COVER PHOTO: The Colorado Army National Guard participating in a rescue of a fallen climber at 12,800’ with the Alpine Rescue Team, Rocky Mountain Rescue Group, Clear Creek County Sheriff’s Office and Flight for Life Colorado in 2012 on Mt Bancroft, Colorado. Photo: Adam Perou Hermans

Other Photo Credits: Andrew Duran, John Lee, Adam Perou Hermans
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Larimer County Search and Rescue

Larimer County Search and Rescue (LCSAR) incorporated in 1979 in the State of Colorado as the non-profit SAR organization for Larimer County, Colorado. Our mission is to find the lost, rescue the stranded and injured, recover the deceased, and educate the public on wilderness and mountain safety.

Welcome from the YMCA of the Rockies

On behalf of the entire YMCA of the Rockies staff team, I welcome you to the Estes Park Center. I'm so pleased that the National Conference of Search & Rescue has selected the EPC as your conference site. Nearly 350 SAR professionals will attend this event and receive instruction in such areas as ropes & rigging rescue, air support, search dogs and many others. More than 50 presenters will participate in the conference, as well as multiple vendors.

Please do not hesitate to seek out any of our staff if we can make your stay with us more enjoyable. Have a wonderful conference in the spectacular Rocky Mountains!

Sincerely,

Dave DeLuca
Estes Park Center Director

History of the YMCA of the Rockies

The YMCA of the Rockies has a rich and colorful history spanning more than a century. The Rocky Mountain Region had been the site of YMCA summer encampments since the 1890s, but the resort locations were deemed unsuitable by many participants. At the 20th State Convention held at Canon City in 1906, it was decided to establish a permanent summer training center for YMCA professionals somewhere in the Rockies.

In July of 1907, 23 YMCA men met in Grand Lake, Colorado to discuss incorporations of the Western Conference of the YMCA. While there, they scouted for possible sites for a summer school to be held the next year, 1908.

Finding nothing appropriate, they decide to travel over the continental divide to Estes Park. A group of six men, led by William E. Sweet, hiked from Grand Lake, stopping overnight at the Wind River Lodge. The beautiful setting and views of Mt Ypsilon were just what the men were looking for.

Ninety-three men attended the 1908 summer school and it was considered to be a rousing success. That success prompted the purchase of the Wind River Lodge property to ensure a permanent home for YMCA.
Welcome from the Colorado Search and Rescue Board (CSRB)

The Colorado Search and Rescue Board (CSRB) is proud to serve as one of the three sponsoring organizations for SARCON 2015, in beautiful Estes Park, Colorado.

The CSRB officially held their first meeting in 1970 under the leadership of Chairman Chuck Demarest of Rocky Mountain Rescue Group. Prior to the formation of CSRB, there were two other statewide organizations, the Colorado Search and Rescue Coordinating Board (1966) and the Colorado Rescue Association (1961).

The CSRB is a statewide membership organization and in 2014 was composed of 42 SAR organizations, 36 Sheriff’s Offices, five support agencies and 48 individual members.

The primary objectives of the organization have not changed since 1970:

- To provide and/or coordinate search and rescue resources when requested by county sheriffs and others responsible for search and rescue in the State of Colorado.
- To serve as a forum in which member search and rescue organizations can meet, exchange ideas and share best practices.
- To provide educational opportunities for the search and rescue community.
- To represent the Colorado search and rescue community.

Over the past 45 years only 13 people have served as the president of this statewide organization. The current Board of Directors comprises nine members from eight different organizations. The organization currently has two memorial funds that provide educational scholarships for members.

The CSRB is unique among the fifty states, as it serves as the State SAR Coordinator. The revolving schedule of nine people, who are volunteer members of volunteer SAR teams, have full access to, and authority to call in, local, state, interstate, federal and military resources. They routinely obtain National Guard, Army and Air Force aircraft with one call to the AFRCC.

Welcome from the National Association for Search and Rescue (NASAR)

NASAR is very pleased to sponsor the 2015 National SAR Conference with our colleagues of the Mountain Rescue Association and the Colorado Search and Rescue Board. We especially want to thank the Larimer County SAR Team for all the extraordinary hard work of its members as local hosts.

We hope you learn something new and valuable, find new equipment and services to make your job easier and spend lots of time meeting and chatting with fellow SAR professionals from around the world - So That Others May Live.

We look forward to seeing you at the Friday evening BBQ and all weekend.
Welcome to SARCON 2015!

On behalf of the Mountain Rescue Association (MRA), I would like to welcome everyone to SARCON 2015. Our planning team has been working hard to bring you the best presenters from a broad spectrum of SAR disciplines. I think you’ll agree, the list presentations and field sessions is one of the most comprehensive and interesting of any SAR conference. There truly is something for every SAR professional.

The MRA was founded with the vision of sharing information and techniques to make every rescuer and every team better and thus to improve our service to those in need in the mountains. Fifty-six years later, this conference is the embodiment of that guiding principle. Further, your attendance here is proof that SAR professionals, both paid and unpaid have a passion for providing the best service possible. For that you have my undying gratitude.

So please enjoy the conference and take what you learn back to your teams to continue the tradition of learning, sharing and promoting excellence in search and rescue service.

Dave Clarke
President, Mountain Rescue Association

Thanks to the SARCON 2015 Staff!

George Janson Incident Commander LCSAR
John Lee Deputy IC LCSAR
Dave Francis Logistics Section Chief LCSAR
Karen Williams Volunteer Coordinator LCSAR
Debbie Francis Medical Officer LCSAR
Vicki Cotton Safety Officer DPSP
Brian Stuebe Safety RMRG
Jacob McDaniels Safety LCSAR
Blake McCarty Safety LCSAR
Chris Boyer Conference Coordinator NASAAS
Skeet Glatterer Conference Coordinator MRA
Woody Woodward Conference Coordinator CSRB
Tom Wood Presenter Coordinator PMI
Aaron Dover Vendor/Sponsor Coordinator PMI
Kayley Bell MRA
Bryan Enberg MRA
Jeff Sparhawk CSRB
Howard Paul PIO NASAAS
Mike Fink PIO LCSAR

The Conference Committee would like to give special thanks to Jeff Sparhawk who assisted in the development of the MOA between the four organizations. Jeff currently serves as one of the legal advisors for the Colorado Search and Rescue Board. If you are in need of legal services you can contact Jeff at jeff@sparhawklaw.com.

Important Phone Numbers

If you have any questions please contact:

George Janson 970-219-2591
or
Deputy IC John Lee 970-222-9872
Thank You to Our Sponsors!
When disaster strikes, what will you have on hand?

Engineered to save lives:
A portion of all profits go back to supporting non-profit search and rescue organizations.

25% off code: JUST4SAR

Wazoo Survival Gear
Products that can save your WAZOO
Handcrafted in the U.S.A.

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# Conference Agenda: Tracks

## ALL HANDS EVENT

### Thursday, June 4, 2015

- **1100 - 1500**
  - Offsite at Rocky Mountain Rescue, Boulder, Drop Tower
  - Pre-Conference Event *(please contact Alison Sheets/RMRG at alisonsheets@usa.net to sign up)*

- **1700 - 2000**
  - Registration

### Friday, June 5, 2015

- **0700 - 1200**
  - Registration

- **0800 - 0900**
  - Assembly Hall
  - SARCON Opening Ceremony - Barb Scott, Mark Magnusson

- **1200 - 1300**
  - Lunch

- **1700 - 1930**
  - Outside
  - BBQ

- **2000 - 2130**
  - Assembly Hall
  - Guest Speaker - Jordan White

### Saturday, June 6, 2015

- **1200 - 1300**
  - Lunch

- **2000 - 2130**
  - Assembly Hall
  - Guest Speaker - Tom Hornbein

- **1200 - 1300**
  - YMCA Cafeteria
  - Dinner
### AIR RESCUE  
**Track Leader: Steve Zuckerman**

#### Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>0915 - 1015</td>
<td>Emerald Mountain Lodge: Bible Point Room</td>
<td>When Angels Fall, Accidents in Med-Evac Helicopter Operations - Charley Shimanski</td>
</tr>
<tr>
<td>1030 - 1130</td>
<td>Emerald Mountain Lodge: Bible Point Room/East Portal Room</td>
<td>HAATS, VMRG and FFL Panel Discussion (COMBO) - LTC Tony Somogyi, Chris Carr and Matt Bowe, Steve Zuckerman</td>
</tr>
<tr>
<td>1130 - 1230</td>
<td>Emerald Mountain Lodge: Bible Point Room/East Portal Room</td>
<td>How To Request Military Rotary Wing Air Resources (COMBO) - LTC Joshua Day</td>
</tr>
<tr>
<td>1315 - 1415</td>
<td>Field</td>
<td>HAATS and FFL Live Helicopter Demo</td>
</tr>
<tr>
<td>1315 - 1415</td>
<td>Field, All Hands</td>
<td>HAATS, Vail Mt Rescue and FFL Live Helicopter Demo</td>
</tr>
<tr>
<td>1430 - 1530</td>
<td>Field</td>
<td>HAATS and FFL Live Helicopter Demo</td>
</tr>
<tr>
<td>1430 - 1530</td>
<td>Field, All Hands</td>
<td>HAATS, Vail Mt Rescue and FFL Live Helicopter Demo</td>
</tr>
</tbody>
</table>
# Conference Agenda: Tracks

**CANINE**  
Track Leader: Sandy Jordan

## Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0915 - 1130</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>Canine Motivational Tools (classroom then field) - Jill Reynolds</td>
</tr>
<tr>
<td>1315 - 1530</td>
<td>Ram’s Horn Lodge: Teddy’s Teeth Room</td>
<td>Reward, Drive and Building Engagement (classroom then field) - Nicholas Hodgen</td>
</tr>
<tr>
<td>1545 - 1645</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>A Simplified Scent Model - Ryan Root</td>
</tr>
</tbody>
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## Saturday, June 6, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0830 - 0930</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>The CO Pre-Veterinary Care Act and its Impact on the Working Canine - Ethan Costain</td>
</tr>
<tr>
<td>0945 - 1045</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>Positive Strategies for Negative K-9 Behaviors – Tools to Improve Common SAR Dogs Behavioral/ Obedience Challenges - Jody Davidson</td>
</tr>
<tr>
<td>1100 - 1200</td>
<td>Ram’s Horn Lodge: Teddy’s Teeth Room</td>
<td>K9 SAR: Lessons Learned from the 2014 Highway 530 / Oso Landslide - Chris Terpstra, Guy Mansfield</td>
</tr>
<tr>
<td>1100 - 1200</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>Trailing: The Right Start - Kasie McGee</td>
</tr>
<tr>
<td>1315 - 1530</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>Man-Made Canine Hazards in the Wild - Charles E. Melvin</td>
</tr>
<tr>
<td>1545 - 1645</td>
<td>Ram’s Horn Lodge: Teddy’s Teeth Room</td>
<td>Would You Survive? A Discussion for Canine Handlers and 1st Responders - Robin Van Metre</td>
</tr>
<tr>
<td>1545 - 1645</td>
<td>Ram’s Horn Lodge: Giant Track Room</td>
<td>Using Distance Alerts to Help Further the Search Effort - Marcia McMahon</td>
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</tbody>
</table>
# Conference Agenda: Tracks

**MEDICAL**  
**Track Leader: Debbie Francis**

## Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0915</td>
<td>Emerald Glen Room</td>
<td>Oxygen Therapy Tanks Compared at Moderately High Altitude - Mark Nelson, Dr. Skeet Glatterer</td>
</tr>
<tr>
<td>1030</td>
<td>Emerald Glen Room</td>
<td>Field Mgmt. of Hypothermia and Avalanche victims for Mountain Rescue – Many are Cold, but Few are Frozen (part 1) - Dr. Ken Zafren</td>
</tr>
<tr>
<td>1130</td>
<td>Emerald Glen Room</td>
<td>Field Mgmt. of Hypothermia and Avalanche victims for Mountain Rescue – Many are Cold, but Few are Frozen (part 2) - Dr. Ken Zafren</td>
</tr>
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## Saturday, June 6, 2015

<table>
<thead>
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<th>Time</th>
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<tbody>
<tr>
<td>0830</td>
<td>Emerald Glen Room</td>
<td>Altered Mental Status: Beyond the Glasgow Coma Scale, What Do Rescuers Need to Know? - Dr. Alison Sheets</td>
</tr>
<tr>
<td>0945</td>
<td>Emerald Glen Room</td>
<td>Nepal Earthquake and Wilderness Trauma Care for Mountain Rescue: You maul ‘em, we haul ‘em (part 1) - Dr. Ken Zafren</td>
</tr>
<tr>
<td>1100</td>
<td>Emerald Glen Room</td>
<td>Nepal Earthquake and Wilderness Trauma Care for Mountain Rescue: You maul ‘em, we haul ‘em (part 2) - Dr. Ken Zafren</td>
</tr>
<tr>
<td>1545</td>
<td>Emerald Glen Room</td>
<td>High Altitude Medicine for Mountain Rescue - Dr. Alison Sheets</td>
</tr>
</tbody>
</table>
### Conference Agenda: Tracks

#### MISC SAR  
Track Leader: John Lee

#### Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>0915</td>
<td>Ram's Horn Lodge: Lily Lake Room</td>
<td>SAR Operations Interoperability (part 1) - Earl Tilton</td>
</tr>
<tr>
<td>0915</td>
<td>Ram's Horn Lodge: Teddy's Teeth Room</td>
<td>Website Optimization for SAR Teams - Kristin Smaltz</td>
</tr>
<tr>
<td>1030</td>
<td>Ram's Horn Lodge: Lily Lake Room</td>
<td>SAR Operations Interoperability (part 2) - Earl Tilton</td>
</tr>
<tr>
<td>1030</td>
<td>Ram's Horn Lodge: Teddy's Teeth Room</td>
<td>Using Cloud-Based Software for Incident Planning, Deployments and Reporting - Eric Hanigan, Chris Stevens</td>
</tr>
<tr>
<td>1315</td>
<td>Eagle Cliff Lodge: Fireside Room</td>
<td>Mounted SAR: Capabilities and Deployment - Tomi’ Finkle</td>
</tr>
<tr>
<td>1430</td>
<td>Eagle Cliff Lodge: Fireside Room</td>
<td>Developing Mounted SAR Horse Rider Testing - Tomi’ Finkle</td>
</tr>
<tr>
<td>1545</td>
<td>Ram’s Horn Lodge: Lily Lake Room</td>
<td>Enhancing Backcountry Radio Communications-Inexpensive Equipment and Simple Technique Changes - Paul Robertson</td>
</tr>
<tr>
<td>1545</td>
<td>Ram’s Horn Lodge: Teddy’s Teeth Room</td>
<td>Emerging Technology for the SAR Team: Mobile Cell Towers and Communication - Ed Mills</td>
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</table>

#### Saturday, June 6, 2015

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<thead>
<tr>
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<tbody>
<tr>
<td>0830</td>
<td>Ram’s Horn Lodge: Teddy’s Teeth Room</td>
<td>Mini Wilderness Survival (classroom then field) - George Dresnek</td>
</tr>
<tr>
<td>0830</td>
<td>Emerald Mountain Lodge: Bible Point Room</td>
<td>Beyond the USGS Topo - Matt Jacobs</td>
</tr>
<tr>
<td>1430</td>
<td>Emerald Mountain Lodge: Aspen Glen Room</td>
<td>Meta-Training: Maximizing Your Training Results Regardless of Team, Topic or Time - Dan MacLellan</td>
</tr>
<tr>
<td>1545</td>
<td>Ram’s Horn Lodge: Holy Hill Room</td>
<td>Long Term Resilience in Crisis Responders - Lorca Smetana</td>
</tr>
<tr>
<td>1545</td>
<td>Emerald Mountain Lodge: Bible Point Room</td>
<td>Risk Assessment and Mitigation for SAR - Mike Vorachek</td>
</tr>
</tbody>
</table>
# Conference Agenda: Tracks

**RESCUE**  **Track Leader: Brian Stuebe**

## Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>0915 - 1015</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>Parallel Plaquettes Put Into Action - Mike Lukens, Kevin Sturmer</td>
</tr>
<tr>
<td>1030 - 1200</td>
<td>Emerald Mountain Lodge: Glacier Basin Room</td>
<td>Evidence-Based Decision-Making for Rope Rescue - Tom Evans, Sarah Truebe</td>
</tr>
<tr>
<td>1545 - 1645</td>
<td>Emerald Mountain Lodge: Bible Point Room/East Portal Room</td>
<td>SAR Near Miss Panel (COMBO) - Rocky Henderson, John Meyers, Shane Snyder</td>
</tr>
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## Saturday, June 6, 2015

<table>
<thead>
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<tbody>
<tr>
<td>0830 - 0930</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>Twin Tensioned Systems Lessons Learned Panel - Dave Clarke, John Meyers</td>
</tr>
<tr>
<td>0945 - 1045</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>Go Light, Go Fast - Testing of Lighter Anchoring and Lowering Options - Zephyr Feryok</td>
</tr>
<tr>
<td>1100 - 1200</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>ICAR Terrestrial Report - Dan Hourihan, Tom Wood</td>
</tr>
<tr>
<td>1315 - 1415</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>Anchors Aweigh: Load Sharing Anchor Options - Tom Wood</td>
</tr>
<tr>
<td>1430 - 1530</td>
<td>Emerald Mountain Lodge: Bible Point Room</td>
<td>Time to Put the RESCUE Back into Avalanche Rescue: A New Way to Avalanche SAR - Dale Atkins</td>
</tr>
<tr>
<td>1315 - 1415</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>Rope Ascending Techniques (classroom) - Marty Reames</td>
</tr>
<tr>
<td>1545 - 1645</td>
<td>Emerald Mountain Lodge: East Portal Room</td>
<td>Rope Ascending Techniques (field) - Marty Reames</td>
</tr>
</tbody>
</table>
### Conference Agenda: Tracks

**SEARCH**  Track Leader: Paul Woodward

#### Friday, June 5, 2015

| 0945 - 1045 | Ram’s Horn Lodge: Lily Lake Room  
Techniques for Search and Rescue Responders (part 1) - Chris Young |
|-------------|--------------------------------------------------------------------------------|
| 1045 - 1100 | Ram’s Horn Lodge: Lily Lake Room  
Techniques for Search and Rescue Responders (part 2) - Chris Young |
| 1100 - 1200 | Ram’s Horn Lodge: Bible Point Room  
Risk Assessment Profiles for Solo Wilderness Hikers - Dan Hadley |
| 1200 - 1345 | Ram’s Horn Lodge: Holy Hill Room  
Error Prevention Science Applied to SAR Navigation - Guy Mansfield |
| 1345 - 1415 | Ram’s Horn Lodge: Holy Hill Room  
How Consensus Can Help with POA - Joseph Bobot |
| 1430 - 1530 | Ram’s Horn Lodge: Lily Lake Room  
How AMDR Can Assist with Resource Allocation (part 1) - Joseph Bobot |
| 1545 - 1645 | Ram’s Horn Lodge: Lily Lake Room  
How AMDR Can Assist with Resource Allocation (part 1) - Joseph Bobot |

#### Saturday, June 6, 2015

| 0945 - 1045 | Emerald Mountain Lodge: Bible Point Room  
Cell Forensics and Search - Paul Woodward, Loren Pfau |
|-------------|--------------------------------------------------------------------------------|
| 1045 - 1100 | Emerald Mountain Lodge: Bible Point Room  
Risk Assessment Profiles for Solo Wilderness Hikers - Dan Hadley |
| 1100 - 1200 | Emerald Mountain Lodge: Bible Point Room  
Cell Forensics and Search - Paul Woodward, Loren Pfau |
| 1200 - 1345 | Emerald Mountain Lodge: Bible Point Room  
Risk Assessment Profiles for Solo Wilderness Hikers - Dan Hadley |
| 1345 - 1415 | Emerald Mountain Lodge: Bible Point Room  
Risk Assessment Profiles for Solo Wilderness Hikers - Dan Hadley |
| 1430 - 1530 | Emerald Mountain Lodge: Bible Point Room  
Lessons Learned from the Salt Creek, Colorado Landslide, MCI response - Mark Hart |
| 1545 - 1645 | Emerald Mountain Lodge: Bible Point Room  
Lessons Learned from the Salt Creek, Colorado Landslide, MCI response - Mark Hart |
## Conference Agenda: Tracks

### NASAR CERTIFICATION  
*Preregistration Required, Additional Fee*

#### Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
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<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0915 - 1200</td>
<td>Long’s Peak Lodge: Boulderfield Room</td>
<td>NASAR Rescue Technician II Certification (classroom) - John Boburchuk</td>
</tr>
<tr>
<td>0915 - 1130</td>
<td>Eagle Cliff Lodge: Fireside Room</td>
<td>NASAR Mounted SARTECH III Certification - Tomi’ Finkle</td>
</tr>
<tr>
<td>1315 - 1415</td>
<td>Long’s Peak Lodge: Boulderfield Room</td>
<td>NASAR Rescue Technician II Certification (classroom) - John Boburchuk</td>
</tr>
<tr>
<td>1430 - 1645</td>
<td>Long’s Peak Lodge: Boulderfield Room</td>
<td>NASAR Rescue Technician II Certification (field) - John Boburchuk</td>
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#### Saturday, June 6, 2015

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<tr>
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<td>Long’s Peak Lodge: Boulderfield Room</td>
<td>NASAR Rescue Technician II Certification (field) - John Boburchuk</td>
</tr>
<tr>
<td>0830 - 1200</td>
<td>Eagle Cliff Lodge: Fireside Room</td>
<td>NASAR FUNSAR Instructor Workshop - Susan J. Thrasher</td>
</tr>
<tr>
<td>1315 - 1645</td>
<td>Long’s Peak Lodge: Boulderfield Room</td>
<td>NASAR Rescue Technician II Certification, FIELD - John Boburchuk</td>
</tr>
<tr>
<td>1315 - 1645</td>
<td>Eagle Cliff Lodge: Fireside Room</td>
<td>NASAR FUNSAR Instructor Workshop - Susan J. Thrasher</td>
</tr>
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## Conference Agenda: Tracks

### MRA EVENT

**Saturday, June 6, 2015**

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1900 - 2000</td>
<td>MRA Awards, Assembly Hall</td>
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</tbody>
</table>

**Sunday, June 7, 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>0830 - 1200</td>
<td>MRA Business Meeting (COMBO), Emerald Mountain Lodge: Bible Point Room/East Portal Room</td>
</tr>
<tr>
<td>1315 - 1645</td>
<td>MRA Business Meeting (COMBO), Emerald Mountain Lodge: Bible Point Room/East Portal Room</td>
</tr>
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</table>
### Conference Agenda: Tracks

**NASAR EVENT**

#### Thursday, June 4, 2015

- **1900 - 2130**
  - Ram’s Horn Lodge: Holy Hill Room
  - NASAR BOD Meeting

#### Saturday, June 6, 2015

- **1900 - 2130**
  - Ram’s Horn Lodge: Teddy’s Teeth Room/Giant Track Room
  - NASAR General Membership Meeting (COMBO)

Photo: Andrew Duran
Conference Agenda: Personal Planner

Use this personal planner to note what presentations you plan to go to throughout the conference.

### Friday, June 5, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Presentation Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800 - 0900</td>
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<tr>
<td>0915 - 1015</td>
<td></td>
<td></td>
</tr>
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### Saturday, June 6, 2015

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Presentations and Presenters

AIR RESCUE

Matthew Bowe and Chris Carr

*Helicopter Crew Resource Management Classroom*
*FFL and HAATS Patient Transfer Field Demo*

Flight for Life Colorado is a civilian air ambulance service that works closely with local SAR teams and military rotary wing assets to provide both medical transport and SAR support on searches, rescues and avalanche deployment. In the classroom portion of this presentation, Bowe and Carr will discuss the mission statement and capabilities of the Flight for Life program as it relates to SAR applications in the backcountry. Also, they will discuss the importance of crew resource management, and how they’ve developed a toe-to-toe protocol for patient transfers in the backcountry. For the field session, patient packaging and live demos with both Vail Mountain Rescue and HAATS will take place.

**LENGTH: 60 minutes Classroom, 120 minutes Field**

*Biographies*

Matthew Bowe is a Flight Nurse with Flight for Life Colorado.

Chris Carr is a Flight Paramedic with Flight for Life Colorado.

LTC Joshua Day

*Proper Use of AFRCC and COANG Resources Classroom*

This presentation will provide attendees with the necessary information to request military air assets for SAR. Specifically, LTC Day will detail the information flow needed to get a mission number from AFRCC, and explain what happens if a mission number is NOT assigned. Also, this presentation will explain how the AFRCC, the National Guard JOC, the state EOC, the NG unit performing the SAR, and local SAR teams can all work together to accomplish the mission at hand.

**LENGTH: 30 minutes**

*Biography*

A Colorado native, LTC Day was born in Denver and grew up in Estes Park, CO. After graduating from Estes Park High School, in 1986, he attended Embry-Riddle Aeronautical University Prescott, AZ Campus on an Army ROTC Scholarship. He was commissioned as a 2LT in 1990 and graduated the next year with a B.S. in Aeronautical Engineering.

2LT Day was initially branched Chemical Corps and attended Chemical OBC in September 1991 later graduating as an Honor Graduate in February 1992. After completing OBC he joined the Colorado Army National Guard as the Battalion Chemical Officer for the 2/135th AVN BN (Attack). In May, 1992 the aviation battalion sent him to FT Rucker for flight training. 2LT Day completed flight school in April 1993 as an AH-1F pilot.

After flight school 2LT Day was assigned to C CO 2/135th AVN BN (Attack) as a Scout Platoon Leader and later moved to the Attack Platoon. In 1996 the 2/135th AVN BN (Attack) changed its MTOE and became 2/135th AVN BN (LUH) turning in the AH-1F for the UH-1H. 1LT Day was assigned to A CO 2/135th AVN BN (LUH) and served initially as a flight company platoon leader and later as the Company Operations Officer. In 2000 CPT Day assumed command of B CO 2/135th AVN BN (LUH). After leaving command of B CO, CPT Day was assigned as the Battalion S-1 in 2002. In November 2002, CPT Day was hired as the full time AG & S-1 for 2/135th AVN BN. In February 2004, CPT Day transferred to HAATS as the unit’s Training Officer. While serving as the HAATS Training Officer he also served as the Executive Officer for 2/135th AVN BN and was promoted to MAJ. MAJ Day assumed command of HAATS in September 2005. He was promoted to LTC effective August 2011. LTC Day left command in January 2013 and now serves as the State Army Aviation Officer for the COARNG.

LTC Day is a graduate of the United States Army Chemical Officer Basic Course, Initial Entry Rotary Wing Course, the Aviation Advanced Course, Combined Arms Services Staff School, and Intermediate Level Education (ILE) once again known as Command and General Staff College. He has also graduated from the UH-1H Instructor Pilot Course, the UH-60A/L Instructor Pilot Course, and the Army Fixed Wing Qualification Course. He is rated in the AH-1F, UH-1H/V, UH-60A/L, and UH-72A and C-26E. He is a Standardization Instructor Pilot in both the UH-1H/V and UH-60A/L. LTC Day has over 3,000 hours of flight time.

Josh has been married to his wife Robyn for 15 years. They have two children, Jack thirteen years old and Zoe eleven years old. In his free time Josh likes to golf in the summer and ski with his kids during the winter months.
Presentations and Presenters

**AIR RESCUE**

**LTC Tony Somogyi**

**HAATS Patient Packaging for External Hoist Ops, Classroom**
**HAATS External Hoist and Patient Packaging for Hoist Ops, Field**

The High-Altitude Army National Guard Aviation Training Site (HAATS) is located in the small mountain town of Gypsum (near Vail), Colorado, on Eagle County Airport. The schoolhouse offers a unique training methodology based on aircraft power that is designed to dramatically increase individual and crew situational awareness. It is the ONLY Department of Defense aviation school that trains pilots to experience this outside the classroom. Catering to rotary-wing military pilots from all over the world, HAATS has hosted and trained helicopter pilots from Slovenia, Norway, Denmark, the Netherlands, Germany and the Republic of Georgia.

Run by full-time Colorado Army National Guard pilots, HAATS is specifically designed to train military pilots from any branch. The High Altitude Aviation Training HAATS currently has a partnership with both Vail Mountain Rescue Group and Mountain Rescue Aspen wherein they train and execute missions in a virtually seamless fashion. HAATS has been recognized with awards from NASAR and the American Helicopter Society for their efforts and successes on Search and Rescue missions.

This presentation will include discussion on SAR patient packaging for external hoist operations, as well how the military can successfully interface with civilian rotary wing air ambulance services.

**LENGTH:** 60 minutes Classroom, 120 minutes Field

**Biography**

Lieutenant Colonel Tony Somogyi is the Commander of the High-altitude Army Aviation Training Site (HAATS) located in Gypsum, CO. He holds a B.S. in Aeronautical Studies from the University of North Dakota where he also earned his Rotorcraft Commercial and Instrument Licenses. After spending eight years on Active Duty, he has been stationed at HAATS for the last nine years where he is also instructs in the OH-58A, CH-47D, and UH-72A helicopters. HAATS is primarily responsible for teaching pilots the art and science of Power Management and Environmental Flight Techniques in a mountainous environment. In addition to student training, the HAATS conducts Search and Rescue missions fairly regularly as part of their state mission as National Guardsmen. LTC Somogyi has conducted numerous SAR missions in the mountainous regions of Colorado. He is a graduate of the Colorado Search and Rescue Board's Search Management Course and has dedicated a great deal of time in integration efforts between National Guard and Civilian SAR agencies.

**Charley Shimanski**

**When Angels Fall, Accidents in Med-Evac Helicopter Operations**

This multi-media presentation will include profiles and analysis of several med-evac helicopter accidents with an assessment of key contributing factors. Dramatic video of accidents and detailed NTSB analyses will provide valuable lessons for attendees.

**LENGTH:** 60 minutes

**Biography**

Charley Shimanski is a Past President and Education Director of the Mountain Rescue Association. He is a Past President of the Alpine Rescue Team in Evergreen, Colorado, and served as an Incident Commander of a SAR operation that included a Line of Duty fatality.

**Steve Zuckerman**

**Mountain SAR and Rotary Wing Interface Classroom**
**Patient Packaging for External Hoist Ops Field**

As part of a joint presentation between Flight for Life Colorado and HAATS, Steve Zuckerman, with Vail Mountain Rescue in Colorado, will explain the role his team has taken as they work and train with rotary wing assets from both the military and civilian air medical transport. Patient packaging for external hoist ops will also be discussed.

**LENGTH:** 60 minutes Classroom, 120 minutes Field

**Biography**

Steve Zuckerman is a veteran member of Vail Mountain Rescue in Colorado, is involved in the Rocky Mountain Region of the MRA, and is serving as the Air Rescue Track Coordinator for SARCON 2015.
**Presentations and Presenters**

**CANINE**

**Ethan Costain**

*The Colorado Pre-Veterinary Care Act and its Impact on the Working Canine*

In August 2014, the Colorado legislature passed the Pre-Veterinary Care Act, authorizing emergency medical responders in the state of Colorado to triage dogs and cats in emergency situations. Both in Colorado and across the United States, this bill has the potential to greatly and positively impact the future of working dog health.

Educational goals of this program:

- Educate individuals about the Colorado Pre-Veterinary Care Act, how it interfaces with the Colorado Veterinary Medical Practice Act and what it all means in terms of the working dog
- Provide a real-life example of how the Pre-Veterinary Care Act is being put into use with law enforcement, search and rescue and paramedic services in Larimer County, Colorado
- Educate individuals on how this act has the potential to inspire other states to take action

LENGTH: 60 minutes

**Biography**

Ethan Costain is a fourth year veterinary student in the professional veterinary medicine program at Colorado State University and is focusing on working dog health and emergency and critical care medicine. He is also a 4-year member with Larimer County Search and Rescue in Fort Collins, Colorado. He has fielded in numerous search and rescue missions across Colorado and has had the privilege to provide field support for several SAR dogs within the state. Besides SAR and veterinary medicine, Ethan enjoys climbing, mountaineering and his Labrador, Eli.

**Jody Davidson**

*Positive Strategies for Negative K-9 Behaviors – Tools to Improve Common SAR Dogs Behavioral/ Obedience Challenges*

A good working K-9 SAR team is all about communication. But, while you’re busy reading your dog, is he ignoring you? Topics to be covered include: Getting focus first time, every time; Dog reactivity; Resource guarding; Developing a solid “Leave It”; Separation Anxiety and training problems specific to your dog.

This session will provide handlers with practical methods based in positive reinforcement that they can utilize after the class to deal with common canine behavioral and obedience issues.

This presentation is suitable for all levels of handlers who are dealing with specific behavioral and/or obedience issues. Featuring a lecture with demonstration, then one-on-one with students/dogs, this presentation will begin in a classroom without dogs then move outdoors and focus on hands-on training and demonstrations with canines.

LENGTH: 60 Minutes

**Biography**

Ms. Davidson and her Clumber Spaniel Josey are certified by CARDA as a Mission-Ready Type 1 (Wilderness and Urban) Trailing team. When not working SAR, Ms. Davidson is a Professional Member of the Association of Professional Dog Trainers with CPDT-KA certification and an AKC Canine Good Citizen/ S.T.A.R. Puppy Evaluator who operates PHD Obedience (www.phdobedience.com) a dog training company. She’s owned bred, trained and shown dogs competitively for 50+ years and has earned more than 60 Obedience and dog sport titles with her dogs. Her four personal dogs are certified with Therapy Dogs International and volunteer weekly at a local hospital and a school for severely disabled children. She served as on-set Dog Trainer for the final season of the Animal Planet show, PIT BOSS.

**Nicholas Hodgen**

*Reward, Drive and Building Engagement*

Educational goals of this program include: Ways to learn to better work with a tug toy or ball to engage with the dog for reward or obedience, problem solving methodologies for issues with the tug or ball reward (e.g., “outing”), using techniques to increase the drive in the dog for the tug or ball, teaching “victims” how to better engage with dogs during training searches and building a better reward system to encourage stronger searching from dogs.

LENGTH: 120 minutes

**Biography**

Nick Hodgen is an assistant trainer for a regional group of Police K9’s in New Hampshire and Massachusetts. He is also a Certified Decoy for several of the biting dog sports (IPO, PSA and NADF).
**Kasie McGee**  
*Trailing: The Right Start*

As an evaluator, McGee has observed that the second most common reason teams fail certification testing is that they do not start the trail correctly. This program is designed to instruct the handler to better integrate how they teach the K9 what is desired, and how to enable the handler to appropriately respond (or not to respond) to best achieve a proper start on the trail. McGee will teach handlers how to correctly provide the target scent to the canine, how to recognize the dog’s working style to establish direction of travel, and how to NOT interfere! This presentation is open to all levels, though most urgently beginning handlers, and combines lecture with an outdoor practical session with dogs.

**LENGTH: 60 minutes**

**Biography**

Kasie McGee has been training dogs since the early 70’s, at that time mostly for herding & farm work. Kasie became involved in SAR in California in the early 80’s, then became involved with CARDA before moving to Colorado. In 2007, Kasie joined El Paso County SAR, left for the Investigations team in 2013. Kasie holds a Master’s degree in Animal Behavior; raises Border Collies, two of which are certified search dogs, and always has at least one Bloodhound as well.

Kasie is a NASAR certified Canine Lead Evaluator.

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**Marcia McMahon**  
*Using Distance Alerts to Help Further the Search Effort*

Using Discussion, Maps, and photos, we will discuss the nature of Air Scent Dog Alerts (Live and Cadaver) and how to use these to help extend the search area. Many times dog information is only considered valuable if the team finds the subject. Properly trained teams can contribute greatly on difficult searches by using alerts, bearings, wind and wind history, conditions, time frames and terrain scent flow patterns in search areas to determine high probability areas in which to place search teams. This will include land and water search scenarios. Also, the training of dogs for distance alerts will be touched on, including the use of GPS and bearings.

**LENGTH: 60 minutes**

**Biography**

Marcia McMahon has been involved with Park County SAR in Colorado for the last 6. She has spent 16 years doing SAR dog training and fielding, helping to certify dogs in Air Scent, Water, HRD, and Avalanche with numerous finds and assists. She is the current President of Park County Search and Rescue, and serves as the Coordinator and the Training Director for Search and Rescue Dogs of Colorado. Marcia has 23 years of experience in canine Obedience/Agility training, is an Instructor for Park County 4H and has 13 years of experience with Sled Dog Training and Racing.

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**Charles E. “Chuck” Melvin**  
*Man-Made Canine Hazards in the Wild*

This presentation will discuss canine hazards such as electric fences, traps, snares, toxic collars, cyanide guns, IEDs, trip wires, tethered snakes, eye hooks, trail pits, etc. that could be encountered during wilderness searches. Additionally, this presentation includes a discussion of myths on releasing a dog from the more common traps. At the conclusion of this program, the student should be able to recognize and hopefully avoid some of the common man-made canine hazards that have been found in the Mountain West.

**LENGTH: 120 minutes**

**Biography**

Chuck Melvin has served as a member of the K9 Search and Rescue Team Inc. from 1984 and Commander from 1990 until 2013. He is now Chairman of the Board and Director of Response. He has trained and fielded canines responding to requests in 12 states, and has taught a wide range of K9 and emergency medical related topics at state & national conferences. He is a Canine Specialist with the 1st Special Response Group, responding internationally, and an area evaluator for the North American Search Dog Network. He is the senior instructor with Search Dog Associates, Inc.

Serving as a part time Dolores Deputy Marshall for over a decade, full-time Lieutenant for Montezuma County Sheriff’s Office, Seasonal Ranger for Colorado State Parks, and Deputy Montezuma County Coroner, Melvin has gained valuable experience, training, and knowledge in all aspects of law enforcement work. He has also served with the Dolores & Lewis-Arriola Fire Departments, the Civil Air Patrol, and the OEM. In addition, Melvin served 41 years as a science teacher and as College Adjunct Professor for 37 years. Melvin was honored with the Ralph Dowdy Award in NM and the Hunter Holloway Award in CO, the only individual to be awarded both. He holds a Master’s Degree in Entomology, emphasis behavior, from the University of Wyoming. He has published extensively.

Mr. Melvin lives on his Colorado Centennial Farm in Dolores, Colorado with his search partner Vrijheid Quiddity, better known as Quiddy.
**Jill Reynolds**  
*Canine Motivational Tools, Classroom and Field*  
For this classroom/field session, Jill will take turns with handlers and their canines of all experience levels running a variety of motivational exercises designed to boost confidence, enthusiasm and an improved refund for the dogs. Handlers will learn at least 3 new exercises.  

**LENGTH: 60 minutes**  

**Biography**  
Jill has been a certified Wilderness Air Scent Handler since 2009 and works with an Aussie named Skid as a member of Larimer County SAR. She owns Canine Massage of the Rockies and resides in Red Feather Lakes, Colorado.

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**Ryan Root**  
*A Simplified Scent Model*  
Current scent models are usually formed around the work of William Syrotuck for the purpose of justifying his theory of canine scent. As a teacher and trainer, Root’s goal is to break the scent model into its constituent parts so that novices can analyze and communicate their thoughts on scent effectively. Root emphasizes that his training experiences have taught him that by “decoding” before comprehension, students become more successful handlers and become better communicators with operations.  

**LENGTH: 60 minutes**  

**Biography**  
Ryan Root has been a member of the Colorado Search and Rescue Board and a handler, trainer and evaluator for Front Range Rescue Dogs since 2001. His work includes canine training in Air Scent, Recovery, Avalanche, Water Recovery and Evidence.

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**Guy Mansfield, PHD, Chris Terpstra**  
*K9 SAR: Lessons Learned from the 2014 Highway 530 / Oso Landslide*  
In March 2014 a catastrophic failure of the hillside above the small community just east of Oso in Snohomish County in the State of Washington caused almost 10 million cubic yards of dirt to plunge down and across the Stillaguamish River. A fast-moving wave of mud and trees ended up taking 43 lives and became a life-changing disaster event for the community and the first responders.  

In this presentation, we share the experience of one K9 Team: What we encountered on the ground; how we adapted and search in conditions we had never encountered before; how K9 teams were deployed; the impact upon our team members (human and K9); what lessons we learned and how we are carrying those lessons forward, within our team and across other K9 search organizations.  

**LENGTH: 60 minutes**  

**Biographies**  
Guy Mansfield’s background includes a Ph.D. in behavioral neuroscience, and post-doctoral research and teaching at the University of Washington and University of Illinois Medical Center. He has held director-level positions in medical information system development, and has recent experience (as Director of Quality and Safety Outcomes) in patient safety and risk management research methods at a major medical center in Seattle, WA. He has written and published research papers and scientific articles.  

Guy has been active in Search and Rescue since 2008 and is a member of Everett Mountain Rescue, one of the largest mountain rescue organizations in the nation. He has deployed on SAR missions ranging from urban searches for Alzheimer patients, to technical rope-rescues, to disaster searches (Oso), to mountain and wilderness searches. He is currently Chair of the Strategic Guidance Team for the Snohomish County K9 Team. Guy helped design and establish the Field Support Certification and Navigation Certification training programs for the Snohomish County K9 Team and regularly designs search-training scenarios involving both live subjects and human remains detection.  

Guy has experience teaching university-level courses (psychology and statistics), and has given multiple presentations at national and international scientific conferences. He is currently the lead navigation instructor for Snohomish County Volunteer Search and Rescue (SCVSR), and the navigation training coordinator for the Snohomish County K9 Team.  

Chris Terpstra is a Certified K9 Handler and volunteer with Everett Mountain Rescue. He has been involved with Search & Rescue since January of 2004. He responded to S30 Landslide the 1st and 4th weeks. Chris has spent the last 5 years as an Emergency Manager at Microsoft. He has a passion for technology, community and K9 SAR.
Robin Van Metre, VMD

*Would You Survive? A Discussion for Canine Handlers and First Responders*

This is an interactive presentation for emergency management of potential field scenarios for working dogs. Topics for discussion include canine assessment, bandaging and controlling hemorrhaging, treatment of gastric dilatation and volvulus, heatstroke, frostbite, drownings, snakebites, etc. This is to be a fluid presentation, tailored to the needs and expertise levels of the attendees. Most importantly, the goal of this presentation is to mitigate potential risks and teach safe restraint, handling and transportation of injured canines. This discussion will also cover the importance of muzzling, and the cautious handling of injured dogs as they are transported to the nearest medical facility.

**LENGTH:** 60 minutes

**Biography**

Robin Van Metre is an ER veterinarian, in Ft Collins, Colorado and is SARTECH III certified. She is currently on call for working dog teams and responders in Northern Colorado.
Presentations and Presenters

MEDICAL

Mark Nelson and Dr. Skeet Glatterer

Oxygen Therapy Tanks Compared at Moderately High Altitude

This experiment gathered data from oxygen therapy temperature deployed in cold wilderness rescue. Comparing carbon composite and aluminum walled medical-grade oxygen tanks without patient contact, the experimentation measured temperature & pressure to time at moderately high altitudes (1,500m-3,500m). When transporting oxygen tanks to an accident scene, the therapy gas equalizes to the environmental temperature, subordinating to the tank wall design; this occurred faster in carbon composites. When running therapy, the regulator flow rate with patient packaging (creating a microenvironment) influenced gas temperature in the cannula. The amount of gas in the tank, the tank type, or insulating the tank itself, offered no significance to gas temperature delivered to the patient.

MRA professionals offered their perspective on therapy deployment in the field. Given acceptable risk, this decision considered factors such as personnel available, patient condition, and transport time, but generally not temperature. Planning supply time typically uses an on-site pressure gauge reading, but this method provided error-prone time estimation when tested in cold environments. Whereas measuring the molecules from the supplier fill provided a reliable baseline for time consistency regardless of environmental temperature.

Funding provided by the MRA Research Committee and MSU-Denver Undergraduate Research Program.

LENGTH: 60 minutes

Biographies

Mark Nelson, PA-S MSPAS, is currently a Physician Assistant-Student pursuing a Master’s of Science degree. Growing up in Conifer, CO, he spent many years climbing technical terrain around the Rocky Mountains. His involvement in wilderness medicine started from experiences in the Colorado Mountain Club, American Alpine Club, and the MRA member organization, the Alpine Rescue Team of Evergreen, CO. He participated in rescue for about seven years in this area as well as serving the community with St. Anthony’s Hospital Prehospital care. Further deciding to change careers and pursue primary care medicine from mentoring of our mountain rescue doctors, watching the combat-injured go through regenerative medicine, and participating in several rescue missions as the in-field medical lead.

Dr. Skeet Glatterer is a Cardiothoracic Surgeon living in Golden, Colorado. He is the Medical Director and Chairman of the Medical Committee for the Mountain Rescue Association. He has a strong interest in the outdoor application of medicine and has been active in the Wilderness Medical Society for many years. Skeet has taught multiple courses at the Colorado Mountain Club where he founded the Mountain Medicine Section. He is an expedition physician for guided mountain trips from Alaska to Russia, Africa, and Nepal. Skeet is an OEC (Outdoor Emergency Care) Instructor Trainer, ski patrols at Copper Mountain Resort in Colorado, and is a member of the Alpine Rescue team in Evergreen, Colorado. His most recent adventure was as a volunteer Climbing Ranger and member of the Denali Rescue Team in Alaska.

Dr. Alison Sheets

Altered Mental Status: Beyond the Glasgow Coma Scale, What Do Rescuers Need to Know?

Through case presentations, discussions on the multiple causes of altered mental status in search and rescue situations will be addressed. Multiple possible causes for a given presentation will be reviewed, as well as patient management and treatment of patients who are suffering from illnesses.

LENGTH: 60 minutes

High Altitude Medicine for Mountain Rescue

This presentation on the subject of high altitude medicine is aimed at mountain rescuers with variable training from basic first aid to paramedic level, and includes discussion on the epidemiology, physiology, clinical presentation, treatment and evacuation of patients at altitude.

LENGTH: 60 minutes

Biography

Dr. Sheets is an Emergency Physician at Longmont United Hospital, and is the medical director and an active field member of the Rocky Mountain Rescue Group. She currently holds a Member at Large position on the Board of Directors for the Rocky Mountain Region of the MRA and is also a member of the MRA Medical Committee. She received her medical degree from the University of Colorado, and completed her emergency medicine training at Denver Health Medical Center. In 2008 she was a staff physician for the Himalayan Rescue Association’s Pheriche clinic at 14,000 ft. in the Everest region of Nepal.

Prior to her medical career, Dr. Sheets worked as a mountain guide and a professional ski patroller. As a guide for over a decade, she was involved in guiding and instructing rock, ice, mountaineering and avalanche programs for the International Alpine School, the Colorado Mountain School and others similar organizations.
INTRO: The Nepal Earthquake followed by Wilderness Trauma Care for Mountain Rescue: You Maul 'em, We Haul 'em

Trauma care in the wilderness is the art of the possible. Using the recent earthquakes in Nepal as well as other wilderness trauma cases, we will discuss the approach to the trauma patient, including the primary survey with control of airway, breathing and circulation (ABC) as well as stabilization of disability (D).

We will review the assessment and initial treatment of specific head, chest and abdominal injuries. We will discuss stabilization of spinal and pelvic injuries.

Objectives
Following this presentation, participants will know:
1. How to perform the initial assessment of a trauma patient in a wilderness setting.
2. How to perform the initial steps necessary to stabilize a trauma patient in a wilderness setting.
3. What can be done for initial management of head, chest and abdominal injuries.
4. When and how to stabilize the spine, particularly the cervical spine and the pelvis.

LENGTH: 90 minutes

Field Management of Hypothermia and Avalanche victims for Mountain Rescue – Many are Cold, but Few are Frozen

There are no controlled studies showing the best approach to hypothermic patients. In 2014, I revised the State of Alaska Cold Injuries Guidelines and was also the lead author of the Wilderness Medical Society Practice Guidelines for the Out-of-Hospital Evaluation and Treatment of Accidental Hypothermia. These guidelines have a number of exciting changes for mountain rescuers.

Initial evaluation and treatment of hypothermic patient or an avalanche victim may require only basic interventions or may demand advanced life support interventions including cardiopulmonary resuscitation.

Following initial stabilization of a hypothermic patient or avalanche victim, the choice of rewarming methods is critical.

Objectives
Following this presentation, participants will know:
1. How to evaluate a hypothermic patient in the field
2. How to manage a hypothermic patient in the field.
3. The priorities for initial evaluation and care of an avalanche victim.

LENGTH: 90 minutes

Biography
Dr. Ken Zafren, MD, FAAEM, FACEP, FAWM is a Medical Advisor to the Alaska Mountain Rescue Group. He is also the Vice President of the International Commission for Mountain Emergency Medicine (ICAR MedCom), and a Clinical Professor - Division of Emergency Medicine at Stanford University Medical Center - Stanford, CA USA. Ken is a Staff Emergency Physician at the Alaska Native Medical Center in Anchorage, and recently spent some time in Nepal helping the Nepalese and Everest climbers after the devastating earthquakes.
## Presentations and Presenters

### MISC SAR

**George Dresnek**  
*Mini Wilderness Survival, Classroom then Field*

This session will give attendees the chance to play McGuyver with common backpack items, challenging participants to think outside the box. After a short classroom presentation, George will take the class outside to practice some basic survival skills like fire building without matches and shelter building with what’s available in a backpack or lying on the ground. This course is condensed from a 2 day overnighter into a two-plus hour session.

**LENGTH:** 120 minutes

**Biography**

George Dresnek is now retired after being employed by Sonoma County, where he worked for 3 years in Probation and 12 years for the Sonoma County Sheriff. He was a member of Sonoma County SAR for 10 years, working as a Lead Tracker and Search Manager. He is a head evaluator for NASAR’s SARTECH I and II courses. He is also a NASAR Instructor for Tracking Fundamentals, Managing the Lost Person Search and Advanced Search and Rescue. He has taught classes at several NASAR conferences and at the California SAREX.

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**Tomi’ Finkle**  
*Mounted SAR Responders Capabilities and Deployment, Developing Mounted SAR Horse Rider Testing*

In this presentation, Tomi’ will offer up methodologies for SAR Team Leaders to develop horse and rider testing programs for their mounted SAR responders.

**LENGTH:** 60 minutes

**Mounted SAR Responders’ Capabilities and Deployment**

This session will provide attendees with a better understanding of the capabilities and deployment tactics of mounted searchers. Also, Tomi’ will provide search managers and planning staff with some tools and tips on how best utilize MSAR personnel and their equines.

**LENGTH:** 60 minutes

**Biography**

Tomi’ Finkle is the Commander of the TrotSAR Mounted Search and Rescue Team. TrotSAR is an all-volunteer Mounted SAR team that was formed in 1992 and is located in the Mid-Atlantic region in the USA. She is the NASAR Mounted SAR Task Force Lead, the NASAR MSAR Advisor to ASTM International F-32 and the International Advisor to Iceland’s Mounted SAR program. She was the chairperson in the development for the first ASTM International F2794-09 Mounted SAR Responder Standard that was first published in December 2009.
Presentations and Presenters

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**Eric Hanigan and Chris Stevens**

*Using Cloud-Based Software for Incident Planning, Deployments and Reporting*

In this technical workshop, attendees will learn tips and tricks on how to use cloud-based incident management software for team management, mission planning, deployments and reports for SAR operations.

See how you can eliminate the guesswork when it comes to personnel and asset management, and also efficiently execute a mission with user-friendly software developed by a first responder. Learn how to efficiently track your members’ training certifications to see which team members are qualified to respond. Discover how to track your team’s equipment and vehicles, including maintenance schedules, with a click of a button.

When executing the mission, learn how to manage and track SAR missions with drag-and-drop team building, real-time communications and web-based maps. See how to send messages to your team simultaneously using email, SMS text and phone messages.

Learn how to use mapping tools to mark points of interest and also track deployed personnel, lost subject information and clues gathered in the field. Dig even deeper and explore the various mapping overlays with categories such as topography, police and fire stations, boundaries and social media feeds.

Finally, learn how to export automated ICS reports based on members’ timekeeping records, radio logs and events captured in real-time.

**LENGTH: 60 minutes**

**Biographies**

Speakers will include Eric Hanigan, a reserve deputy with the San Diego Sheriff’s Department for over 22 years, and Chris Stevens, a member of the Desert Sheriff Search & Rescue Team (DSSAR) in Riverside County, Calif, for five years and member of DSSAR’s Board of Directors for four years.

Eric’s primary assignment is to the SAR unit, currently serving as a Reserve Captain overseeing four specialty units. Eric was also the unit leader for the Technical Rescue Unit for over 15 years, where he was responsible for conducting an annual Rescue Specialist Course and overseeing rope training for new SAR Academy members. Additionally, Eric volunteers with the Special Enforcement Division, driving its armored vehicles. With a keen interest in using technology to manage command post functions and streamline the deployment of first responders, Eric also provides training and customer support for Mission Manager, Inc.

Chris, who is actively involved in the planning and strategy of SAR operations, holds the SAR TECH II certification and also teaches classes in man-tracking and land navigation. He has completed FEMA ICS courses 100, 200, 400, 700, 800 & 907. Chris moved to the California Desert in 1998 after completing the study of business and marketing at Washington State University. In addition to his role with DSSAR, Chris serves as the Far Western Region Sales Director for Mission Manager, Inc.

**Matt Jacobs**

*Beyond the USGS Topo*

For decades, the USGS 7.5’ topo map has been the go-to resource for backcountry navigation. However, the series has been discontinued and several of those maps are now out of date. This class will take a look at the wide variety of alternative data sources available, explore their limitations and show us how to use them for effective route planning. While the focus will be on layers available through SAR Topo, most of the information covered is applicable to mapping tools such as ArcGis.

**LENGTH: 60 minutes**

**Biography**

Matt Jacobs is a member of the Bay Area Mountain Rescue Unit, a software engineer and the creator of SAR Topo.
Presentations and Presenters

**Dan MacLellan**

*Meta-Training: Maximizing Your Training Results Regardless of Team, Topic or Time*

You know that leading trainings is a large part of being a SAR volunteer or professional—developing and executing classroom and field sessions in order to introduce or reinforce skills and procedures. You seek expert advice with regards to SAR hardware, technology, tactics and strategies, so why shouldn’t you do the same for communicating with your people? The importance of disseminating the right information in the right way can have critical consequences—how can you make sure that this happens? How do you design and implement trainings that are engaging, effective and well-attended, especially in the context of limited budgets, complex topics and busy adults? This presentation will answer these questions and engage you with concrete, hands-on, SAR-specific teaching and learning opportunities. Although topics will be based on research and theory, this is a PRACTICAL workshop. You will develop a toolbox of strategies and tactics to take home for the next SAR training you have to lead, you will get real-world examples of effective teaching practices and you will gain enthusiasm and confidence in the knowledge that you are providing the best possible trainings for your teams!

LENGTH: 60 minutes

**Biography**

Dan MacLellan is a SAR volunteer with the Mountain Rescue Unit of the Deschutes County Sheriff’s Office in Central Oregon. When not on rescue missions or climbing mountains and rocks, he works as a full-time Software Trainer for a large IT software security company. His professional background consists of over 15 years as a technical educator and he has designed and led classes and presentations to numerous Fortune 500 IT professionals. He is particularly interested in adult learning theory and how it can be applied in educational environments in order to maximize learner engagement, assimilation and retention of training objectives.

**Paul Robertson**

*Enhancing Backcountry Radio Communications—Inexpensive Equipment and Simple Technique Changes*

Enhancing Backcountry Radio Communications—Going from @#$%^ to 5x5. Many teams operate in mountainous, backcountry terrain where the “peak to valley” altitude differential can be 4,000’, and ALL teams operate communication-challenged environments. This presentation will challenge attendees to learn they can enhance member-to-member and team-to-IC communications. In particular, this presentation takes a succinct look at inexpensive equipment that will enhance their team’s radio communications. We’ll look at $20, frequency specific tuned antennas that out-perform “do all” factory antennas. Can a 4oz $25 Roll-Up, Packable Antenna really DOUBLE output for establishing Command out in the field? Attendees will also learn how to establish a “field- based” portable radio communication repeater station with gear that weighs under 10lbs and costs less than $250.

LENGTH: 60 minutes

**Biography**

Paul Robertson has been with Grand County SAR in Colorado for three years, and a GCSAR Board of Directors member for two of those years. He is a medical First Responder, and has an FCC Ham Radio Technician License.

**Kristin Smaltz**

*Website Optimization for SAR Teams*

Website sites play a crucial role for all search and rescue teams. Websites can be used to gain awareness, positive press, donations, and new membership. It is important that teams to have a functional and useful website that is easily maintained and updated, and that they represents a clear mission of their SAR team. For the user, the website should be current, user friendly, mobile friendly, and visually appealing. For the admin of the website, it should be easily updatable, have multiple accounts, be optimized for search engines, and should contain all of the SAR team’s necessary information. Utilizing free tools, there are many options available for making a great website that can make the most of search engine optimization and the team’s public presence on the Internet. This class discusses the use of free Wordpress and Google tools to create a great SAR team website. Please check out my SAR team’s website at www.alphasar.org.

LENGTH: 60 minutes

**Biography**

Kristin is literally a rocket scientist by trade, but she spends the majority of her time passionately dedicated to search and rescue. She has spent the last 6 years in a leadership role in local teams and is the current president of Alpha Search and Recovery in Houston, Texas. She is also a canine handler currently on her second dog, Havok, after retiring her first canine. Kristin currently runs and maintains a variety of websites for her SAR team, national SAR organizations, and a cutting edge survival company, Wazoo Survival Gear. Check out some of her latest websites at www.alphasar.org and www.wazoosurvivalgear.com.
One of the most interesting elements of working with the crisis response communities is the extent to which strength and vulnerability are both so present and meshed. Responders are traditionally extensively skilled, physically vital, intensively trained and highly motivated. Yet the overarching intention of preparation is for the next challenging moment, and not for what it takes to remain viable as a responder over time, and this is where we see vulnerability. The stress of steady exposure to crisis can be compounded by common experiences of bureaucracy, top-down policies, cultural invisibility, low pay and conflicting relationships with other medical professionals. A culture of stoicism contributes to avoidance over time of addressing perceived weakness by both men and women. And when a responder goes down too far the consequences can be severe — lost edge, professional error, burnout, damaged relationships, leaving the field entirely, depression and suicide.

This presentation was created to take a hard look at what is personally necessary to stay sustainable long-term in fields with constant stressors on many planes; to give tools to evaluate at any moment were we stand on that scale and to clearly understand where we have a weak foundation or are not taking full advantage of powerful natural sources of renewal.

My own story of pursuing a long and vibrantly resilient life in the face first of tragedy and then a professional life that returns me repeatedly into the presence of mortality is about 15 minutes of the presentation. The center section is an active workshop based on the first two chapters of my book, the tarn and the wellsprings. I’m including a brief summary here below. This is an interactive session that goes 45 minutes and leaves participants with a personal map, notes of insights gained and an action list that is personal, pragmatic and actionable.

The next section takes a look at the weakness of some common strategies of resilience. Each participant evaluates their own strategies in the context of five common myths around personal and professional resilience. This lasts about 15 minutes.

We wrap up in a group discussion of how having a widely held cultural context for professional and personal resilience would affect and transform the fields of crisis response and wilderness risk management and of what some of the conversations and actions are that would forward it. What do they see it to be a sustainably flourishing crisis responder, long-term, surrounded by more such? You have to have the clear vision first. What would it be worth to create that reality?

I hold burnout as personally and culturally preventable and treatable and find a long-term acceptance of it in fields of service as unacceptable. It is possible and morally necessary to heal damage that has not yet happened, particularly to those who serve. There is no human being who doesn’t benefit from invoking some form of Tarn, some way of consistently evaluating their own human condition, but it is especially important for those in whom compassion or giving are integral parts of their identity, personal or professional, and also for those who have been willing by their choices to consistently put themselves in the path of the darker parts of human living —trauma, loss, fear, or hostility.

LENGTH: 60 minutes

**Biography**
Lorca Smetana is an educator and an author. She is also a burnout and recovery expert for crisis managers and outdoor educators.

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**Ed Mills**

**Emerging Technology for the SAR Team: Mobile Cell Towers and Communication**

In this session focusing on emerging technologies for SAR, presenter Ed Mills will examine cutting edge technologies being used in the field to aid SAR operations. Additionally, he will discuss emerging technologies that will enhance SAR field operations through enhanced communication of information and data. He will also discuss FirstNet, and its SAR implications.

LENGTH: 60 minutes

**Biography**
Ed Mills is a Military Policy Army veteran, a first responder and member of Evergreen Fire in Colorado. He is the Outreach Coordinator for FirstNet Colorado.
Dale Atkins

Time to Put the RESCUE Back into Avalanche Rescue

A review of the more than 1800 avalanche accidents in the past 25 years shows that avalanche accidents, attitudes and technologies have changed. To meet these changes avalanche rescuers need to change their ways from a tools-based approach based on ideas from the 1970s and ‘80s that focused only on search (finding) to a modern systems-based approach that focuses on rescue (saving). This presentation highlights the changes that have occurred and offers a new systems approach to avalanche rescue. This new approach also may apply to all types of mountain rescue.

Biography

Dale Atkins is veteran mountain rescuer with 40 years of mountain rescue experience. A member of the Alpine Rescue Team in Evergreen Colorado since he was a teenager, Dale is a Past President of the American Avalanche Assoc., and the MRA Avalanche Delegate to IKAR. A former Colorado Avalanche Information Center forecaster, Dale now works for RECCO and lives in Vail, Colorado.

Patrick Bentley and Eric Gunnerson

KISS: Knots In Successful Systems, Classroom

This introductory session will be a fun, fast paced presentation focused on basic knots, and how to incorporate them into simple and compound raise/lower systems. All levels of experience are welcome. Attendees will “learn by doing” and will be challenged to participate in the hands on field session that will take place after a short classroom presentation. Attendees do NOT need to bring PPE or gear, it will be provided by the presenters. Class size will be limited to roughly 20 attendees.

LENGTH: 120 minutes

PAARC: Practical Application of Anchors, Rigging & Changeovers, Field

This afternoon session takes lessons from the KISS morning session into the field, in real time, by setting up and taking down rope-system rigging –from the anchors down to the patient and all that goes in-between. The instructors will assist class participants as they work on various inclines. The focus in the field-exercise portion of this class is to get practice setting up real systems while working with other SAR personal you may never have met before. Topics to include: anchors and rigging plates, radium release hitch, various belay devices, super Munter, bowline (single and interlocking), backing up anchors, 30-seconds changeovers (lower to raise, raise to lower), and how to construct a Voo-Doo system. Class size is limited to 20 participants. Basic PPE is required (helmet, harness, gloves, and 3 carabiners).

LENGTH: 120 minutes

Biographies

Patrick Bentley received his Master’s degree from USU in Instructional Design with an emphasis in Adventure Programming with a Bachelor degree in Parks and Recreation. He has been a valuable member of the Cache County Sheriff’s Search and Rescue team in Logan Utah for the past 18 years and has served as their Commander, a team lead and Quartermaster at various times. He is currently serving as one of their Training Officers as well as the liaison for the Mountain Rescue Association for his team.

Patrick currently works at Utah State University for the University Inn and Conference Center as the Coordinator for the Utah State University Challenge Course. He annually hires, trains and leads facilitators on how to run low and high events at the USU Course. He is also a Safety Officer/Senior Instructor for the Leadership Challenge Camp which works with the USMC JROTC and AF JROTC units throughout the nation. Additionally Patrick works as the Experiential Program Coordinator for Sherwood Hill Recovery Resort. He is certified as a Level II facilitator and a Ropes Course Manager through the Association for Challenge Course Technologies (ACCT) for the past 3 years.

Eric Gunnerson has been a member of the Cache County Sheriff’s Search and Rescue team in Utah for the last 20 years and has held positions of Commander and team leads throughout those years. He has been the team lead of the Technical Rope Rescue Team and he feels an important part of the team’s training is to “keep things simple and consistent in rope rescues.” Eric holds a master’s degree from the University of Colorado in German and has attended numerous SAR conferences throughout Nevada, Utah, Arizona and Oregon.

Eric spent 7 years coaching in Leadville Co. for the ski jumping and cross country racing teams and another 23 years in Logan coaching gymnastics to preschool thru college athletes. He has competed for the German National B team in gymnastics and feels that one of the best ways to instruct others is to get them out and get their hands and feet dirty. Eric has been a professional hardwood flooring contractor for the last 23 years as well as a strong member of the Sheriff’s Search and Rescue team.
Andrew Blackstock

Destructive Testing and Small Group Force Analysis, Thursday Pre-conference at RMRG in Boulder

The Rocky Mountain Rescue Group will host a pre-conference destructive testing session at drop tower near their headquarters in Boulder on Thursday June 4th from 11am till 3pm. A light lunch will be provided. Destructive testing demos at the drop tower will be followed by small group activities and some open forum testing. Attendees may bring soft goods to test.

LOCATION: 3720 Walnut Street, Boulder, CO 80301 (contact Andrew Blackstock at 303-917-4650 for details)

LENGTH: 4 hours

Biography

Andrew Blackstock is a RS member of the Rocky Mountain Rescue Group in Boulder Colorado. He is also an instructor for both NCRC and the Colorado Cave Rescue Network, and a certified welder by trade.

Dave Clarke and John Meyers

Twin Tensioned Systems: Lessons Learned Panel

This panel discussion will share the lessons learned by two teams that switched from a main and belay rope rescue system to a twin tensioned system. Ideally the audience should already be familiar with both mainline/ belay and twin tensioned rope systems, as this presentation is not meant to be an educational class on twin tensioned systems. Rather, this panel of presenters will share the challenges their teams faced in implementing the change in systems, and discuss the resulting solutions at which they arrived. The goal of this panel is to offer hard-earned insights gained from experience with other SAR teams that may be contemplating a similar change in systems.

LENGTH: 60 minutes

Biography

MRA President Dave Clarke has been with Portland Mountain Rescue for 15 years, with 13 of those as a Rescue Leader with the team. A career firefighter/officer of 27 years, Dave has also been the leader of his department’s technical rescue team for the last 15 years.

John Myers is a 12 year member of Olympic Mountain Rescue. Of those dozen years, John spent 5 of them as a Rescue Leader and Rigging Instructor for OMR. He has been an alpine climber and mountaineer for the last 20 years, and a professional engineer for 22 years.

Tom Evans, Sarah Truebe

Evidence-Based Decision-Making for Rope Rescue

We make rigging decisions based on what we’ve been taught in trainings or read in training manuals, but how do we know that what we’ve read in manuals is correct? Rigging practices are often based on advice from experienced professionals, often applied without analysis. Usually, experience produces accurate results. Recent testing, however, challenges many assumptions we make in rigging. In this workshop, participants and leaders will provide opinions on the behavior of rigging systems and have the chance to analyze how systems function in light of recent testing data. We will provide handouts of testing data on webbing anchors and prusik behavior, and we will use these as case examples to illustrate the mismatch between common perceptions among rescuers and observations from lab testing. Ultimately, we will make a case for using evidence rather than tradition to make rigging decisions.

LENGTH: 120 minutes

Biographies

Tom Evans is a frequent presenter at the International Technical rescue Symposium, an instructor for the NCRC, a SAR volunteer and one of the founders of SAR^3, a new non-profit organization designed to support rope-related disciplines.

Sarah Truebe is a SAR volunteer in Arizona, an NCRC trained cave rescuer and one of the founders of SAR^3, a new non-profit organization designed to support rope-related disciplines.
Zephyr Feryok  
*Go Light, Go Fast - Testing of Lighter Anchoring and Lowering Options*  
As modern climbing shifts to a “fast and light” approach, modern rescue has remained slow and heavy. A quantitative look at climbing systems as applied to rescue could help reduce weight carried by responding teams, and provide them with more tools with which to respond. This study tests the strength and usability of numerous Dyneema® anchor configurations, as well as the usability of the Monster Munter hitch as a lowering and belaying tool. It examines previously untested systems in a scientific manner.  
LENGTH: 60 minutes  

**Biography**  
A former member of Sitka Mountain Rescue in Alaska, Zephyr Feryok is presently studying mechanical engineering at Tufts University. He is an avid rock and ice climber.

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**Rocky Henderson, John Meyers, Shane Snyder**  
*Near Miss Incidents in Search and Rescue Panel*  
The sharing of Near Miss Incidents and the resulting lessons learned is a crucial part of any SAR organization’s efforts to keep their members safe. On this panel, three SAR veterans set aside their egos and discuss some near misses that they’ve experienced over the years in the hopes that others can learn from their mistakes.  

**Biographies**  
Rocky Henderson has been a member of Portland Mountain Rescue since 1986, and considers himself a very lucky guy to still be alive after 40 years of climbing. He is a past President of PMR and past President of MRA. Currently a Rescue level member, Rocky remains involved mostly with technical rope rescue systems and equipment issues with PMR.  
John Myers is a 12 year member of Olympic Mountain Rescue. Of those dozen years, John spent 5 of them as a Rescue Leader and Rigging Instructor for OMR. He has been an alpine climber and mountaineer for the last 20 years, and a professional engineer for 22 years.  
Shane Snyder is a veteran of the Knoxville Volunteer Rescue Squad, where he is a Cave Rescue Captain on their Vertical Cave and Cliff Team. A SPRAT® certified rope technician, Shane work as an industrial rope and rescue trainer for American ERT.

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**Dan Hourihan and Tom Wood**  
*2014 ICAR Congress Terrestrial Rescue Report*  
For the first time in its 66 year history, the International Commission for Alpine Rescue Congress was held in the United States in Lake Tahoe, Nevada. This presentation, given by the primary and alternate U.S. Terrestrial Rescue delegates, offers an overview of the main Terrestrial Rescue techniques and topics that were discussed during both classroom presentations and field sessions last October, and will discuss how the U.S. SAR community benefits from involvement in ICAR.  
LENGTH: 60 minutes  

**Biographies**  
Dan Hourihan is a retired law enforcement Park Ranger from the State of Alaska. He served in that capacity from 1978-2006 and began work as a Training Specialist contractor for the Nevada Division of Emergency Management (NDEM) in March, 2010.  
He is a Past President of the national Mountain Rescue Association (MRA) and is a Past President of the National Association for Search and Rescue (NASAR). Additionally, he serves on the Special Operations Committee of the National Sheriffs’ Association; serving as the Chair of the Search and Rescue and Incident Management Sub-Committees. He is the MRA Terrestrial Rescue delegate to the International Commission for Alpine Rescue (ICAR) and serves on the ICAR Board of Directors. He is the first non-European elected to the ICAR Board.  
He is currently employed full-time by the Nevada Department of Public Safety, NDEM, in Carson City, as the NDEM Rural/Tribal Liaison and is a Rescue category member of the Douglas County (NV) Sheriff’s SAR Team.  
Tom Wood is a 17 year veteran of the Alpine Rescue Team in Evergreen, Colorado and has a passion for surrounding himself with acronyms. He has served as the ART Field Director since 2013. The MRA’s alternate delegate to ICAR, Tom is a Level One NCRC (National Commission for Cave Rescue) trained cave rescuer. His day job is that of TM (Training Manager) for PMI’s (Pigeon Mountain Industries) VRS™ (Vertical Rescue Solutions). He is a SPRAT® (Society of Professional Rope Access Technicians) EC (Evaluations Committee) member and Level 3 Supervisor, sits on the NATE (National Association of Tower Erectors) Safety and Education Committee and participates in the ASTM (American Society for Testing and Materials) F-32 SAR Committee. Tom is a Kent State graduate with a degree in photojournalism, has served in the USMCR as a Combat Photographer and in his meager spare time, he works as a freelance photographer, writer and author.  
A husband and father of three, Tom is an active ice climber and caver.
Kenneth N. Laidlaw
Cave Rescue Awareness

Cave rescue and recovery presents special challenges. This presentation provides a background into what to expect doing cave rescues underground. The locations of cave areas in the United States are briefly outlined and terms defined. Videos are shown to establish a baseline for techniques and rescue conditions found underground.

Opportunities for cave rescue training will be presented.

LENGTH: 60 minutes

Biography
Kenneth N. Laidlaw has been a practitioner of Search and Rescue skills with ten different types of organizations over the last forty years. His qualifications and certifications include: Management, Documentation, Communications, First Responder, Rope Access, Confined Space, Cave Rescue, Mines, Mantracking, Hazardous Materials, Dive Operations, Law Enforcement, Firefighting.

Mike Lukens, Kevin Sturmer
Parallel Plaquettes Put Into Action

This presentation will focus on the transition process of staff at Rocky Mountain National Park to the parallel plaquette system as taught by Mike Gibbs from Rigging for Rescue. This presentation will cover some of the hurdles that were encountered, and the lessons learned from the transition as well as the overall benefit to the SAR program at RMNP. In addition, recent rescues that utilized the plaquette system will be discussed. This will be a classroom based presentation, followed by a hands-on interactive session. No PPE is needed for attendees.

LENGTH: 60 minutes

Biography
Mike Lukens and Kevin Sturmer are veteran Climbing Rangers at Rocky Mountain National Park, and have participated in several high-profile SAR missions over the years.

Marty Reames
Rope Ascending Techniques and Squeezebox Challenge, Classroom and Field

There is more than one way to skin a cat, as the saying goes. The same can be said for ascending ropes. This presentation will offer a short classroom segment that reviews various methods of rope ascending tools and techniques (focusing on techniques practiced by vertical cavers), and explores the pros and cons of each method.

After the classroom session, attendees will have the opportunity to observe a live demo of rope ascending techniques on the YMCA High Ropes Course, and, under the watchful eyes of NCRC Instructors, attendees will get a chance to ascend some rope (time and weather permitting). Please bring a harness, helmet, vertical gear, gloves and close-toed shoes if planning to ascend rope.

As an added challenge, Marty will be bringing a Squeezebox to challenge attendees. Not sure what a Squeezebox is? Attend Marty’s session and find out!

LENGTH: 120 minutes

Biography
Marty Reames is the Director of the Colorado Cave Rescue Network (CCRN), and a caver of 23 years. She has been teaching cave rescue in Colorado for the last 9 years and in 2012 became an instructor for the National Cave Rescue Commission (NCRC). An active member of the National Speleological Society, Marty has been integral to the representation of the CCRN to the Colorado Search and Rescue Board.

Marty and her husband Steve are avid cavers, canyoneers and skiers, and live in Colorado Springs.
Tom Wood

Anchors Aweigh: Load Sharing Anchor Options

Anchors are a fundamental component of nearly every rope rescue system. But what options are available to the rescuer who is confronted with sub-optimal anchors or a fall line that just doesn’t jibe with a single anchor point? Load sharing anchors to the rescue! This presentation covers important anchor building considerations like knot selection, load distributing versus load sharing anchors, man-made versus natural anchors and multi-point anchor angle forces.

LENGTH: 60 minutes

Biography

Tom Wood is a 17 year veteran of the Alpine Rescue Team in Evergreen, Colorado and has a passion for surrounding himself with acronyms. He has served as the ART Field Director since 2013. The MRA's alternate delegate to ICAR, Tom is a Level One NCRC (National Commission for Cave Rescue) trained cave rescuer. His day job is that of TM (Training Manager) for PMI's (Pigeon Mountain Industries) VRS™ (Vertical Rescue Solutions). He is a SPRAT® (Society of Professional Rope Access Technicians) EC (Evaluations Committee) member and Level 3 Supervisor, sits on the NATE (National Association of Tower Erectors) Safety and Education Committee and participates in the ASTM (American Society for Testing and Materials) F-32 SAR Committee. Tom is a Kent State graduate with a degree in photojournalism, has served in the USMCR as a Combat Photographer and in his meager spare time, he works as a freelance photographer, writer and author.

A husband and father of three, Tom is an active ice climber and caver.
Joseph Bobot  
**How Consensus Can Help with POA**  
The primary elements of a successful search is to first look in the right place and secondly be able to detect what it is you are looking for. When dealing with a missing person incident, all the elements are present for the application of probability theory.  
The chance (probability) that the subject is in a particular area is uncertain before and after the area is searched. These “chances” can be estimated by representing them as a percentage. (i.e., there is a 50% chance that the subject is in the area). The principles of search theory apply to any situation where the objective is to find a person or object contained in some geographic region in the most efficient manner. In this context, “efficient” means minimizing the time required to find the search object while maximizing the chances for finding it with the available resources.  
While the Matson Consensus was wildly used, a more realistic method can be applied. It can be applied to what type of scenario we are working with as well as to where we will be searching. This course will introduce another method of consensus calculating as well as taking a closer look at POA and how we can take a closer look at where and why we allocate resources to the field.  
**LENGTH: 60 minutes**  

**AMDR and Resource Allocation**  
We have all learned how to calculate AMDR, but this course will take that and apply it in a way that can be another tool in the toolbox when it comes to answering that age old question from your IC, “How long is this going to take?” It is important for the planner to be able to send the right resources to the right place at the right time. In order to keep the primary objective of success is to maximize the chances of finding the subject in the minimum amount of time using the available resources.  
Resource allocation calculations enable the planner to take a region or segment and calculate how many searchers will be needed in the given time or how long it will take to search a region or segment with the available resources based on the level of coverage they need.  
The course will teach participants how to conduct an AMDR and then apply it to a resource allocation formula created by the presenter. The students will be able to calculate ball-park estimates on how long a search should take or how many searchers are needed to search a given segment.  
**LENGTH: 120 minutes**  

**Biography**  
Joseph Thomas Bobot started his professional public service career in 1990 upon graduation from the Ohio Peace Officer Training Academy. He served as a police officer for five years prior to entering the field of EMS. It was in 1995 that Mr. Bobot became an EMT-Basic and later in 1996 obtained his Paramedic certification and in 2010 became a Wilderness EMT.  
It was during his career in public safety that he found an interest in Search & Rescue and in 2000 became a certified Search & Rescue Technician - Level II by the NASAR. Mr. Bobot received his certification as a NASAR SAR Technician - Level 1 / Crew Leader in October of 2010.  
Currently, Mr. Bobot is serving as a volunteer with the Ohio Special Response Team. There his holds the rank of Captain and Unit 6 Commander. Mr. Bobot has taken his training and experience into the world of academia where he is an Adjunct Faculty Professor at Columbus State Community College where he teaches WMD for EMS Providers and Search & Rescue as part of the Fire & EMS Science Degree program since 2004. He has also written the text for that course, “SEARCH & RESCUE, An Interoperability Approach”.  

Dan Hadley  
**Risk Assessment Profiles for Solo Wilderness Hikers**  
Current Search and Rescue (SAR) research has shaped how we perceive the individuals who pose the greatest risk for requiring SAR assistance. It looks something like a young male traveling unprepared and alone in the wilderness. While there is some truth to this, it does not tell the whole story. Now that we have a solid base of epidemiological data for SAR victims, it’s time to take a closer look at the risk factors so PSARs can have greater success. A new study from 2011-2014 helps steer the direction for future research to be conducted; it involves using proportions. For example, if there are more males than females that require SAR, does that actually mean that males have riskier behavior patterns than females, and how can we prove this? A look at solo wilderness travel in Salt Lake County wilderness area tells the next chapter in this story. Perhaps we are wrong to suggest that hiking with someone is safer.  
**LENGTH: 60 minutes**  

**Biography**  
Daniel Hadley studied Emergency Management and Wilderness Rescue at the University of Utah for his undergraduate and graduate degrees. He has volunteered on the Salt Lake County Search and Rescue team since 2010. He teaches Wilderness Medicine classes for the Wilderness Medicine Institute and has been guiding Boy Scouts on numerous outdoor adventures for 3 years.
Presentations and Presenters

**SEARCH**

**Mark Hart**  
*Coldado Salt Creek Landslide, MCI Response*  
Mark will present a lessons learned session based on the Mesa County SAR response to the West Salt Creek Landslide in Colorado, which claimed the lives of three men on May 25, 2014. Covering all angles and considerations, from Incident Command to SAR operations and resource allocation, this presentation will provide attendees with key information that could help with future Mass Casualty Incident planning.

LENGTH: 60 minutes

**Biography**  
Mark Hart is the President of Colorado’s Mesa County SAR ground team, and has been a member for the last 5 years. He has been a management trainer for the last 20 years and was a team leader on the first search team to reach the West Salt Creek Landslide.

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**Robert Koester**  
*Recent Advances in Search Practices*  
The presentation will cover recent research findings as a result of research work funded by the Department of Homeland Security Science & Technology. Topics will include updates to Lost Person Behavior based upon 150,000 new incidents collected in ISRID, new subject categories, the subject category algorithm, searcher speeds, new subject spatial models, day vs. night POD correction factors, Range of Detection versus POD, expedient field methods to obtain objective sweep width values, visualizing probability of area, new methods to obtain POA, and putting it all together.

LENGTH: 60 minutes

**Biography**  
Robert J. Koester first joined the Appalachian Search & Rescue Conference in 1981 and since then has participated in hundreds of searches, including over a hundred as Incident Commander. He holds a MS from the University of Virginia in biology (neurobiology) and is currently a visiting honorary Fellow at Kingston University in London. His contributions to search and rescue include seminal research on lost person behavior (with an early emphasis on dementia) along with creating the International Search and Rescue Incident Database (ISRID). A Search and Rescue Mission Coordinator, instructor for the Virginia Department of Emergency Management and past-president (15 years) of the Virginia Search and Rescue Council, Robert has also worked for the United States Coast Guard (conducting visual sweep width experiments), National Aeronautics and Space Administration (conducting missing aircraft radar research), National Park Service (responding to major searches and writing the draft NPS SAR Field Manual), Federal Emergency Management Agency (as an instructor), SAR Institute of New Zealand (conducting sound and light sweep width experiments), and Justice Institute of British Columbia (reviewing management texts). He is the CEO of dbS Productions which provides research, publications, and training services. He is currently conducting research and development on SAR software and apps for the US Department of Homeland Security Science & Technology Directorate. Robert has authored numerous books and research articles on search and rescue, including Lost Person Behavior and is on the editorial board of the Journal of Search and Rescue. He has presented in Aruba, Australia, Iceland, Ireland, Norway, Poland, United Kingdom, and throughout Canada, New Zealand, and the United States. He is widely sought by the media and has been interviewed by Talk of the Nation, NPR, CBC, Outside Magazine, Seventeen, United Academic, Discoveries & Breakthroughs Inside Science, Men’s Health, Backpacker, and numerous news agencies.
PRESENTATIONS AND PRESENTERS

SEARCH

GUY MANSFIELD

Error Prevention Science Applied to SAR Navigation

SAR navigation is a complex cognitive task, often performed under the stress of time pressure, emotional factors, darkness, and bad weather. Human factors science tells us that we routinely make cognitive errors (such as slips, mistakes, miscalculations), and that the rate of such errors increases dramatically under stress conditions. Risk management science tells us that it is possible to identify system-level (“latent”) conditions that can increase the probability of cognitive errors.

This course will describe how we can identify factors that cause navigation errors, and adopt tactics from safety-critical industries (such as aviation and healthcare) that will help prevent navigation errors, or capture them early when they do occur. The course will provide an opportunity to introduce science-based error prevention tactics to SAR leaders and members, and to generate discussion on how those tactics might be adopted as standard practice in training and in SAR missions.

LENGTH: 60 minutes

Biography

Guy Mansfield's background includes a Ph.D. in behavioral neuroscience, and post-doctoral research and teaching at the University of Washington and University of Illinois Medical Center. He has held director-level positions in medical information system development, and has recent experience (as Director of Quality and Safety Outcomes) in patient safety and risk management research methods at a major medical center in Seattle, WA. He has written and published research papers and scientific articles.

Guy has been active in Search and Rescue since 2008 and is a member of Everett Mountain Rescue, one of the largest mountain rescue organizations in the nation. He has deployed on SAR missions ranging from urban searches for Alzheimer patients, to technical rope-rescues, to disaster searches (Oso), to mountain and wilderness searches. He is currently Chair of the Strategic Guidance Team for the Snohomish County K9 Team. Guy helped design and establish the Field Support Certification and Navigation Certification training programs for the Snohomish County K9 Team and regularly designs search-training scenarios involving both live subjects and human remains detection.

Guy has experience teaching university-level courses (psychology and statistics), and has given multiple presentations at national and international scientific conferences. He is currently the lead navigation instructor for Snohomish County Volunteer Search and Rescue (SCVSAR), and the navigation training coordinator for the Snohomish County K9 Team.

HOWARD PAUL

Clue Awareness Classroom and Field

Are Probability of Detection (POD) statistics accurate? Can a search Incident Commander effectively use them with your team in your terrain? Do searchers really know what their effectiveness really is? Are veteran searchers better or worse than new SAR team members? What distractions (fatigue, speed, etc.) detract from ability to detect clues? This field session will answer these questions for each participant. Under a variety of terrain, vegetation, sun angles and light quality, participants will learn what their clue detection ability is. Just as importantly, participants will also learn how to duplicate the session for their team at home and be supplied all material and information to take home. Participants should wear light hiking boots and clothing for the terrain and weather, carry a daypack with the ten essentials.

LENGTH: Half day

Biography

Howard Paul, of Alpine Rescue Team, Evergreen, Colorado, is a former member of NASAR's Board of directors, the past president of the Colorado Search and Rescue Board, as well as PIO for NASAR, the Colorado SAR Board and his own team. His first love is the search side of SAR; he taught Managing the Search Function and Managing the Lost Person Incident for more than 10 years. He has taught at more than 20 national and state SAR and EMS conferences. Paul has written legislation and standards, created typing for resources, edited emergency service periodicals, carried bodies, hauled rope at 14,000’, probed avalanche debris, trudged trails, built highlines across rivers, created PSAR programs and taught Hug-A-tree presenters and received several awards including the NASAR State Award for Colorado, twice.
Earl Tilton

**SAR Operations Interoperability**

Training standards within national organizations has long been an issue of a failure to work interoperably. One national organization, though very well trained in operation management may not be fully aware of the communications limitations in the area. Another may be well versed in certain specialized tactics may fall short during a tasked mission when faced with a situation they have not trained on. This has long been an issue when working with organizations such as Civil Air Patrol, National Ski Patrol, the Mountain Rescue Association, the National Speleological Society, local rescue teams, fire departments, law enforcement agencies and independent SAR teams. Though highly proficient and capable in their chosen specialty, many of these resources are misunderstood by their counterparts and misappropriated - or at worst not called at all – despite thousands of hours of training.

This presentation will discuss both the strengths and weaknesses of these organizations in an attempt to shed light on the problems we have in a multi-agency event within the realm of interoperability, asset allocation and cooperative training in order to best utilize the limited resources we have available in the interest of affecting an organized, financially responsible and safe return of subjects in need.

**LENGTH: 60 minutes**

**Biography**

Earl began his career as a volunteer search and rescue team member in 2010 in western North Carolina where he then petitioned and created a paid position in order to formally organize and train a volunteer staff of over 50 personnel. He has since moved on to become a full time NASAR instructor/ lead evaluator, Civil Air Patrol Group Emergency Services Training Officer and is now assisting with the Southern Division (Dixie Region) National Ski Patrol Mountain Travel and Rescue program.

He is a North Carolina certified EMT, OSFM Technical Rescue technician with a dual specialty in high angle rope rescue and wilderness rescue, Civil Air Patrol Ranger program Advanced Ranger and Civil Air Patrol Ground and Urban Direction Finding team leader. Earl also holds certifications in Managing Land Search Operations, Lost Person Behavior, Homeland Security Exercise Evaluation Planning, Incident Management Team Resource Unit Leader and is working on his IMT Operations Section Chief.

When he is not traveling up and down the East Coast for NASAR courses Earl spends much of his time hiking the Appalachian Mountains with his Siberian Husky, Nikki, exploring caves in the T.A.G and working as an electrician.

Earl grew up in Northern New Hampshire and has since lived in Texas and now resides in North Carolina.

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Mike Vorachek

**Risk Assessment and Mitigation for SAR**

No SAR responder wants to go out on an actual event or training activity and become the victim of an accident. Team leadership wants to make sure that an event can be managed without an injury. Jurisdictional Risk Managers are increasingly concerned about exposure of local governments in the event of an accident. Safety is a critical component of every operation we undertake. This presentation will examine the adaptation of some common industrial techniques and processes for the identification and mitigation of risk in the SAR community.

**LENGTH: 60 minutes**

**Biography**

Mike Vorachek has been involved in various aspects of SAR since 1967 and currently serves as the Secretary of NASAR. Mike has spent the last 20 years as a volunteer with Bonneville County Sheriff’s SAR Team in Idaho Falls, Idaho. He has been the Emergency Services Officer for the Idaho Wing of the Civil Air Patrol for more than 45 years. Prior to moving to Idaho, he served 5 years as a volunteer with the Las Vegas Metro Police SAR Team. Mike retired as a Lieutenant Colonel in the US Army Reserve after 34 years of Active, Reserve, and National Guard Service. He has a Master’s Degree in Industrial Safety and has taught graduate and undergraduate courses in Emergency Management for the University of Idaho, as well as presenting various topics at SAR and safety conferences. An EMT for more than 40 years, Mike recently retired from his position as the Environmental Safety, Health and Quality Assurance Manager for a construction contractor at the DOE’s Idaho National Laboratory.
Presentations and Presenters

**SEARCH**

**Paul Woodward and Loren Pfau**

*Finding the McManus’s: A Mountain Search Case Study, Cell Forensics and Search*

In April 2014 the McManus’s, a father and son from Minnesota on a spring break road trip, disappeared on a hike in the vicinity of Mount Evans, Colorado. The resulting search for the pair was one of the largest and longest-running SAR missions in the state, spanning 107 days and involving over 5000 man-hours of SAR team members.

The initial search began on April 6th; four days after their hike began on April 2nd. During these four days, there was a severe winter storm that dropped 20+ inches of snow in the area, covering any clues that might have been present. This mission incorporated information from a wide variety of sources: team knowledge of the Mount Evans area; traditional investigative work analyzing the subjects’ possessions; computer forensics of the subjects’ laptops; and then a new type of investigation for the Team in the analyzing of the cellphone record forensics provided by the AFRCC/Civil Air Patrol.

You will hear from the Alpine Mission Leaders responsible for the planning and management of the 53 formal and informal search activities that occurred during the 107 days.

The session will be interactive with ample time for questions. You will leave with lessons learned you can apply to similar missions your team may face.

**LENGTH: 60 minutes**

**Biographies**

Paul (Woody) Woodward has been a member of the Alpine Rescue Team for 27 years. He has been a Mission Coordinator for the Team since 1992 and has also served as the Team’s Field Director, President, Training Director and Board Member. Woody is currently the President of the Colorado Search and Rescue Board (CSRB) and also serves as one of the 9 State SAR Coordinators in Colorado. In addition, he has served as the Chairperson and Vice-Chairperson for the Rocky Mountain Region of the MRA.

Loren Pfau has been involved in mountain SAR as a member of the Alpine Rescue Team of Evergreen, CO for the past 13 years. He is currently one of Alpine’s Mission Coordinators and in the past has been the Team President, Treasurer and Board member, and has served as the Secretary-Treasurer of the Rocky Mountain Region of the MRA. In 2013 Loren received his Master of Geographic Information Systems from Penn State where he concentrated his studies on the application of GIS technology to wilderness SAR. Loren works in the tech and telecom sectors and lives in Evergreen, CO.

**Chris Young**

*Interview and Investigation – Techniques for Search and Rescue Responders*

Interviewing is an important part of search investigation, and yet it is often done hastily and not fully completed. In many searches, especially those in an urban environment, an interview may be what generates the most clues on where to search. This presentation will discuss the reasons why we need to interview, and will compare and contrast law enforcement interrogation techniques with SAR interview techniques. It will also probe the “how to” mechanics of good interviewing, from the interview’s setting to the demeanor of the interviewer. The importance of the type of in-depth questions and how the gathered information can be used to paint a mental picture and profile of the missing subject will also be discussed. This information can then be used to assist the planning function to establish where to look and the best use of SAR resources. This presentation will also cover the best way to set up and conduct practice interviews.

**LENGTH: 120 minutes**

**Biography**

Christopher (Chris) S. Young has been active in Search and Rescue since 1981, managed searches since 1986, is the past reserve Captain for the Contra Costa County Sheriff’s SAR Team and serves as chairman of the Bay Area Search and Rescue Council, Inc. Chris is retired Instructor for the POST “Direction and Control of the Search Function Course” for Cal OES for 25 years, an Instructor Trainer for the “Managing the Lost Person Incident” and “Urban Search” for the NASAR, he is also an Instructor Trainer for the Red Cross since 1973, as well as specialized topics in Search Management, including Search Management in the Urban Environment, and Investigation and Interviewing in SAR. Chris has also written, published and presented search management papers at NASAR conferences, the Canadian National Search and Rescue Secretariat SARSCENE conferences, the William Syrotuck Symposiums on Search Theory and Practice, the Canadian Coast Guard College, the Provincial Sûreté Du Québec Police and several State Search and Rescue conferences on the subject of Search Management in the Urban Environment. He is also co-author of the book “Urban Search – Managing Missing Person Searches in the Urban Environment” published 2007 by dbS Publications as well as a contributing author on several other books for search and rescue. Additionally, Chris is a Level 1 law enforcement reserve with the Sheriff’s Department and the City of Danville.
Presentations and Presenters

NASAR CERTIFICATION

John Boburchuk
“NASAR Rescue Technician II Certification” Classroom and Field

John Boburchuk
“NASAR Crewleader II Certification” Classroom and Field

Tomi’ Finkle, TrotSAR
“NASAR Mounted SARTECH III”

Susan J. Thrasher
“NASAR FUNSAR Instructor Workshop” Classroom and Field
Where are you? ..HERE!

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109 – Emergency Response Intl.
110 – NASAR
111 – Verizon
112 – Orion Safety Products
113 – National Emblem
114 – DeLorme
115 – Classic Air Medical
116 – Zoll Medical
117 – Deuter
118 – Mission Manager
119 – Kirmuss & Associates/Infinity
Booth # 100
We are innovators who make purpose-built gear for the most demanding missions. 5.11 creates innovative, distinctive products to enhance safety, speed, performance of first responders and other professionals worldwide. Built on a foundation of durability, quality and value that began with the authentic 5.11 Tactical pant, 5.11 leads in delivering functionally innovative gear.

Booth # 101
Creature Craft has changed what is possible in huge whitewater rapids but when its not a thrill you are looking for they offer two versions of the “rescue craft” one for low head dams the other for flooding or ocean response. The ultimate safety for your team.

Booth # 102
For over 37 years, CMC Rescue has been developing innovative tools and techniques used by professionals in rescue and work-at-height. Today CMC is an employee-owned, ISO-9001 certified company and a leading designer, manufacturer, and worldwide distributor of rescue equipment—as well as a globally respected emergency response educator.

Booth # 103
Rock Exotica is a US based manufacturer that provides innovative technical rope access and rescue equipment for the expert user.

Booth # 104
Born in the Canadian Coast Mountain wilderness, Arc’teryx is built on the principle of obsessive, precise design and production. In-house manufacturing and design centres allow us to constantly evolve and build products the right way.

Booth # 105
For more than two decades, Benchmade Knife Company has been committed to exceeding the expectations of elite users around the world through manufacturing a broad range of products that offer superior quality and performance, built to meet the specific needs of a wide and loyal customer base. In addition, all Benchmade products are covered by the company’s LifeSharp service and limited lifetime warranty. For more information about Benchmade’s world class products and Customer Service please call 1-800-800-7427.

Booth # 106
Named for a peak in the nearby Mt. Zirkel Wilderness, Big Agnes®, Inc. is located in Steamboat Springs, Colorado, and produces award-winning sleeping bags, pads, tents and insulated apparel. Big Agnes is the exclusive distributor of Helinox trekking poles and camp furniture in North and South America. For more information, visit www.bigagnes.com.

Booth # 107
Our mission is to create innovative high performance gear that reflects our love of adventure and our devotion to the outdoors. We succeed when we meet the demanding expectation of our most discerning customers and they are proud to use our packs.
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Booth # 109
Emergency Response International specializes in Global Survival, Search and Rescue (SAR), and Emergency Preparedness Training, Publications, Consulting and superior outdoor products. ERI offers only the highest quality programs, products, and services. We specialize in tailor made training (survival, basic SAR, or SAR management), consulting services, publications, survival, or SAR and emergency preparedness equipment sales.

Booth # 110
Formed in the early 1970's, The National Association For Search And Rescue (NASAR) is a not-for-profit membership organization of primarily volunteer SAR response professionals. NASAR is the only U.S. national level SAR education and certification body that focuses on individual SAR responders and local SAR teams. NASAR also acts as an umbrella advocacy organization where people of all SAR specialties can meet, network, and coordinate their wide-ranging skills to establish maximum effectiveness in emergency situations. Since 1972, NASAR has provided its members with educational and certification opportunities, timely publications, and a variety of conferences, workshops and symposia. NASAR offers formal training opportunities that have grown to include topics ranging from the most rudimentary SAR skills through sophisticated incident management and specialty skills.

Booth # 111
The Verizon Powerful Answers Award is a multi-million dollar challenge for entrepreneurs, companies and innovators worldwide to provide innovative solutions for First Responders, Search and Rescue and Long-Term Relief. Submit your idea before June 18th for the chance to win up to $1M in prizes. http://powerfulanswersaward.com

Booth # 112
Orion Safety Products is the world’s leading manufacturer of emergency flares and other signaling devices. When you use flares, chances are you’re using an Orion product, backed by nearly 100 years of innovation, engineering technology and superior safety.

Booth # 113
Manufacturers of high quality custom embroidered, woven, and soft PVC emblems for use on uniform shirts.

Booth # 114
inReach Explorer, the world’s only truly global satellite communicator now has built-in navigation with waypoints and routing. Navigate, create waypoints, log your trip and find your way back. Send and receive text messages. Trigger an interactive SOS. Plan, track and share your journey with 100% global coverage from Iridium.
Booth # 115
Classic Air Medical provides excellent critical care transport 24/7/365. We use modern well-equipped aircraft with a network of coordinated, expertly trained medical teams linking the region’s major hospitals and first responders together when illness or injury demands. Classic also specializes in assisting Search and Rescue and we are firmly committed to your communities. www.ClassicAirMedical.com, 800.444.9223

Booth # 116
ZOLL Medical Corporation, a leader in medical devices and integrated software solutions, helps first responders manage patient care, treat, and save lives while also increasing operational efficiency. ZOLL offers innovative products for circulation, defibrillation, temperature management, ventilation, and data to improve outcomes.

Booth # 117
Deuter Sport GmbH of Gersthofen, Germany, celebrated its 115th year in 2013 and is one of the leading international technical pack brands. Deuter’s major focus is on innovation, quality and sustainability while the products stand for fit, ventilation and function.

Booth # 118
Mission Manager – a leading cloud-based incident management tool – provides a secure, integrated solution for personnel and asset management, mission planning and situational awareness. Based on Preparation, Readiness and Execution, Mission Manager allows incident commanders to efficiently manage their daily team operations, track mission events in real-time and produce automated reports.

Booth # 119
Established in 1979, K&A is a family business. In 2006 faced with pending narrow banding and radios that were not affordable for K&A owner’s SAR Team, the affordable “Infinity” line of field programmable FCC Part 90 radios were developed. Accessories destined initially for SAR such as a situational awareness GPS Mic with LCD, bank chargers, and a 12 battery AA battery clamshell were soon added. Now as OEM manufacturer to Icom with its GPS mic sold to public safety and military, K&A at SARCON will pre-release its new series of compatible lower cost GPS Microphones at SARCON, leveraging both existing LMR and Bluetooth technologies. Additionally it’s new field programmable dual band and dPMR radio will be provided for show management to use and radios will be offered at heavy discount after the show. All sales at the show will see $5 per radio donated to NASAR.
Estes Park, Colorado - Attractions

Rocky Mountain National Park
Rocky Mountain National Park offers incredible alpine hiking and trails. The town of Estes Park is often referred to as the "base camp" for hiking in the park, and many who stay at the YMCA's Estes Park Center cannot help but take advantage of all the park has to offer.

Trail Ridge Road
Trail Ridge Road, the highest continuous paved road in the United States.

White Water Rafting
Whitewater rafting trips are offered through Rapid Transit Rafting. http://www.rapidtransitrafting.com Full and half-day rafting trips! Our trips are designed for both first-time and experienced rafters, and are great for the whole family. Rapid Transit Rafting has offered raft trips from Estes Park for more than 20 years. Our morning and afternoon half-day trips are on the Cache La Poudre River, and our full day trips float the Colorado River.

YMCA of the Rockies Activities
- Horseback Riding
- Yoga
- Outdoor Concerts
- High-Ropes
- Disc Golf
- Sand Volleyball
- Indoor Pool
- Arts & Craft Shop
- Archery
- Fly-fishing
- Mini Golf
- Bird Banding
- Zipline

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