



Serving the Colorado SAR Community since 1966



August—September 2005

<http://www.coloradosarboard.org/>

Colorado Search and Rescue Board

PMB 424, 7645 North Union Blvd., Colorado Springs, CO 80920

**Special Points
Of Interest**

- ?? CSRB Meeting
- ?? RMNP Search
- ?? SAR Mgmt Academy (SARMA)
- ?? Lessons Learned

The next CSRB meeting is Sept. 10th - Alpine Rescue Shack in Evergreen at 1200.



Inside this issue:

CSRB Meeting	1
RMNP Search	1
News, Notes, and Stuff	2
CSRB Meeting Minutes	3
SARMA	4,5
FEMA Courses	5
Sweep Width Study	6
Lessons Learned	6
Your Dream Job	7
Calendar of Events	8

September CSRB Meeting

09/10/05

Alpine Rescue Team "Shack"

BOD Meeting starts at 1000

General Membership Meeting starts at 1200

No Training this Meeting. Have a great Holiday Weekend!



**Ranger 233 out of service
The CSRB remembers
RMNP Ranger Jeff Christensen**

The search for Rocky Mountain National Park ranger Jeff Christensen was one of the larger and longer in Colorado SAR in recent years. 19 Colorado SAR teams assisted the Park in the search. "Lessons learned are too valuable to pass up and not share with others," says RMNP Chief Ranger Mark Magnuson.

We are pleased to announce that he and others from RMNP will attend the **November** regular meeting of the CSRB to offer the National Park Service perspective on the search; sort of a "here is what happened, what we did, how and why." This mission has generated many questions within the SAR community (as does any mission of this magnitude). Senior CSRB State Coordinator Barry Mitchell (Douglas County SART) will be present to discuss CSRB resource requests; Tim Cochrane (Vail Mountain Rescue Group) will discuss his perspective as a CSRB-sent technical specialist that ultimately served in the operations section. This will by no means be any sort of an external review or critique - far from it. That is not our function. There are lessons learned that all of us could benefit from. I have talked with many people from different agencies since the start of the search, and many (especially those that were unable to

contribute in the search for Jeff) would like to learn more than what they could from news reports. Any public criticism offered will not be welcome, nor tolerated.

Comments are welcome by e-mail. Some people involved in the search with whom I have chatted, have had have some polite, very constructive and beneficial points. Chief Ranger Magnuson welcomes those comments, and also says, "Any criticism(s) should be brought to our attention as well. "You may send such comments by e-mail directly to him at Mark_Magnuson@nps.gov. He can address them at the November meeting if you send them early.

We applaud his willingness to openly discuss an emotional search for one of "his own" - indeed one of "our own" - in the spirit of improving our profession.

The September 10 CSRB meeting will begin at noon (brown bag lunch); as always at Alpine Rescue Team HQ, at the Evergreen exit of I-70 (north of and across the road from the El Rancho restaurant). Map at www.coloradoSARboard.org.

News, Notes, and Stuff...

Rose Snyder Consulting is hosting a Nonprofit Best Practices Summit in Colorado Springs on September 27, 2005 at the World Arena Doubletree Hotel.

Rose has spent the past 20 years helping small non-profits run their organizations like a business. She has held leadership positions in the United States Olympic Committee and other national governing bodies. She has gathered a panel of experts to share the latest best practices information regarding legal, financial, and management issues facing non-profits today.

Space is limited. If your organization is interested in attending, send an email to rosesnyderconsulting@yahoo.com to receive a PDF brochure. Read below to get a feel for the summit topics.

Nonprofit Best Practices Summit

If your organization has affiliate or chapter group members this summit will help your put together program ideas to educate these member organizations.

During this summit we will explore the Sarbanes-Oxley Act and the Grassley senate hearings and the impact these have on non-profit organizations from both a legal and financial perspective. Most nonprofit board members do not clearly understand their ethical and legal duties as caretakers of an organization. We will examine the legal responsibilities of nonprofit board members

Conflict management and resolution has become an important aspect of nonprofit governance. Organizations today are realizing that an ounce of prevention is worth a pound of cure.

Risk management and risk mitigation are imperative to all organizations, and non-profits are no exception. We will cover the latest issues on risk management from vehicle coverage, directors and officers' liability and other risk mitigation strategies.

A panel discussion will complete the day and will feature organizations that require education as a prerequisite for full club/affiliate group membership.

Please join us for a day of education, networking and sharing.

Colorado Rockies Appreciation Event

Medical Personnel and Families - This season the Colorado Rockies would like to invite all Medical Personnel and their families to the Rockies game on Sunday, September 11, 2005 @ 1:05pm against the Arizona Diamondbacks. On this day the Rockies are offering discounted tickets.

Midfield Box - \$16 = \$17 savings Pavilion - \$10 = \$3 savings Lower Rightfield Reserve - \$7

These tickets are available by clicking on the link below and using the login information.
<https://www.groupticketwindow.com/groupticket/mlb/rockies/group>
 Username: ems2005 Password: gorockies

If you would like a group of these tickets together for you department or families please call me at 303-312-2227.

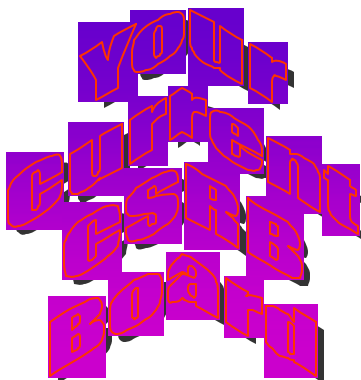
Thanks, Justin Rossi, Colorado Rockies Ticket Sales 303-312-2227

SAR Management Classes

Now is the time for your team's request to host a search management class in 2006. The CSRB adopted a policy last winter that we would hold one on the West Slope in February and one on the front Range in September.

We've received two requests from the West Slope, none from the Front Range.

The board will be planing the 2006 calendar at its Sept. 10 meeting, so please act very soon.



Howard	Paul	hmpaul@ecentral.com	President/D
Bill	Young	wyoung@frii.com	VP/D
Dan	Remsburg	n0vsx@msn.com	Sec/D/Newsletter
Bruce	Fosdick	b_fos@msn.com	Treas/D/MC
Leonard	Ginther	l.l.ginther@worldnet.att.net	D/MC
Lanny	Grant	lannyg@earthlink.net	D
George	Janson	georgej@nrel.colostat.edu	D/MC
Phil	Luethy	philluethy@juno.com	D/MC
Mike	McDonald	mgmsar@comcast.net	D
Barry	Mitchell	n0kv@arrl.net	D/MC
Ian	Vowles	Ian@modric.net	D

CSRB Meeting Minutes

07/02/05

Alpine Rescue Base

MRA – Douglas County passed all for accreditation in December. Routt County passed all except avalanche. Grand County will redo the scree & high angle training. Alpine passed all. Tests are more standard. Less exposure to disciplines. Have some trouble. National conference in Vail – 200. Represented by 8 countries.

NASAR – Memorial Day week is the conference. ASTM meeting had some ballot items. Mounted SAR standard is hard to write. NASAR has lost over \$350k over the last 3 years. Going through a lot of shuffling/restructuring. Lots of complaints about the conference cost/lodging. PLB handout.
-computers for the national system were discussed
-no actual land PLB hits in the U.S.(48 contiguous states). Boats & air only.
-coordination CAP/CSRB for ELT/PLB. Could be both.
-letter for AFRCC with concerns.
PLB calls need to have CAP coordination
CSRB will pay all of Mike McDonald's bill for the conference.

Resources—Dogs – Routt County has no dogs now. Have 2 in training. Dog injured on missions. Surgeries cost \$5k. Who pays the cost? Pueblo County needed a water scent dog but it would be ineffective due to the current. None were available. Very short mission

Rocky Mountain Trackers – 2 missions.

Standards – CRMWG – USAR is not in Ross. West Metro Fire – collapsed structure. USAR Federal resource. Task Force 1. Goes through FEMA. Problems with coord between ICP & EOC. Drew does not have final draft. Need another meeting.
-draft definitions/physical fitness.
-avalanche – Dale Atkins.

SAR Fund – Bruce Fosdick— \$635k. \$300k to pass out. Checks are in the mail. \$5-12k typical. Radios & computers are usually good. Be in Ross for next DOLA cycle – the Sheriff has to do it. Needed to be specific in the grant about what you want. Meeting scheduled for January @CSOC. John Agnew term up the end of June. We nominate – DOLA appoints.

PR/Ext – Howard Paul – e-mails with Mark Young of CAP. Situation in the past about Steve Douglas in Pueblo. Meeting to go over problems. Meeting was not needed. The problems are being addressed & taken care of.

Two bills in Congress

- prohibit NWS to do anything the private sector can do. We need to be able to call them for local forecast. Howard Paul to write a letter.
- SERVE ACT – allows 1k credit on Federal taxes for emergency responders, fire/EMS.

Howard Paul to write to get SAR included in the bill.

COMMS – Almost done. 4 NB statewide frequencies. By end of July- coordination done. Back by 1st of September. Part 90 prohibits digikey/peter on the VHF band of public safety com-

mercial. Amateur has it. Can do it for the UHF band. Less cross talk/intermod.

Motion by Ian Vowles, second by Leonard Ginther– allocate up to \$1,500.00 to pay for Ian/Leonard license fees including the UHF. Passed 5-1.

JEFFCO portables are compatible with system. Need Omnilink -scans zone controllers.

Other – state all-hazards committee—ntr.

Bruce – fallen member plaque – should CSRB take over the plaque? It is currently at CSOC. We would set the requirements for additions. Was originally SARDOG network.

Survey – Project for next year. Let everyone know within 60 days it is coming. Jerome Stiller—ART. Howard Paul to meet with them to refine what data we want. Online survey may be easier. Have a host for the website.

Projector – we do not need one. Crawford Rainwater will try to sell our old one.

Ian Vowles – newsletter – limited distribution. A lot of county folks needs the information that do not get it.
-medium of marketing?
-subscribe to news via website – Don Davis.
President & Secretary of WSC in Gunnison SAR team. Did not know we were having SARMA there.

SARMA – Lots of problems with mail apps. Purchase orders/government credit cards are a question? Folks coming from all over.
-for the future – do we raise late fees? Earlier deadline?
-limited seating.
SARCON 2006 – meeting at SARMA to finalize plan outline for the September CSRB/BOD meeting.

Tracking -Three more tracking classes – Silverton, Larimer, & El Paso/Teller.

Leonard Ginther moved and Ian Vowles seconded – motion to move CSRB meeting to 9/10. Unanimous vote AYE.

Missions –

Teller – quiet

Douglas – quiet.

CAP – Conejos mission. Calls made all over by woman but no call to sheriff. Chicago media, etc. Was a real mess.

Arapahoe – average.

Alpine – ntr

Gilpin – ntr

Mounted – very busy. 90% of subjects lack common sense (DTD). 3 missions at once. All worked together great.

Summit – Avs still happening. Peak 10 (2 trapped). Flight will fly a body. Nurse pronounced. CPR 32 minutes. Once flight has the patient, it is theirs.

Routt – busy. Lots of help from other teams. Comms issues for 911 calls.

Rocky – Used fire dept. cherry picker to get subject in litter across Boulder Creek. Used fixed Tyrolean.

SARMA

- by Howard Paul, CSRB President

The CSRB's first SAR Management Academy was successful the last weekend of July. Held on the beautiful campus of Western State College, Gunnison, students immersed themselves in the serious topics of



"Plans Section Chief - Emergency Response," "Search Management for the Initial Response IC" and "Volunteer

SAR Team Administration and Leadership." Lodging in college dorms underscored the academic mind set of the weekend as students strolled past the original 1910 campus building to meals in a Moorish-architecture dining hall (for the usual "dorm food" -- some things never change).

65 SAR professionals - both volunteer and paid, from 18 Colorado SAR teams and sheriff's offices, and seven other states, attended. While they spent the days learning about the six steps of initial incident management from Rick Goodman, the tremendous volume of work required of a Plans Section Chief, or managing a disparate bunch of volunteers that comprise their SAR team, just as much was learned during the evening's informal "educational" sessions that were part relaxation and part

swapping tales of how it's done in Larimer County, Lake County and Los Angeles County.



Planning Meeting

"I learn just as much, or more, from meeting and talking with everyone as I do in the classroom," said Art Fortini of Sierra Madre SAR Team in Los Angeles County, California. "If what I learned about the work

that Rocky Mountain Rescue Group and Alpine are doing to deal with escalating insurance rates will save my team \$10,000, it alone will pay for the cost of attending the Academy."

The weekend was tempered by the news that Rocky Mountain National Park ranger

Jeff Christensen had gone missing in the area of Mt. Ypsilon in the Mummy Range. Many attendees were concerned, as he is one of "our own." It wasn't long before topo maps of the area were laid out in the dormitory lounge and RMNP SAR Director Rich Perch, RMNP West District Ranger Jim Sanborn (both PSC:ER students), PSC instructor Drew Davis and students from the PSC:ER and IR IC classes were evaluating possible travel routes and scenarios -- while knowing they could do nothing from a few hundred miles away.

The biggest possible commendation, and then some, to Mounted Search and Rescue's Ian Vowles (Pagosa Springs), a member of the CSRB Board of Directors, for a magnificent job of coordinating the Academy. Nothing (well, extraordinarily little) was overlooked. Even the meltdown of his laptop caused not a hitch, as Ian just pulled out his back-up. Great support was freely given by CSRB Board of Directors member Leonard Ginther of the Civil Air Patrol who traveled over and attended on his dime just to assist. CSRB Treasurer Bruce Fosdick assisted, too, by teaching the financial portion of the SAR Team Administration class and Colorado resources in the Incident Command for the Initial Response IC course.



Incident Command Post

(Continued on page 5)

(Continued from page 4)



I -- well, I just did what I was told by Coordinator Vowles, although it was difficult to do

when I accidentally switched my Icom portable radio into encrypted mode.

While on campus we evaluated the potential of holding next years "SARCON" at the college, May 13-16, 2005. Western State Mountain Rescue Team's Zak Slutzky gave me a tour of the "Hartman Rock" climbing area, immediately south of town. It is a wonderful climbing area with infinite short routes at which we could hold sessions on scree evacs, vertical evacs and highlines, with chimneys and innumerable cracks. It seems a superb site to teach and practice building artificial anchors and LDAs, as the natural anchors are few and very far between.

Gunnison County is home to four SAR Teams (!) so I suspect local support would be generous.

The board of directors will consider this at its September 10 meeting, which will immediately precede the regular general membership meeting (held at noon) at Alpine Rescue Team, Evergreen. We are still evaluat-

ing



various versions of annual conference schedules and locations, fixed vs. roving, conference vs. academy, etc., so please attend the September meeting and voice your opinion.

View Just North of Crested Butte/N of Gunnison



New FEMA Web-based ICS courses

Two new Incident Command System (ICS) courses are now available on-line for emergency responders through the Federal Emergency Management Agency (FEMA) Virtual Campus.

Jointly developed by the U.S. Fire Administration (USFA) and the National Wildfire Coordinating Group (NWCG), these new courses integrate the National Incident Management System (NIMS) guidelines and meet the systems baseline training requirements. The USFA and U.S. Department of Agriculture are working together and coordinating with the U.S. Department of Homeland Security's NIMS Integration Center to ensure that ICS courses at the 100, 200, 300, and 400 levels are available in various formats and for all emergency response disciplines.

Introduction to All-Hazards NIMS ICS for Operational First Responders, Q-462 (equivalent to NWCG I-100), and Basic All-Hazards NIMS ICS for Operational First Responders, Q-463 (equivalent to NWCG I-200), are both web-based, self study and interactive. They can be found at the FEMA Virtual Campus accessible through <http://training.fema.gov/>.

NSARC Releases Sweep Width Study for Ground SAR

The National Search and Rescue Committee recently released a study called "Sweep Width Estimation for Ground Search and Rescue." This landmark study provides ground search and rescue (SAR) providers and planners a scientifically sound yet practical method for objectively determining the probability of detection (POD) for lost persons and clues. For both pre-search planning and post-search evaluation, it is essential that the search planner be able to objectively estimate the POD for a given object in a specific segment given a sensor/resource type and level of effort. The study details a simple method of planning, conducting, recording, and performing an automated analysis of an experiment and its results to determine effective sweep width, which is the cornerstone of objective POD estimation. The report fully describes detection experiments using personnel on the ground searching visually for typical SAR search objects.

These experiments were conducted at five different sites in the continental U.S. representing different eco-regions or seasons of the year. Searchers with varying levels of experience participated in the experiment with the average number of years in SAR equal to 9 and the average number of searches nearly 50. Sweep width values ranged from 142 meters for a high-visibility adult in winter-time deciduous forest of Virginia to 17 meters for a low-visibility adult in the dense marine forest of western Washington State. In addition, a loose relationship between Average Maximum Detection Range and sweep width was identified that requires further experimentation to determine whether sweep width can be inferred from a few abbreviated detection range experiments performed at the scene of an actual search.

Several factors were found that increase or decrease a searcher's ability to detect the search object. In addition to describing the experiment, the report has extensive appendices that describe the theory and application of effective sweep width. The study should be considered a must read for both search managers and for field personnel who actually carry out visual search. The results of the study have been discussed recently on SAR-list. It is important for everyone to understand the actual results. The study is 245 pages long and is available as a free PDF download (6 megs).

<http://www.uscg.mil/hq/g-o/g-opr/nsarc/nsarc.htm#Ground%20SAR%20Sweep>

Lessons Learned

One of the benefits of attending the CSRB's bimonthly meetings, is learning what our colleagues have discovered. Since most can't attend, we inaugurate this new feature, in which we'll publish those valuable stories. Our first contribution comes from Alpine's Co-director of Training, Roy Wyatt.

One week this summer, Alpine Rescue Team responded to two lost children situations - a 12 year old near Mount Evans and a 6 year old in a park near Evergreen. As a parent whose young daughter didn't get off the school bus one day, I can empathize with the parents of these two young people. So, I was refreshing my lessons and doing a bit of research into the behavior of lost children.

I want to pass along some interesting and, I hope, thought-provoking items. This information is, of course, based upon historical records and statistics. Now, I am a mathematician(!) have the degree(!) and concentrated on statistics and probability theory!!! Therefore, you can save your #2 pencils!!! I do not need to get a bunch of messages about how statistics can be manipulated, and they are just probabilities

after all, and the Sun will definitely rise tomorrow rather than there being just a 99.9999% probability that it will rise, etc., etc., etc.!!!!!!

One of the causes for a 12 year old to become lost is that he is attempting a short cut. That is exactly what this young person did. One of the behavior tendencies when lost for this category is to "Trail Run" - move down a travel aid to try to reestablish his bearings. 67% of children in this age group use travel aids - drainages, roads, trails, He went down the Metz Creek drainage. For us, confinement is important; so, if you're assigned that "lowly, unexciting" job of "driving a road", think better it. The median distance traveled is 1.6 miles downhill. I don't know exactly where he was found, but it was probably close to this.

One of the causes for a 6 year old to become lost is that she is just exploring, or following an animal. One of the behavior tendencies is to try to return home. I think this young person was found very close to home. Another tendency is that she will not answer when called and will try to hide from searchers, because she has been taught to avoid strangers. I understand we were told this exact thing by her parents. For us, this means we must be very thor-

ough and clue aware. The median distance traveled is 1.1 miles downhill. That's quite a way for a 6 year old!

Here's what really got my attention!
4% (1 out of 25) of lost children die in good weather;
66% (16 out of 25) die in bad weather.

Another study indicates that 11% (almost 3 out of 25) die irrespective of the weather. If I have misread or misinterpreted something, I'm sure someone will point it out to me. I sincerely hope that I have. This is certainly enough incentive to get me away from the dinner table or out of my office to go and help these young folks and their parents who are having one of the worst days of their lives. I pray it is enough incentive for you, also.

Did I get your attention?

Thanks to all of you for volunteering to help when someone is having a really bad day in the mountains.

Roy Wyatt
Co-director of Training and Parent
Alpine Rescue Team
roy.wyatt@worldnet.att.net



Win This Snowmobile!

Teller County SAR is holding a raffle with this beautiful Polaris 800XCSP Edge as the Grand Prize (valued at over \$9300)! Tickets are only \$3 and the drawing will be held on 12/17/05 in Woodland Park. Need not be present to win. Tickets will be available at the September and November CSRB meetings. Would make a GREAT Christmas present!

According to salary.com, SAR is a dream job!!!

SAR Captain Your Dream Job

Alive and Well

It's midnight when you get the call to assemble your team and get to work. Someone's life is on the line, and, unlike an emergency room doctor or EMT, you don't even know where your person is. Someone - the reporting party, or RP—has reported a friend or family member missing, and all you have to go on is the place last seen (or PLS), a map, and the talent and experience of your team.

Time is of the essence

Every minute counts, and often the clock has started ticking well before the rescuers ever know there's trouble. According to Robert, a veteran of over 400 searches, a benign situation, such as a well-traveled hiking trail on a warm afternoon, can become life-threatening very quickly, given an injury, disorientation, dehydration, darkness, or an unexpected storm.

Playing detective

Rescue teams generally start with a profile of the person or people they're looking for, and follow established patterns of behavior to find them. Critical points are, What were they wearing? Are they familiar with the area? Do they have wilderness or survival training of any kind? "The answers point us in the right direction," said Paul, a team captain in the Sierra Wilderness. "Someone who is trained

might build a shelter, forage for food, or try to build a fire.

Someone who's not will seek natural shelter in caves, and more often than not end up in a mountain lion's den or an old mine shaft."

In addition, SAR captains use nationally published guidelines on specific behaviors they can expect. "Sixty percent of hunters follow water. Berry pickers go uphill, and children under three don't understand the concept of being lost: believing Mama is the one who's lost, they start looking for her," Paul explained.

Davis, SAR captain for the U.S. Coast Guard, is primarily responsible for water search and rescue operations, which are completely different from mountain and wilderness efforts. "The main problem we have, aside from weather, is the area we have to cover, and mapping a grid of open water so we can make sure we've covered it all. You'd be amazed how easy it is to miss a small boat or a person in the water behind a large swell. High winds can make helicopter rescues very difficult, but sometimes there's just no time to get a boat out to them."

Huge responsibility

A search and rescue captain not only feels responsible for finding the lost party, but also for keeping his or her own team safe. "You're dealing with conditions that have already gotten someone lost, hurt, or worse. So your job is to send your teams out equipped with gear, provisions, and training not

to get themselves into the same situation," said Robert.

Unsung heroes

Many SAR "professionals" are actually volunteers who devote perhaps 15 hours a week to the search and rescue "job." High levels of burnout are often attributed to something called "critical incident stress," a syndrome somewhat akin to post-traumatic stress disorder, known primarily among emergency workers.

The good news

Believe it or not, statistically 98 percent of lost people are found alive and uninjured, although they're usually "cold, hungry, and really glad to see us," said Paul. That's good news for all amateur hikers. And the satisfaction of returning a lost person to his or her loved ones is unparalleled, paid or not.

So if you want to get called out in the middle of the night, with the possible reward of saving someone's life, buy yourself some hiking boots and a powerful headlamp and dream on!

For more information

To learn more about search and rescue professionals, consult the National Association for Search and Rescue at <http://www.nasar.org>

- Lauren Sheppard, Salary.com Contributor



PMB 424, 7645 North Union Blvd
Colorado Springs, CO 80920

Upcoming Calendar of Events

CSRB Meeting	9/10	Alpine Rescue
International Technical Rescue Symposium 2005	11/4-11/16	Ft. Collins, CO
CSRB Meeting	11/10	Alpine Rescue

Remember to send newsletter articles to: "n0vsx@msn.com". Mail to: Dan Remsburg, 1913 County Road 782, Woodland Park, CO 80863. Do you have a great SAR photo? Any photos submitted can be scanned and returned.