nature of the cartilage proteoglycans sucks it back out of the joint fluid and puts it back into storage within the tissue matrix. This "pump" occurs with every cycle of movement. These important cartilage proteoglycans will break down over time, needing constant replacement. The loss of proteoglycans due to either overuse or under-replacement, and the ability to move protective fluid in and out of the joint fluid and cartilage, are some of the most important factors associated with arthritis.

What is Arthritis?

The word arthritis means inflammation in a synovial joint. The word seems simple enough to understand, but it is a vague term that encompasses many different symptoms and presentations. Arthritis is a progressive process that can start in either the cartilage lining a joint, the highly viscous fluid within the joint space, or the connective tissue capsule and lining that encompass the joint. Any damage or trauma to any of these areas can eventually lead to the loss of normal structure and function of first, the cartilage, and eventually, the underlying bone itself, with stiffness, swelling, and pain along the way.

I often hear people say, "Oh, my dog doesn't have arthritis, the joints look normal on X-rays!" Wrong! By the time the bone is affected (osteoarthritis), the process has progressed to the point of no return, and it's much more difficult to manage the pain and inflammation associated with it. Any handler, owner, or trainer should probably assume that any hard-moving, active, busy, and working dog will eventually develop arthritis.

Anytime there is damage or wear-and-tear to the cartilage surface, or bruising or trauma to the joint capsule, there will be inflammation in the joint. It's a chicken-and-egg thing in terms of which happens first — loss of fluid in the joint or loss of cartilage components. The upshot is that if the cartilage loses proteoglycans due to normal use breakdown (and no replacement compounds coming in) or surface trauma, there is less water in the joint. With less hydrophilic proteoglycans, the water that gets released during loading isn't sucked back into the cartilage, leading to more inflammatory chemicals damaging the joint capsule, then thinner synovial fluid leading to more damage to the cartilage, etc.

If the amount of inflammation overwhelms the synovial membrane's ability to mitigate the process with immune cells and vitamin C, and if the loss of cartilage components leads to both cartilage shrinking, surface roughness (loss of the frictionless smoothness), dryness, and loss of joint fluid, you have all the components for arthritis. Sounds bad, but remember, these are often small changes initially. In high-drive dogs, minor pain and stiffness issues are usually ignored and rarely slow them down. Just because a dog doesn't show signs of early joint changes doesn't mean it's not going to become an important issue.

The time to start addressing arthritis is before you see that it's even there! That means in a working dog, I recommend adding various nutraceuticals at a fairly early age. We'll get to what, how, and when shortly, but first let's look at the common ingredients of joint supplements and what they do.

Common Ingredients in Joint Supplements

Glucosamine: This ingredient is now so common I'd be surprised if everyone didn't know that it is good for joints. Why

is it good? Look at the name — glucose + amine — it is easy to tell that it is one of the body's proteoglycans (in this case, it's specifically a glycosaminoglycan — sugar+protein+sugar). Glucosamine helps hold the water in the cartilage lattice (matrix), so it helps cartilage hold its shape and contributes to proper joint gliding. It is commonly found in most oral joint supplements (sourcing usually from shellfish such as green-lipped mussels) and is one of the components of Adequan® joint-support injections (usually given under the skin or into the muscle) for dogs (and horses). It is also in Polyglycan®, which many veterinarians use to inject directly into the joints (intra-articular, IA) of dogs and horses. It is usually in supplements or injections as glucosamine sulfate, glucosamine hydrochloride, or N-acetyl-glucosamine. There doesn't seem to be much of a difference between the products in action, mostly in absorption from the gut. Even though these products are broken down during digestion, the building blocks are transported to joints, where they are put back together and enter the cartilage as new replacements.

Chondroitin: Another glycosaminoglycan present in cartilage as well as supplements. It is usually sourced from animal tracheal cartilage. It is also commonly found as a secondary ingredient behind glucosamine in most oral joint supplements. It is not present in Adequan® but is present in Polyglycan®. It too is broken down and moved to the joint to replace used cartilage chondroitin.

Hyaluronic Acid (HA or hyaluronan): This is the proteoglycan that is the most important to joint fluid. While it is also present in smaller amounts in cartilage, its most important job is keeping the gel-like consistency of the viscous joint fluid. HA can be found as a stand-alone product or combined with other glycosaminoglycans. It is present in Polyglycan® injectable as well as in a horse product (intravenous and intra-articular) with the brand name Legend®. Using Legend® in dogs is an extra-label usage in the U.S., but its use as an intra-articular treatment in dogs has been routine for years.

MSM (methylsulfonylmethane): MSM is a natural substance found in many food sources such as garlic, onions, legumes, nuts, cruciferous veggies, milk, and eggs.

It is the natural version of the solvent DMSO — the one that leaves a taste of rotten garlic (as a client once described it) after it is touched. Fortunately, joint MSM formulas don't have that effect. Research has found that it may be important as an anti-inflammatory as well as an antioxidant and liver protectant. It is also a source of sulfur, so it may play an important role in "knitting" collagen fibers together, as sulfur acts as a crosslink between the collagen fibers that make up connective tissue. Some studies show that it might act synergistically in alleviating joint inflammation when combined with glucosamine and chondroitin. I tend to recommend it when there is inflammation of connective tissue such as in trauma of the joint capsule or joint instability after a tendon or ligament injury.

Vitamin C (ascorbate or ascorbic acid): As mentioned above, vitamin C plays an important role in protecting the joint cartilage, fluid, and synovial membrane from oxidative damage during inflammation. Besides acting as an antioxidant, vitamin C also plays a crucial role in creating new replacement collagen fibers for connective tissue that has either been injured or is under significant mechanical stress.

Cetyl-myristoleate (Cetyl-M): Cetyl-M is a modified fatty acid that has strong anti-inflammatory effects by blocking the production of several pro-inflammatory chemicals such as prostaglandins, leukotrienes, and cyclooxygenase enzymes. It is found naturally in fish oils, dairy products (especially butter and ghee), and animal fat. Some current supplements source from beef tallow, so contamination with other fat-soluble chemicals such as pesticides could be a problem. I recommend clients find fish oil sources.

Fish Oil (Omega 3 fatty acids): While we don't have the space to go into ALL the benefits of supplementing scent-based working dogs with omega-3 fatty acids, one of the important results of omega-3 fatty acids is its anti-inflammatory effect on the total body. O3FAs are the building blocks for anti-inflammatory compounds called resolvins, which are released by moving and stretching connective tissue (including connective tissue in joint capsules and fascia around joints). Additionally, high levels of one particular O3FA, EPA (eicosapentaenoic acid), help to stop cartilage degeneration by reducing

inflammatory signaling chemicals and blocking tissue destroying enzymes.

Avocado Soybean Unsaponifiables (ASU): ASUs are present in some human and animal joint supplements. These compounds are made from the oils of avocados and soybeans. Research is still iffy, but clinical trials report that ASUs may reduce inflammation associated with cartilage damage and degeneration by blocking various inflammatory pathways. The only caveat I would add is that soybeans are on the Roundup® Dirty Dozen list, so ASUs have the potential of being heavily contaminated with carcinogenic herbicides and pesticides. ASUs are prominent in the product Dasequin®.

Boswellia serrata (Indian Frankincense): Boswellia is an herb made from the resin of the Indian and Middle Eastern olibanum tree. It has a long use in Ayurvedic medicine as an anti-inflammatory treatment. Research has validated that many active compounds in Boswellia resin block various inflammation pathways. Additionally, Boswellia appears to slow down the breakdown of glycosaminoglycans, thus increasing functional life of the compounds in the cartilage.

Turmeric: Turmeric contains the active ingredient curcumin, which acts as a very strong antioxidant, anti-inflammatory, antimicrobial, and also has some possible anticancer effects. A 2014 study in humans showed that curcumin did better than ibuprofen in alleviating arthritis pain. Another study showed that it worked better than both aspirin and ibuprofen. Other studies have shown that curcumin can be just as effective as steroids in treating inflammation.

Turmeric is easily metabolized, so it may have to be given in small amounts more frequently. Additionally, turmeric has poor digestibility unless it is accompanied by black pepper (piperine) or undergoes special processing. Long-term use or excessive dosing can interfere with clotting, so make sure there isn't an additive effect of small amounts of turmeric in multiple supplements. Turmeric can be found in many complex supplements or can be added separately. I personally recommend either using the veterinary product Plena Curae (with

boswellia), Dr. Mercola's curcumin supplement, or making the Golden Paste recipe in Table 2.

How to Decide on Supplements

There are many other additives that are combined into many common joint supplements, but the ones above are the biggies. With all the options, how does an active dog handler or owner decide what to use?

I recommend that young dogs that are straight (they get regular body work), well-conditioned, and with minimal conformation or structural problems start on simple formulas at 3-4 years of age. By simple, I mean supplements containing just a few foundational ingredients such as glucosamine, vitamin C, and MSM. Find two formulas that you like and that the dog will eat, and alternate between the two every three months (so you don't get any acclimatization to any one product). Doses usually need to be doubled for 2-4 weeks when first starting supplementation, but not when switching products.

As a dog ages, or if there are any traumatic or surgical episodes, supplementation should be stepped up by using a product with all the big three glycosaminoglycans (glucosamine, chondroitin, HA), MSM, vitamin C, and either Boswellia and/or turmeric. The older a working dog is, the more I use products that also have a larger complement of anti-inflammatory herbs (Boswellia, turmeric, yucca, devil's claw) and higher doses of vitamin C and the glycosaminoglycans. Varying supplements every few months should be continued permanently.

If a dog seems to have dry joints, I might emphasize a product with higher HA. If there is joint laxity and thickening of the joint capsule, I might lean toward more MSM. If there is a lot of inflammation and stiffness (keep that in mind for you folks in Lyme country), think of doing higher levels of vitamin C and Boswellia and/or turmeric. I recommend that dogs be started on an oral supplement before starting anything injectable so that joint support is more complete and well-rounded.

As far as I and my working dog handlers have noticed, none of the common joint supplements have interfered with scent ability. +

Touchpoint/Sensory Pair Gap Analysis Example Table			
COMPOUND	TYPE	DOSE	PRECAUTIONS
Glucosamine	Proteoglycan	5-20 lb: 250-500 mg 21-45 lb: 500 mg 46-90 lb: 1000 mg	None known except possible diarrhea
Chondroitin	Proteoglycan	<80 lb: 900 mg >80 lb: 1800 mg	None known except possible diarrhea
Hyaluronic acid	Proteoglycan	< 10 lb: 5 mg 10-25 lb: 10 mg 25-50 lb: 20 mg 50-100 lb: 40 mg	None known except possible diarrhea
MSM	Organosulfur	50-100 mg/10 lb BW	None
Ascorbate/ Ascorbic Acid	Vitamin	9-11 mg/lb BW	Can cause diarrhea if dose is too high too fast
Fish Oils	Omega 3 Fatty Acid	34-45.5 mg/lb BW	Diarrhea, pancreatitis if introduced with too high of a dose too fast
ASU	Unsaponified Oil	Not yet determined; 300 mg every three days in one study	Diarrhea, pancreatitis if introduced with too high of a dose too fast
Boswellia	Herb	5-10 mg/lb twice a day OR 18 mg/lb once a day	GI upset, inappetence
Turmeric	Herb	Follow label directions for any product	Diarrhea, food refusal, clotting disorders

Table 2

Golden Paste Formula (from *Dogs Naturally* magazine)

- 1/2 cup organic turmeric powder
- 1 to 1 1/2 cups filtered or spring water
- 1 1/2 tsp freshly ground black pepper
- 1/4 cup organic MCT oil or ghee*

Directions

Mix turmeric with 1 cup water in a pan. Save the remaining water in case it is needed to thin the paste.

Stir the liquid on low/medium heat for about seven to 10 minutes. It should form a thick paste in this time. If the paste is too thick,

add more water to preferred consistency. If the paste is too thin, add a small amount of turmeric and heat it for another couple of minutes.

Once the paste has thickened, add pepper and oil, stir thoroughly, then allow mixture to cool. Store paste in a lidded jar and refrigerate for no more than two weeks.

Dose

Take 2-4 weeks to work up to a dose of 1/8 to 1/4 teaspoon per 10 pounds of weight per day.

*Most golden paste recipes use coconut oil. However, coconut oil may not be best for a dog's gut health. For a healthier golden paste, instead use either organic MCT oil or organic ghee (clarified butter). Make sure that any MCT oil doesn't contain lauric acid.

FROM THE *Director's* CHAIR



Approaching the top of the mountain at Showdown.
Photo by Mel Carnahan.

AN INTERVIEW WITH ALLAN RABBITT, VOLUNTEER SKI PATROL DIRECTOR AT SHOWDOWN MONTANA

BY AMY WEST

It might sound strange to feel smitten with a resort one has never been to, but I am ready for next season so I can travel north to Montana to a sweet little town called Great Falls. A hidden gem of a ski resort called Showdown Montana sits there in central Montana. It boasts no lift lines, affordable prices, and is family-owned.

It has made some ripples in the National Ski Patrol community recently, landing as runner-up for NSP National Outstanding Large Alpine Patrol (they call themselves “a small large alpine patrol”). The patrol shines with its creative Outdoor Emergency Care refresher approach, long-standing patrollers, connections to the local community, and welcoming,



Great Falls Ski Patrol Director Allan Rabbitt

friendly family vibe, with a female owner who believes in giving vouchers to those who have been injured to come back and ski again. In a recent post on the resort's Facebook page, they wrote, “Our base is our people...People with warm hearts & nerves of steel. People who are passionate about life, love & fun. People who value service & connection with others as much as a sweet run or a paycheck. Our base isn't measured in inches...Our base is

measured in smiles, love, attention to details & exceeding your expectations. OUR BASE IS OUR PEOPLE.”

Allan Rabbitt, the Great Falls volunteer ski patrol director, who has been with the patrol for 43 years and possesses a colorful career that includes the Olympic Ski Patrol, exudes that small-mountain friendliness. He is someone you would want to encounter on the mountain — whether to patch you up or ski some



Participants at the Northern Division Ladies Event hosted by the Great Falls Ski Patrol, a two-day event with skiing/boarding, toboggan, avalanche, and high-angle rescue clinics. Photo by Terry Stevenson.

lines with. His mountain is built on what ski mountains were first made of, and I dream of visiting.

SPM: What do I need to know about Great Falls Ski Resort? What makes it so special to you?

Allan: OK, so first, the ski resort is called Showdown [Montana]. The reason for the differences in name is that the Great Falls Ski Patrol was started the same year as NSP started. The name of the ski area changed (only a couple of times); the name of the ski patrol stayed the same. What is special to me is it's a mom-and-pop ski resort. And you're only a stranger there once. The management is very friendly. They're very outgoing to make sure the public has a positive experience, and they do whatever they can to make sure that that happens. It's where your friends are.

SPM: What drew you there?

Allan: I was raised in Great Falls, and Showdown is our local ski area. So, that is where I started skiing as a youngster, and I have continued to ski there as my home area ever since.

SPM: What was your trajectory as a patroller from just skiing?

Allan: I was in high school and was talked into joining the ski patrol by two friends who were already members of the Great Falls Ski Patrol. Back in 1979 when I joined, they referred to it as the Junior Ski Patrol program. Now, it's the Young Adult Patroller program.

SPM: What was your first connection to NSP?

Allan: My first connection to NSP was being injured, tweaking my knee and being taken down off the mountain in one

of the rescue toboggans and sent home on the ski bus in a cardboard splint at about age 12.

SPM: How long have you been in your role?

Allan: I have done nine years as a volunteer ski patrol director. Our term for patrol director is two years, and then you can fall off for a year and run again. Our elections are a bit different. We vote in the assistant patrol director. That person is the assistant patrol director for two years, then automatically rotates into the patrol director position for two years. And then you roll out, and you're the past patrol director for two years. So, you're in that hierarchical chart for six years, and it really lends its way to having a pretty good continuity from year to year.

I have been at Showdown for 43 years and was part of the Olympic Ski Patrol in

1988 in Calgary. That included myself and other ski patrollers from Showdown (Stan King, Bill Lay, Dale Sivumaki, George Stean); we were over half of the American contingent to the Olympics for patrollers. We were registered as Canadian Ski Patrol and to the Olympic Ski Patrol.

You can have a passion for a job, but it's not a passion like you would have if you are volunteering. A job is a job and a paycheck is paycheck, but when you are out there giving of yourself and your time, it's a different attitude of how one views the ski patrol. And I was pro patrol for eight years, so I have been on both sides.

SPM: Now you are in charge of a bunch of volunteers. How many, and how do you get them to keep volunteering?

Allan: We have 49 ski patrollers (and five

pro patrollers). Our recruitment has been word of mouth, from current members to people we know or we think would be good prospects to become ski patrollers. I think the process to become a ski patroller is fairly arduous. Folks who stick with the whole program — between the OEC and the on-hill training and the different things you need to learn to become a ski patroller — and have the attitude to get through all of that pretty much have the attitude to fit in with the rest of the ski patrol.

SPM: How many do you hire each year?

Allan: We don't have a lot of attrition in our patrol. The average years of a ski patroller on our ski patrol is around 20-plus years. We do an OEC class every other year, and that is usually attended

by 12 to 14 people. By the time the class and all the other things are done for training, we usually end up with about six or seven; so, about a 50% attrition rate through the process of joining. That usually keeps us even.

SPM: Do you have a record for longest-running patroller, since patrollers tend to stay with it for life?

Allan: They do. Ski patrolling — if it's in your blood and you enjoy it — is something you don't give up very easily. So, as a consequence, our longest patroller is Stan King, and he's doing a 60th year [in NSP]. We have several in the 40-year club, one guy in for 50 years, and lots of 30-year patrollers. It's pretty amazing. Like I said, once you decide this is for you, it's kind of a lifetime deal.



Senior clinic OEC practice. Photo by Mel Carnahan.



Great Falls ski patroller Gregg Rydquist teaches next generation of patrollers how to find a buried avalanche transceiver during the Great Falls Ski Patrollerpalooza. Photo by Joe Taylor.

SPM: What is your philosophy in what you look for in new patrollers?

Allan: We would all collectively put the attitude of the candidate as the primary qualification. We can teach the rest. If they are really arrogant or don't play nicely with others, we don't need that. We are happy with the folks we have. If someone does not pass the sniff test, we feel no obligation to train them. That's also why we have people that last 20, 30, 40 years. Everyone there is looking out for their fellow patrollers. It's not just a job. It's recreation. It's what you look forward to.

Friday will come and I (with gleeful abandon) will drive to the ski area to have my duty day. It's my decompression. You will be a better person having that outlet. My wife will be like, "Do you have a

duty day this weekend?" This part of ski patrol is just as important as passing out the Band-Aids: being able to support your fellow patroller. It is a family.

SPM: What is the percentage who have medical training beyond an OEC?

Allan: We have additional EMTs and paramedics. We have a nurse. We don't have any physicians or PAs or NPs, or anything beyond. We are a small area, so consequently we pretty much know who is skiing on the mountain with regard to physicians, and they are willing to come in and help out if we have a difficult case.

SPM: I saw the Patrollerpalooza recently happened. What is that, and how did it go this year?

Allan: We have a fundraiser every year,

and with COVID, that went away. Yet, we still had our expenses. The area management came to us and said that they would like to do a Great Falls Ski Patrol Appreciation Day, and that a portion of the proceeds would go to us. So, myself and five other folks came up with the Great Falls Ski Patrollerpalooza. Raising funds is nice, but our main focus was to have more of an open house and invite people into the ski patrol community at Showdown — show them what we do and play with the toys we have.

When visitors came to Showdown that morning, they received a card that had a map of the stations around the mountain. You go to the stations, and the people there sign your card. If you went to two of the five stations, then your name went into a hat for a drawing. The stations

were a first aid station where they did just a simple sling and swathe. We had a mountaineering station with all kinds of search and rescue equipment, like packs full of equipment we need to stay the night and keep everybody warm and nourished. We had an avalanche station where they learned how to use an avalanche transceiver, probe, and shovel. Another station was a ropes and knot-tying station. Then we gave toboggan rides down a V-shaped run. We kind of geared it more toward kids, but the adults, of course, were certainly welcome to join. On the card you could check about joining the patrol, and we got quite a few people showing interest.

It was packed all day long and a really positive atmosphere. The patrollers had a great time. Even the management came down and said that it was awesome; they didn't have to put a lot of resources toward it. That goes a long way for relationships. We had a great outreach program and potential patrollers to train up. If any other patrol has the possibility to pull that off, it is definitely worthwhile. It's a win-win-win.

SPM: *Ski patrol can have a bad reputation of being unapproachable or seem intimidating. That kind of outreach helps break that barrier.*

Allan: Those are issues, and unless you are really conscious about them you kind of isolate yourself. We are a close-knit group and sometimes look unapproachable, but that is not the case. We are some of the most approachable people, friendly and outgoing. It's important to make sure that ski patrol is doing outreach programs to show the public what we do and the services we offer. Anything you can do to take away the snow cop persona is in your best interest. It's about risk management and making sure people stay safe. Parents during the Patrollerpalooza wanted their kids to ride the toboggan so that, on the off-chance they were to get injured, it would not be their first time and be as scary. I thought that was a pretty cool angle.

SPM: *Is there anything else the patrol is involved in outside of the resort?*

Allan: Not as an organization, but we have members providing first aid at soccer meets. We have an Ironman type of competition that members were giving first aid. That event will be moving to the ski area, and we will probably become



Mercy Flight's flight time to Showdown is 35 minutes. Their services from the accident site are requested as soon as possible. Photo by Mel Carnahan.



Mel Carnahan receiving the Northern Division Outstanding Patroller Award. Photo by Dave Elmquist.



Stan King has been a member of the Great Falls Ski Patrol for 60 years and is the local face of the Great Falls Ski Patrol. Photo by Justin Grohs.



Katie Boedecker, the owner of Showdown. Photo by Avery Gold.



Patrol attending to a member of the public. Photo by Mel Carnahan.



Allan Rabbitt on top of Breckenridge Peak 7, where he proudly represented his region at Powderfall 2022. Photo by Jeff Birks.

more organized as ski patrol to do first aid for that event.

SPM: Are there more advanced medical services on the hill?

Allan: Our closest hospital with any trauma services is 65 miles away. It's an hour drive. We do have a ground ambulance that is 45 miles away, an ALS ground ambulance 65 miles away, and helicopter service from Great Falls. If you can determine you are going to need a helicopter or ambulance, you call in requesting that from your accident scene. They are about 40 minutes away.

SPM: Do you do anything special for patrollers during the year (parties, morale boosts)? Or something traditional that is par for the course?

Allan: Every year we have a banquet as a last hurrah. We pass out any awards that are for different things, serious awards, funny awards. We recognize employees of the ski area that are in other departments that support ski patrol above and beyond. We recognize maintenance to lifts to rental shops.

SPM: It sounds like a well-loved and well-supported patrol.

Allan: We have the latest equipment we can afford for patient care and patroller safety. We are really fortunate. The support that we get from area management is second to none. They really do take care of us and appreciate the effort that we put out.

I am also our regional advisor for the Northern Division. I talk a lot to other ski patrollers and directors, and the support and atmosphere we get from our area management is not, unfortunately, the same atmosphere that other ski patrols operate in.

SPM: Is that because of being a mom-and-pop operation?

Allan: Our area is a family-owned ski resort. Owned by George Willet, who bought it in 1972. As an aside, we nominated him for a Distinguished Service Award from NSP, which he was honored with. He sold the resort to his daughter, Katie Boedecker, two years ago, and she does a great job. She's one of the few women who owns a resort in the U.S. (see chart on page 34). You'll have a call and a young person downstairs in the patrol room, and if Katie has the time, she will be down there holding the little person's hand and consoling

them. She shows up with a free lift ticket voucher for the next time. She does that for anybody; anybody who's hurt at Showdown gets a voucher for another day of skiing, which is really generous. And it's good business. [Katie Boedecker was a 2022 SAMMY Leadership Award honoree by *Ski Area Management* magazine. Read more here: <https://www.saminfo.com/sammy-awards>.]

SPM: *I can understand why you were runner-up for NSP National Outstanding Large Alpine Patrol. Do you know what got you noticed?*

Allan: Frankly, everything that I just said we try to condense in a page or page and half in a nomination form. It's hard. We do have a lot going on. It's the package. I don't think you could put your finger on one thing. It's each individual member contributing. We are a reflection of all our pieces, not one individual or one aspect. I am proud to say we do it well. We try to support the Northern Division as we can. We barely make the cut for large patrol; we are little bitty large patrol.

A couple of patrollers have had a relationship with the local hospital. Like all hospitals, it seems they are always remodeling. They let us know when they are remodeling and will have really nice ER hospital beds or Bair Huggers to heat up people. We have a lot of that type of equipment in our patrol facilities. We are really fortunate with the resources and equipment we have, but it comes with work to get it all, and we're fortunate to have folks willing to put forth the effort to be as good as we can.

SPM: *What about the change in the climate and weather patterns? What have you noticed since you have been there?*

Allan: This is my 43rd year. In that period of time, I have noticed our average snowpack is probably down by 24-30 inches a year. We still get around 250 inches a year. I don't know if it's La Niña or El Niño, but the worst part is we get wind.

SPM: *Are you able to nail down what brings you back year after year? Does anything stand out?*

Allan: I can tell you a story pretty much about anyone on the ski patrol. They do something above and beyond. One person is really into the OEC and hands-on aspect of refreshers: Mel Carnahan. He's a 35-plus-year patroller



Ski patrol training occurs throughout the year. Photo by Allan Rabbitt.

and still has the fire in his belly. He took what is usually an OEC refresher (a little bit of hands-on and death by PowerPoint) and, with help from others, made our OEC refresher purely hands-on. We do not do PowerPoint. In a two-year rotation some portion of our first aid refresher is taught by every member of the Great Falls Ski Patrol.

Our philosophy is the best way to know something is to teach it. For instance, we set up a chairlift between two wreckers (he owns a wrecker company) and set up a mock chairlift evac with multiple injuries for our triage scenarios. Mel had a burnt-out bus and filled it full of people. Almost all our patients are the drama students from the local high school; they love the makeup and blood and cuts and burns. We have

really good moulage people that have done extracurricular training. They are great actors. Because you don't know them, you treat them as a real patient. It becomes much more realistic. Our refreshers over the last dozen years, well, you can see the level of care and expertise has gone up. It has given our patrollers a lot of confidence. When [you are] a volunteer patroller, you don't have the chance to go on 20-30 accidents a year. So over time, you start losing a little bit of confidence. Through these refreshers, though, people are not nervous about heading out to the accident anymore. It's really been a great way to be a lot stronger ski patrol.

A few years ago, we had a neighboring ski patrol, and they were having a hard time getting their refresher together. We invited



By using drama students from the local schools as patients and using realistic moulage, Mel Carnahan has made the OEC training as effective as possible. Photo by Mel Carnahan.



Stan King given an award for his 60 years of service, and he is still going downhill. Photo by Diane Eusterman.

them down to ours. You could tell the way we were doing it was overwhelming to them. They now have been coming down for the last seven years and just fall right in. They get a lot out of it. Plus, you get to know more people.

SPM: *Is there anything that you would want to be remembered for during your time at Showdown, serious or funny?*

Allan: I am not very good about talking about myself. It's pretty stereotypical, but maybe that my actions were instigated and governed by trying to make the Great Falls Ski Patrol, as a whole, a successful and better organization.

SPM: *Anything else I should have asked you, but I didn't?*

Allan: Last year when nothing was going on in the world, we had four women on our ski patrol decide they should have a Women's Fest. They invited other women from Northern Division to do some skiing, toboggan training, and avalanche work. They had good participation, and they set it up in three weeks. The same women put it together this year as a two-day event, and I think (from having 12 women last year) they're approaching 30 participants. We are a small division, only 400 people. Of that, women are unfortunately a small percentage. They got good participation for their event. I think it's one more example of leading by doing — a good service to everybody. +

According to the National Ski Areas Association, the following are resorts that are either fully or partially owned by a woman. This includes resorts that co-owned with family or a spouse, and also includes women who were owners in the past.

Name	Ski Area	State	Comments
Gwyn Howat	Mt. Baker	WA	partial shareholder
Katie Boedecker	Showdown	MT	owner
Sara Larsen	Wild Mountain	MN	
Suzanne Thomas	Buena Vista Ski Area	MN	
Amy Reents	Mount Kato	MN	familial
Corrine "Chip" Solner	Buck Hill	MN	spousal
Carolyn Stimpson	Wachusett	MA	familial
Rosanne Pitcher	Wolf Creek	CO	spousal
Sally Helm*	Dodge Ridge	CA	Former owner
Barb Green	Blue Mountain	PA	
Betsy Pratt**	Mad River Glen	VT	prior to moving to co-op model
Reba Moretz^	Appalachian Ski Mountain	NC	spousal/familial
Marge Seeholzer	Beaver Mountain	UT	

*Sally and Frank Helm sold Dodge Ridge in 2021 to Invision Capital, owners of Mountain High Resort in California, and Karl Kapuscinski, president and CEO of Mountain High Resort.

^former co-owner with her late husband, Grady. Her children, Brad and Brenda, are the current owners.

A Q&A WITH

Jeremy Verbeke



Jeremy Verbeke out on a trail ride.

NEW NSP BIKE PROGRAM DIRECTOR SHARES VISION FOR PROGRAM

BY CANDACE HORGAN

In late 2020, the National Ski Patrol board of directors voted to officially make Bike an NSP program, just like Outdoor Emergency Care, Mountain Travel and Rescue, and Nordic/Backcountry. After doing so, they had to find a director to get the program off the ground.

Luckily, they quickly found Jeremy Verbeke, who had already been doing much the same work for the Central Division. Verbeke, unlike many patrollers, started as a bike patroller, and that is his sole experience. As such, he is able to see the needs and growth opportunities for the program. Verbeke is already hard at work to expand bike patrols and patrollers in NSP.

Ski Patrol Magazine sat down for an interview with Verbeke about bike patrolling, his experiences with it, and how he envisions the Bike Program growing moving forward.

SPM: OK, so tell me first a little bit about your patrolling background. How long have you been patrolling, where, and a

little bit about what made you start patrolling and how you got into it.

Jeremy: Back in 2010, I started mountain biking a little bit. I went to a festival for mountain bikers. At that time, they had a National Mountain Bike Patrol recruitment booth. I was talking with people there and found out that mountain bike patrolling was a thing. I'm a firefighter-paramedic, and I like mountain biking, so it was kind of like a natural fit for me. I researched that more and found out that in 2011 there were only six mountain bike patrollers in the state of Michigan that were part of the International Mountain Bicycling Association's bike patrol. So, I thought I could help that number and I joined.

SPM: So, you joined straight into mountain biking. You didn't do the ski patrol intermediary step?

Jeremy: Correct. I started off as a mountain bike patroller. In 2012, I decided that we needed a better presence here locally in

“In 2012, I decided that we needed a better presence here locally in my area, so I decided to go through the steps of forming our own mountain bike patrol.”

my area, so I decided to go through the steps of forming our own mountain bike patrol underneath the Clinton River Area Mountain Biking Association (CRAMBA). We started a patrol there, grew that patrol over the first couple of years from just six people initially in my patrol up to about 56 in 2017. In 2017, the International Mountain Bicycling Association decided that it wasn't within their mission scope to have a bike patrol, so that's when they started talking with the National Ski Patrol about taking over their bike patrol program. When that happened in 2018, CRAMBA National Mountain Bike Patrol made the transition from IMBA over to the National Ski Patrol.

SPM: So how long have you been a firefighter-paramedic for?

Jeremy: I've been in EMS for 31 years. I've been at my current job for 21 years. Yes, I've been here a little while. I was also a U.S. Army combat medic and while stationed in Germany was able to achieve the expert field medical badge (EFMB).

SPM: That is a long time. Let's talk about mountain biking. First of all, the patrol that you work in, what area of the country is that in?

Jeremy: It's in Metro Detroit, north of Detroit. It's the suburbs. We have 14 trail systems, but 120 miles worth of singletrack trail and seven different land managers that we coordinate and work with.

SPM: How many patrollers do you have out on the trail at any given time? Are they out there every day, or is it a weekend thing?

Jeremy: It all depends. For the geographical or non-resort-based patrols, it's pretty much just you go out and ride your bike and it's a right place, right time kind of thing, unless the land manager requests us there for events. A lot of bike races, off-road 5K runs, we get requested a lot to have our services there for those types of events. That's when we really are out in the public eye. Otherwise, we're just out there riding our bike just like everyone else, except we have some training and equipment to help anyone that needs help.

SPM: Are any of the rest of your patrollers fire-EMS based, or are they ski patrollers who wanted something to do in the off season, or is it a mix?

Jeremy: It's a big mix. When we transitioned from IMBA to NSP, we brought in a large contingent of [IMBA] bike patrollers and host members into the Outdoor First Care Program. We also have several local ski patrols around, so we were able to recruit secondary roster Outdoor Emergency Care members into the patrol also. Right now, I believe our current roster is about 60 patrollers or host members. I think it's about half and a half. I think there are 30-some hosts, and then the rest are all OEC secondaries.

SPM: Would you say you function as a medic, or would you say



CRAMBA Mountain Bike Patrol. Photo c/o Jeremy Verbeke.



CRAMBA patrol in action. Photo c/o Jeremy Verbeke.

you function more as an OEC? Do you have a med director, do you carry pain meds, that type of thing?

Jeremy: No, we completely operate under the Good Samaritan laws, and the standard of care is up to your level of training, which for most people is OFC or OEC. It's all basic trauma. Obviously, you're not practicing outside the scope of your job, and it's a volunteer job, so OEC or OFC levels.

SPM: Did you go through OEC after your patrol went to the NSP?

Jeremy: I did the OEC Modified Challenge for EMTs. I did quite a few study sessions and then took the OEC challenge.

SPM: What challenges do you think mountain bike patrollers have with patient care and transport in general? And how do you see yourself as the national Bike Program director kind of helping to address those challenges?

Jeremy: Well, this is something that we're identifying at the national level, is that there are very wide, diverse types of bike patrols out there. We have ski resort patrols that do summertime patrolling. That has a unique environment that is completely different than a geographical bike patrol, which I'm currently on. Then there are also urban and suburban bike patrols that don't have much terrain, but they're patrolling public pathways or linear parks. The different kinds of environments that the bike patrols are operating in are a unique challenge because we don't have the support network yet to transport people, so a lot of times bike patrollers are stabilizing in place and coordinating with EMS to do the

extrication out. The local resort patrols have more resources available where they have service roads or designated extrication routes. A lot of the public lands or the public mountain bike parks or public mountain bike trail systems, they don't. They have five, 10, 15, 20, 25 miles of singletrack trails and very limited access. So, a lot of it is having to stabilize in place, coordinating with the EMS, and then working the extrication with local EMS teams.

SPM: Do you feel that mountain biking is a growing component of patrolling? How do you hope to continue that trend if that's the case?

Jeremy: I do think that the Bike Program is going to be a great growth opportunity for the National Ski Patrol. With the climate change that everyone is dealing with, a lot of the ski seasons are getting shorter and shorter, but that in turn opens up summertime activities. A lot of ski resorts are looking for year-round operations, so they're opening up bike rentals, providing year-round activities at their resorts to bring income in. We're looking at a great potential for growth because not only are ski resorts looking at year-round operations, but now there is also the possibility of non-ski-area patrol units. We can start looking in the Southern parts of the country that typically don't have ski patrols because there is no snow. I think that is an untapped potential that as long as we can focus our resources and provide value, we can bring in several, if not hundreds or thousands, new patrollers into the organization.

SPM: Do you think OEC needs to be expanded at all to address the types of injury patterns you see in mountain

“I’m doing a bike patrol presentation at Powderfall. It’s called “Bike Patrol: Past, Present and Future.” It’s going to be an overview of where the bike patrol started, where we are today, and where we’re going to take it from here.”

biking, maybe more irrigation and wound care for things like road rash, or do you think the way it is right now kind of covers it?

Jeremy: The OEC Program is a robust medical program, and it is superb in what it delivers. Most of the stuff is already covered in it. A lot of the request right now is in scenario-based situations, have it apply not specifically to a ski environment. We can have the ability to flex the scenario into a backcountry mountain biking environment. Most of the skills are already in the OEC Program. We just need to have a little flexibility in applying the skills in the environment that mountain bikers, the bike patrols, are going to be using that skill in.

SPM: What led you to apply to become the national bike program director? How did that happen for you? How did you start stepping up into more of a leadership role from where you were?

Jeremy: So yeah, when the CRAMBA Mountain Bike Patrol was established, I had the honor to be the patrol director there

for seven years. Our leadership team was able to grow that to the organization it is and then I handed it off to the next patrol director, because I wanted to be able to do what I did locally at CRAMBA to help other patrols get up and running. The Central Division director asked me if I was interested in the division Bike supervisor position, and I thought that’d be a perfect fit because now I could help all the startup bike patrols in the division. I did that for a year and a half, and then this position opened up. The program became official, and they put out a call for a program director, and I thought if I can do it locally, and I can do well divisionally, why not take it all the way to the top and help bike patrols all across the country?

SPM: Is the Bike Program also encompassing bike hosts? Is that something that you’re also looking to grow? I know there’s a substantial difference between bike host and bike patroller in terms of medical training; how do you see the bike hosts fitting into the whole structure of bike patrolling?



Jeremy Verbeke helping patrollers ready for the day. Photo c/o Jeremy Verbeke.

Jeremy: I think the bike host program is an integral part. I see it as a great gateway for mountain bike enthusiasts that want to do more without taking the huge jump into the OEC training. I think it's a gateway. We can use it as a catapult to get them in, to confirm that they're going to be dedicated enough to go up to the patroller level. The skills between bike host and bike patroller I envision being the same [as ski patrolling]; the only difference is going to be the level of medical training. The bike host is going to have your basic first aid, and then your OEC, your patrollers, are going to be your advanced first aid. I feel the relation between OFC and OEC members are similar to EMT and paramedic dynamics, obviously not equal in training standard, but both play important roles in providing emergency medical care to the injured or sick.

SPM: *For ski patrollers who maybe don't have too much familiarity with mountain bike patrolling, what type of first aid equipment do you carry when you're out on a ride?*

Jeremy: It all depends. If you're going out for a general ride, a first aid pack with some basic bandaging, Stop the Bleed equipment. Bike patrollers doing a general patrol don't have the resources of a resort. You can't just call for more help from your patrol shack or aid room, you're calling for EMS or an ambulance. Imagine patrolling your ski hill by yourself. A lot of times it's just basic first aid supplies. Patrolling events is a little bit different, where you can have a centralized aid station and then you can have larger patrol packs so if there is an incident, you're able to call for more equipment if needed.

SPM: *Would you say when you're out on a ride, you maybe carry some wound care or maybe a CAT 7, a SAM splint, and a couple of slings, that kind of base?*

Jeremy: Yup, yup. Several cravats, some trauma dressings, some abdominal pads, some pressure dressings. I encourage all my patrollers to carry tourniquets because that's the new thing. When you're way out in the middle of nowhere, controlling that bleeding is critical, because it may be a while before you're able to get someone there to definitive care. It's all bleeding control and some splinting materials like a SAM splint, milk jug cutouts, or anything along those lines.

SPM: *It would seem to me for the resort-based, especially where maybe they need to do some extrication, one area where things might be improved is in transport equipment. Ski patrol has been around for 80 years, plus or minus, and there are a variety of different toboggans that you can use depending on your terrain. It seems to me a lot of what bike patrols are using is stuff that's being adapted from search and rescue. Do you think there are ways to expand transport options when you can't just drive a truck up a U.S. Forest Service road to 20 or 30 feet away from the patient?*

Jeremy: Yeah, absolutely. There are lots of challenges with patient transportation. This is something that we're hoping to work with OET and trying to figure out how we can identify and improve non-ski transportation, or non-snow transportation. The toboggan

works great as long as you don't have any friction. There are some commercially manufactured extrication devices. There are several different wheeled litter baskets, like the Cascade Rescue Terrain Master Litter Wheel. There are a couple of other collapsible type litters that you can use with either two- or four-point carries. Again though, if you're going miles, you have to find the most efficient yet safe way to extract an injured rider.

SPM: *Do you have the ability to track how many people are doing both ski patrol in the winter and bike patrolling in summer? Do you have a handle on how many people are bike patrolling overall in NSP?*

Jeremy: That's one of the challenges that we have identified. A lot of bike patrols are secondary rosters on ski patrols. It's really difficult for us to quantify those. We're trying to find a way to better track the number of bike patrollers. If they have a primary bike registration, it's a little bit easier, but it's the secondary rosters where it's just difficult to get those numbers right now. We're working on it. We're trying to make it better. Hopefully in the near future, we'll be able to say we have this many bike patrollers and this many bike patrols.

SPM: *Have you thought about trying to create some sort of national gathering for bike patrollers similar to what Powderfall is for ski patrollers?*

Jeremy: Haven't really thought about it yet. I'm going to my first Powderfall next month, so I need to see what it's like first, I guess. Definitely the possibility is there to have some kind of gathering, bring in all sorts of subject matter experts to work together and provide input and make this program as good as it possibly could be. I'm doing a bike patrol presentation at Powderfall. It's called "Bike Patrol: Past, Present and Future." It's going to be an overview of where the bike patrol started, where we are today, and where we're going to take it from here. +



Jeremy Verbeke presenting on bike patrolling at Powderfall 2022 in Breckenridge, Colorado. Photo by Candace Horgan.





CULTIVATING RESILIENT SKI PATROLLERS

THE IMPORTANCE OF MENTAL HEALTH
AMONG PATROLLERS

BY TERRY RITTER

*“Pardon me. I
have a question.
Do you have a
moment? Listen, I
need your help.”*

LEAN IN MY FRIEND, THE SCENE
IS SAFE. I AM A MEMBER OF THE
NATIONAL SKI PATROL.

EASY GREEN RUN: THE SCENE

Last season during a very busy day at the ski hill, I found myself escorting a patient out of our very full first aid room and overheard a call for patrollers to respond to one of our most advanced runs, one that has steep slopes and trees. I heard a couple patrollers radio that they were close and en route. I listened for a first-due report but was so distracted by the crowds of skiers I didn't hear one.

I knew I would be one of the last ones on scene and depending upon the exact location of the incident may not even be needed. I traversed from one lift to another, eventually riding a chair that would go over the location of the incident. As I approached the scene, I saw skiers flying down the advanced run, dropping over the lower headwall and adjusting their lines to avoid several ski patrollers and a day pass skier huddled over a downed skier as if they were working in the trenches, protecting the severely injured trauma patient using their bodies as shields. One patroller looked up and yelled, “Terry, we need the run shut down.” I responded that I'd take care of it, and after I handled that task I watched a helicopter land and fly away with the patient a short time later.



Photo by iStock.com/DanBranden.

MORE DIFFICULT BLUE RUN: MY PROBLEM

I felt bad that I wasn't first on scene. Professionally, I am a firefighter-paramedic, former tactical paramedic, and a vetted practitioner and instructor in all levels. I knew for these patrollers it would be a life-changing experience. I was curious and wondered, "Who do they turn to if they question their efforts? How do they process events like this afterward?"

I am also a survivor of an incurable cancer and have looked into the eyes of many doctors and nurses knowing they strive so hard to keep people like me alive, but ultimately have watched so many die. (See "To Serve is To Survive: My Cancer-Fight Story," *Firefighter Wellness, A Supplement to Fire Engineering*, Sept. 2019, p.20, <https://digital.pennwell.com/pennwellevents/>)

[fe_2019_firefighter_wellness?pg=20#pg20](#).) I wonder who takes care of those who care for others. How do these healthcare providers process watching people fight to stay alive while knowing they will almost certainly die? This also applies to our fellow ski patrollers.

DOUBLE BLACK EXTREME TERRAIN

As I patrolled the rest of the day, I gave the patrollers who had been involved in direct patient care during that incident time to breathe. Based on my experiences in the fire service, I know all too well that we all process traumatic incidents differently. I eventually walked into the ski patrol headquarters and just inside the door to the left noted the young crew chief standing motionless, shoulders hanging over the large coffee table often used for meals and training alike. I also noted he had several of the young patrollers sitting on a bench against the far wall. I inquired if he was going to do a crew debrief and if I should stay; he stated yes, and please do.

I can't count how many debriefs I've done over my nearly 40 years in protective services and wondered if he knew how important it can be as a step toward therapeutic processing. In the fire service, we have a phrase, "the art of reading smoke." It's a process to read the environment and gauge potential hazards within the environment, a size-up tool for an initial impression of risk and safety. It's similar to the Pediatric Assessment Triangle for a rapid assessment where we look at the work of breathing, appearance, and activity of the patient. The room was quiet, and the young crew chief seemed nervous as he was organizing his thoughts. Perhaps a bit stressed, overwhelmed? What could I do to help?

I felt he needed support, so as others gathered and began to circle the coffee table, I closed the PHQ door and stated, "I think you all did an incredible job. I apologize for not assisting in patient care, as I was busy with another patient when the call came over the radio. I closed the run as requested, and being that this debrief is for only those directly involved in patient care I will depart unless any of you have questions." The crew chief looked to me and smiled briefly, thanked me, and I departed, closing the PHQ door with the young chief and his crew secured within. No one entered during their discussion.

I wondered if any of them have ever been trained in critical incident stress management (CISM) principles and purpose or are aware of how many first responders are impacted and in what way after events like this.

COURAGE

To say that post-traumatic stress disorder (PTSD) and behavioral health may be noted after critical incidents like the one above does not do the subject justice. There are so many diverse, causative factors to traumatic experiences and environments that the arena of CISM and first responders is not filled with organized, robust research or support processes.

To examine this subject, we must rely on research from high reliability organizations (HROs). For instance, the Federal Motor Carrier Safety Administration, the Centers for Disease Control (CDC), and the International Association of Fire Fighters (IAFF) impact the professional fire service. Consequently, we in the fire service recognize we are primarily in a reactive response service that requires us to be proactive when it comes to the health and well-being of our fellow firefighters with initiatives such as the



“We must have the courage to check our egos at the door, to accept others from diverse backgrounds, and avail ourselves of their relative and transferable skills and experiences so we may learn how to protect and engage our members and continue to serve with excellence.”

development of employee assistance and CISM programs. (See <https://www.iaff.org/wellness-fitness/wfi-resource/eap/>.)

The courage to call attention to the need for behavioral health concerns for first responders in these entities is a beginning, and I believe all first responders are those who are designated or trained to respond to an emergency and protect life and property in the face of disaster or need. Therefore, PTSD shall be understood to potentially impact ski patrollers, and we as a community must acknowledge our duty to recognize the potential risk of behavioral health issues suffered within the ranks of our fellow ski patrollers. This is not about you, they, me, or I; this concern is about we, ourselves, and our own.

BLACK EXPERT RUN

Call it being situationally aware or scene size-up. Whatever you call it, and even if you don't know how to articulate it, believe in yourself. Note when people are not their normal self and if you sense they may be suffering from behavioral health issues. Are you noticing a fellow patroller's performance or engagement falling below acceptable performance levels? It is courageous in this

setting to question how to proceed when we note behavioral, mood, emotional, or other problems like antisocial personality disorder behaviors in our fellow ski patrollers.

In an article titled “We Need to Talk about the Mental Health of First Responders” in [verywellmind.com](https://www.verywellmind.com) published in 2021 (<https://www.verywellmind.com/first-responders-mental-health-5207002>), Krystal Jagoo defines first responders as those in law enforcement, fire, and EMS who need access to mental health therapists for support. She further shares that there are stigmas attached to personnel asking for mental health support that prevent many from seeking it. That point is well documented in research.

Are we as Outdoor Emergency Care technicians and ski patrollers skilled in addressing these issues? Be honest with yourself. Odds are you are not a professional therapist with advanced certifications in critical incident therapeutic care. You may have insight and experience in related fields, but understand if you try to help in caring for individuals at risk for behavioral health issues your role should be that of a facilitator and confidante. If you try to act as a therapist, you may do more long-term damage than care, and you will threaten the efficacy and efficiency of any CISM process.



Photo by iStock.com/DragonImages.

If you think about HROs, there are inherent risks, and their processes are to identify vulnerabilities and take measures to reduce risks to their people, processes, priorities, and purpose. This is directly transferable to the National Ski Patrol and the services we provide. We must have the courage to check our egos at the door, to accept others from diverse backgrounds, and avail ourselves of their relative and transferable skills and experiences so we may learn how to protect and engage our members and continue to serve with excellence. If you think we don't need assistance from certified professionals skilled in critical incident management and processes of creating a safe work environment, you are wrong. True, I may be challenging a stoic culture or construct, but again, look to other professional organizations that serve in the emergency response realm — they are acknowledging that care and support is needed for emergency responders.

This is the essence of scene safety. When we do not support adaptive change models, we put not only success at risk, but the health and well-being of those involved at risk. Now, the statement above may cause some to get “turf toe,” but I challenge you to be stronger than your ego and respect that there are in fact dedicated professionals and processes set forth to assist us in establishing a safe workplace environment where we all belong and can trust that if a worst-case scenario does occur that we won't be judged; rather, we will be supported by our peers who were by our sides in the arena of the great outdoors. This is a work environment where it is OK to ask for help.

Whether you are a formal or informal leader, we must admit we are

not all skilled in the fields surrounding and supporting emergency first responders. Whether you are an OEC technician, instructor, paramedic, or other first responder like a firefighter, we must respect that our own roles, responsibilities, skills, talents, and opinions have a limited scope and application.

For those seeking to share adaptive change models that may alter certain community constructs (how we communicate and influence) and lead to uncharted courses, beware; to be the first to set this line can be dangerous. Leadership is rooted in putting yourself at risk by introducing new processes and caring for all your crew members. (See *Leadership on the Line: Staying Alive through the Dangers of Leading*, by Ronald A. Heifetz and Marty Linsky.)

CAUTION: ROCKS

To combat cultural dissonance, we as ski patrollers, first responders, and fellow support personnel must understand that by seeking, developing, and implementing a uniform, discreet, and confidential critical incident review and management process, we are actually being proactive and creating a safe workplace environment that our fellow personnel can trust. This CISM model must be dedicated to others without relying on a title. Rather, it must focus on skillset and character, with confidentiality and compassion as core traits. These personnel shall help others combat the potential behavioral health impacts after experiencing trauma. If you think about it, this is all about scene safety.

The core of any CISM function is honest, open sharing without judgment. If we integrate members because they are instructors in certain areas, rather than having the core character traits to be CISM facilitators, patrollers involved in a briefing may feel consciously or subconsciously that they are being evaluated. As we choose our CISM leaders or facilitators, we must choose character over title.

I implore you to realize that from the day a ski patroller joins your service they are trying to fit in, trying to figure out where the crevasses are and how to avoid them, trying to find a safe way to succeed. Our job as leaders, whether formal or informal, is to establish a safe scene, a place where others can be themselves and help us achieve our mission as ambassadors to the great outdoors. It is our purpose to identify vulnerabilities and take measures to reduce risks, whether it be on the ski slopes or within our ski patrol culture and community.

TRAILS MERGE

I will share with you that I consider myself a student, perhaps more a facilitator, one committed to total societal impact (TSI) where I consider not just how we as first responders deliver service and train, but also how we impact our community. I look for a positive relationship between what and how we deliver our service to the community and seek an increasing positive relationship with how our fellow crewmates feel. Not only do I seek to improve my skills, I seek to learn, share, and grow with my fellow crew members.

It is this passion and perspective that I know may make some people appreciate my efforts, even if there are speed bumps along

the way. I believe the CISM care continuum should become the standard of practice and standard of care for all first responders before, during, and after critical events.

CAUTION: UNMARKED OBSTACLES

Having heard some crew chiefs were looking for assistance in how to support other patrollers with assorted issues and concerns, I decided to research and develop a CISM care continuum for my patrol. I decided I would converse with the lead crew chief, ski hill medical director, primary response fire and EMS service, and the county medical director and share with them my intent.

As a member of the patrol's board my goal was to support the EMS division and have the local fire and EMS authority having jurisdiction (AHJ) invite patrol members and resort staff directly involved in traumatic patient care events any time a CISM defusing/debriefing occurred within the AHJ realm. We on the board agreed on the importance of all first responders, including patrol members, having access to critical incident stress management professional therapeutic processes.

During summer 2021, I presented the CISM care continuum and related information in this article to my board and crew chiefs. The videos, with questions to stir discussion, were emailed to patrol crew chiefs and leaders prior to the fall crew chief meeting, as were the CISM definitions and processes. Mind you, I have been with this ski patrol only two years. Most of the patrol had no idea that I have created community initiatives like this before and have published works held in the National Emergency Training Center Resource Library in Maryland.

On a cultural level when I was speaking to the patrol crew chiefs, how do you think my message was received? I will tell you this, the program was set forth, implemented, and even activated this past season due to another very critical traumatic event. During the presentation to the crew chiefs, I noted that unfortunately one key shareholder chose not to attend, and one key leader totally ignored my presentation. I knew that in this audience I was challenging their construct, and since they didn't participate in the presentation and discussion they might feel their roles were compromised.

Ultimately, when the calls for activation of the CISM process occurred this past season, there was confusion and delay in who to call, when, how, and why. As with any adaptive change, leaders may lead, but they also become marginalized and casualties while their processes are fractured (*Leadership on the Line*). However, the critical incident defusing facilitated by the fire department and authority having jurisdiction was well received by the intended audience (those who had direct patient care within a traumatic setting).

Unfortunately, the shareholders involved did not adhere to the essence of the core therapeutic process of establishing a closed, confidential, and safe discussion where only the professional therapist and those directly involved in the incident were allowed to share. Thus, a violation of roles, responsibilities, and lack of respect and discipline for therapeutic processes occurred. Sure, we all care, that's why we are OEC technicians and more.

However, we must respect that our desire to share our concerns is not within the realm of a private therapeutic session meant for those who were directly involved in a traumatic event. Remember, there are stigmas attached to asking for mental health support, and many fear being judged.

The reason for this limitation of access is so that those directly involved and at risk for PTSD and associated behavioral health concerns feel safe, not judged. Those involved did say they appreciated having access to the professional CISM therapist and process. However, they acknowledged they were uncertain why those who were not involved in direct patient care showed up and were allowed in the defusing process and why after the event they kept fielding questions from other patrollers (yes, unfortunately those who think it is their role to counsel, though not designated as such).

So, as with any new process being implemented, a continuous quality improvement communication was set forth and those shareholders who chose first not to participate in the introduction and facilitation of the CISM process have been asked to review the program and adhere to its principles and objectives to achieve the total societal impact we seek.

TERRAIN PARK

It is estimated that 30% of first responders develop behavioral health conditions including, but not limited to, depression and post-traumatic stress disorder. A 2018 NBC/IAFF study illustrated that the mental and emotional health of first responders is not getting enough attention. Among the distressing statistics:

- 19% had thoughts of suicide.
- 27% struggle with substance abuse.
- 65% are haunted by memories of traumatic situations.
- 81% believe asking for help will make them seem weak or unfit.

Much of what ski patrol crew chiefs do is directly related and transferable to what I do professionally in the fire service. We as ski patrollers are recognized as formal and informal leaders and ambassadors to the outdoors. Just as firefighters are ambassadors to safety, I believe we as National Ski Patrollers are charged with caring for those who serve with us. Those of us who lead shall be responsible for the health and well-being of others, our mission, and lastly ourselves. We are charged to "risk a lot to save a lot."

Moreover, if we align ourselves as an organization with a clear chain of command, we must respect the roles and responsibilities and be accountable to the processes and purposes set forth. That requires discipline and respect. This means checking your ego, badges, patches, certificates, awards, and titles at the door and leaving it outside of PHQ, especially when an incident debrief is occurring. We don't care what you know until we know that you are confidential, caring, and can respect others' needs and skill sets.

“Life cannot be about the fall; it must be about the rise.”

FREESTYLE

This is risky business in protective services (I worked in law enforcement prior to fire and EMS). I am talking about reputations being attacked for calling for adaptive change, a change where cultures, constructs, and roles and responsibilities evolve and we admit the mental health of crew members is important and beyond our scope as an OEC technician. I am talking about recognizing that workplace culture and constructs can cultivate micro-events that erode trust and prevent the creation of confidential climates where people feel safe and secure. This can lead to workplace climates where responders may feel weak or even harassed if they struggle with incidents or aspects of service.

By bringing CISM principles into patrol practices, I believe we can build caring climates of trust and confidentiality where people know that it's OK to have dialogue for clarity and understanding when facing an assortment of stressors that may be reduced through CISM principles and participation. Remember, this is an open-air, safe exchange of ideas and information. It is not a discussion where people are led in a direction of communication or a debate where one seeks to be right over another. A critical component of every CISM process is that dialogue is enjoyed.

Here is an example of a critical incident stress management system care continuum.

1. Crew chief learns of an incident that has crew members that may benefit from debriefing and performs the same by having only those members directly involved in the incident convene and share dialogue.
2. Crew chief communicates with lead crew chief and shares that an incident has occurred, a debriefing has followed, and shows interest in participating in a larger defusing if one is called.
3. Lead crew chief may contact the individuals involved while keeping confidentiality and inquire if further support is desired and may suggest further support from the patroller's personal medical doctor or a behavioral health specialist.
4. Authority having jurisdiction calls for a large-scale defusing and invites patrollers directly involved in patient care.
5. Lead crew chief contacts those patrollers involved in defusing and considers further support and/or referral to behavioral health provider.
6. Lead crew chief contacts all crew chiefs and advises that certain individuals have been involved in a CISM event and those crew chiefs should be sensitive to the needs of said individuals and communicate with lead crew chief as needed.

CULTIVATING EMPATHY (POWDER DAYS SAVE LIVES!)

Behavioral health, post-traumatic stress disorder (PTSD), substance abuse, and “caring for our own” are emerging concerns for all levels of first responders who experience critical incidents. The NSP is committed to the health and well-being of its members, who come from all walks of life, have diverse skill sets, and serve together in volunteer through professional full-time paid positions. Defining how to support such a unified yet diverse organization has many aspects, and just like in the firehouse I believe it starts with crew

chief rituals and communication.

I am known to have a unique ritual at the beginning of each 24-hour shift in my fire service. I perform this ritual daily because I need each crew member to know it is a safe workplace environment to share their stories and perspectives without judgment, since we utilize this construct to confidentially debrief after critical incidents.

In this ritual, I greet each firefighter, am briefed by the previous shift officer, perform vehicle and equipment inspections, and attend a shift briefing with officers citywide via Zoom. During this time each firefighter, paramedic, and apparatus engineer that works for me performs their own tasks and ultimately meets with me at a large coffee table. There, I survey each member and learn how I can best help them achieve their professional and personal goals of the day and gauge where they are on a psychological and emotional level. It's a sneak peek to determine if I should check in on them privately to see if they need additional support of any kind. It's the daily slope and terrain report.

Behavioral health is an environment few of us have worked in, yet we can bridge this gap by developing climates of trust and leading with empathy. My goal is to help you define a process you may integrate into your daily processes where your people realize they are our priority. The practices and rituals I utilize in the fire service are directly related and transferable to your role as patrol crew chiefs and members.

By increasing awareness of what critical incident stress management is, we can aid in the development of self-care and crew chief leadership practices. We can then establish climates of confidentiality and collaboration to minimize the risk of negative impacts our rescuers may be exposed to during emergency response and aid in recovery from abnormal events.

Below are some signs and behaviors exhibited by fellow first responders who may benefit from behavioral health intervention. I will also discuss how to cultivate caring climates of cooperation and support to increase patroller resiliency. Finally, I will illustrate how coping mechanisms can be cultivated through crew dynamics as we strive to reduce any negative impacts associated with emergency or critical incident response.

Some physical symptoms first responders may exhibit (which may also be signs of a serious medical event) include:

- Chills
- Thirst
- Fatigue
- Nausea/vomiting
- Fainting
- Dizziness
- Weakness
- Headaches
- Elevated heart rate, blood pressure, diaphoresis
- Difficulty breathing
- Visual disturbances



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As we respond to and from critical events, monitoring one another is imperative to protecting our own. Some cognitive symptoms we may note in responders are:

- Confusion
- Nightmares
- Uncertainty
- Hypervigilance
- Paranoia
- Projecting or blaming others
- Inability to maintain attention/concentration
- Disorientation
- Malaise

While these lists are not all-inclusive, they do help illustrate notable responses. This can help create a differential diagnosis toward defining a precipitating factor and need for attention. In doing so, we may encounter emotional symptoms exhibited by our fellow patroller/first responder, such as:

- Apprehension and anxiety
- Emotional outbursts, irritability, anger
- A feeling of being overwhelmed, depression
- Fear, guilt, grief, denial

We all process stressful experiences in different ways. Some of us have gained resilience and coping mechanisms through formal training and education, while others have done so through life experiences and more. However, being in tune with behavioral symptoms associated with PTSD should clue us all in on advocating for one another and accessing professional behavioral health services associated with CISM. Some behavioral symptoms noted could include:

- Absenteeism, withdrawal from participation
- Antisocial acts, change in social patterning and communications
- Restlessness
- Change in appetite, diet, or exercise
- Increased use of alcohol, substance abuse

We may not note these signs or symptoms in our fellow patrollers and first responders immediately after critical incidents, as some appear many years after repeated exposure to traumatic events. Our goal as patrol leaders should be to take an organized approach to understanding critical incident response (both micro-events and those rare high-risk events). We should introduce and review concepts and pathways to assist patrollers in coping with stressors that may occur from response to any critical incident. We can do this by:

- Establishing a culture of confidentiality and peer support personnel.



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- Providing a procedure for activation of a critical incident stress management response (defusing/debriefing) in response to a critical incident.
- Cultivating an empathetic, communicative, and collaborative environment that reduces the potency of behavioral health impacts associated with traumatic events by establishing confidential coping mechanisms for positive outcomes.
- Achieving trust and cooperation within our organization and community through formal expectation education and code of conduct reviews.
- Help crew leaders cultivate empathy and perspective to care for team members in our charge. (See Simon Sinek's TED Talk "Leading with Empathy.")

CORDUROY: ESTABLISHING A TRUSTING WORKPLACE ENVIRONMENT

Patrollers seek to attract, engage, and inspire participants in outdoor sports. I ask you to take that same quest and focus on cultivating your crew and building a cohesive team just as I strive to in the fire service. To establish open, welcoming environments where people sense they belong is to establish safe constructs within a culture where we as team leaders encourage diverse skill sets and communication. We must avail ourselves of and acknowledge, appreciate, and accept others' commentary; however, this does not

require agreement. During my morning crew meetings, I set forth the following principles and state that communications shall:

1. Be within set boundaries of what is and is not acceptable. Talking to someone is different from talking about someone when we gossip or criticize.
2. Reliable: The communication we share must be constructive and caring. Our behaviors must be engaging and illustrate we care.
3. Accountable: We as leaders are accountable to ourselves, our role, our mission, and others. We must acknowledge that we are not always right, nor are we always aware. Avoid blame and excuses. Listen and consider how we can improve. This is a cognitive process that requires reflection and honesty. Do not blame. Blame is an emotional discharge of guilt to avoid shame. Blame is rooted in insecurity. Be brave, have courage, and admit we too need help.
4. Confidential: Do you protect your people's reputations? Do not share criticism or gossip. Do not shame people into accountability. Shame erodes accountability and trust.
5. Integrity: Have meaningful conversations. Practice and adopt leadership values. If people are focused on fitting in, they are assessing a hazardous environment and are seeking to avoid hazards. They feel vulnerable. There is a huge difference between fitting in and belonging. When people belong, they

“I am talking about recognizing that workplace culture and constructs can cultivate micro-events that erode trust and prevent the creation of confidential climates where people feel safe and secure.”

sense they can be themselves and are appreciated for the same.

6. Non-judgmental: Be tolerant and forgiving. Don't use sound-bites to cast judgment. Seek context and clarity. This is watercolor painting, not paint by the numbers. Your job is to ensure that your people have the tools to paint. Appreciate their creativity.
7. Generosity: Look back retrospectively and do a personal inventory. Are you someone people can trust? This is a huge part of building trusting relationships and positive work environments. Pause, breathe, and allow others to do their best. This is about establishing boundaries. Be clear about boundaries and expectations. Are you lying to yourself and telling yourself a story? People see that. (See Brené Brown's "Dare to Lead" podcasts.)

You have agreed to be a crew chief. Your duty is to establish a safe workplace environment. Trust is imperative. Keep your story and others' stories in your confidence. Talk to people, not about people, and understand the complexity between fitting in and belonging, between gossiping and sharing. Allow people to vent. Maintain boundaries within your environment, establish traditions and rituals, and especially avoid sharing confidential information or gossiping. Learn to be tolerant. Acknowledge, appreciate, and accept different perspectives, knowing we may not agree, and that the most valuable trait is that your crew member feels it is a safe environment to share their stories. The narrative you are telling yourself may not be an actual depiction of how people see you, so check your ego at the door.

THE PURPOSE

The purpose of CISM is to achieve resilient patrollers and allow individuals to verbally express reactions and share coping strategies after events without judgment. CISM is an effective approach because it empowers individuals, in the context of their service environment, to define and maintain their own and others' health through education, communication, enhanced social support, and confidentiality. While the evidence is still varied about whether CISM prevents PTSD, it should be implemented and adhered to strictly as part of a larger approach to first responder safety.

CISM also provides an opportunity to share lessons learned and for quality improvement. Workplace champions who lead with compassion and empathy to reinforce anti-stigma messages, who can implement CISM practices formally or informally, should be recognized and cultivated. The expectation for all crew chiefs is to consider patrollers' need for trust, perspective, confidentiality, peer support, debriefing and/or defusing, and when further professional support should be pursued.

Let me share an excerpt from Theodore Roosevelt's "Citizenship in a Republic" speech. It is a section called "The Man in the Arena." The speech was given in Paris on April 23, 1910.

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, and comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows the great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat.

The reason I share this is because we strive to do our best, yet we often question ourselves privately or publicly. Just as those in the fire service study a great leader's purpose and sacrifice, I maintain we in the ski and bike patrol should do the same and let no one stand in judgment of another if they have not served in the trenches by our sides working to save a patient who looks into our eyes with hope.

My objectives in this article are:

- Introduce and review concepts and pathways to assist patrollers in coping with stressors that may occur through response to a critical incident.
- Provide a procedure for activation of a critical incident stress management response (defusing/debriefing) in response to a critical incident.
- Cultivate an empathetic, communicative, and collaborative environment while reducing the potency of behavioral health impacts associated with traumatic events by establishing confidential coping mechanisms for positive outcomes.
- Achieve trust and cooperation within our organization and community.
- Help crew leaders cultivate empathy and perspective to care for team members in our charge.
- Acknowledge that micro-events and recurring events that cause stress for employees have proven to be just as devastating as major traumatic events negatively impacting the mental health and well-being of individuals. This has to do with a workplace culture of diminishing or criticizing the efforts of others, gossip, lack of inclusion, accommodation, confidentiality, trust, cooperation, and support.
- Illustrate how CISM practices can be infused in patrol service.

A critical incident can be defined as:

- An event that is outside the usual range of experience for most patrollers and would be markedly distressing to almost

anyone. For example:

- The serious injury or death of a fellow ski patroller.
- The serious injury or death of an employee or guest.
- The unexpected death of a fellow ski patroller or employee.
- An event associated with prolonged and extraordinary rescue efforts — chairlift evacuations, avalanche, entrapment, etc.
- Any incident that can be considered a serious physical or psychological threat to a ski patroller or fellow employee.
- Any incident in which there is unusual media coverage, such as on-hill severe trauma or death.
- A series of incidents that may have cumulative effects (patroller's code of conduct).
- Any abnormal event in which circumstances are so unusual or distressing it produces immediate or delayed emotional reactions that surpass normal coping mechanisms.

EXPECTATIONS OF PATROL CREW CHIEFS

- Practice listening without judgment.
- Inform your crew of the CISM process and available support.
- Acknowledge an incident, issue, event, or activity as one that may benefit from defusing/debriefing processes to help give patrollers coping mechanisms to reduce stressors.

- Lead with empathy, convey trust, provide anonymity, and assure confidentiality while supporting and mentoring crew members and those in your charge seeking assistance.
- Be available for peer contact and be willing to provide support on a voluntary basis.
- Be a potential first point of contact to initiate critical incident response.
- Manage incident informal discussions by limiting access to those involved and/or avoiding potential negative or judgmental commentary.
- Care for and nurture mature, reflective, constructive communications with crew members.
- Ask your skilled ski patrol mentor for assistance and guidance as you navigate difficult discussions or incidents with crew members.
- Consider referring patrollers to a skilled behavioral health specialist or primary care physician as needed.
- Cultivate a culture of empathy with perspective and confidentiality.

Critical Incident Stress Debriefing Activation and Code of Ethics

Paramount to success is that any level of CISM is performed by a designated crew chief or recognized CISM peer support patroller who holds confidentiality and empathy above all.

Patrol title, status, and area of ancillary duties does not qualify



“If I claim to be a wise man, it surely means that I don’t know.”
— “Carry on Wayward Son,” by Kansas



said person to facilitate or participate in any CISM process. This must be adhered to, and no outside discussions or sharing should be allowed.

Without exception, participants in any CISM event are only those directly involved in the incident. However, it may extend to other citizens or employees directly involved in patient care. The goal is to establish trust in the process and confidentiality among peers. The crew chief may call for incident review, whether it be micro-event or critical incident. Others may present interest to the crew chief and request a critical incident stress debriefing. It is a safe environment and allows patrollers to open up and share. It is non-judgmental; it is not a critique of what happened. It is confidential. There are no side discussions with people who were not present, and no records are maintained.

There are professional, certified critical incident stress psychotherapists for emergency service providers. When requesting a professional CISD, financial costs for services are managed by the authority having jurisdiction or organization requesting services.

Additional learning about critical incident stress debriefing may be found at International Critical Incident Stress Foundation, Inc. Also look toward Canada; see <https://www.ivegotyour-back911.com/>. The goal of their campaign is to spread social awareness of first responders facing mental health issues. Another resource is www.everyonegoeshome.com (Everyone Goes Home Advocates).

SUMMARY: THE FALL LINE

We know our first role as patrollers is to make the scene safe. To examine the scenery includes recognizing chaotic or emotional dysregulation that may begin within our own construct — the presumed acceptable behavior or manner of communication that defines certain cultures — while also eroding our own purpose of establishing a caring culture. Life cannot be about the fall; it must be about the rise. I have fallen many times, yet I strive to rise and help others who sense they have fallen.

I realize all National Ski Patrol members and OEC technicians care. Obviously, one of my passions is to share and care. I struggle with the perceptions and scope of practice being limited in the field, though accept it as a disciplined practitioner. Whose job is it to lead the initiative to care for our own? I believe we can do something to bring about a standard of practice and care with regard to helping our fellow first responders who struggle after working in a critical incident or who are impacted by a workplace culture and construct that research has identified as negative sourced micro-events.

This article is intended to bring about hope, encouragement, empowerment, personal reflection and responsibility, and professional accountability. We can heal and comfort others today while influencing the future.

Service-oriented leadership is all about putting others before self in pursuit of our purpose. Please establish and maintain a safe workplace. Protect your crew. Cut wood and carry water. Cultivate resilient crew members through compassion and confidentiality. +



AN INSURANCE THING



Wild Mountain candidates watching an instructor demonstrate a skill (adult patrollers Jason Rosandich, David Foster, YAPs Claire Landberg and Alex James). The others (Katie C. And Trent V.) were from different hills.

WHAT YOUNG ADULTS BRING TO A PATROL

BY CLAIRE LANDBERG

The title of this article comes from a conversation between one of our young adult patrollers (YAP) and a patroller from another hill during our chair evacuation refresher this fall.

“So, as a YAP, you guys just basically follow the real patrollers around, right?” he asks.

“No, we are ‘real’ alpine patrollers; we can treat injuries and bring toboggans down just the same as everyone else,” she replies, a note of irritation in her voice.

He scoffs. “Then what is the purpose of being a YAP? I don’t see a reason.”

“Well, it’s a lot easier for younger patrollers to bond with others their age. Plus, it creates incentive to recruit and bring more people into the program. We go through all the same training and testing as regular adult patrollers.”

“So, it’s basically an insurance thing, then, in case you guys mess up.”



Claire Landberg, Izzy Vazquez, and Taylen Peterson work to improve their beacon skills at a YAP event at Granite Peak in Wausau, Wisconsin.

An insurance thing. To this patroller, all our training, testing, and experience boils down to nothing more than a title to prevent us from getting sued. Any young adult patroller in the country knows that this cannot be further from the truth.

In December 2018, I lay at the bottom of the training hill, my left patella fully dislocated from a ski racing crash. I was pulled to the aid room in a toboggan and my leg immobilized in a cardboard splint, the lead patroller kindly consoling me the entire time. Once my tears slowed, she handed me a business card that read “Join the National Ski Patrol.” I’d never seen myself working in medicine; human medicine seemed too complicated, and at the time I was set on being a veterinarian. However, after being assisted at my accident, I became drawn to the idea of combining my passion for skiing with helping others. The more I thought about it, the clearer I could see myself wearing the red jacket, skiing down the mountain with toboggans, and delving eagerly into the patrol culture.

Seven months later, my stomach churning with nerves, I walked into my first Outdoor Emergency Care class. I didn’t know anybody else taking this class, much less any other 15-year-olds. From what I’d seen, the ski patrol was only staffed with adult men and women. I was convinced I wouldn’t fit in with the rest of the group. I timidly walked into the classroom and my shoulders relaxed with relief; among the adults in the classroom, another teenage girl sat in the front row. I immediately took the empty chair next to her and introduced myself, having never felt more grateful to see someone my age.

During my candidacy, there were three other YAPs taking OEC and Outdoor Emergency Transportation, plus one that was

already certified and an OEC instructor. The five of us became extremely close throughout the eight months of training to become certified. Coming from four different high schools, all but two of us met for the first time that first day of OEC. We studied as a group, partnered up for scenarios, rode up the chairlift together, and even assisted on a critical injury together. Our friendship even led us to spend time together outside of patrol, going to the lake in the summers, meeting up for coffee, and traveling together. It was incredible to witness the growth of trust that we had within each other and to work together through these high-pressure situations, all while still having fun and creating great memories.

That’s part of the magic of the Young Adult Program. Something about taking a group of teenagers who share a common love for skiing and snowboarding and teaching them lifesaving skills will bond them like no other; it’s a type of trust that I have yet to experience elsewhere in my life. YAPs work immaculately together; like a well-oiled machine, they’re remarkably skillful when dealing with emergencies because of their attentiveness to detail and ability to think outside of the box. Since most of us are in high school, studying and quick information recall are well-practiced skills. We aren’t afraid to try new things or receive feedback to make us more efficient. Being younger than most patrollers, many adults see us as having an aura of immaturity and inexperience. It’s up to us to prove that we are far more capable than most people believe, which often leads to developing a newfound sense of leadership and confidence.

What happens when the YAPs receive their cap and gown, though? Many patrols have been hesitant to start a YAP program because their young adult patrollers will leave when



Taylen Peterson, Will Dauffenbauch, Izzy Vazquez, and Claire Landberg at a YAP event at Granite Peak in Wausau, Wisconsin.

Claire Landberg receiving her toboggan certification.



Taylen Peterson and Sam Ward transporting a toboggan up the chairlift.

they graduate high school, and the numbers will stay stagnant. However, the YAP program is bigger than simply growing the ranks of a single patrol. Many YAPs, myself included, have plans to continue patrolling through college and even pursue a professional patrol career. Along with many patrollers on our patrol who started out as YAPs, at least four of the YAPs on our patrol have plans to patrol professionally throughout college and into their adult lives.

With exposure to emergency medicine, working under extreme pressure, and all the rewarding experiences that come from ski patrol, many YAPs find their passions within healthcare or first responding. For example, my YAP co-captain has plans to attend physician assistant school because of her patrol experiences.

Additionally, seeing younger patrollers out on the hill will inspire more to join, and the patrol recruitment process grows significantly. My hill went from just one YAP to over 10 in just two years as a result of word spreading about our YAP program. We did hold some recruitment events as well, but the majority of candidates had heard about it through others. Ski patrol allows young adults to experience hands-on situations and gain experience to equip them with basic knowledge to pursue a medical degree, begin training as an EMT or paramedic, or even to be of assistance in a public emergency.

My experience with the YAP program at Wild Mountain in Taylors Falls, Minnesota, was nothing short of inspiring. Working alongside my other patrollers and YAPs helped me to uncover a type of determination within myself that I didn't even realize was there. I looked forward to every Friday night when I was able to go to the hill and patrol alongside my fellow

YAPs, responding to injuries and being able to use my training. I was also able to hold leadership positions within our patrol, such as becoming a captain of the YAP program and holding a spot on the Central Division YAP Advising Board. In these positions, I was able to create recruitment initiatives, organize seminar events across the Midwest for YAPs to meet each other and improve their skills, and act as a mentor for new YAP candidates.

From an instructor perspective as well, it was so inspiring to see each class of YAPs go through OEC, OET, become certified, and start working. Getting to constantly interact with my other YAPs and adult patrollers as well helped me make connections and bonds that will last me a lifetime. With the help and support of my patrol, I grew not only as a skier but as a person as well. I became much more confident in myself and what I can handle, as well as in my teamwork skills. I learned how to work precisely and carefully under pressure, and I found that I really enjoy it. Although it seems cheesy, ski patrol helped me find my purpose in life and what I want to pursue in the future.

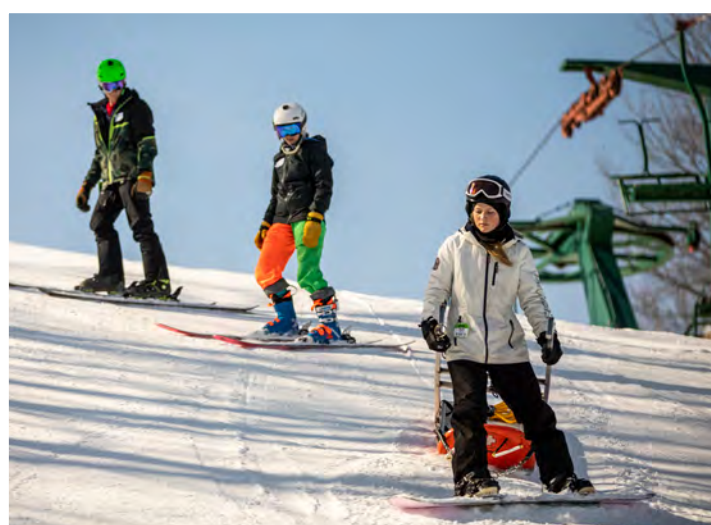
So, to patrol directors who are on the fence about starting a young adult patrol program at their mountain, I urge you to. The impact you can have on the lives of your young adult patrollers is immeasurable. I've heard first-hand from veteran patrollers at my hill that they enjoy the sense of youthfulness and energy that the YAPs carry with them. Even if your YAPs don't stick around after high school, you can know that you've positively influenced their lives and benefitted the National Ski Patrol as a whole. To those of us who know the positive impact of ski patrol as a YAP, the title of a young adult patroller will always be more than "just an insurance thing." +



YAP Claire Landberg receiving beacon advice.



Ilsa Bastiaens and Taylen Peterson working with toboggans.



Sam Ward, Ilsa Bastiaens, and Taylen Peterson working on their toboggan skills.





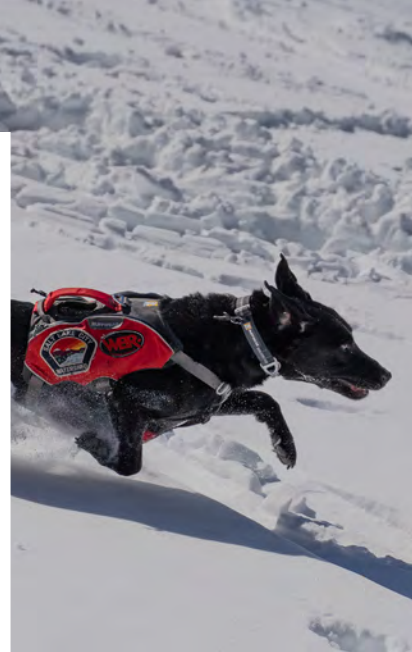
EVERY DOG HAS ITS DAY

DOGS FROM AROUND THE COUNTRY COME TO
TRAIN AT THE WASATCH BACKCOUNTRY RESCUE
INTERNATIONAL DOG SCHOOL

PHOTOGRAPHS BY ERICA CLIFFORD



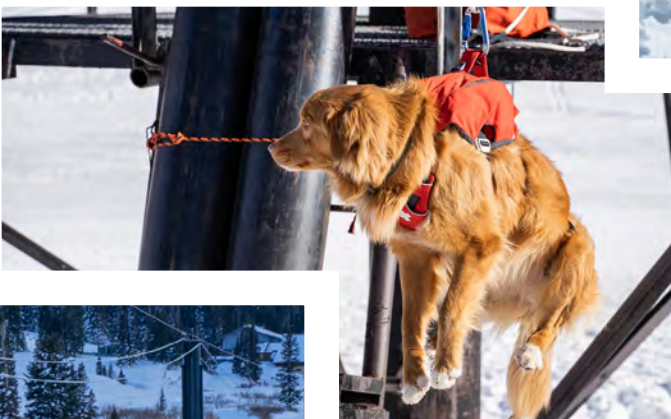
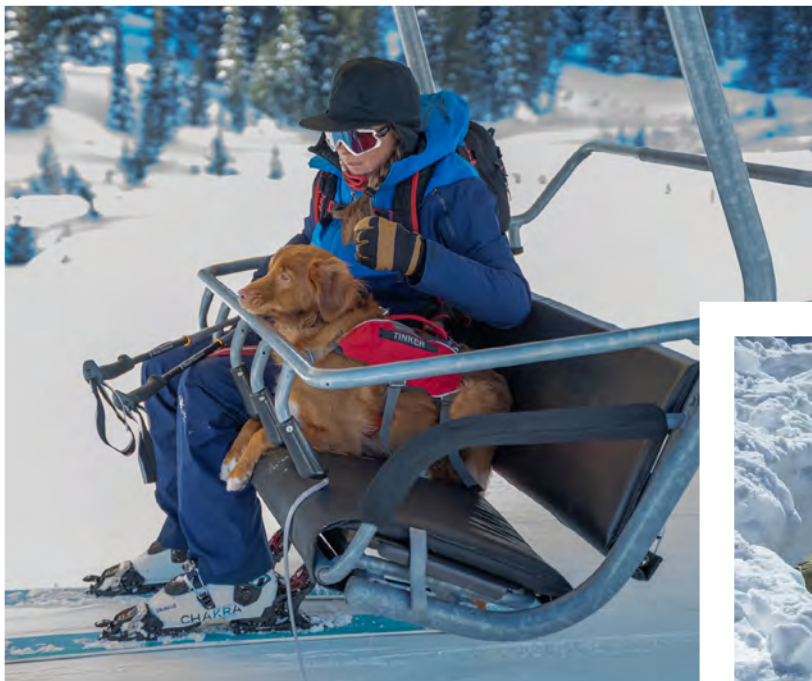
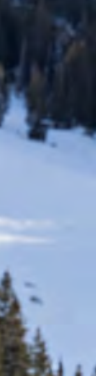
WASATCH BACKCOUNTRY RESCUE



This January, the National Ski Patrol and Subaru of America sponsored five dog teams to attend the Wasatch Backcountry Rescue International Dog School in Alta, Utah. The NSP-Subaru partnership is celebrating its fourth year of providing scholarships for dog teams from across the country. Each winter, funds are raised by Subaru's Winterfest opt-in program to cover the cost of scholarships. Subaru donates \$1 for every email collected during Winterfest events nationwide. The 2022 scholarship winners included Kolina Coe, of Northstar California Resort; Zachary Bloom, of Keystone Resort; Cordelia Brewster, of Northstar California Resort; Paul Spranklin, of Snowbird Resort; and Stephanie Boyd, of the Yellowstone Club.

This year's school was limited to smaller groups of teams due to COVID-19 precautions. However, a smaller roster resulted in more one-on-one time with instructors and increased opportunities for sharing information and feedback. The dogs and handlers receive training in important rescue skills like searching and ranging, alerting handlers of a find, digging victims out of avalanche debris, and riding on snowmobiles, chairlifts, and in helicopters. The school's primary purpose is to help teams achieve or maintain their certification as rapid responders for avalanche rescue, winter-related mountain rescue, and medical evacuation incidents. NSP is honored to work with Subaru to support the critical work WBR does to provide training to these amazing dogs and their handlers.





WASATCH BACKCOUNTRY RESCUE





Originally from New Jersey, Greg Miller has been patrolling for more than seven years at Alta Ski Area in Utah, where he also serves as the dog coordinator. In 2020, he had the opportunity to select Alta's newest avalanche dog, OC, named after Dan O'Connor, who helped establish Alta's avalanche dog program in 1980. In January 2022, Greg and OC achieved their Level A certification together at the Wasatch Backcountry Rescue school. We caught up with Greg and OC to ask them a few questions about the process.

OC celebrates achieving his well-earned Level A certification in January 2022 at Alta Ski Area.



Q&A

SPM: *How long have you and OC been working toward your Level A certification?*

Greg: OC and I started working toward our certification from the day I brought him home up until his test at age 2. We picked OC from a breeder and lineage that has produced a handful of very good avalanche search and rescue dogs. We also used the Volhard Puppy Aptitude Test to assess his attributes at 7 weeks old. Picking from a known breeder and using this test helps assure more confidence in that dog being a successful search and rescue dog.

SPM: *What were the steps leading up to this certification?*

Greg: Everyone has a different strategy and process for achieving Level A certification with their dog. In our case, it involved (and still involves) lots of little steps over time. I started with teaching him to search right away, which involved him just finding his favorite toy or myself (human) in the house. Then we built up the love of playing tug (his reward for finding someone). From there, we worked on making the searches harder until he was finding humans buried under the snow. During this time, OC became comfortable being on the ski hill and with all the stimuli in that environment. These building blocks allow you to move into the snow environment and then proceed into harder and more technical drills.

In order to get the Level A certification, you have to first pass the obedience test and have a dog of testing age (around 18-24 months). As a practice test, I took a Level B test when OC was about 16 months old. The Level B test is at the dog's home resort with the dog looking for two victims buried 3-5 feet under the snow surface. Some of the drills we do for training include quick searches involving one buried victim that take five minutes, working on ranging (using visual or voice commands to direct the dog at a distance), or basic things like learning how to move around on touring equipment with the dog. Each drill is a stepping stone for learning different aspects of proficiency for the big test.

WITH AN AVALANCHE DOG HANDLER

SPM: Did you (or OC) have any concerns or nerves going into your certification test in front of all the WBR attendees?

Greg: Yes, I think there will always be nerves before a test. This one especially, as it took place during a WBR school, so the crowd watching us consisted of all my mentors and teachers, as well as patrollers from around the West. Once we started the test though, it was easy to block everything else out and focus on our job, having complete confidence in OC and his abilities. He wasn't nervous and was having a blast working.

SPM: What can you and OC do now that you've achieved a Level A certification?

Greg: OC and I are now certified to be able to search anywhere in Utah and the West. He will be able to travel to back-country rescues and has shown that he is able to uphold the WBR search standard.

SPM: How often do you need to recertify?

Greg: The certification is good for two years, and he will need to retest obedience every year. However, this coming year OC will do an additional Level A test with a second handler, which will allow him to have two certified handlers able to search anywhere with him.

SPM: What are your top three favorite things about being an avalanche dog handler?

Greg: 1. The ability to take your dog to work and create a super close bond with him. He's my shadow all winter, he wakes up for early mornings with me, and sometimes we even get to ski powder together.

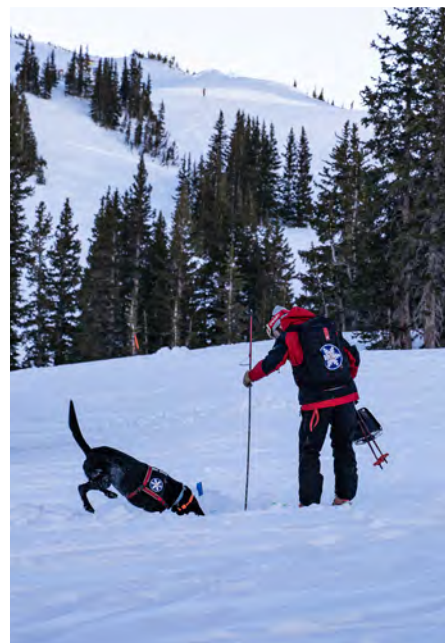
2. I named OC after Dan O'Connor, who was one of the founding members of WBR, because I am proud of the dogs and our program. I feel honored that I get to

help train OC to continue to set a high standard for dogs being a valuable tool in an avalanche rescue.

3. It has allowed me to better my ski patroller abilities, as this process has made me a better rescuer and taught me to manage more on the job, balancing my duties and OC. I have also had the ability to meet different patrollers from across the West and to learn and interact with them doing WBR dog schools and other dog-related stuff.

SPM: What does OC do on his summer vacations?

Greg: OC and I normally try to ski as long as we can into the summer. Once we run out of snow, we transition to rafting and hiking. He LOVES any chance he gets to swim and play in the water and enjoys hiking in the Wasatch and visiting places that he might have to work in the snowy months. OC is lucky enough to have the other Alta avalanche dogs as his pals and gets to hang with them a bunch in the summer. We continue to do drills with searching and obedience throughout the summer, and sometimes the obedience test falls in the summer months as well. +





SPOTLIGHT ON ALUMNI

OLYMPIC EXPERIENCES AND MORE!

BY TIM VIAL, NSP NATIONAL ALUMNI PROGRAM ADVISOR

Our Alumni members enrich the National Ski Patrol and hundreds of NSP member ski patrols, bike patrols, and mountain host units, with many of our almost 5,400 alumni active at patrol, region, and division levels.

Alumni members have time, talent, and a deep history of the NSP, bringing experience to our organization. They provide a vast resource of needed skills and expertise to supplement the efforts of the “active membership” and remain actively involved at their patrol or region/division levels. With COVID-19, many discovered ways to remain active, assist their former patrols, regions, or divisions, or take on renewed activity as bike hosts or mountain hosts.

Patrollers leave the active ranks due to many factors: educational options, relocating to a new part of the country, family or job responsibilities, health issues, and more. Many alumni eventually rejoin as active members or find new NSP duties as mountain or bike hosts.

Here we highlight active alumni and their contributions to NSP!

Alumni Olympians: Patty and Mark Giebel, Far West Division

The Giebels, alumni advisors for Southern Region of the Far West Division, have been “alumni Olympians” for almost five months. They volunteered months earlier for this special service and were in China from Nov. 14 to March 15.

Notes Patty, “We have experienced many wonderful adventures. The first three weeks were challenging as, because of COVID-19, we were quarantined at a hotel in Tianjin. We found ways to make it fun without going crazy with each other while being confined to one room for that timeframe. Our activities included watching movies on our computer, listening to our favorite music, setting up a practice Z system, finding a way to jog a mile by opening the door to the hallway, and, also



(From L-R): Mark Giebel, Thomas Walsh, Spencer Wood (both USA Paralympians) and Patty Giebel.

worth mentioning, we put each other in full body vacuum splints for rescue practice. We were asked to bring 22 from Los Angeles to Beijing!”

Once out of quarantine, the Giebels explored the exciting city of Beijing, including hiking the Great Wall, having a guide to visit the Forbidden City and Tiananmen Square, and visiting Anna, a newly acquired Chinese friend who owned and ran a bakery/coffee shop and bar in Beijing. In addition, they enjoyed tasting a traditional Chinese hot pot meal.

Continues Patty, “One out of the two designated mountains, Yanqing, is where we were assigned to patrol. Being in China since November, we have met some wonderful individuals who coincide with the spirit of the Olympics, beginning with our mountain operations leader Niki, who has done an incredible job orchestrating the development of this mountain over the last three years. Starting with nothing, he has created an amazing, successful Olympic and Paralympic experience, all with man-made snow. Other individuals include meeting and connecting with Chinese and international patrollers and doctors, as well as the snowmakers, groomers, and a multitude of workers,

all with the common goal of making the Olympics/Paralympics what it should be.

The Giebels received a fine reception from the International Olympic Committee; they were interviewed and filmed as being at the China Olympics at age 75 and still doing ski patrol. They consider it an honor to have been invited here. Adds Patty, “NBC TV carried the story, which went worldwide; even an Olympic judge at the Paralympics saw our story while he was in Salt Lake City and recognized us from the Olympic story. Finally, meeting and connecting with the athletes, who gave us a true appreciation of their dedication, determination, and enthusiasm for their sports and for life. Whether it be Olympics or Paralympics, these athletes have been an inspiration to both of us!”

The Giebels have been patrollers for 38 years with the National Ski Patrol and are also Association of Professional Patroller members, and they continue to share their knowledge and experiences, such as rescue, toboggan transportation, skiing, and treating and preventing injuries. In addition, they have worked with the disabled at Mammoth Mountain for the last 11 years, which made their experience in China that much more rewarding.

“Two highlights with the Paralympic standup athletes were with Thomas Walsh from the U.S. and Arthur Bauchet from France. Thomas, while preparing for his giant slalom race, took the time to ask about our time in China. We traded pins and took a photo with another U.S. athlete, Spencer Wood, and Thomas, Patty,



Patty and Mark Giebels in Olympic Ski Patrol uniforms.



Martin Merwin

and I at the finish line, with me holding Thomas' silver medal from the giant slalom race," Mark remembers.

"Our favorite Paralympic/Olympic moment was with Bauchet. His disability involves spinal issues. After the giant slalom race, he had violent spasms for over an hour, during which we helped to stabilize him. He needed and wanted to go out to the awards ceremony to receive his bronze medal. We were asked to take him out in a wheelchair and remain there with him throughout the ceremony. On another day we were at the finish line when he won his second gold medal of the games. As he came through the finish archway with his gold medal on, he turned to us in appreciation for our help and asked if he could have his picture taken with us. That definitely was our Olympic moment!"

Martin Merwin, Northern Division

Marty Merwin joined the Showdown Ski Patrol in Montana in 1983 and patrolled there until 1997, then moved in 1997 to the Marshal Mountain Ski Patrol. As a member, he taught Outdoor Emergency Care and Outdoor Emergency Transportation and eventually became the patrol director for Marshal Mountain. In 2004, Marshal Mountain Ski Area closed,

and he moved to Montana Snowbowl Ski Patrol in 2005, where he attained his Senior and became an OEC instructor trainer. He was soon appointed the Northern Division Region 1 advisor; after going alumni, he was nominated for Northern Division Alumni advisor.

Marty holds a host of awards and courses, including Circle A and Circle M, the Northern Division Outstanding Ski Patroller Award, the Mark Behan (Outstanding Instructor) Award, and National Appointment Number 11316. In 2004, he became a lifetime member. Perhaps that record of deep involvement keeps him dedicated and involved as an alumni member.

Marty adds, "I didn't do any of this on my own. It was, and is, the consistent, unrecognized assistance of others in the training of candidate patrollers, the yearly review of our skills, and the dedication to their patrols and the NSP in our pursuit of providing the public with the highest standard of care and assistance that we are noted for! For me, and many of you, it is this dedication and camaraderie that brings us back year after year!"

Dave Flynn, Eastern Division

Alumni Dave Flynn shares how he and his spouse remain deeply involved as alumni. "Fundraising. We decided to keep up our OEC credentials current, including CPR and Federal Emergency Management Agency IS-100. When the patrol needs additional volunteers for a fundraiser, we attend, especially when my wife is running in a race where the patrol is doing the medical race support. She runs, and I volunteer as part of the first aid team. Medical race support can be a long day for half marathons and longer races. The patrol also runs the regional ski swap yearly. As candidates, we helped with the marketing campaign. As alumni, we bring things to sell and support the event."

Continues Dave, "Our volunteer hours here add up for a separate donation to the patrol. My wife's company donates \$10 for every volunteer hour each of us spends helping the patrol as part of the



Dave and Rosemary Flynn

company's charitable outreach, and we make sure that money goes to the patrol that trained us. Our overall contribution averages about \$1,000 a year, which is dedicated to patroller training and trips."

The Flynn's remain involved in training. He continues, "Two local patrols work together for OEC training, and candidates join in one large class. There are 36 chapters to cover in class, followed by an exam and then eight weeks on the hill practicing splinting, backboarding, and trauma training. We realized during our candidate experience that there are so many things to learn that little time remains to actually internalize the practical skills. So, we invented a home-grown solution called OEC Practice Dinners. This program lasts 8 to 10 weeks at our home, with the whole candidate class invited. We also invite several instructors. Everyone arrives at 6:30 for dinner cooked by us. This provides a 30-minute buffer that allows for city traffic and late arrivals after work. From 7-9 p.m., the instructors take over on everything from oxygen to quick splints. Both my wife and I are involved throughout and serve in every role needed, from 'how to tie that' to 'tie that on me.' Our time contribution adds up to about \$50 every time the candidates come due to my wife's company match. So, in the end, they get



dinner, training, a donation, and interestingly, this helps them become a team.”

Continues Dave, “For retraining, many alpine patrollers serving today are years past their OEC training and exams. We added them to the 8 to 10 weeks of OEC Practice Dinners, filling the gap. We decided to invite regular patrollers who wanted to teach, watch, or be practice victims. While we get more candidates than alpine patrollers, people like the symposium-style atmosphere.

“Holding an event like our OEC Practice Dinners can’t be done too soon or too late. For our group, every Wednesday a week or two after Labor Day is about right. We planned eight weeks last year, but it got so popular that we extended it to 10. We had up to 18 people a week in total, which frankly was a trick to seat and feed, but we never had less than 10, and that was only on one week because of a last-minute schedule change. The response from instructors was very positive, as they could see the candidates improving week by week. One instructor came to our event for the first time and exclaimed, ‘So this is the place of legend!’ And I won’t say it isn’t a lot of work, but it is a perfect task for alumni who are not otherwise assigned.”

Thanks to the Giebels, Marty, and Dave for sharing their experiences as involved alumni!

Never overlook the talents and energy of alumni in forming new national bike and mountain host units. Carl Dahl and Doc Jim Margolis joined with several other NSP alumni two years ago and reached out to the land managers of the American River Bike Trail, one of the busiest urban bike trails, in Sacramento, California, and were instrumental in establishing and recruiting for the American River Bike Patrol. With their help, the patrol has grown to 95 members and become the largest urban bike patrol in the National Bike Patrol system.

Suggestions as an Alumni Member?

If you are already an NSP alumni member, what are your questions or suggestions? With your help, additional value and enthusiasm can be added to a well-established alumni program. Don’t overlook alumni perks such as access to the NSP Online Store and NSP pro deals. Alumni retain their ongoing years of service! If you want more involvement, let those leaders at the patrol, region, or division level know your interest — be the squeaky wheel, speak up, and help to build your own patrol’s alumni program!

Alumni Program Benefits

Alumni membership is a way for former patrollers to remain affiliated with NSP. You can choose how involved you want to be, whether as an instructor or with your local patrol. You always have the option to go back to patrolling with current OEC and your patrol representative/director’s approval.

For only \$35 a year, you’ll receive many benefits, including:

- *Ski Patrol Magazine*
- Regular e-newsletters with fresh NSP updates
- Ability to participate in NSP training or education programs
- Discounts through the NSP Online Store and NSP Pro Deals Page

- Maintain your continuing NSP years of service
- Online access to the NSP website
- Voting rights in board elections
- Easy access to your division alumni advisor for insights and special alumni events

Finally, join us in Whitefish, Montana, for our annual Alumni Celebration Week at Whitefish Mountain Resort the week of Feb. 26-March 4, 2023. The lovely Grouse Mountain Lodge has booked a block of rooms for only \$89/night, and this past year, Whitefish offered day tickets for seniors 70 and over for only \$29, with those 65 to 70 getting a discounted rate of \$76 (multiday tickets save you more) — you can hardly afford not to come to Whitefish! Evenings include group dinners at lovely Whitefish restaurants, cross-country skiing around the lodge, options for dog sled tours and a trip into Glacier National Park, and more. For more information on this event, email NSP National Alumni Program Advisor Tim Viall at tviall@msn.com.

To our many NSP alumni, we welcome your continuing involvement in your local patrol, region, or division. Please share your comments with NSP National Alumni Advisor Tim Viall at tviall@msn.com or (209) 969-3875. +



Alumni Celebration Week group photo at Whitefish.



WINTER WEATHER AND AVALANCHES 2021-22

LEARNING FROM THIS SEASON'S
AVALANCHE INCIDENTS

BY DALE ATKINS

For snow lovers, 2021-22 was the tale of two winters. In a Dickensque-sort-of-way, it was the best of times and the worst of times. Winters are all about variability between warm and cold, between snowy and dry conditions, and this variability enhances avalanche problems. What makes this past winter standout was the abruptness of the changes (and extremes), especially in terms of snowfall. Before recapping the season's snow and avalanches, let's first review what the weather prognosticators thought might happen.

Back in September, as leaves started to turn color and temperatures began to cool, attention and excitement about the upcoming winter rose. Fresh on the heels of the previous winter, another La Niña — known as a “double dip” (back-to-back episodes) — was brewing in the Pacific Ocean. The colder water temperatures of La Niña tend to shift storm tracks northward, bringing cooler and snowier conditions to the northern half of the United States from the Pacific Northwest to New England. Over the southern U.S., warmer and drier weather tends to prevail from Southern California across the Southern Rockies and eastward. During La Niñas, the center swath of the U.S. is a “no man's zone” offering only a trend of uncertainty. Such winters can be colder, wetter, hotter, drier, or average. Powder-seekers and weather forecasters believed it would be



Aerial photo of the Hoosier Pass avalanche. Photo c/o Colorado Avalanche Information Center.

a snowier winter. However, professional climatologists were not as optimistic. There is much more to winter weather than La Niña (and her petulant sibling, El Niño).

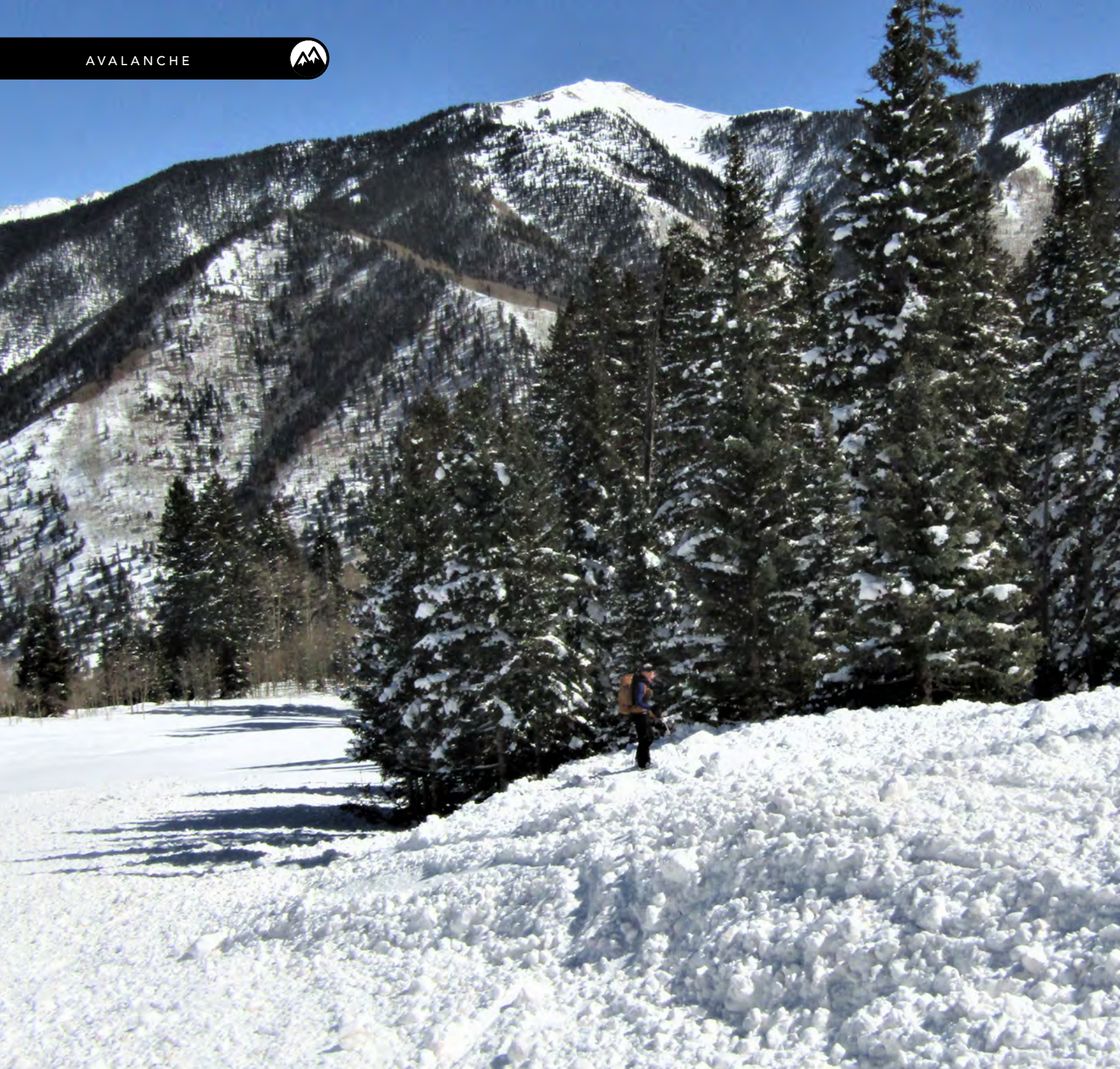
FALL (OCTOBER-NOVEMBER)

Fall was relatively wet along the West Coast; however, very warm temperatures kept freezing levels high and delayed snowmaking. Much of the snow that fell melted or was later washed away by heavy rains. For riders and patrolers, that can be the worst of times. For example, Mt. Baker had a base of nearly 4 feet in early November, but by early December it had shrunk to just over a foot. To the south, Mammoth Mountain in California had its wettest October on record, (much of which was rain), but the ski area did manage to open on October 29. It was only the 10th time since 1955 that the ski area opened in

October. In November, storms avoided Mammoth, as less than 1 foot of snow fell during the entire month.

Further north, storms rolled eastward, but little to no moisture remained. In November, Alta, Utah, reported only 21.5 inches, which tied a 42-year record for its driest November. Colorado fared no better. While a few ski areas opened limited terrain on manmade snow, natural snow was in very short supply. Denver even smashed its record for its latest snowfall. The season's first measurable snow fell on December 10, breaking the previous record of November 21, set in 1934. In New England, Mount Washington's summit received 4 feet of snow in November, with most of it falling in the latter half of the month.

South central and southeast Alaska were the outliers, as an atmospheric river of tropical moisture fueled by a powerful low-pressure system in the



The Durango avalanche. Photo c/o Colorado Avalanche Information Center.

Gulf of Alaska combined with cold temperatures to drown the region at the end of October. Just south of Girdwood and Alyeska Resort, the Portage Glacier Visitor's Center received nearly 19 inches of rain in two days. At 5,000 feet, at least 10 feet of snow fell. On the highest peak in the Chugach Mountains — Mount Marcus Baker (13,176 feet) — National Oceanic and Atmospheric Administration and National Weather Service computers forecasted a staggering 344 inches of snow for a 72-hour

period. That is almost 29 feet! No one was there to know how much actually fell, but given that 10 feet fell at less than half that elevation, it would not be a surprise if 25-plus feet of snow fell in three days.

Monster snows often mean monster avalanches; however, that was not the case in southern Alaska this season, as there was little or no weak, old snow layer. (The deep snowpacks could cause avalanche problems later in spring.) In the rest of the U.S., the absence of snow

in many areas meant no opportunity for the snow to become weak and unstable. In areas that had snow, the widespread and very warm temperatures limited the formation of weak, faceted snow. For many regions, the winter of 2021-22 was off to an unusual start.

WINTER (DECEMBER-FEBRUARY)

The dry pattern continued into December, at least on the mainland. Hawaii's few snow lovers enjoyed



decent skiing and snowboarding on the high volcanos early in the month. To great relief, a parade of storms finally hit the Western states the week before Christmas. It was the best of times for many areas, as abundant snows continued through December, with another wave of storms in the first half of January. Hardest hit were the Sierra. In December, the Central Sierra Snow Laboratory (Donner Pass) got 214 inches. Mammoth reported 161 inches. Despite the storm track squarely aimed at California, December precipitation in

Oregon and Washington was near normal. In the Rockies, Alta reported 143.5 inches. In Colorado, Gothic (just north of Crested Butte) received 119 inches, just over double the long-term average. New England received moisture, but mid-December was warm and rainy. Despite tallying precipitation almost every day, Mount Washington reported only 35 inches of snow. Colder weather after Christmas and in early January did bring snow to New England.

As quickly as snow started in mid-December, it ended across most of the West by mid-January. What followed was an almost two-month period for most areas where generally dry and sunny conditions prevailed. Only a few, very small storms passed across the West. Not until early to mid-March did snow return.

Snowfall was in short supply. It was not the worst of times, but any hope that California's drought would be broken were dashed. At Mammoth, no snow fell in January (and only 7 inches in February). Further north, the Snow Lab at Donner Pass reported 25 inches. Eastward, Jackson Hole, Wyoming, reported 21 inches. Gothic, just north of Crested Butte in Colorado, got 36 inches. In New England, snowfall on Mount Washington was 79% of average, with only 33 inches reported.

Alaska continued to be snowy, however. Alyeska hit the 500-inch mark in early February,

SPRING (MARCH TO END)

Dickens wrote that spring is "when it is summer in the light and winter in the shade." For most areas, it seemed that the trend was toward summer, especially in March. In April, winter returned to many mountain areas.

In the Sierra, the drought continued through March. The Snow Lab received only 6 inches, but in mid-April the fortunes changed. In a 10-day period, just over 6 feet fell. In the Rockies, snowfall was subpar, but enough fell to keep the skiing good. Jackson Hole reported 37 inches in March and 44 inches for the first three weeks of April. Loveland Basin in Colorado reported 41 inches in March and 36 inches through April's first

three weeks.

In New England, March snowfall on Mount Washington March was only 48% of average. However, April, fared better. With a week to go, snowfall had just topped the monthly average of 33 inches.

Alaska stayed snowy. With one week remaining in April, Alyeska hit the 800-inch mark and announced it would extend ski season into May. To the east, Valdez had its most snow in more than a decade.

AVALANCHES

In terms of avalanches and accidents, the winter of 2021–22 has been quiet. The 16 deaths thus far this winter are 58% of average since 2000. Notably missing from the tally are the West Coast states that typically account for about a dozen fatalities each winter: Alaska, Washington, and California. The tally may rise as climbers and skiers start to tackle the high peaks in Alaska.

Despite the fewer deaths, the distribution of those killed followed the pattern of longtime averages. Backcountry riders (skiers and snowboarders) and snowmobilers led the tally.

State	Fatalities (2021-22)*	Avg Fatalities/ Year (1990-91 to 2020-21)
CO	6	5.9
AK	0	3.8
UT	0	3.7
MT	4	3.3
ID	2	3.1
WA	1	3.0
CA	0	2.2
WY	2	1.4
OR	1	.4
NV	0	0.3
NH	0	0.2
VT	0	0.1
AZ	0	0.1
ND	0	0.1
Totals	16	27.5



Note: The individual averages do not tally 27.5 because of rounding.

ACTIVITY	Fatalities (2021-22)*	Average 2000-01 to 2020-21
Climbers	0	2.5
Backcountry riders	6	8.0
Out-of-area riders	0	3.3
In-area riders	1	0.8
Mechanized riders	0	0.1
Snowmobilers	5	9.7
Snowbikers	1	0.4
Hikers/snowshoers	3	0.9
Misc. recreation	0	0.8
Patrollers	0	0.3
Motorists/highway workers	0	0.0
Residents	0	0.6
Guides-mech	0	0.3
Guides-foot	0	0.2
Forecasters	0	0.1
Others at work	0	0.1
Totals	16	27.5

Since 2000-01, U.S. avalanche deaths have trended downward. Certainly, some of the decline can be attributed to public avalanche forecasting, education, and luck; however, climate change appears to have a role, too. Looking at two recent low death years, the winter of 2014-15 was dry to extremely dry across the Western U.S., while the winter of 2016-17 was wetter than average across the West. For the latter, when the snows fell made the difference. After a dry start, a series of atmospheric rivers came in January and February. Snowfalls crushed buried weak layers so they could not be a problem. In Colorado, over half of the winter's snows fell in a three-week period. Then the spigot turned off. In the wake of the storms there remained a strong, deep snow cover across much of the West.

This past winter, the avalanche activity around the West also corresponded to when the snows fell and did not fall. The season's first eight deaths (Washington,

Idaho, Colorado, and Montana) occurred with the arrival of the winter's first big cycle of storms. After the storms stopped, no deaths occurred for about a month between mid-January and mid-February. While the avalanche danger diminished, the fair weather set a trap for the next round of storms. Three deaths (Montana and Colorado) occurred in February during a 10-day period with several small storms. Dry weather returned, and the trap was reset for the next round of storms. In mid-March, four deaths occurred in Wyoming and Colorado during a four-day period.

Let's look at several notable avalanche accidents from this past winter.

HOOSIER PASS, COLORADO: JAN. 8, 2022

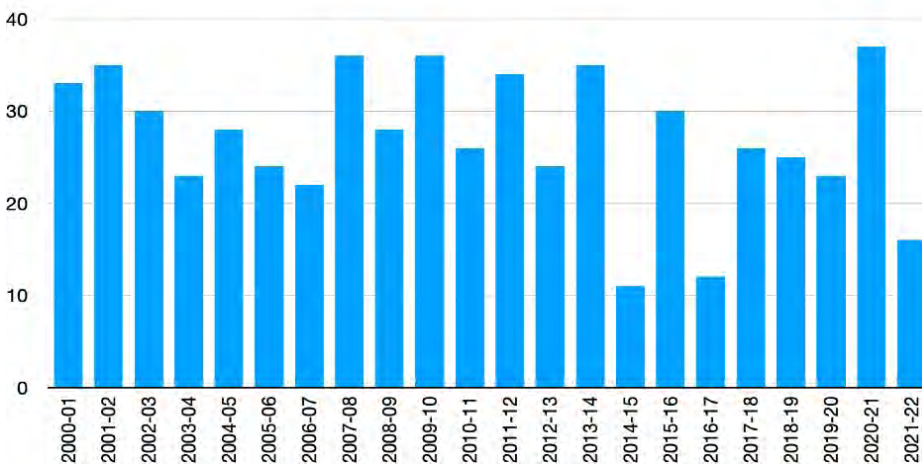
This accident occurred just after the Christmas and New Year's storm cycle. On a Saturday in January, a young couple drove to Hoosier Pass, just south of Breckenridge, for a short snowshoe outing. With their dog on a short lead, the couple set out on a snow-covered jeep road. They were planning to meet friends the next day to ski at Breckenridge. When the couple failed to show up the next morning for carpool, their friends got worried. The sister of one of the snowshoers was able to get her overdue sister's cellphone coordinates. Friends found the couple's car at the pass, and as a sheriff's deputy responded he spotted a large avalanche not far from the pass. An air ambulance helicopter was requested to fly over. From the air, they spotted tracks in but no tracks out. Instantly, the search turned into a rescue effort. Members of a local mountain rescue team, who also happened to be off-duty professional ski patrollers, were doing a dog training near the hanger. The helicopter returned and picked up the first team

and dropped them off near the avalanche. Within minutes of arriving on the debris, the dog made an alert. Just as the second team arrived, the dog alerted again. The bodies of the two and their dog were quickly recovered.

LA PLATA MOUNTAINS, COLORADO: FEB. 26, 2022

In the mountains west of Durango, a backcountry skier was swept into a tree and suffered an open femur fracture and spinal injury. His partner quickly found him, partly buried, and with "lots of blood" in the snow. He called 911 before digging out his friend. After uncovering his friend, he fashioned webbing into a tourniquet to stop the bleeding. Part of the femur stuck out the backside of the thigh. Worried about another avalanche, he dragged his friend to a more sheltered spot, then called 911 again. A helicopter landed approximately 100 yards away and downhill of the injured skier. It took the medics and the friend almost an hour to package him and move him to the helicopter. Approximately 90 minutes from the time of the avalanche, the now very cold (core temperature in the mid-80s F) skier was in the hospital's emergency department. Four hours later, he was flown to a large hospital on the Front Range. Three days after, he awoke with a rod in his leg and a fused spine. He will recover.

This accident and rescue highlight that to save a life requires a systems approach and luck, too. It started with a fast rescue by the partner and then a chain of care involving rescuers that extended all the way to hospital care. Critical time was saved because the partner called 911 before even attempting to free his friend. The tourniquet, though improvised, was also lifesaving. The second call to 911 was



U.S. avalanche deaths by avalanche year (Oct. 1 to Sep 30).

key, too. It better informed rescuers of the nature of the injuries and that the helicopter would be able to land close by.

VICTOR, IDAHO: MARCH 3, 2022

A group of friends had already spent several days backcountry skiing from a nearby yurt. On the fateful day, they had already skied a couple of runs when they decided to move over to steeper terrain where they had watched two others ski an hour earlier. The first two skiers skied partway down and pulled off to opposite sides of the path. Skiers three and four skied down and stopped in the middle of the path. The last skier had already made several turns when the avalanche released. That skier heard a yell and cut to the side as the avalanche tore past. The slide slammed “like a freight train” into skiers three and four. Both were swept more than 500 feet down the mountain and buried. As soon as the powder cloud settled, with transceivers out, the trio started down after their friends. They spotted a gloved hand on the surface, and two started to dig while the third continued to search. The hand belonged to skier four. She was cyanotic and unresponsive, but after three rescue breaths from her husband she regained spontaneous respirations.

Skier three was found further down buried at a depth of 0.8 meters. The pair who had skied the slope earlier helped dig out the buried skier. He was pulseless, and after about 15 minutes of digging the three started CPR. They continued for 30 minutes, but there was no success.

The skiers were a backcountry- and avalanche-savvy group that seemed to let their guard down. They seemed focused on the stated “low” danger, resulting in a confirmation bias rather than seeking snow and terrain information that might disprove the rating. The first skier made good decisions as he started down and waited well to the side; however, skiers three and four stopped in the middle of the path, and skier five started down before they cleared. Maybe it was fatigue that caused the two to stop in such an exposed place, or perhaps the group had become casual, given the absence of signs of instability. No matter the reasoning, never let down your guard, even if the danger is rated low. Had the group practiced disciplined, smart-travel techniques — one at a time, never stop in the middle, and don’t ski above (or below) your friends — the descent may have ended very differently.



The Eagle River avalanche. Photo by Lex Treinen, Alaska Public Media.

EAGLE RIVER, ALASKA: MARCH 24, 2022

About a dozen miles north of Anchorage in the suburb Eagle River, the huge snows of the winter finally avalanched, at least where an avalanche could be witnessed. It buried the only road in and out of the community under 80 feet of snow. Fortunately, no injuries or deaths were reported, though several vehicles were buried and a small house was moved a considerable way. Crews worked for almost two weeks to open the road and removed over 37,000 cubic yards of snow, enough snow to fill 39 747 airplanes.

MT. HOOD MEADOWS, OREGON: APRIL 5, 2022

A solo snowboarder was buried and killed in a terrain trap along a creek bottom in open terrain. While the circumstances of the accident are not entirely clear — if it was an avalanche (very small) or snow immersion suffocation — the consequences of the accident were: the rider lost his life. This accident highlights the challenges faced by ski areas, patrollers, and riders. Ski areas and patrollers do an outstanding job to mitigate the threats caused by terrain, weather, and snow conditions. However, no terrain can be made safe if it is to be open to riders. Thus, riders need to take responsibility for where they go, especially if they are alone. Had this rider been with a friend, the outcome likely would have been very different. Instead, he was found four days later.

FINAL THOUGHTS

Snow and avalanches continue to fascinate and test riders and ski patrollers everywhere. When the season’s snowfall

numbers are all added up, snowfall across most of the West will be about normal or just below. Above normal snows fell in Alaska and Washington. However, snowfall in Southern California, Arizona, New Mexico, and likely in New England was below normal. On paper, the numbers seem to suggest a typical winter. However, 2021-22 was unusual because of abrupt and extended periods of dry and wet. Avalanche professionals are fond of saying that unusual conditions result in unusual avalanches. This is true, but during much of the winter, conditions were typical, too, and avalanches also occur when conditions are not unusual.

The challenge is that in the times of typical conditions there are often no obvious signs of instabilities and danger. It is during these times that patrollers, guests, and backcountry travelers get surprised. Every winter some patrollers “take a ride” while doing avalanche mitigation. Most incidents become a good story; however, every winter, a few patrollers get buried or injured. About once every three years a patroller is killed. Avalanches don’t care how knowledgeable and skilled we are or how hard we work. When things are going well and the snow seems stable, that is the time to stop and ask yourself what clues you might have missed. Instead of seeking more information that will likely be just more of what you already know, seek different information. It is those different details that will reveal the hidden or insidious avalanche dangers.

Contact your division Avalanche supervisor for more information. +



BIKE PATROL EXPANSION

NSP BIKE PATROL AND MEMBERS INCREASE MEMBERSHIP

BY TIM VIAL, NSP NATIONAL ALUMNI PROGRAM ADVISOR

The National Ski Patrol Bike Program has been working hard to expand on the foundation built by its predecessor, the NSP Bike Task Force. In partnership with the national office, the Bike Program has successfully filed an intent-to-use trademark application for the first-ever official Bike Patrol shield logo. We are now able to use the shield logo and “National Bike Patrol” phrasing on promotional recruitment materials for bike patrols and host units across the country!

We are also excited to announce that an all-new National Bike Patrol uniform will soon be available via the NSP Online Store, custom designed and created with help from our official Bike Patrol uniform sponsor, Primal Wear, Inc. The uniform will bear the new Bike Program shield logo as well as the usual crosses and patroller texts.

The Bike Committee is also working with bike patrols and host units to identify their training needs and prepare topics to build out content and curriculum. We understand that bike patrols and host units can be very diverse in their needs, and we are focusing on the commonalities to start. We are also finalizing a standardized bike patrol startup document. Whether you are ski patrol-based, a mountain bike group, or a free-standing organization, this document will assist with step-by-step procedures to organize and register your bike patrol or host unit. If you have questions, please email NSP Bike Program Director Jeremy Verbeke at bike@nsp.org.

Across the country, scores of National Ski and Bike Patrols, both alpine and urban patrols, watch over the cycling and hiking public, contributing thousands of hours of service and riding a million estimated miles to keep trail systems both well-maintained and safe for the public. Here are short recaps of activities of four members of the National Ski and Bike Patrol, as well as the annual “NBP



M. Pleasant patrol team putting on first aid clinic at “Rooted” women’s mountain bike festival. Photo by Don Farbotnik.

Insta-patrol” that serves the huge Sea Otter Classic each year.

THE MOUNT PLEASANT BIKE PATROL

This patrol, based in northwest Pennsylvania, began in 2017 when Mount Pleasant started building its 7.5-mile trail network, which exploded in popularity in summer 2020. The trails are cross-country singletrack, with a 6-mile race loop and a downhill flow trail. In 2020, the Mount Pleasant Ski Patrol met with mountain management and started formation of a bike patrol; in spring 2021, it became an official NSP bike patrol made up of Outdoor Emergency Care-certified members.

Patrolling a cross-country trail network poses logistical challenges that vary from a bike park, so the patrol looked for new ideas to promote safety across the trails. Knowing that a patroller may be a long way from an accident site, the patrol



Winter fat biking. Photo by Don Farbotnik.



Tim Franz working with Fishers Fire and Victor Fire to determine search grids for mountain bike patrol to search during joint S&R training. Photo by Valerie Sorrells.



Bike and ski patrollers confer with backcountry leader Dave Rollings before heading to assignments. Photo by Tim Viall.



Sea Otter patrol barbecue. Photo c/o Tim Viall.

relies on the bikers themselves for initial assessment and care. The solution was to design a mountain bike first aid clinic that is conducted for the public at Mount Pleasant bike events as well as other region mountain bike events.

In doing this, the patrol has expanded its reach beyond the resort and been welcomed by the Northern Allegheny Mountain Bike Association (NAMBA) and Western New York Mountain Bike Association (WYNMBA) in support of their events. The bike patrol operates year-round, which sometimes means trading bikes for snowshoes to access the groomed trail networks for winter fat biking!

In the future, the Mount Pleasant Bike Patrol is looking at adding training for interested bike patrollers at the OEC and Outdoor First Care levels to support region needs for patrollers. The patrol is also working to develop a trailhead safety app connected to rescue plans, which would aid in locating anyone on the trails that needs assistance more quickly and follow designated extraction routes.

For information, contact Don Farbotnik, Mount Pleasant Bike Patrol leader, at dfarbotnik@gmail.com.

GENESSEE MOUNTAIN BIKE PATROL

This patrol started in 1996 because there were almost no legal places to ride mountain bikes in the Finger Lakes Region of upstate New York. To gain trail access, local mountain bikers created an advocacy club and committed to assisting with trail maintenance and trail safety.

GROC Patrol was initially part of the International Mountain Bicycling Association. In 2018, the GROC Patrol voted unanimously to join NSP. They patrol six public parks where the parent club has agreements for trail design, building, maintenance, and safety. In all, the patrol is responsible for over 200 miles of singletrack and doubletrack trails across two counties.

The patrol remains a committee of its parent club, Genesee Regional Off-road Cyclists (GROC), and they manage the relationships with land managers. GROC Patrol gets direction from the board; it's a different arrangement than many traditional NSP units but works well for the patrol.

At the time the patrol switched to NSP, it had 12 members, only three of whom were NSP members. The patrol is now



nearing 40 members. Approximately one-third are OFC-trained, while about two-thirds are OEC-trained and primary members on a winter patrol.

The support the patrol has received from the Genesee Valley Region and Eastern Division has helped its growth. All the patrol members, regardless of training, perform the exact same duties: perform as ambassadors of the trail, improve trail safety, provide support for mechanical issues, and help during medical emergencies.

Each season, the patrol typically works 4-6 local mountain bike races, six different “Love Your Trail” trail work/trail maintenance days, the local REI National Trails Day, and a fun, local mountain bike festival.

For information, contact Tim Franz, tfranz@sjfc.edu.

BRYCE MOUNTAIN BIKE PATROL

This patrol, near Basye, Virginia, began in March 2013 when the general manager voluntold, “We are opening a mountain bike park, you are now our patrol director, and we need a bike patrol.” The park opening was slated for June. The patrol drew up the roster, equipment needs, response protocols, patroller park familiarization, patroller training, patroller bike training, riding protocols, and safety equipment mandates for riding patrollers; the list gets long quick, and the patrol only had months to get this accomplished.

The patrol had a small number of existing patrollers express interest in the bike park and bike patrol, so it reached out to Massanutten Resort’s patrol and found several patrollers interested, which helped them get started. Staffing was still challenging, as the patrol was only allowed to have a single patroller on duty during the week the first year and two patrollers on duty during weekends. The patrol still has bike patrollers who are shared between Bryce and Massanutten’s resorts today.

Gravity Logic Inc. was brought in to build the bike park, yielding a park known for its flow and great progression. The park does have a few trails with



Winter Park patroller Tyler Foulkes navigates rocky single track. Photo by Matt Brugge.



Winter Park patroller Greg Moran patrolling at the National Championships. Photo by Craig Huggman.

good technical aspects, but most of the park is built with flow. The patrol was included in the entire trail build process, which benefitted patrollers immensely, allowing the patrol to preplan emergency access points and identify potential problem areas. The ski patrollers asked how bike injuries differed from skier injuries, and it was explained that bikers

bleed a lot more than skiers; the patrol adapted quickly due to the increased treatment of flesh wounds and potential blood-borne pathogens.

The park added two new trails in 2020 and one new trail in 2021, bringing the total to 10. Trail 11 is scheduled for spring 2022; with all these trails, the



Winter Park patrollers do a practice exercise with a Cascade litter. Photo by Ken Kramer.

patrol has a total of 30 wooden features spread throughout to enhance the riding experience.

The patrol continues to grow, with 30 part-time paid bike patrollers and a handful of volunteer bike patrollers. They continue to provide the highest level of OEC care they can. The patrol has averaged over approximately 300–350 patients per bike season, from treating minor issues all the way up to the life-threatening or life-altering injuries.

For information, contact Glenn Jackson, glenn@bryceresort.com.

WINTER PARK BIKE PATROL

Grand County, Colorado, isn't just home to Winter Park/Mary Jane Ski Resort; it is also home to the largest bike park in the U.S. — Trestle Bike Park at Winter Park Resort — and more than 600 miles of bike trails throughout the Fraser Valley.

Thousands of riders flock to Trestle Bike Park during bike season because it offers 40 miles of trails and over 40 lift-served runs that feature many unique freeride, technical, and cross-country sections. Most of the bike trails are unpaved singletrack, offering a variety of terrain for all riders.

The Winter Park Bike Patrol staffs 26 paid patrollers who serve as on-hill riders seven days a week during bike season; assisting are 150 volunteer bike patrollers, including 40 young adult patrollers. Most of Winter Park's bike patrollers are ski patrollers in the winter and are, at a minimum, OEC-certified, while some have EMT certification.

Winter Park hosted the annual 2021 Winter Park Classics XC Mountain Bike Race Series and the Trestle Gravity Series, offering cross-country competition for riders of all skill levels, from juniors to pros, on various weekends

during the summers. A highlight of the 2021 summer season was the USA Cycling Mountain Bike National Championships, hosting approximately 2,600 racers per day and featuring downhill, enduro, cross-country, short track cross-country, and dual slalom.

The volunteer bike patrol at Winter Park Resort acts as an extension of the paid patrol and provided coverage for the entire Winter Park Classic XC Series, along with the USA Cycling Mountain Bike National Championships. Last summer, they had 35 different bike patrol volunteers dedicate nearly 800 hours of their time to ensure guest and participant safety.

JB Brockman, current patrol leader of the Winter Park Volunteer Patrol, notes that volunteer patrollers enjoy the opportunity to practice OEC in the summer. "Not only do we get to keep our skills sharp during the off season, but bike patrol helps us recruit future volunteer patrollers." That the skills required for mountain biking and skiing are similar and offer the opportunity to be on the mountain in both winter and summer is an added benefit. "Plus, we get to ride really fun trails," she adds.

For information, contact Ken Kramer, Winter Park Volunteer Patrol and Rocky Mountain Division Bike Patrol supervisor, at kkramer@cigarettestore.com.

In the Far West Division, the annual Sea Otter Classic Insta-patrol formed in early April for the huge Sea Otter Bike Classic at Laguna Seca Raceway and Fort Ord National Monument for the 20th year. Annually, about 10 NSP and NBP alpine and bike patrols join to provide four days of first aid service, with 30 to 50 volunteers covering 130-plus shifts and treating 150 first aid incidents.

From the beginning, Dodge Ridge NSP Patrol has been the leader, joined in recent years by the new American River Bike Patrol, China Peak NSP, June Mountain NSP, and a half-dozen other patrols. Each year, a celebratory Saturday evening barbecue allows patrollers the chance to have fun and meet fellow patrollers from around the West. For info on the 2023 event, contact Tim Viall at tviall@msn.com. +

CERTIFIED PROGRAM TRANSITION

NEW PROGRAM DIRECTOR INTRODUCTION

BY CHRIS BRODERSEN AND SAL MASCAREÑAS



Sal Mascareñas

After six years, the time has come to pass the role of Certified national program director (NPD) to new and what I am certain will be excellent leadership (more on that in a minute).

First, I need to express my sincerest and deepest thanks to all the Certified Committee members during my tenure, as well as those Certified members who leaned in and continue to do so to help drive the program forward. Since 2016, the Certified Committee has made enormous strides in driving toward the goal of creating a national, unified set of standards across the core modules, namely ski/ride, Outdoor Emergency Transportation, Avalanche, rope rescue, Outdoor Emergency Care, and the newly created Outdoor Risk Management (ORM) Program. For anyone interested in learning more about this content, it can be found on the Certified page of the NSP website, and I would invite all NSP members to view these documents to better understand the work of the Certified Committee over the past six years.

On the last point with respect to ORM, we all need to give a special thanks to Mark Petrozzi, whose thought, leadership, skill, and knowledge allowed the

Certified Program to create, beta test, and roll out what is currently being designed as a new national program. The goal of the ORM Program is to ensure the NSP delivers to the ski industry the necessary skills required of the NSP membership to create and maintain a safe environment for the public to enjoy the snow sports to which we are all dedicated. This is a prime example of the Certified Program at its finest, and I look forward to more such efforts in the future.

As many have heard me express in the past, “Certified is not a destination, but a journey.” To this end, the Certified Committee has made refinements to the national standards mentioned above. They will continue to do so in the future and will create new standards around parts of the Certified Program that are not part of the core modules, such as candidate credentials. It has been my core belief from the beginning of my personal journey as Certified Program director that the program can and should never be static, but rather adjust to the needs of the NSP membership and snow sports industry to create new thought leadership, methodologies, and skills to ensure NSP is regarded as the leading provider of patrolling excellence. I also firmly believe that the best and most efficient way of moving these efforts forward is through open, shared communication and input from Certified members as well as other NSP programs that overlap with the Certified core modules.

I would now like to hand it off to the incoming Certified Program Director Sal Mascareñas. Sal has already shared his vision and ideas with the Certified membership and Committee regarding what I believe will take the Certified Program to the next level. With that, Sal, please share with the NSP members your thoughts.

Hello everyone, my name is Sal Mascareñas, and I am the incoming



Chris Brodersen

Certified NPD. I (and those on the Certified Committee) wish to thank Chris for all his effort and hard work over the last six years. As Chris states above, the Certified Committee has been able to publish their core modules online, provide a backbone for the new ORM Program, and establish a candidate credentials document to help those interested in becoming a Certified patroller understand the expected requirements. Again, Chris did an outstanding job of getting these documents published.

For some background on me, I started patrolling with the Beaver Mountain Ski Patrol in Logan, Utah, in 1982. Since then, I have patrolled in Utah, Southern California, Idaho, and Wyoming. I have been both a paid staff and non-paid staff patroller, along with a snowcat guide. I am currently registered with 1) Grand Targhee Ski Patrol in Alta, Wyoming; 2) Idaho Falls Nordic Ski Patrol in Island Park, Idaho; and 3) Blizzard Mountain Ski Patrol in Arco, Idaho. I am also currently an Intermountain Division (IMD) Outdoor Emergency Transportation instructor-trainer and a Nordic/Backcountry instructor. I have been the Intermountain Division Safety Team representative, the

IMD OET Program supervisor, the IMD ORM Program supervisor, and the IMD Certified Program supervisor. I have NSP National Appointment Number 8160 and Certified Number 816. In the 2017-18 season, I achieved Certified. In the 2018-19 season, I was appointed the IMD Certified Program supervisor with a mandate to reinstate a viable Certified Program within the IMD (it had been dormant since 1987). The IMD Certified Program is continuing, and interest is growing due to IMD patrollers seeing the value-added of the program.

The Certified Program has made great strides over the last five years but will need to evolve and be agile in the next five years to adjust to stakeholder expectations without lowering the standards of the program. I believe the Certified Program will continue to grow and develop and will continue to attract those patrollers who have exceptional skills

and leadership capabilities who are looking to further develop those skills and capabilities. To continue to evolve the Certified Program to its next chapter, the Certified Committee will be working on the following initiatives:

- Have all program documents online and accessible to all interested patrollers.
- Provide a consistent online program appearance and program implementation across all NSP divisions.
- Interface with and support the Association of Professional Patrollers (APP), the Professional Ski Patrol Association (PSPA), and the National Ski Areas Association (NSAA).
- Continue to support and develop the Certified Program databases.
- Be an agile program to be able to address stakeholder input and direction.

- Review, revise, and reissue currently approved documents as necessary to address stakeholder expectations.
- Support the NSP Center for Learning objective and promote the Certified Program.
- Promote an inclusive and diverse participation in the Certified Program.
- Promote Certified Program growth within the NSP.

I believe the initiatives I have identified above support the NSP's mission and vision and that by implementing these actions, the Certified Program will continue to be recognized as the pinnacle of ski patroller training, support, and service.

If anyone has any questions concerning the Certified Program or the initiatives identified above, please feel free to contact me at certified@nsp.serves.org. +



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IT'S THE BEST TIME TO BECOME AN NSP INSTRUCTOR!

NEW NSP CENTER FOR LEARNING OFFERS TOOL FOR INSTRUCTING

BY DOUGLAS HILL, INSTRUCTOR DEVELOPMENT PROGRAM ADMINISTRATOR, SOUTHERN CALIFORNIA REGION, FAR WEST DIVISION; THE NATIONAL INSTRUCTOR DEVELOPMENT COMMITTEE; AND THE NEW LEARNING MANAGEMENT SYSTEM (LMS) NATIONAL OFFICE/VOLUNTEER COLLABORATIVE LMSITEAM

You've been patrolling for a while and are considering becoming an NSP instructor in one of the six NSP instructor disciplines (Avalanche, Instructor Development, Mountain Travel and Rescue, Nordic/Backcountry, Outdoor Emergency Care, and Outdoor Emergency Transportation). Or perhaps you are already an instructor and are considering becoming an instructor in another discipline. This is great news, because our instructors are our most important asset and the backbone of our educational organization. In my humble opinion, now is the best time to become an NSP instructor.

First, let's glance at some of the reasons a patroller might make the decision to step up and become an NSP instructor. It certainly is a bigger commitment of time and energy than just their normal patrol schedule. When I ask students in my Instructor Development classes what their motivation is to become an instructor, I get responses such as, "My patrol representative encouraged me to get involved as we need more instructors in our patrol for Avalanche or OEC training," or "I want to teach in order to keep my own skills sharp," or "I have learned so many valuable skills in patrolling that I want to give something back to patrol."

One of the motivations I offer them that I have learned, and they probably don't realize yet, came from an email I received several years back from a former CPR and Outdoor Emergency Care student and fellow patroller on the day after Christmas. He was at the gym very early working out, and one of the customers collapsed while lifting weights. He determined that the person was in full cardiac arrest. He asked the staff to dial 911 and began CPR. By the time the paramedics arrived, he had restored breathing and pulse, and the customer made a complete recovery. What a great Christmas present for all involved, and for me as well! It

is very rewarding watching the students you have taught in your classes out on the slopes doing avalanche control, transporting injured skiers and riders, reuniting families, saving lives, and then being recognized with awards and merit stars for their accomplishments.

So, what are the requirements to become an NSP instructor? First, you must be an NSP member in good standing. Second, you must hold a current certification for the discipline you would like to teach. For example, if you want to teach Outdoor Emergency Care, you must hold a current OEC technician card. Third, you must complete an Instructor Development course.

There are two ways to complete the ID course. First, you may take a one-day Instructor Development classroom course in your region. Second, as an alternative you may complete an ID hybrid course that consists of an online course of the Instructor Development didactic material and a half-day classroom session that covers the balance of the material, such as administrative procedures, practice teaching, continuing education, instructor recertification requirements, etc.

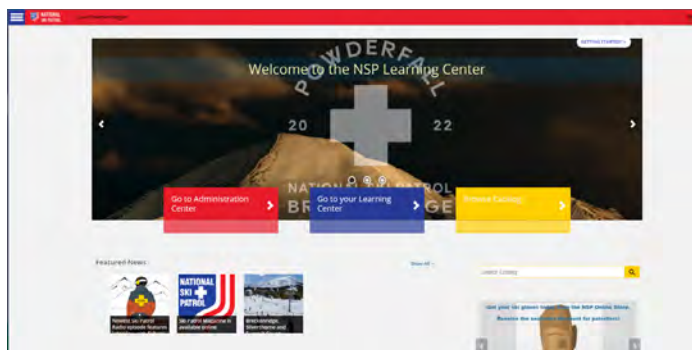
The final step to becoming an instructor is to enter and complete the instructor mentoring program. After completing the Instructor Development course, you will be assigned an experienced instructor mentor from the discipline in which you want to teach. The mentor and an instructor trainer from that discipline will observe you teach for at least three sessions in real classes, and if successful you will become a certified instructor in your discipline of choice. The process does not have to be lengthy, and most of you could become an instructor in the upcoming season if you are diligent.

So, why is this the best time to become an instructor? We

are between winter seasons, and there should be Instructor Development courses available in your region and division. You can check the “Course Schedule” tab on your NSP page or contact your region Instructor Development Program administrator or division program supervisor for course availability near you. There are usually Outdoor Emergency Care courses being held at this time in preparation for the upcoming season, so if you are interested in becoming an OEC instructor there are many mentoring opportunities at those courses, as well as at the upcoming OEC refreshers prior to the season starting.

If you are interested in teaching Outdoor Emergency Transportation, Mountain Travel and Rescue, Nordic/Backcountry, or Avalanche, the snow will be falling in a couple of months and those disciplines will all be looking to recruit new instructors for their programs. Contact the region program administrators for those disciplines and make them aware of your interest in becoming an instructor. This will help them line up experienced instructor mentors for you.

There is one more important reason that this is the best time to become or to be an NSP instructor. Last fall, NSP made the strategic decision to invest in a new Learning Management System (LMS) called “Top Class” to replace our current LMS. The new LMS, presented at Powderfall 2022, dwarfs our current LMS in features and cutting-edge technology. The new LMS is in testing and transition as of this writing, but by the time you read this it will be up and running, providing instructors and leadership with an array of the latest teaching tools and technology. These tools can turn good courses into great courses and make the instructor’s job much easier in course design and presentation. The new LMS, now called the NSP Center for Learning, was implemented by a



Screenshot of the new NSP Center for Learning.

collaborative team of national office staff and dedicated volunteers, a group called the LMSiTEAM; their work has become a model for future projects benefiting membership.

If you are not currently an NSP instructor and have thought about teaching in one or more of the NSP disciplines, take the challenge and begin your NSP teaching career by enrolling in an Instructor Development course in your region. You can change patrollers’ lives, and I think you may change your life as well.

For more information on the Instructor Development Program, or if you would like an Instructor Development course offered to your patrol, contact the Instructor Development Program administrator in your region or the Instructor Development Program supervisor for your division. If you have questions or comments regarding this article, or ideas for future articles related to the Instructor Development Program, you may contact me at dch@cadwest.com. +



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HELICOPTER OPERATIONS IN MOUNTAIN TRAVEL AND RESCUE

HOW TO WORK SAFELY AROUND HELICOPTERS IN RESCUES

BY BILL COTTON, NSP NATIONAL MOUNTAIN TRAVEL AND RESCUE PROGRAM DIRECTOR



Medevac helicopter landing in the backcountry. Photo by Bill Cotton.

Most of us have at least seen, if not been directly involved with, medical helicopters transporting patients from ski areas. It is likely your ski area has an established procedure and location where the helicopter will land and experienced personnel who interface with the flight crew. What about helicopters in the backcountry on a search and rescue mission, like we train for in the Mountain Travel and Rescue Program?

For these missions outside ski areas, it is important for rescuers to be familiar with helicopter operations, since you never know who will need to identify an appropriate landing zone and communicate with the pilot. Additionally, a helicopter may be used to transport search and rescue personnel to a remote location. Knowing helicopter safety procedures is important.

SELECTING A LANDING ZONE

Depending on the operation, there may be multiple landing zones (LZs), or helispots, involved. There may be one for a rendezvous with resources such as avalanche or rescue personnel, search dogs and special equipment, one at the incident base for a briefing, and finally one in the field.

A landing zone should be reasonably flat and be approachable by the helicopter facing into the wind. Ideally it should be approachable from 360 degrees, but it at least should have an approach into the wind.

The LZ should have a safety circle at least 1.5 times the rotor diameter of the helicopter being used. This can be 75 feet for a smaller medical helicopter and 150 feet or more for a large helicopter. The safety circle must be free of rocks, bushes, or trees taller than 18 inches. There shouldn't be anything in the area that can be blown around by the helicopter's rotor wash and possibly damage the helicopter. The landing pad where the helicopter will settle down should be between 15 and 30 feet in diameter, depending on the helicopter's size. It must be less than a 10 percent slope, which translates to a 5.7-degree slope angle.

Any hazards in the area, such as poles, fences, and powerlines, need to be communicated to the pilot and marked, if possible. Wires in the vicinity of a landing area present an extreme danger since they can be difficult to see from the air. With the increasing use of drones in search and rescue operations, the extreme danger posed by flying drones to helicopter pilots has become an increasingly important problem in aerial rescues. Bring all drones to the ground before a helicopter enters the airspace near the incident.

A windsock or flagging tape on a pole upwind of the landing zone is helpful for the pilot.

In the winter, the middle of an open field of snow may not be the best choice for a landing zone because rotor wash can create a mini-whiteout. It is better to select a landing zone 50 to 75 feet downwind of a large pine tree. Trees can absorb some of the snow kicked up by the rotor wash and give the pilot a point of reference. For the most experienced search and rescue programs, the pilot may want a rescuer to stand at the upwind end of where he or she will land, providing a point of "vertical reference." The pilot will essentially land directly where the rescuer is standing, and the rescuer drops to one knee as the helicopter is on "short final" approach.

Communicate the location of the LZ. The standard aeronautical format for terrestrial coordinates is degrees-decimal minutes (DDD °MM.MMM'); however, pilots usually can work with other formats.

IDENTIFY A GROUND CONTACT

A single ground contact should be identified for each landing zone. The ground contact should have a radio, signal, or strobe light and be prepared to report weather conditions, hazards, and other information about the landing zone. Knowing and planning in advance with helicopter programs will help you know what ground-to-air radio frequency will normally be used.

All other personnel, patients, and equipment should be upwind and to the side of the LZ and prepared for rotor wash. It's best if all personnel except the ground contact gather in one area visible to



Flight For Life Colorado helicopter landing guided by a ski patroller. Photo by Charley Shimanski.

the pilot. This makes it easier for the pilot to avoid people if sudden adjustments to the flight need to be made. Eye protection, ear protection, and helmets should be worn by all in the vicinity. Any objects that could fly in the rotor wash need to be stowed or tied down. Ball caps should not be worn, as they blow off and fly around at random. Any objects that fly into the rotors could damage and will always ground the helicopter. Avoid dead trees that may get blown down by the rotor wash.

When the helicopter comes into view, the ground contact should communicate direction to the pilot based on the pilot's view on a clock face with 12:00 being straight ahead and 3:00 being to the pilot's right. The ground contact should stand with his or her back to the wind with arms extended over his or her head in a "Y" formation. This is the universally recognized arm signal indicating that the ground contact is the landing zone target. Then, as the aircraft approaches the LZ, the ground contact should stay in the same location and extend his or her arms outstretched forward toward the LZ. This is the universal signal for "Land here, my back is to the wind." If the ground contact sees a hazard arise, the pilot can be waved off by waving the arms back and forth across the head, which indicates "Do NOT land!" Do not use this command to try to get the pilot's attention; they will leave.

Don't be surprised if the pilot ignores the LZ you have chosen and selects another one. The pilot has more experience selecting a landing zone and may see one he or she prefers in the conditions. Given that, if you happen to be near a helicopter operation, don't hang out in an open area that might make a good LZ. A pilot may suddenly need the area, and you don't want to block it with people and gear in the way.

APPROACH AND DEPARTURE

When the helicopter lands, do not approach it unless the pilot or crew signals to you. Usually, a crew member will exit and approach for a briefing.

It is preferable that the helicopter be shut down with rotors stopped



Loading in the backcountry. Photo by Bill Cotton.

before personnel approach or leave the helicopter. However, there are times when it is necessary to load the helicopter "hot" with the rotors spinning, although this is not common.

Again, only approach the helicopter after being signaled to do so by the pilot or crew member. Do not approach directly from the front or rear or uphill of the helicopter. The 10:00 or 2:00 positions on the downhill side are usually the best. Never approach the rear half of the helicopter. Stay in front of the doors. The tail rotor is very hard to see and extremely dangerous.

The exception to staying away from the rear is with a twin rotor Chinook, which has a ramp in the rear. In this case a crew member will guide individuals to the rear.

Be in the habit of crouching and keeping your eyes and attention on the aircraft as you approach, whether it is running or not. This is true for fixed-wing airplanes as well. It's surprising how many things there are to bump into. Keep gear, especially skis and poles, low and horizontal.

"HOT LOADING" PATIENTS

While loading a patient, all participants will be under direct supervision of a crew member. If the patient isn't already secured in a vacuum splint or rescue litter, a crew member may select one person to retrieve the stretcher from the helicopter. If the patient is appropriately packaged in a vacuum splint or litter that will fit, they can be carried directly to the helicopter under the flight crew's direction.

As you leave the helicopter, you must remember to keep your head low and maintain eye contact with the pilot. As many experienced mountain rescuers say, "Heads down, eyes up."

It's important to work slowly around the helicopter. You should not feel pressured to work quickly because it is a hot load.

When the helicopter is about to depart, it is important to recheck the area for any objects that may fly as the helicopter takes off. It is likely there will be items of clothing and medical supplies loose



A Colorado Rapid Avalanche Deployment team waits to board the helicopter. Photo by Charley Shimanski.



A Flight For Life Colorado helicopter approaches. Photo by Charley Shimanski.

where the patient was reassessed and repackaged. The ground contact should resume their position and assure the scene is clear for takeoff.

FLIGHT PREPARATION

Many helicopter operators require specific training on a regular basis before individuals may fly on their aircraft. Others may do training during the briefing at the landing zone. Either way, it's good to be familiar with safety procedures and review them regularly. The Mountain Rescue Association has three free, certificate-based online helicopter safety training courses, and many ski patrol and search and rescue units require the certificates of completion from their members. These can be found at www.training.mra.org.

If you are going to fly in a helicopter, you will often wear a flight helmet, usually provided by the flight crew. Therefore, you will need to pack your personal helmet, hat, and goggles in your pack for easy retrieval at the deployment site.

The pilot and flight crew will be wearing fire-resistant clothing. However, for search and rescue personnel the greater hazard is the environment, so suitable outdoor clothing may be worn. If you are going to be flying for an extended period as a spotter during a search, it is a good idea to wear fire-resistant clothing. If the flight crew cannot supply it, wildland firefighting Nomex may be obtained from your emergency services agency.

It's a good idea to carry your radio in a chest harness so it is readily available. Once on board, your radio should be off and your cell-phone should be in airplane mode or off. Skis and poles should be tightly bound together in a package and dragged to the aircraft. They should never be lifted above your chest. Tighten down your pack straps and secure them so they won't flap or get stuck in the door. It's usually best to fasten the hip belt to itself. Do not have gear or water bottles in open pockets that may spill. A medical helicopter crew will likely have rescuers secure their ski packages and packs on the

patient stretcher, with stretcher seat belts looped through straps of the backpacks.

The pilot will need to be briefed on the mission. If that is your role, be sure to be prepared with a map, any known coordinates relevant to the rescue, and any other details needed to accomplish a safe mission.

Once on board, fasten your seatbelt, put on your flight helmet, and connect communication cables. During in-person training, be sure to take time to familiarize yourself with the operation of the flight helmet. They are a bit different from other helmets and can be confusing. The flight crew will usually open and close the doors, but you should be familiar with their operation and be briefed on the emergency exits.

MAINTAIN A STERILE COCKPIT

During takeoff and landing, it is important to maintain what is known as a "sterile cockpit." This means no talking with the pilot unless asked or if you see a hazard. Don't be afraid to speak up if you see something possibly wrong; the pilot may not see all hazards.

After landing, keep your seatbelt and flight helmet on until the pilot instructs you to remove them. The flight crew will usually open the doors, so again, wait for specific instructions. When you remove your seatbelt, buckle it to itself so it cannot go out the door and damage the aircraft.

EMERGENCY PROCEDURES

It's important to be familiar with the in-flight emergency procedures should a mishap occur. You should be briefed on the procedures specific to your aircraft prior to the flight. The common procedures are:

- Follow the instructions of the pilot or flight crew personnel.
- Snug your seatbelt and shoulder harness.
- Secure your gear.



Patrollers on board a helicopter. Photo by Charley Shimanski.



A ski patroller prepares to board a helicopter. Photo by Charley Shimanski.

- Emergency seating positions:
 - Forward-Facing Seat:
 - Press your lower torso firmly against the seatback.
 - Lower your chin to your chest.
 - Grip the seat edge with your hands, or place hands under thighs.
 - Rear-Facing Seat:
 - Same as forward-facing seat except place your head back against the headrest or bulkhead.
 - Side-Facing Seat:
 - Lean toward the front of the aircraft and brace your upper torso and head against whatever might be contacted, or move head in direction of impact to reduce flailing
- Move clear of the aircraft only after the rotor blades stop or when instructed by the pilot or flight crew.
- If the pilot is incapacitated, shut off the fuel, engage the rotor brake, and turn off the aircraft battery.
- In the case of a post-crash fire, remember that the small onboard fire extinguisher is NOT designed to extinguish a burning aircraft. Rather, it is intended to be used by crewmembers to extinguish a fire near a crewmember during extrication. In other words, use the fire extinguisher to assist in evacuating injured crew members, not to try to put out the entire fire.
- Assist injured personnel.
- Assess the situation. Remove the first aid kit, survival kit, radio, emergency locator transmitter, and fire extinguisher. Render first aid. Attempt to establish contact with incident command or other emergency contact.

This information should spur you to learn more about helicopter resources in your area. They are the best resource to learn more about how aircraft may be used on missions and any training and procedures they require. Search for Flight for Life Colorado Mountain Rescue Operations for a great example of cooperation between a

medical helicopter service and ski patrol. As mentioned above, the Mountain Rescue Association offers an excellent series of online courses on helicopter operations for search and rescue at no charge, available at www.training.mra.org. Some ski patrols already require these courses for their members.

If you are doing search and rescue operations out of area, it's only a matter of time before you get involved in a helicopter operation. The more you familiarize yourself with this resource, the safer and more comfortable you will be.

Acknowledgements: I truly appreciate the edits on this article by Charley Shimanski, president of the Air Rescue Commission for the International Commission for Alpine Rescue; and Myron Allen, NSP board member and Education Committee chair. I wouldn't have dared release such important information without their review +

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An “Electrical Storm” in your Brain

MANAGING SEIZURES IN THE PREHOSPITAL REALM

BY CANDACE HORGAN, NATIONALLY REGISTERED PARAMEDIC



It's a sunny spring day at your resort, and you've decided to grab some lunch at the mid-mountain restaurant. As you start to click out of your skis, a call comes over the radio from staff inside, saying “Patrol, we need assistance in the restaurant. A guest is having a seizure.”

You quickly finish getting out of your skis and head inside. Near the cashier line, you notice a man who appears to be in his mid-40s who is on the ground. A woman is cradling his head off the ground. He is staring off into space. The woman states he is known to have a seizure disorder and that this seizure lasted approximately one minute. She states she was able to lower him to the ground when it started, and that the patient did not hit his head or experience any trauma.

With that information, what are your next steps in managing this patient?

What is a seizure?

While a seizure may not be a common medical emergency in the context of ski patrolling, those of us who work pre-hospital in a 911 system, or in a hospital emergency room, know that seizures are among the most common medical calls

we get. For the most part, a seizure call is benign, but there are potential complications that you need to be aware of to appropriately manage the patient.

So, what is a seizure? A seizure is an episode of uncontrolled electrical activity between the neurons in your brain. It can cause a variety of symptoms, including twitching, limpness, or stiffness in the muscles, as well as other symptoms such as changes in responsiveness, sensation, and behavior.¹

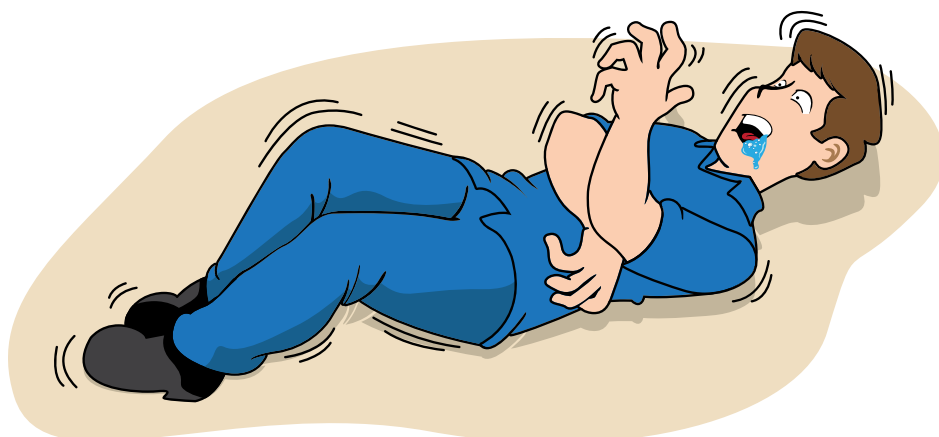
There are two main classifications of

seizure: generalized and focal. A generalized seizure affects both sides of the brain. Focal seizures, which used to be called partial seizures, are from activity located in one part of the brain. Generalized seizures can also start as focal seizures.

Generalized seizures can be broken down into absence seizures, also called petit mal seizures, and generalized tonic-clonic seizures, which used to be called grand mal seizures.² In an absence seizure, the patient generally stares off into space; they can also blink rapidly. In a tonic-clonic seizure, the patient can fall to the ground and have muscle spasms and jerks.

Focal seizures can either cause a change in awareness or remain in one area of the brain, affecting sensation or motor control. When a focal seizure results in a change of awareness, it is called a “focal unaware seizure,” which used to be called a complex partial seizure.¹ These seizures usually involve a large area of the brain and cause confusion, minor shaking, or muscle stiffness.

In a focal aware seizure, the patient remains aware of what is happening and may notice changes in sensation or movement. These seizures used to be called simple partial seizures.



Artistic drawing of a seizure. Illustration by iStock.com/LCOSMO.



Photo by iStock.com/madrolly.

Seizure statistics

As stated earlier, seizures are a common medical emergency in 911 response and for those working in a hospital or urgent care. A person is diagnosed with epilepsy if they have two or more unprovoked seizures that are not related to a condition such as low blood sugar or alcohol withdrawal. According to the Centers for Disease Control, approximately 3.4 million Americans have been diagnosed with epilepsy.⁴ Further, epilepsy is the fourth most common neurologic problem facing Americans, behind migraines, strokes, and Alzheimer's dementia.⁵

Epilepsy is a chronic condition that can be managed by things such as medication and diet, but it cannot be cured. Often, patients need to try several different seizure medications before finding one that best manages their condition. Approximately 50-60% of patients find that the first medication they try will manage their condition, while a second medication may help 10 to 20 percent of patients.

Epilepsy may be related to a traumatic brain injury. It can also have a genetic component. There is a slightly elevated risk of epilepsy developing in the siblings of someone who has epilepsy, as well as in the

children of patients with epilepsy.

While epilepsy is defined by seizures, not all seizures are epileptic in nature. Electric impulses in the brain can be disrupted and fire erratically due to any number of causes. For instance, in children, a rapid rise in body temperature from a fever can cause a febrile seizure, which is usually benign. These seizures occur in healthy children with no prior history of seizures. A febrile seizure typically causes the child to lose consciousness and have jerking motions, and they are usually associated with temperatures above 100 F and within 24 hours of the onset of the fever.⁶ Febrile seizures can be classified as simple or complex. Simple last a few seconds to a few minutes and do not reoccur, whereas complex can last more than a few minutes and happen more than once.

Other seizure causes include:

- Stroke
- Brain tumor
- Certain medications, such as pain relievers and antidepressants
- Head trauma
- Hyponatremia (low blood sodium)
- Autoimmune diseases, including lupus and multiple sclerosis

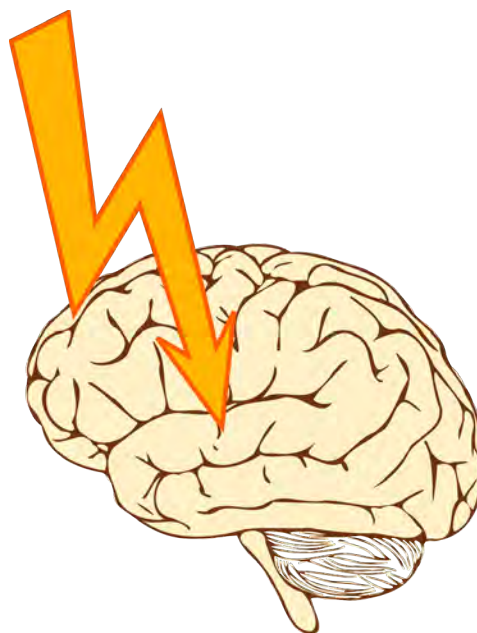
- COVID-19 infection
- Recreational drug use, especially stimulants

Alcoholics are also at risk of seizures, usually when they abruptly cease alcohol intake. The sudden withdrawal can cause generalized seizures in 2-5% of alcoholics. These seizures typically occur within 48 hours of the cessation of alcohol use.⁷

One other type of seizure is the pseudo seizure, or psychogenic nonepileptic seizure. These seizures are not caused by abnormal electrical activity in the brain, but instead are a manifestation of an underlying psychiatric problem. These seizures look like epileptic seizures, and one study found that up to 25% of patients diagnosed with epilepsy who are not improving with medication therapy have been misdiagnosed and are having pseudo seizures. An EEG is needed to diagnose pseudo seizures.

Seizure triggers

Seizures can have a variety of triggers and sometimes occur in a pattern. Patients who are managing a chronic seizure condition are often encouraged to track what it was they were doing before the seizure occurred to see if there is a pattern. Among the different reported seizure triggers are:



- Stress
- Low blood sugar
- Dehydration
- Sleep deprivation
- Changes to diet or missing a meal
- Flashing lights (photosensitivity)
- Illnesses
- Changes in menstruation or hormone levels
- Drug or alcohol abuse
- Certain foods

Stimulants are especially likely to increase the risk of seizures. While illicit drugs like cocaine, amphetamines, and ecstasy increase the risk of seizures even in people with no seizure history, epileptics can have seizures triggered by a commonly used drug like caffeine.

Long-term seizure management

Patients with a history of seizures are encouraged to try a variety of management techniques. Basic techniques include getting enough sleep, around 7-8 hours per night, and regular exercise. Keeping a balanced diet and controlling weight are also helpful, as is avoiding excessive consumption of alcohol and limiting or eliminating nicotine use.

Ultimately, most seizure patients are placed on a medication regimen. There are close to 30 different medications that are approved for use in controlling seizures. Some of the more common are carbamazepine (Tegretol), gabapentin (Neurontin), divalproex (Depakote), clonazepam (Klonopin), levetiracetam (Keppra), lamotrigine (Lamictal), phenytoin (Dilantin), and phenobarbital. These medications must be taken daily. Before taking any new medication or supplement, a patient with a seizure history should check for possible interactions with their seizure medications.

Seizure signs and symptoms

While seizures by their nature are unpredictable, there can be some warning signs. Patients sometimes report odd feelings

or unusual smells or sensations prior to a seizure, including feeling like they are “out of their body.” They can also feel confused or “spacey.” Other warning signs include numbness or tingling in part of the body.

Some patients experience an aura, which is actually a simple partial seizure that presages a more severe, generalized one.⁸ Aura symptoms include anxiety, euphoria, and changes in sensations of taste, smell, hearing, and vision.

Once the seizure begins, the symptoms depend on the type of seizure. The patient may display the classic twitching and jerking that the general public associates with seizures. The patient may stare off into space or lose consciousness. Urinary incontinence can affect up to 39% of epilepsy patients.⁹ Seizure patients may also lose control of their bowels. This can occur either during the seizure itself or immediately afterward.

After the seizure, many patients experience a postictal state. This altered level of consciousness can last anywhere from five to 30 minutes. Patients are not alert and oriented during this period. They may be drowsy, and often struggle to remember events immediately prior to the seizure. These patients may also be hypertensive. Sometimes, postictal patients experience nausea and vomiting.

Management of an acute seizure patient

Most seizures are benign in nature. However, a seizure can cause other problems. Patients having a seizure are at risk of

falling, and that fall can cause head trauma. If someone has a seizure while driving, it can cause an accident. For that reason, patients with a history of seizures must be seizure-free for anywhere from six months to a year before they are allowed to drive, depending on state law. Seizures can also cause complications during pregnancy, and they can lead to mental health problems such as depression and anxiety.

If you are responding to a seizure patient, remember these possible complications. If you arrive as the patient starts to seize, help lower the patient to the ground. If the patient is already on the ground, you should take manual C-spine precautions until you are able to assess the possibility of head or neck injury. While the patient is actively seizing, you do not need to do anything. Do not try to force something between the patient's teeth, and do not do anything to compromise the patient. Airway management is always a concern with seizure patients, as they can produce a lot of secretions that can be difficult to manage. Suction should be on hand and used as necessary.

After the seizure stops, be aware that the patient may be postictal and confused about where they are and what happened. Reassure the patient as needed that you are a medical responder and are there to help. If they are unresponsive, manage the airway if the patient is not managing their own, including with a nasopharyngeal or oropharyngeal airway if needed. Support the patient's oxygenation as indicated.

If there is someone there who knows the patient, ask your OPQRST questions as soon as possible. Ask if the patient mentioned an aura or other presymptom of a seizure, and if you did not witness the seizure ask how long it lasted. Ask what the patient was doing immediately prior to the seizure. Be aware that for the layperson, a seizure is a scary event, and their estimation of the seizure duration may be off. Also ask your SAMPLE questions, especially about medications. If the patient or a friend or family member mentions a seizure medication, ask whether the patient is compliant in taking their medication or if it is a recent change in medication, as those are risk

factors for seizures.

If your protocols allow it, you should check a blood sugar, as seizures can be caused by hypoglycemia. If the patient's blood sugar is low, administer glucose as allowed and possible. Do not try to force oral glucose into a patient who is altered.

Beyond that, seizure management focuses on supporting the ABCs. Seizures can cause hypoxia, so manage the airway as needed and support oxygenation. Check your patient's pulse oximetry, and if the SPO2 is below 94% put them on oxygen and titrate to 94%. If the patient is postictal, they should be transported to the aid room for further evaluation. It goes without saying, but unless the patient is AAOx4, they cannot refuse care. However, they can be left in care of a family member if the family member consents to doing so. Make sure you educate them on the possible risks of seizures, and confirm that they understand the risks before you have them sign refusal paperwork.

The most concerning seizure patient is one in status epilepticus. A status patient will have a seizure that lasts either longer than five minutes or two or more seizures in a five-minute period without a return to normal baseline mentation. Status seizures can be ongoing, sometimes as long as 10-15 minutes. Status seizures are often caused by stroke, low blood sugar, or alcohol withdrawal. While status epilepticus is rare, when it does occur it is a life-threatening emergency that requires immediate medical intervention. Ongoing seizures can cause brain damage and death.

The typical advanced life support treatment for a status seizure patient involves the administration of a benzodiazepine medication such as midazolam (Versed), lorazepam (Ativan), or diazepam (Valium). These medications can be administered either intravenously or intramuscularly, but when a patient is actively seizing it can be difficult to establish IV access, so the IM route is usually preferred. Some studies have shown that Ativan has more efficacy in stopping status seizures. Benzos enhance the neurotransmitter gamma-Aminobutyric acid (GABA), which results in a sedative

effect upon administration. If you are managing a patient experiencing status seizures, it is imperative to get the patient to advanced life support treatment, either with a paramedic on your patrol, a responding ALS unit, or the medical clinic at your resort's base.

On very rare occasions, a patient having a seizure may go into cardiac arrest, either during the seizure or immediately after it. The cause of the arrest can vary, but it can be due to either a period of apnea caused by the seizure or a cardiac dysrhythmia. In a 10-year study done in Oregon, 34% of patients with a history of epilepsy who had a witnessed cardiac arrest showed some seizure activity prior to the arrest.¹²

Case update

You assess your patient and find he is postictal. His airway is intact, and with your handheld pulse oximeter you find his SPO2 to be 95%. The patient has not experienced incontinence. The friend states the patient has been taking Keppra for his seizures, but he recently ran out and has not had a chance to refill his prescription. You radio to PHQ that you'd like to transport the patient to the aid room for further evaluation. At the aid room, the patient's blood sugar is checked and found to be 84. The patient is kept there until the postictal state passes and he is AAOx4. The patient is now answering questions appropriately and refuses an offer of an ambulance. You encourage the patient to follow up with his primary care physician, and the patient signs refusal paperwork.

Summary

Seizures can look dramatic, but for the most part the complications of a seizure are related to other issues, such as the potential for trauma. Support your patient's airway, breathing, and circulation, and minimize the possibility of trauma as possible by lowering the patient to the ground, if the seizure is witnessed. Be aware of the potential for status epilepticus or cardiac arrest, and transport the patient to the hospital as needed. +

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Mountain Biking Tips



Kristen Barlage demonstrates riding in a neutral position.

LEARN THESE BASICS SO YOU CAN CONFIDENTLY RIDE CHALLENGING TERRAIN

STORY AND PHOTOS BY MARC BARLAGE, NSP NATIONAL OUTDOOR EMERGENCY TRANSPORTATION PROGRAM DIRECTOR

You don't need mountains to go mountain biking. Just about any off-pavement riding will get you out in the fresh air, offering great exercise and a way to keep you in shape for the coming ski season.

Mountain biking requires different skills than road cycling. Below, I share some basic techniques to help you get started.

One of the biggest keys to successful mountain biking is your body position. Mountain bike trail surfaces include rocks, roots, ruts, sand, and mud. The variable terrain and potential obstacles are all part of the fun but can be intimidating to beginners. Being in the right body position helps you get through tricky sections of trail.

There are two primary body positions: neutral and ready.

NEUTRAL POSITION

When you're riding nontechnical sections of trail, you want to be in a neutral position on the bike. This keeps you rolling along efficiently and comfortably while allowing you to easily transition into the ready position for technical terrain. The neutral position includes:

- Level pedals that are evenly weighted
- A slight bend in the knees and elbows
- Index fingers on the brake levers
- Eyes looking forward about 15 to 20 feet ahead; look where you want to go

READY POSITION

When the trail gets steeper or rockier, it's time to move into the ready position. The ready position gets you mentally and physically prepared to take on technical sections of trail. The ready position includes:

- Level pedals that are evenly weighted
- A deep bend in the knees and elbows
- Rear end off the seat and hips shifted back (Drop your seat if you have a dropper seat post.)
- Your back is arched
- Index fingers on the brake levers
- Eyes forward looking about 15 to 20 feet ahead; look where you want to go. Look farther ahead as speed increases.

For climbing, position your seat for maximum efficiency while pedaling. With your foot at the bottom of the pedal stroke, you should see a slight bend in the leg, reaching close to full leg extension. This helps you pedal efficiently and powerfully by using your major leg muscles. Too low in the seat and you are not using your legs to max efficiency. A seat height that is too high will likely cause leg pain. If you have questions, go to your local bike shop for advice.

When it's time to descend, drop your seat about 2 or 3 inches from the height you set it at for climbing hills. Lowering your seat lowers your center of gravity, which gives you better



Brighton Ski Patrol enjoys biking in Moab.



Attack position.

control and more confidence through steep descents. You may need to experiment with different seat heights to find what feels best. I like to lower just an inch or two for moderate flowy downhill and do a full drop in steep, technical terrain.

A beginner's mistake is looking at spots you want to avoid, rather than focusing on where you want to go. Pick a path and stick to it to get over and around tricky sections of trail. What hazards should you look for? That depends on your skill level. A log that will stop one cyclist may be a fun bunny hop for another. Generally, look for loose rocks, deep sand, water, wet roots, and logs while avoiding other cyclists, hikers, and animals.

To find your line, scan ahead for hazards

by looking about 15-20 feet down the trail. Then, move your eyes back toward your tire. Doing this up-and-back action allows your eyes to take in lots of information. Knowing hazards ahead of time can help you adjust your balance and pick a line around them.

Braking seems simple: you squeeze the levers, and the bike slows down. That is the gist of it, but learning more about how to brake goes a long way toward making you more comfortable and secure on the bike.

Braking should be consistent and controlled. Most of your braking power comes from your front brake, but grabbing a handful of front brake will send you over the bars. Instead, lightly apply the brakes, and

do so evenly on the front and back brakes. Skidding is bad form on trails.

While braking, brace yourself by moving your hips back, dropping your heels down, and keeping a slight bend in your knees and elbows. This body position helps you stay in control and from getting too far forward on the bike.

When approaching a turn, brake before you hit the turn and then let your momentum carry you through. This allows you to focus on your technique through the turn and exit the turn with speed. Momentum can also be your friend when getting up and over obstacles in the trail. Beginner riders often slow too much when approaching obstacles. Some momentum can help you get through tricky sections of trail.

Since most mountain biking involves at least some ups and downs, it's good to know how to shift your gears efficiently. Shift early; don't wait to shift until you've already started up that big hill. Always shift to the gear you will need before you hit the steep terrain. This allows you to keep a steady cycling cadence for maximum power. It also prevents awkward shifting under a load that is hard on your gears and could cause your chain to pop off. If you have trouble finding the right gear for the terrain you're riding, err on the side of spinning in an easier gear rather than mashing in a hard gear.

Finally, always remember to keep pedaling as you are shifting. Not pedaling as you shift can damage or break the chain.

Mountain biking is often done on trails or roads shared with other users, such as hikers, runners, motorcyclists, and horses. Here are some of the most important rules:

- Yield the right of way to cyclists traveling uphill.
- Slow down when approaching hikers, runners, or horses and give them a wide berth. A good approach to dealing with horses is to take direction from the horseback rider. Bikes usually yield to these users.
- Let other trail users know you're coming — give a friendly greeting. Sometimes a bell can be helpful to avoid collisions.

Hopefully, these tips can help springboard your 2022 cycling year. Hope to see you on the trails! +



Hazards and Obstacles: What are They?

IDENTIFICATION AND MARKING: SIGNAGE, ROPES, FENCES, AND OTHER WARNINGS

BY JEANNINE MOGAN, NSP CENTRAL DIVISION REPRESENTATIVE OUTDOOR RISK MANAGEMENT COMMITTEE;
AND MARK PETROZZI, NSP NATIONAL OUTDOOR RISK MANAGEMENT PROGRAM DIRECTOR

Outdoor Risk Outdoor Risk Management (ORM) is a soon-to-be-rolled-out National Ski Patrol (NSP) educational program that is currently being developed by a committee of risk management professionals (who are also NSP members), ski industry veterans, and representatives of NSP's divisions. The ORM Program is designed for the basic patroller and will provide patrollers a baseline of risk management information and skills to apply to their daily patrolling activities. The anticipated rollout of the program will be fall 2022. *Ski Patrol Magazine* will highlight the concepts contained within various program modules in upcoming issues to familiarize readers with selected program topics.

This issue's article focuses on the general concepts of hazard identification and marking and a discussion of some of the approaches and criteria applied by resorts when choosing, deploying, and maintaining various warning and marking devices. This article is not intended to be a primer on what to use, how to use it, or where to use these devices. The sources for this content include the National Ski Areas Association (NSAA) resources and over 600 years of collective industry experience of the authors.

During the course of many patrollers' duty days, they may become involved in the identification and marking of hazards. Whether you are out enjoying the mountain on skis, a snowboard, or a mountain bike, you and the resort's guests may encounter hazards and obstacles. Your lift ticket most likely includes language about these things that are intrinsic to the sport/activity or the environment and cannot be removed or eliminated by the resort, such as trees, rocks, stumps, forest debris, variations in terrain, surface conditions, and those objects typical to mountain resort infrastructure (lift towers, snowmaking equipment, posts, poles, etc.).

Hazards versus Obstacles

Within the context of skiing/snowboarding/mountain biking and mountain resort operations, it is important to understand the distinction between a "hazard" and an "obstacle," terms which are sometimes interchanged and/or misapplied. A hazard is something that is not able to be seen from a distance above, such that a person keeping a proper lookout and skiing/riding in control could not stop or avoid it and by impacting/colliding/

interfacing with it may sustain injury or harm. It is helpful to think about hazards being those things that are not open, obvious, and visible, or "OOV" to the approaching person.

An obstacle, on the other hand, is something that can be seen from such a distance above, such that a person keeping a proper lookout and skiing in control could stop or avoid it, thereby avoiding injury or harm. Obstacles are those things that are OOV to the approaching person. One scientific study that was performed to measure the reaction time of skiers/snowboarders found that once an object becomes visible, the skier/snowboarder was able to react and start to respond in less than one second. Therefore, upon observing an object that is OOV from some reasonable distance above, that skier/rider would be provided "notice" of its existence.

Why is this distinction important to understand? The prevailing practice in the mountain resort industry is to mark or warn of hazards, those objects or things that are not OOV that are on designated trails or prepared and maintained trail or slope surfaces. On the other hand, obstacles are typically not marked or identified as they are OOV and therefore can be seen/perceived by the skier/rider and avoided.

Based on this concept, if a skier/rider is 1) keeping a proper lookout as to what is in their chosen path, and 2) skiing/riding in control, at a reasonable speed for their ability and the conditions, then an object that is open, obvious, and visible (OOV) from several seconds or more uphill (the time and distance would depend on how fast they are skiing/riding) should be able to be avoided by that skier/rider, who would have the time/opportunity to perceive it and avoid it. One state's ski legislation chooses to quantify the distance of 100 feet, a good rule of thumb.

Hazard Identification and Marking

However, those objects (or things) that are not OOV, depending on a variety of factors/criteria, are often marked in some manner to help warn and inform our guests. These factors/criteria may include 1) whether the object is on-trail or off-trail (within the maintained surface of the designated trail or slope), or whether it is off-piste, and 2) whether it is within or outside the ski area boundary. Other considerations may also include the designated degree of difficulty of the trail, the prevailing demographics of



Patrollers staging at a slow sign. Photo by Candace Horgan.

your skiers/riders, the geographical region your resort is located in, as well as a variety of other factors. It is important to note that individual resorts may approach hazard identification and marking differently, and it is up to area management to determine specifically how they may do so.

Warn and Inform

As previously mentioned, mountain resorts may warn and inform guests of those objects they have identified as hazards (that are not OOV). They may do this by erecting rope lines or fencing, or by deploying signs or other types of warning devices. Once the identified hazard is marked so it may be seen/perceived, those objects have then been “transformed” into obstacles by the marking device(s) and as such, have now been rendered open, obvious, visible, and marked, or OOVAM.

Rope and Bamboo

Rope lines are useful for visually defining, marking off, or closing certain areas within the resort. Ski areas typically employ braided or hard-twist three-strand rope. The rope color chosen should contrast with the surrounding environment, with solid orange, orange/black, or yellow/black being common choices. Ropes should be flagged to break up the horizontal line that they create. Even without significant wind, flagging often moves, which serves to further attract the eye. Solid orange surveyor’s

tape or other solid orange flagging may be inserted into the strands every 6 to 15 feet.

Rope lines are typically held up by bamboo poles drilled/inserted into the snow. Rope lines should be taut and hung at or around waist height in most situations; however, erecting ropes at different heights due to location and topography may be considered. Bamboo should be maintained in good condition and replaced when broken or frayed.

Fencing

Fencing typically falls into two primary categories: warning/visual/directional fencing and restraint/protective fencing. Warning/visual/directional fencing provides a visual warning or cue to help direct the flow of traffic, or it provides a visual barrier to help keep skiers and riders out of or away from certain objects or areas. This type of fencing includes pop fencing, event fencing, and fabric fencing, among others.

Most types of restraint/protective type fencing are typically deployed to serve as a physical barrier to help prevent persons from going beyond the fencing. So-called A-netting is often deployed as a physical barrier and is typically suspended from robust fixed posts or uprights, whereas B-netting is typically deployed to help decelerate a fallen skier/riders, most often seen on race or competition courses or venues.



Placing tower pads. Photo by Candace Horgan.

Signage

Signage (the use of signs) is often used by resorts to help warn, inform, and provide guidance and direction to our guests. Signs may be permanent, for example, trail signs and signs on lifts, or they may be temporary/moveable, such as a “Snowmaking in Progress” sign posted at a trailhead when snow is being made. Common warning signs posted at ski areas may include “Trails Merge” signs, or, during late-season, “Thin Cover and Bare Spots” signs. Directional/informational signs, also known as “way-finding” signs, are also posted at many resorts to help assist guests in finding their way to lifts, trails, and other resort facilities.

Other examples of signs that are posted at ski areas include those that may be posted at terrain park entrances or in the park, or the ANSI B77.1 required signs that are placed at the loads, on the line, and at the unloads of surface and aerial lifts. Some park signs contain both informational and warning language, such as the park entry sign that advises guests that upon entering the park there will be freestyle terrain features and what size features are in the park, as well as warning of the potential for injuries and that the user “assumes all risks.” The Park Smart sign, on the other hand, provides more informational and instructional content and what the users’ role is in using park features.

As mentioned earlier, patrollers are often tasked to play an important role in the hazard identification and marking process, which many times means the deployment of rope and bamboo or other warning devices, the posting of signs, and the erection of fencing of various types. As a general rule, upon deploying any of the described marking devices, regular inspection and as-needed maintenance is also an important component to your program. Check to see that fencing and rope lines are well maintained, as a well-maintained rope or fence line is a well-respected line. Also, regular checks of both permanent and moveable signage are important to determine whether they are properly placed and readily visible and able to be read. Signs should not be snow-covered, faded, or defaced. Once again, well-maintained signs are more often respected and heeded. +



Apple Watch Fall Feature Causes False 911 Calls

HUNDREDS OF CALLS FROM SKI AREAS INTERFERE WITH 911 OPERATIONS

BY DICK WOOLF, NSP NATIONAL TELECOMMUNICATIONS ADVISOR

During NSP's recent Powderfall Conference, one of the classes for which attendees could sign up was "Working With 911." The purpose of this class was to show how 911 deals with calls generated by skiers and other on-snow guests, from the time the call is received by the 911 center to ultimate hand-off back to the ski patrol dispatcher.

Attendees traveled by minibus to the Summit County Emergency Communications Center in Frisco, Colorado, about a 15-minute drive from the conference venue in Breckenridge. The Comm Center handles 911 calls for all of Summit County, including its five ski resorts (Breckenridge, Keystone, Copper Mountain, Arapahoe Basin, and Loveland). These resorts can easily handle over 10,000 skiers on a holiday weekend, so when you consider road accidents and other typical emergencies, the 911 center can get extremely busy.

The Breckenridge Ski Patrol assisted with 911 call simulation. During the session, "fake" 911 calls were placed from the ski area (by a patroller). Attendees could observe the call come into a call-answering position, with caller ID displayed. A moment later, the coordinates of the cell phone were displayed, and in addition, those coordinates were correlated to a map of the ski area so that the 911 operator could pinpoint the caller's approximate location. The resolution accuracy was 6 meters! The computer's calculation and presentation of coordinates and ski area mapping data took less than five seconds!

Once the 911 operator spoke with the "injured" guest, the operator pressed a button on his console and the caller was then conferenced in with the Breckenridge Ski Patrol dispatcher. The 911 operator announced the call, provided the injured guest's name, her phone number, her coordinates, her approximate location (just below the top of the X lift), and stated the confidence level of the given coordinates. Once the ski patrol dispatcher had the call, the 911 operator released the call and then proceeded to take another incoming 911 call.

Following the actual live call presentation, 911 Center Director Jerry Del Valle brought up a topic that affects 911 centers throughout the United States, but hits 911 centers in ski country especially hard. The problem relates to the fall detection feature and emergency alert dialer in Apple Watch series 4 and newer versions.

The feature basically works this way: when it is "on," if the watch senses a hard fall and the wearer doesn't move for 30 seconds, the watch goes into a countdown mode. If there is no further movement, the watch will automatically dial 911, play a prerecorded emergency message, and provide the coordinates of the watch. The wearer may cancel the emergency call



at any time. However, many Apple Watch wearers are unaware of the feature and how it works.

Apple has a technical document on this feature, available at www.support.apple.com/en-us/HT208944.

There has been considerable press coverage given to the benefits of fall detection. A solo climber in Tennessee fell and was unconscious. His Apple Watch dialed 911, and he was rescued. Apple has posted YouTube videos touting the benefits of this feature, and to be sure, there are benefits.

The CBS TV affiliate in Denver ran a story on Apple Watch fall detection affecting both Vail and Summit County's 911 centers. Let's face it: beginner skiers and riders fall. They fall frequently, and when they fall and don't move for a minute, their Apple Watch's fall detection faithfully dials 911 and reports an emergency, often from the bunny slope. According to Del Valle, the majority of the false Apple Watch calls they receive are from beginner terrain.

Del Valle explains a much more serious consequence of false Apple Watch fall detection calls. When a 911 operator is on a call and another call comes in, someone must answer the second call, because it might be much more serious than the call they're presently taking. 911 operators are trained in basic first aid and can provide instructions to callers before EMS arrives. What if the 911 operator is providing rescue breathing instruction to a mother whose baby is unconscious and turning blue? Another call comes in. The 911 operator must put the mother on hold to take the second call ... from the bunny slope. It's not until the Apple Watch's automated voice provides the coordinates to the 911 computer and plots it on the trail map that they realize it's not necessarily a "real" 911 call.

Del Valle believes ski patrol and ski area operators can perform a public service by educating skiers and riders about Apple Watch fall detection and encourage beginners to turn it off. It's certainly an interesting idea worthy of consideration.

Questions and comments on this topic may be directed to telecom@nspserver.org. +



NEW events



Intermountain Division women's event.



Pinecreek women's event.

A SUCCESSFUL SEASON, AND A PREVIEW OF NEXT SEASON

BY NSP NATIONAL WOMEN'S PROGRAM ADVISOR TANYA THOMAS

Last year felt like the season that wasn't because we couldn't get together due to COVID-19. This season, many resorts didn't open until weeks after usual opening due to lack of snow, and many resorts closed early due to warm weather. As I sit here writing this article, I am anxiously anticipating Powderfall in Breckenridge, Colorado, and I hope we have plenty of snow to slide on while there.

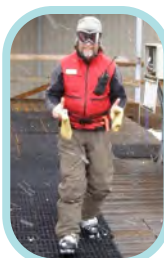
The Women's Program is working hard on putting together events for women in patrol. While many events had to be cancelled due to COVID, program advisers put on a great selection for women around the country. Our newest divisions to have women's programs got to host their first event for their divisions — see more under Intermountain and Alaska in Division News. The Northern

Division is hosting its second clinic at the end of March, and Pacific Northwest is hosting a program at Nuts and Bolts in June.

At Powderfall, the Women's Program hopes to update the program goals and mission during our two days of meetings prior to the event. We will focus on how we can lead the charge of diversity, equity, and inclusion in our organization. We hope to create some videos for tips and tricks for women when handling a toboggan as well.

Next year, look for women's programs across all divisions of NSP, and keep an eye out for information about our collaboration with the Professional Ski Instructors of America-American Association of Snowboard Instructors for the Women's Summit in the Pacific Northwest, date/location to be determined. +

Michael Baker



Michael Baker

Michael P. Baker, 65, passed away on Jan. 16, 2022. He had been struck at Gore Mountain on Jan. 14, 2022, and was kept on life support to fulfill his organ and tissue donation request.

Mike “Bakes” was born on Dec. 16, 1956, in Troy, New York, to George and Wanda Baker. He graduated from Burnt Hills High School in 1975 and went on to earn his associate degree in electrical engineering. Employed as an engineer for 35 years, Mike retired from Knolls Atomic Power Laboratory (KAPL) in Niskayuna, New York.

Mike was an avid outdoorsman and enjoyed camping, hiking, biking, canoeing, skiing, volleyball, golfing, and nature photography. Mike joined the Whiteface Volunteer Ski Patrol in 1999, and after his KAPL retirement in 2013 he became a professional ski patroller at Whiteface Mountain.

Mike also organized the volleyball games at the yearly Whiteface Ski Patrol picnic. He was a ski ambassador at Stowe Mountain Resort in Vermont and was a groundskeeper at the Edison Club in Rexford, New York. He was an active member of the Out of Control Ski Club, where he made many lifelong friends. He also enjoyed listening to music, including his favorite band, the Grateful Dead.

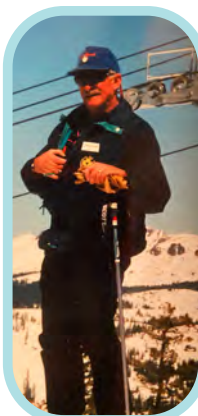
Michael is survived by his siblings, Thomas (Deborah) Baker, Richard Baker, David (Maryann) Baker, Daniel (Julie) Baker, and Susanne (Thomas) Clark; his cherished nieces and nephews, Eric (Kristen) Baker, Mark Baker, Jessica Baker, Rachael (DJ) Clark, and Brandon Clark; his two great nieces, Georgia and Savannah Centofanti; aunts, uncles and many, many lifelong friends.

As a patroller, Mike was all over the mountain. His presence on the slopes and assistance in many incidents made Whiteface Mountain a safer place to ski. Mike skied with us, biked with us, golfed with us, and played volleyball with us. The patrollers of Whiteface and the Eastern New York Region wish Mike Godspeed on his final sweep; you will be missed.

Joe Rine

Whiteface Ski Patrol, New York

Don D'Alessandro



Don D'Alessandro

Donald D'Alessandro (Don D) joined National Ski Patrol in 1950 as a junior patroller with the Snoqualmie Pass Patrol. After serving in the Korean War, he settled in Stockton, California, where he was a founding member of the Stockton Ski Patrol serving the Dodge Ridge Ski Area. In 1960, he helped found the Sugar Bowl Ski Patrol in the Lake Tahoe area.

He received his Senior in 1962 and was honored with National Appointment Number 3182 in 1967. He has been honored with a Green Merit Star (1963) and a Yellow Merit Star (1969). He was a national Avalanche instructor from 1967-74. In 2004, he was awarded the Silver Merit Star as first runner-up for the NSP National Outstanding Patroller Award. In his 68-year patrolling career, Don served as a patrol director, assistant patrol director, toboggan instructor, Outdoor Emergency Care instructor, region awards chair, and board member.

The patriarch of three generations of NSP patrollers, Don's son, Jeff, and grandchildren, Lindsey and Austin, have also served with various patrols throughout the U.S.

Don is survived by his sons, Tim, Jeff, Travis, and was preceded in death by his son, Patrick. The fall 2008 edition of *Ski Patrol Magazine* featured this multi-generation patrol family in the article “Triple Hitters.”

Outside of the NSP, Don taught industrial arts in the Stockton School District and was involved in boat building, yacht sales, knife-making, and construction. He was part owner of the Baranof Wilderness Lodge in Sitka, Alaska, and an avid fisherman. Don was a mentor, teacher, and friend. He will be remembered for his kindness, humility, generosity, love, and inspiration.

Ken Bergmann

Sugar Bowl Ski Patrol, California

Don Erickson



Don Erickson

Longtime Schuss Mountain ski patroller Don Erickson (“Old 2525”) passed away Dec. 22, 2021, at the age of 100. Don was a mentor and idol to so many of us and was such a positive influence on our patrol.

Don originally joined NSP in the 1956-57 ski season and quickly became involved in patrol leadership as patrol director at Mt. Frederick in Frederick, Michigan. He joined the Schuss Mountain Ski Patrol in 1968. His daughters grew up at Schuss, as did his grandsons, and now his great-grandchildren are all over the hill, all ski racers. Don retired from ski patrolling in 2010, culminating 54 years of service to the National Ski Patrol.

So many great memories. Every Saturday and Sunday morning as we're booting up, there was suddenly a blast on his whistle and the exclamation, “WE'RE BURNIN' DAYLIGHT!” He was always full of prose, lyrics, and poetry. I had the unique pleasure of driving up north to Schuss for so many ski patrol weekends and picking Don up along the way. I'd put the XM radio on the station “'40s on 4,” and Don knew the lyrics to every popular song from the '40s era.

Don was born in a cabin on Oct. 16, 1921, in Sioux Falls, South Dakota, to George and Ruth Erickson. The Ericksons then moved to Michigan in the 1920s and initially settled in Highland Park. At the beginning of the depression, he worked as a soda jerk and acquired a paper route through Palmer Park. In 1935, the family moved to Birmingham, Michigan, where Don graduated from Baldwin High School in 1940.

He worked at General Motors in Pontiac, Michigan, after high school. His formal education began in Flint, Michigan, at General Motors Institute (GMI) (now Kettering University), where he completed his mechanical engineering automotive studies after returning home from World War II.

During the war, he served in the U.S. Navy, starting as a reservist on the destroyer USS

Crane and subsequently as a machinist mate (first class) on the USS Kilty, which was a naval destroyer converted to an APD (attack personnel destroyer) landing troops on hostile shores. Don served in the South Pacific 1941-45, including the consolidation of the Solomon Islands in 1943, through to the end with the Okinawa operation. His naval unit was awarded exceptional merits against Japanese aircraft, shore batteries, and submarines during the South Pacific campaign. After the war and with the completion of his college education, Don stayed at General Motors Institute and taught hydraulics.

Don met the love of his life while on a ski trip in Northern Michigan. He married Joan Potts in 1952, and they moved to Flushing, Michigan, where they continued to enjoy skiing, golf, and raising a family. Don was employed in Flint as an engineer at GM Fisher Body until his retirement in 1987.

Don enjoyed volunteering and serving others. He volunteered in several local organizations, including the Flushing Lions Club, Flushing PTA, Alzheimer's Association, Special Olympics, and Trinity Episcopal Church. His deepest passion was for the National Ski Patrol, where he served 50-plus years and was awarded lifetime membership in 2014. Don joined the National Ski Patrol in 1957 and was awarded National Appointment Number 2525 in 1962. He was patrol leader of three Michigan patrols between 1958-68 and was Northern Michigan Section 2 chief from 1963-65.

He earned several awards throughout the years, including Central Division Outstanding Patrolman in 1969. He was Schuss Mountain (Shanty Creek Resort) Patrol Awards advisor from 1980-99 and received the NSP Distinguished Service Award in 2001. The thing that described Don best was the 2005-06 Park-Willis "Everyday Patroller" award, as his service on the Schuss Mountain Ski Patrol was his passion.

He loved the outdoors and pursued it by spending time gardening, doing yard work, camping, golfing, downhill skiing, and cross-country skiing. He was blessed with wonderful friends with whom he loved spending time. Don's greatest love was his wife, Joan, who predeceased him in 2007. He was devoted to his daughters, his grandchildren, and his great grandchildren and loved being with all of them.

He lived a wonderful life with his dear

wife, Joanie, and he is reunited with her now. He raised his family the right way and is a Schuss icon. We will always miss "Old 2525." RIP, Don Erickson.

Mike Moreen

Schuss Mountain Ski Patrol Director

Ilene Gimmel

Ilene Gimmel passed away on April 14, 2021, at her home in Boise, Idaho. She was 86 years old. Ilene was born on Sept. 19, 1934, in Boise to John and Mary St. Clair. She was the youngest of seven children and the only child in the family to be born in a hospital. She spent her childhood growing up in beautiful New Meadows and McCall, Idaho. Idaho was home to Ilene for most of her life.

Ilene married Gayle Buffaloe in 1950. The marriage ended in divorce. Ilene joined the Bogus Basin Ski Patrol in 1960 and actively patrolled for 17 years, retiring in 1977. She received National Appointment Number 3620 in 1970. While on the patrol, Ilene met Hank Gimmel, National Appointment Number 3847, and they married in September 1973.

In the '60s, Ilene, along with her friend and toboggan partner, Dee Waters, took first place in a toboggan-running contest held at Summit at Snoqualmie during the Pacific Northwest Division convention. They were the only women to take on this challenge, beating out all the male patrollers from throughout the division. Quite the feat! Although Ilene quit patrolling herself, she actively supported Hank throughout his 53-year NSP career at Bogus Basin.

Ilene was a woman who wasn't afraid to tell it like it was. She was an avid bowler, loved flowers, and doted on her dogs. She and Hank loved to spend summers out at Lucky Peak Reservoir on their boat and enjoyed motorhome trips to Jackpot, Nevada, and to visit family. Everyone that came to their home was welcomed and



Ilene Gimmel

offered a drink. She loved a good gin and tonic!

Ilene is survived by her son, Butch, and his wife, Peggy, and their children, Matt and Sandy; daughter-in-law, Yonna; granddaughter, Jessica; stepson, Brian Gimmel, and his wife, Eve, and their children, Ivy and Madeline; as well as seven great grandchildren. She was preceded in death by her siblings Ted, Sophie, Bernie, Tom, Terres, and John; her husband, Hank; and son, Gene.

Pam Carson and Carol Peterson

Bogus Basin Ski Patrol, Idaho

Michal Hoellein

Mike Hoellein, 73, passed away on May 18, 2021, at his home in Roy, Utah.

Mike began his 40-plus years of patrolling



Michal Hoellein

in 1980 with the Heidelberg Ski Patrol of the European Division. While in Germany, he also attained his National Registry emergency medical technician (EMT) registration in the pilot program for the area and served as assistant patrol director and treasurer for the Heidelberg Ski Patrol in 1982-83. The Heidelberg patrol recognized his service with its outstanding dedication award.

After returning stateside, Mike rostered with the Nordic Valley Patrol in 1984 until his passing, serving in a variety of roles with a primary focus on first aid in Winter Emergency Care and then Outdoor Emergency Care. He was a certified American Red Cross CPR instructor and WEC and OEC instructor from 1985-2021. He served as Nordic Valley OEC advisor from 1987-2021. Mike fostered the growth of patrollers seeking Senior alpine patroller certification, and he spent countless hours in training them and was always present at the Senior tests.

In both 1986 and 1988, he was selected as the Nordic Valley patroller of the year. Nordic Valley also recognized his contributions to the NSP with a Yellow Merit Star in 1988 and 2003. In 1990, Mike received National Appointment Number

7196, honoring his exceptional leadership within the Nordic Valley Patrol and the Intermountain Division (IMD). More recently, he was selected as the 2019 Intermountain Division Southern Region Outstanding OEC instructor and 2020 IMD Southern Region Outstanding Instructor Development instructor.

Mike was born May 28, 1947, in Ogden, Utah, to William and Elizabeth Hansen Hoellein. After high school graduation, he attended Utah State University. Mike spent his life in the outdoors hunting, fishing and ATV-ing in the Wasatch Mountains. Ski patrolling was a family affair, with Mike and Karen (wife) in it for the long haul. They both shared an interest in OEC instructing, and Karen also served 14 years as registration coordinator for the Intermountain Division. Upon her passing, Mike graciously picked up the ball and carried on as registration coordinator for the Intermountain Division for seven more years. The IMD recognized Mike's generosity and extraordinary contributions with a Yellow Merit Star in 2018.

Mike is survived by his daughter, Christine (Brian) Earley; son, John (Mindi) Hoellein; daughter, Kara (Shane) Teuscher; eight grandchildren; two great-grandchildren; and three brothers, William (Diane) Hoellein, Steve (Kathy) Hoellein, and Stan (Kay) Hoellein. He was preceded in death by his wife, parents, and one brother, James.

Nancy Pitstick
*Intermountain Division Awards
 Program Supervisor*

Barry Larson

It is with great sadness that we report the passing of one of the best patrollers that the Mt. Crescent Ski Patrol had the pleasure of being associated with. Barry Larson passed away Nov. 5, 2021, after a long chronic illness at the age of 87 years old.

Barry was an avid and lifelong skier but did not start ski patrolling until he was almost 50 years old. This did not dampen his impact and enthusiasm, as he was soon very involved with the patrol. Within a few years of starting on the patrol, he volunteered as assistant patrol director and was in charge of scheduling and training. He quickly

learned the new Winter Emergency Care curriculum and rose to level of instructor trainer for the now Outdoor Emergency Care. He was integral in coordinating the OEC instruction and was an inspiring and engaging instructor.

After a few years as assistant patrol director, he stepped up to become our patrol director. He was a great and selfless leader and mentor for many a young patroller, some of whom are still actively involved in our patrol. He set an example of service to the patrol and the skiing public. While patrol director, he ensured a large presence of our patrol at National Day, a tradition that continues to this day.

He was a general contractor and home-builder and initiated and supervised construction of the patrol bump shack. This project would not have been accomplished without his work and supervision. He coordinated many of our volunteers to help in the construction. He eventually went on to become a section chief in the Rocky Mountain Division and remained very involved in training and mentoring patrollers until he eventually had to retire because of health problems. He still enthusiastically participated in alumni patrol events until he passed away. It was a joy to know him and patrol with him, and his selfless dedication to patrolling and the skiing public was an inspiration to all.

He was also a successful businessman and philanthropist and was president of the Metro Omaha Builders Association for several years. In his spare time, he was also very involved in his church, helping them build a new church and community center before he died. He was also a community leader in Omaha and participated in many volunteer organizations. He will be sorely missed by our community and patrol. I was proud and glad to be counted as one of his friends.

James E. Quinn, M.D.
*Mt. Crescent Ski Patrol Medical
 Adviser*

Ralph Lincoln

Ralph Louis "Abe" Lincoln III, age 61, of Richmond, Virginia, passed away on Nov. 13, 2021. His death was premature

and very unexpected.

He was born in Kingsport, Tennessee, on May 1, 1960. He attended Randolph Macon



Ralph Lincoln

College in Ashland, Virginia, and after graduation moved to Keystone, Colorado, where he skied all day and waited tables at one of Keystone's fine dining restaurants at night. He loved waiting tables because he was very much a people person and was really good at it. Plus, he made great tips!

After returning to Virginia, he started and was the former longtime owner/operator of Richmond Express Courier Service and Warehousing in Richmond.

Abe was a former Wintergreen ski patroller. He joined the National Ski Patrol and completed the Winter Emergency Care course, now called Outdoor Emergency Care, in fall 1989 and went on to become an excellent OEC instructor. For several years, Abe would host the annual CPR refresher at his home in Richmond. In 2003, Abe was named the outstanding Wintergreen patroller. When he passed away, he was an Alumni member of NSP. Abe actively patrolled until 2011.

During his patrolling career, Abe handled several "bad" incidents that had undesirable outcomes. At that time, very little was known about the devastating effects such incidents could/can have on those involved. Programs such as critical incident stress debriefing (CISD) were unheard of. As the years passed, Abe realized that he had likely been affected and would often talk about the need for a support program of some type that would help those involved in such incidents.

Abe loved the outdoors and was active in many outdoor activities. While patrolling, he was an avid and passionate telemark skier and could often be found assisting with the annual toboggan refresher training program when not on actual patrol duty. He and his wife, Melissa, often enjoyed traveling and camping in their fully restored Airstream camper. Their adventures often took them to the mountains of West Virginia, where Abe loved to mountain bike.

You could always find Abe smiling and ready to help anyone in need. One

patroller said of him, “Abe never met anyone he didn’t like.” His outgoing friendliness landed him many friends over the years.

Abe is survived by his wife of 25 years, Melissa, and a younger brother, Rob, who lives in Johnson City, Tennessee. He will be missed by so many people.

Bill Smith

Wintergreen Ski Patrol, Virginia

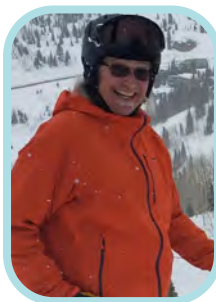
Roark Nagler

The world lost a good one on Oct. 24, 2021, when Roark Nagler, National Appointment Number 10026, left this Earth. He was a role model, companion, and outdoorsman who always believed life is short, so live large. Roark was a valued member of the National Ski Patrol since 1993 and received his National Appointment Number in 2004.

Roark was an exceptional NSP instructor who taught Outdoor Emergency Care, Outdoor Emergency Transportation, and Avalanche courses to new as well as seasoned patrollers. Roark gave tirelessly of himself in various leadership positions and educational roles on the patrol. Whenever there was a need, he was always one of the first to step up. He particularly enjoyed working with new patrollers and showing them the ropes. He could often be heard saying “Safety is no accident” and taught us all how to do our job the right way.

He was born on Feb. 26, 1948, to a disciplinarian war hero in Chicago who gave him a knack for fixing things and a sharp wit. Roark graduated from 12 years of Catholic school straight into the arms of the merchant sailors at Kings Point Merchant Marine Academy

in New York. At Kings Point, he earned a degree in engineering, a letter in marksmanship, and met the love of his life and wife of 50 years, Patricia Jordan. Roark and Patricia married, started a family,



Roark Nagler

and began a long cross-country journey chasing a career with AT&T.

At their stop in Littleton, Colorado, Roark got bit by a snow snake, learned how to ski, and infected his three boys with the same bug. When work took them to Boise, Idaho, the family knew they were home. Roark found a second family with the Bogus Basin Ski Patrol, where he spent 27 years giving toboggan rides, teaching Outdoor Emergency Care, skiing hard, and never stopping for lunch, although he always had time to stop and straighten just one more bamboo!

Roark always planned to skid his Corvette sideways into the afterlife, shouting “What a ride!” However, in a surprise move he left us during a bike ride, when his heart, at only 73 years young, decided it was time. Roark passed away a few days later surrounded by his wife and sons. All four of his grandchildren, his mother, stepfather, wife, kids, and a huge community of friends miss his powerful hugs, great hair, and terrible sense of humor.

Roark never liked funerals. He always wanted a “big ass party” in his honor, so we held a “Big Ass Bruce Springsteen and Bad Dancing” celebration of life on his birthday in 2022. There was food, drinks, karaoke, and a very serious dance contest with extremely valuable prizes for those with finger gun and karate kick moves.

To say he will be missed is such an understatement. Roark is survived by his wife, Pat; two sons, Ryan and Patrick; and four grandchildren. He was preceded in death by his son, Jordan.

Roark always said, “Remember, you don’t quit skiing because you get old, you get old because you quit skiing.”

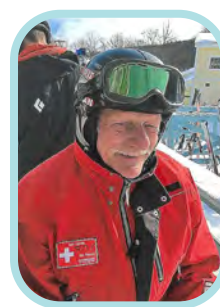
Pam Carson and Carol Peterson
Bogus Basin Ski Patrol, Idaho

Roy Neuer

The Mad River Ski Patrol was saddened to learn of the death on Dec. 27, 2021, of one of its long-serving members, Roy Neuer, of South Burlington, Vermont. Roy, who served on the patrol for more

than 50 years, loved downhill skiing more than any other outdoor activity.

Having been introduced to skiing as a teenager at Belleayre Mountain in the Catskills in New York, Roy travelled



Roy Neuer

to Europe during a college gap year and spent time at Obergurgl and Zell am Zee in Austria to further develop his technique and love of the sport. Roy moved to Vermont in 1961 and was quickly introduced to Vermont downhill ski areas by his General Electric colleagues.

According to Roy, there was nothing quite like skiing Mad River Glen, enjoying the camaraderie of the ski patrol, and continually updating his first aid skills at the patrol’s annual refresher. Always prepared, he had a first aid kit in his car, his bike bag, his boat, his wife’s bike bag and car, and, of course, at home. He enjoyed numerous skiing trips to Western ski areas with his friends, including the “No Whiners,” a close-knit group of Canadian and American men.

Roy was an enthusiastic and confident traveler, sharing many adventures with his wife, Shirley, and friends. In 1996, Roy participated in the first of five trekking trips with the Explorers Network. His trip to the Mount Everest region of Nepal with a collegial group of trekkers and climbers was one of the highlights of his life. The following year, he was thrilled to summit Mount Kilimanjaro in Tanzania. Roy simply loved mountains, different cultures, and different experiences.

Roy’s good cheer, curious mind, and dedication to the Mad River Ski Patrol and alpine skiing will be missed.

Geordie Hall
Mad River Ski Patrol, Vermont

Marcia Nussbaum

Marcia Nussbaum was born in 1949 in Seattle, where she lived her entire life. She passed away on Dec. 13, 2021, after two



Marcia Nussbaum

years of battling ovarian cancer. She is survived by her brother, Brian; his wife Teri; their son, Rusty, his wife, and

their six children,

whom Marcia made sure learned to ski as they got old enough.

Her annual holiday letters were filled with the many ways she enjoyed life. Most important was skiing, her ski patrol family, and spending as many weekends as possible patrolling in the winter. She taught PE in high school and middle school until retirement a few years ago. Marcia's other avocation of swimming was enjoyed through lifeguarding and teaching swim classes. Many patrollers brought their children to her classes. She would happily join any volunteer effort from Walk MS to a competition among Seattle pool employees to see who could bicycle, instead of driving, the most miles during the summer. Her letters always ended with tales of her beloved cats.

Marcia was introduced to skiing by a neighboring family who would take her with them on Christmas Day. She would always tell the story, saying that both families were Jewish, so it was a great day to go skiing. When she turned 16, she joined ski patrol. She patrolled with the Snoqualmie Pass Volunteer Ski Patrol from 1965-98 and earned National Appointment Number 5071. In 1997, the area was sold by the Moffat family, and in 1998 she accepted a job with the management's paid ski patrol staff. She became their stalwart cornerstone, gatekeeper, and liaison for the next 24 years.

She was responsible for a multitude of essentials, from aid room forms to area/employee incidents. She was always the first to respond when paid staff was needed in the aid room. She embodied the true spirit of a ski patroller. Even after being diagnosed with cancer, she still came up most weekends. Though frail toward the end, she kept working right up until she was hospitalized the final time. Having taught Winter Emergency Care and then Outdoor Emergency Care for decades, Marcia, of course, taught at the refresher in October and attended the on-hill in

November. Mid-November, she went into the hospital and left us a few weeks later. Her spirit will remain with the patrol, patrollers, and alumni for many years to come.

No one will ever forget Marcia's energy, dedication, and generosity. She was the spirit and image of our patrol: upbeat, competent, and always willing to help everyone. She was a great inspiration to all. Marcia saw what needed to be done and did it without wanting recognition. She was relied upon to take care of any issues around the building. If you needed help, she appeared beside you without having to be asked. She always arrived Friday night and left Sunday evening. Everyone became better patrollers because of her example.

Marcia was and always will be a responsible, indomitable, and powerful presence. We are all strengthened by the dignity she showed in the face of such adversity. She appreciated everyone's love, support, and good will while she stayed positive right to the very end. It was a joy to have her with us for as long as we did. The building will be impossibly empty without her.

Peggy Lindgren
Summit at Snoqualmie West Ski Patrol, Washington

Ellen Rich

Brantling Ski Patrol and NSP lost alum Ellen Rich, age 95, on April 24, 2021. Ellen joined Brantling's volunteer patrol in the Genesee Valley Section of Western New York with her husband, Harry, in winter 1968. Her NSP career as an alpine patroller spanned 28 seasons, retiring in 1996.

Brantling Ski Slopes' "learn to ski" ski club and student racing programs grew exponentially during the 1980s, creating a demand for additional patrol responders. Ellen's skiing ability, formal education in nursing, and occupation as a Marion Central School District nurse made her a natural fit for her local patrol. She served as a first aid instructor in the annual patrol and Genesee Valley Region refreshers.

Outside of her patrol duties, Ellen and Harry owned and operated Caldwell Place, a Century Farm on the ancestral homestead in Marion, New York. She

also shared her enjoyment of skiing with her school's students by serving as a ski club adviser for the district. Daughter Martha joined the Brantling patrol in 1975, making the entire branch of this Rich family tree active NSP members.

Ellen is survived by a daughter, Martha (Robert Curtis) Rich.

Dave Vinke
Brantling Ski Patrol, New York

Hal Richardson

Harold (Hal) Richardson passed away on June 1, 2021, after a lengthy illness and almost 30 years of service with the Snow King Ski Patrol and National Ski Patrol. Hal was born in Salt Lake City, Utah, where his family owned and operated a small dairy farm and he developed his extraordinary work ethic, commitment to duty, and loyalty to family — characteristics that served to provide him with a strong identity throughout the remainder of his life.

During high school, he was a multisport athlete and was a distinguished wrestler and football player. He enlisted in the U.S. Army Reserves in December 1960 and completed his basic training at Fort Ord in Monterey, California. There, he earned an expert marksmanship badge as a rifleman. In December 1968, he was honorably discharged after having obtained the rank of specialist.

From 1964-69, Hal studied at the University of Utah. He redshirted on the Utes' Division I football team his first year, then proceeded to play offensive (right and left) guard for the remaining four years of his time at Utah. He graduated with bachelor's in health sciences. In fall 1969, he began graduate studies in physical education and health science at Adams State College in Alamosa, Colorado, and graduated in spring 1970.

At Adams State, Hal



Hal Richardson

worked as a graduate assistant and offensive line coach and discovered his lifelong passion for alpine skiing during this time. Most importantly, while studying there he met his future wife, Carol Murphy, who was studying as an undergraduate. They married on Nov. 28, 1970. Hal also completed hours toward his doctorate in 1970-71. After Carol completed her bachelor's, Hal and Carol both worked as educators, and Hal as a football coach, in Utah and Colorado. Hal also taught and was an assistant high school football coach in Plainview, Texas, where he also obtained his insurance license.

In 1978, with two small children in tow, Hal and Carol moved to Jackson, Wyoming. There, he built relationships with many clients to help them realize their goals, first as an insurance agent then stockbroker, financial adviser, and finally, as a small-business owner in the financial services industry.

Hal first joined the Snow King Ski Patrol in 1992 and rapidly became immersed in building his own skills and knowledge to be certified as an Outdoor Emergency Care instructor, contributing to the expertise of the entire patrol as well as new recruits. After just five years, Hal was named the Snow King patroller of the year. The patrol further honored his efforts with the Doug McClaren Award for training excellence. Repeatedly throughout his career, Hal captured the record for most days patrolled in the season, which also led to the Fritch Award for outstanding commitment to the patrol.

As an instructor, Hal demonstrated his superior leadership and team-building skills, always demanding excellence while still being a valued cheerleader. Before long, Hal accepted patrol representative responsibilities for the volunteer patrol in 2000. He went on to set the record for length of service in that role, as well as raising the overall skill level and expectations of the volunteers. His leadership resulted in resuscitating the volunteer patrol with renewed recruitment efforts, building a phenomenally successful annual fundraising campaign, equipment upgrades, an improved relationship with the paid patrol, and a greatly enhanced position with Snow King management. Hal's strong leadership, commitment, and service led to his receiving

National Appointment Number 9728 in 2003. In 2009, Hal was named Intermountain Division Outstanding Patrol Representative.

Recognized for his adept management of funding, Hal was tapped to be the Intermountain Division financial advisor and served with distinction for 16 years through the administrations of three division directors. He advised not only the management of Intermountain Division funds, but also guided inexperienced patrol directors/representatives throughout the IMD in the management and documentation of their finances. For his exceptional stewardship of IMD accounts, Hal received the NSP Meritorious Service Award in 2018. Additionally in 2018, in summation of his entire ski patrolling career the NSP awarded its Distinguished Service Award to Hal.

Hal is survived by his wife, Carol; son, Dirk; daughter, Brandi Kupchella (Adam); daughter, Brie Richardson (Luke); son, Erik (Katie); and grandchildren, Sia, Lincoln, and Lilah. He is also survived by his five siblings, Louise, John, Jeanne, Karen, and Faye, as well as many nieces and nephews.

Dave Vinke
Brantling Ski Patrol, New York

Robert and Sally Sellers

Robert Sellers was born Feb. 28, 1929, in Oakland, California, to Eugene and Mildred Sellers. Sally Sellers was born in Medford, Oregon, on July 3, 1929, to Ruth and Arthur Moen. Sally's father was a park ranger at Crater Lake National Park and later at Yosemite National Park. Sally and Bob met as classmates at Berkeley High School in California. Their combined love for Yosemite blossomed into a shared love for each other.

After Bob completed his degree in wildlife conservation at University of California, Berkeley, the couple married, and their outdoor life together began. Bob's first job was in Grand Teton National Park in the early 1950s; their home was a 20-year-old wall tent with a wooden floor. They cooked on

a Coleman stove, used a community outhouse, bathed under a wood-fired, 55-gallon oil drum, and slept on a single-size army cot with a new baby.

They then transferred to a winter ranger assignment in Death Valley National Monument.

The small house trailer they were given became seriously over-crowded when a second baby was born, so they moved into a tiny house used in a Japanese relocation camp. It was not much bigger than the trailer, but it was their first house with indoor plumbing.

Mount Rainier National Park came next, where they lived in a log ranger station furnished for a time with camping equipment. With Bob responding to incidents both day and night, and their nearest neighbors 10 miles away, Sally had to learn to put on tire chains in the winter and to work the radio.

They moved to Glacier National Park in 1962, where Bob was the district ranger of the west side. The family skied, hiked, and backpacked together. Sally was an expert skier, so skiing was a big part of their lives. The family made regular trips to Big Mountain, Montana, and Schweitzer, Idaho.

In 1967, the family moved to Yellowstone National Park, where Sally and friends took advantage of the long winters by making overnight ski trips to backcountry cabins. She figured the best way to enjoy Yellowstone in the winter was on a pair of long cross-country skis. In 1977, after 10 years of working wildland fire management in Yellowstone, the family moved to Boise when Bob accepted a job as the wildland fire coordinator at what is now called the National Interagency Fire Center.

Bob and Sally joined the Bogus Basin



Bob Sellers

all



Sally Sellers

Ski Patrol in 1980 and were known as “the elderly couple.” Bob, National Appointment Number 6908, spent 25 years on the patrol, and Sally, six. Bob served twice as volunteer patrol leader and held other positions, including historian, during his tenure.

The Sellers met and often guided movie stars, famous athletes, war heroes, and presidents throughout the parks. With Sally’s help, Bob wrote a book about the people he met and the things he did, *I Want to be a Ranger*, a story about his 32 years in the park service. In the section “Winding Down,” he writes about what being a ranger meant to him, saying, “It was all I ever wanted to do. I didn’t do it by myself. Sally was behind me all the way and had to put up with some pretty primitive living conditions. Without her, I would never have been able to fulfill my dream. Being able to live and work in areas that most people only visit was indeed a privilege.”

Sally passed away on June 29, 2018; Bob passed away on April 1, 2021. He was 92. They are survived by their three children, Mike, Margi, and Ed, and two granddaughters.

Pam Carson and Carol Peterson
Bogus Basin Ski Patrol, Idaho

Dan Smyers

On Feb. 7, 2022, Dan Smyers passed away after a heart attack near his home in North Andover, Massachusetts. He was born to Dan and Trudie Reno Smyers in 1946 in Pittsburgh. He was the husband of Kathleen Walsh Smyers and father of Scott Daniel (Jennifer McHugh) Smyers and Bethany Smyers (Thomas) Innis. He leaves behind, but will always inspire, four grandchildren: Jonathan Daniel Smyers, Rachel Ilse Smyers, Trudie Charlotte Innis, and Mae Helen Innis.

He was a graduate of Carnegie Mellon University and the University of Michigan. Dan was an employee of Copperweld and then Air Products. After Air Products, he started Terra Hardwoods, Inc., importing bamboo flooring with his business partner and friend, Don Street.

Dan was an enthusiastic hiker,

mountaineer, cyclist, skier, photographer, and musician. He guided many family hiking trips but also led outings for the Boy Scouts with his son, Scott, and his friends. Later, he climbed many peaks in the Alps and even guided in Switzerland in his semi-retirement.

He kept people safe through over 50 years of ski patrolling in five states (Pennsylvania, Michigan, New Hampshire, Massachusetts, and Vermont), most recently patrolling at Nashoba Valley in Massachusetts and Mount Snow, Vermont. Dan joined the National Ski Patrol in 1969. At Mount Snow, Dan created lifelong friends and was held in the highest regard by all who knew him. Skiing and outdoor emergency first aid was a huge part of his life, and he provided training to countless ski patrollers as an Outdoor Emergency Care instructor. At Mount Snow, Dan worked as the hill chief chair, and his calm yet strong voice reassured many a patroller during hard, difficult codes.

Dan reconnected with his love of the piano in his later years, taking formal lessons, and he encouraged others to appreciate and enjoy music. He will be remembered for his steadfast and dependable presence in so many lives, for his technology, handyman, and woodworking skills, his bearlike hugs, and deep belly laughs.

His tremendous smile, laugh, and personality will be greatly miss by all.

Dave Weiss

Al Webster

The Mt. Hood Ski Patrol in the Pacific Northwest Division lost longtime and dedicated patroller Al Webster on Dec. 1, 2021.

Al joined the Mt. Hood Ski Patrol in 1981 and was awarded MHSP Number 943. He was an Outdoor Emergency Transportation instructor, became a hill captain in 1984, attained senior hill captain status in 1993, and was awarded National Appointment Number 7893 in 1994, recognition that was long overdue for his leadership and guidance of the MHSP.

Officially, Al joined the NSP in 1989,

but he had already been a member of Mt. Hood Patrol, an independent patrol at the time, for eight years. To add a bit of historical perspective, the Mt. Hood Ski Patrol

was organized in 1937 and named National Ski Patrol’s Outstanding Alpine Ski Patrol in 1961. The following year, on Feb. 14, 1962, the patrol chose to withdraw their membership in NSP. In 1989, the patrol voted to rejoin the NSP. Also in 1989, Al was elected patrol chief/patrol representative of the 300-plus member patrol.

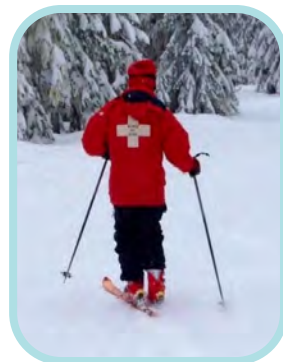
Al was at the helm of the Mt. Hood Patrol for the next two years when it was going through the transition of rejoining the National Ski Patrol and meeting the requirements of NSP membership. Al continued his service to the MHSP Council as vice president from 1991-93.

Al’s passion for skiing started as a teenager when he participated in the high school racing team. He was a longtime member of the Cascade Ski Club in Government Camp, Oregon, and served as the president of the Cascade Ski Club from 1984-85.

Al was born on Aug. 17, 1943, in Portland, Oregon, where he lived most of his life. He worked in the plywood manufacturing industry and equipment sales in the Portland area.

Al is survived by his wife, Christie Webster, and daughters, Kristine Webster and Tess Lee.

The picture above is Al’s last day skiing on Mt. Hood at the patrol’s 75th anniversary event in 2012.



Al Webster

Nancy Stromswold
Homewood Ski Patrol, California



WRITE A CAPTION FOR THIS PHOTO

Send *Ski Patrol Magazine* your captions for the photo to the right. Scribe of the winning caption will receive a \$25 gift certificate to the NSP Online Store and recognition in the next issue. Send entries to editor@nsp.org, or mail them to 133 S. Van Gordon St., Suite 100, Lakewood, CO 80228. Only NSP members are eligible.

Remember *SPM* if you have a humorous photo for next issue's caption contest. Send it in high resolution (at least 225 dpi) to editor@nsp.org.



Congrats to our winner, Debby Riehl of the Summit at Snoqualmie Ski Patrol, and thanks to everyone for their submissions. Thanks to Jim Bender, of the Villa Olivia Ski Patrol in Illinois, for the photo.

WINNER

"Frank's idea of the exalted status of hill captains was vastly overinflated."

— Debby Riehl, Summit at Snoqualmie, Washington

HONORABLE MENTIONS

"Carry me forth minions, to secure the diamonds!"

— Matt Miller, Catamount Ski Patrol, New York

"From his throne at the top of the mountain, the Chief of the Hill supervises patrol operations for the day."

— Scott Launt, Labrador Mountain Ski Patrol, New York

"Patrol director Bob finally gets out of PHQ."

— Dave Ruechel, Sunlight Volunteer Ski Patrol, Colorado

"Babe Ruth's great-grandson points to the couloir he will descend flawlessly while sitting in a chair."

— Mitch Kessler, Mountain Trails Ski Patrol, New York



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