



## Special Points

### Of Interest

- PLBs
- Missions
- Training
- Open CSRB Positions



**The next CSRB meeting is January 9th at Camp George West in Golden**

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## NASA Shuttle Disaster Response

The Colorado Search and Rescue Board has been asked to provide assistance in the on-going search for remnants of the Shuttle Disaster. The Federal Emergency Management Administration (FEMA) has called on CSRB to provide resources for the on-going search mission.

Initially, Colorado was called upon to find a Search and Rescue Plans Section Chief. Initially, FEMA tried to locate them themselves and later came to CSRB for assistance. Specific criteria and training was required, as well as an ICS background. Two candidates meeting the task requirements were found when FEMA called backed to say someone from the State of Washington would be filling the position.

The plan was to use U.S. Forest Service Wildland Fire Crews as ground search personnel using Type III grid search procedures, because they were available and already in the federal payroll system. These people are being assigned to 3 week assignments. The Plans Section Chief and Agency Liaison personnel from search and rescue teams would help to delegate the duties and training required. SAR personnel would then be asked to come down as technical specialists to help over 2000-3000 fire personnel commence probably the largest search in US history.

Maybe a quick synopsis of the magnitude of the search. The crews working east of Fort Worth-Dallas area are searching a path 11 miles wide and 240 miles long (2,640 square miles). Using grid search techniques, this requires searchers traveling at .29 miles per hour (walking one mile in 3.5 hours) to make several passes in each mile of search area to get coverage with ten foot spacing. A grid search line over a mile wide? The Command Post wants 95% POD coverage. Can you imagine a line search this big?

The weather has also been great. Four inches of rain fell last Thursday followed by an ice storm. It was so heavy, it destroyed one of the tent cities that were set up for Wildland Fire Crews. So, everyone had their Gore Tex and things were fine, right? Wrong, the underbrush etc. is tearing the gore-tex. Time to switch to other materials.

Some of the other interesting items include facts surrounding the critters in the area - snakes once it warms up and maybe a few alligators. Sounds like fun, if it warms up!

Colorado initially sent five people representing several teams (Alpine Rescue Team, El Paso County SAR, Larimer County SAR, and Rocky Mountain Rescue to Palestine, Texas for a 9 day assignment. The people sent needed to be team leaders from their teams with 3-5 years experience. They also needed the physical stamina to search 12 hour days for the entire time they would be deployed. By the time the newsletter comes out, these people will have returned and a second group of five will be preparing to leave (Alpine Rescue Team, Douglas County SAR, and El Paso County SAR will be represented at this time). The agency liaison then meets into the evening after crews come out of the field.

We hope for a short debrief at the CSRB meeting. Some dissent and complaining aside, the mission appears to be good. Thanks to the volunteers who could give of their time (even if they weren't volunteers for the time period of assignment).

**Lessons Learned.** FEMA expects an immediate response to their *(cont. on page 5)*

# News, Notes, and Stuff...

May 28-31, 2003

## Don't miss NASAR's 31st Annual Conference and Exhibition!

What do Personal Location Beacons, "Surf Rescue," and the Columbia Space Shuttle Disaster all have in common? They are all workshop topics at NASAR's annual conference. This year's event is shaping up to be the biggest and best in the organization's history. Featured presenters will include notables such as tracking expert, Ab Taylor, and SAR dog guru, Sandy Bryson. Bo Derek has been invited to serve as Mistress of Ceremonies for the opening ceremonies. March 14, 2003 is the deadline for "early bird" discounts, **register today!**  
<http://www.nasar.org/general/conferences.shtml>

The Colorado House bill that exempted from prosecution peace officers, firefighters and ambulance crews -- but not search and rescue personnel -- for using a cell phone or radio without a "hands-free device" while driving has died in committee.

Howard M. Paul, Public Affairs Manager  
 Colorado Search and Rescue Board Member, Emergency Service PIOs of Colorado



## UTS Tracking Class

El Paso Search and Rescue will be hosting a UTS Track Aware/TK1 class May 9-11th at their base: 3950 Interpark Drive in Colorado Springs. Pre-register for the course prior to April 29th. For more info, contact Paula Allen @719-264-2439 or e-mail: "allenpaula@aol.com". Further details can be seen at the UTS website: "www.utstrackingservices.com".



To those interested in CSRB hat pins:

There are only a few (yuk, yuk) of the CSRB hat pins, which are available from CSRB (\$5 each) - the bag is currently in the custody of the CSRB President - Bruce Fosdick. It is easiest to let Bruce know to bring them to a meeting because it probably costs more to ship them than the pin is worth.  
 Bruce Fosdick

## Volunteer Mileage Deduction

The following bills to increase the amount of volunteer mileage deduction were not passed into law in the fall 2002 legislative session. They are worth following, and may be introduced again in the spring 2003 legislative session. If they are reintroduced be sure to write your senator and representative to express your views and opinions. Senator Russell Feingold, Wisconsin, introduced S.2761 and Representative Todd Platts, Pennsylvania, introduced H.R. 5229. The bills would have changed the current deduction from \$0.14 per mile to \$0.365 per mile.

If you ever need to find your way to the regular bi-monthly meetings of the Colo. SAR Board, there is a map on the OEM website. Go to: <http://www.dola.state.co.us/oem/images/cartoem.gif>



Fosdick	Bruce	B_FOS@msn.com	MC/D/President/ Treasurer
Wichmann	Ann	awlogan@mindspring.com	D
Jansen	George	georgej@nrel.colostate.edu	D
Ginther	Leonard	l.l.ginther@worldnet.att.net	MC/D
Mitchell	Barry	NOKV@arrl.net	D
McDonald	Mike	mgmsar@attbi.com	D
Thorsen	Dave	dthorson@starband.net	D
Remsburg	Dan	remsburg@bigfoot.com	D/Newsletter
Stuebe	Brian	stuebe@dimensional.com	D/Sec
Young	Bill	wyoung@frii.com	D/VP

# CSRB General Meeting Notes

## January 9, 2003

**Elections:**

This year there were 4 candidates for the 6 positions open on the board of directors.

Mike McDonald, Barry Mitchell, George Janson, Ann Wickman

Bruce Fosdick made the motion to accept the candidates without a vote. The motion was seconded and there was no discussion. The vote was accepted by all teams present. ? (15) teams were represented in the vote.

The new board consists of:

Fosdick	Bruce	bfosdick@uswest.net	MC/D/Pres/ Treasurer	02/04
Ginther	Leonard	leonard_ginther@emass.com	D/Secretary	02/04
Janson	George	georgej@nrel.colostate.edu	MC/D	03/05
McDonald	Mike	mgmsar@attbi.com		03/05
Mitchell	Barry	N0KV@arrl.net		03/05
Remsburg	Dan	novsx@msn.com	D	02/04
Stuebe	Brian	stuebe@dimensional.com		02/04
Thorson	Dave	dthorson@amigo.net		03/05
Wickman	Ann	awlogan@mindspring.com		03/05
Young	Bill	wyoung@frii.com		02/04

**Training:** (George Janson Training Chairman)

Managing Land Search Operations (MLSO):

Douglas is hosting a class January 25-26, February 1-2, 2003.

This Class is the second in a trial classes.

**DOLA:**

Next meeting in Frisco coming Wednesday.

**Special Interest Sections:**

**Dog Liaison:**

SARDOC has a new board. Two dogs will no longer be responding. Dog food promised by NASAR has not been delivered.

**MRA:**

National conference in West Valley Utah. Winter conference the end of January. Park and Rocky Mountain due to re-certify this year

**ASTM:**

Nothing new.

**NASAR:**

**Aviation:**

Nothing.

**EMS:**

- 1) Bill to amend background checks for EMS.
- 2) Bill to license Air Ambulance Services. Transpiration of sick people can be exempt until medical services are applied.

**Help Wanted:**

Still looking for State Coordinators.

**New County Sheriff's:**

36 new Sheriff's. CSRB has 15 minutes of conference time to explain SAR responsibilities.

Second weekend in February, SARDOC and CSRB have booths at the conference. Bruce needs representatives from CSRB to staff booth Wednesday and Thursday (12 & 13) at the annual Sheriff's Association Meeting.

**PLB Discussion:**

406 Beacons will be legal in July this year. CSRB is listed as primary contact and they will in turn contact the Sheriff.

**CSRB WEB Page:**

Don Davis has stepped up to take over the WEB page. The WEB page has changed names to [www.cosarboard.org](http://www.cosarboard.org). Don will need help rebuilding and transferring data.

**Other:**

**CSRB-ICS-211** sign in sheet. Met with varying responses.

**License Plates:** Application will charge \$200.00 and send a designed for the plate. Includes a one time \$25.00 fee. Need to sell quite a few of these.

There was a motion to approve \$200 for fee and mailing to request interest in getting a SAR license. Motion carried (directors only). Mike McDonald made motion, Bill Young seconded the motion. With the vote the motions carried.

**Team Jackets:**

Bill Young ([wyoung@frii.com](mailto:wyoung@frii.com)) would like to get information on team jackets.

**Mission Reports:**

Rocky Mountain Rescue: Nothing to report.

Summit: Missions down by half. Nov 16 two skiers took 1800-ft ride down Quandary Peak, over two cliffs. Both ended up on top of the debris. Walked out nearly a mile. Both parties were hypothermic. Both survived.

Park County: Some discussion about charging for SAR with new Sheriff.

Teller County: Four wheeler in burn area.

Larimer County: Highest number of searches in last 10 years. 82 calls, 52 of which fielded teams. Since last meeting, 10 calls 5 self-recovered. Urban searches for lost children. This brought up questions about team uniforms.

El Paso County: Searches down 25% only 134 for the year.

SARDOC: Alzheimer's response in Jefferson County.

Douglas County SAR: Missions up but did not field as much.

Gilpin: Quiet, some cell phone rescues.

CAP: Year-end 40 missions (average) and about 71 incidents.

Arapahoe: Quiet.

Alpine: Six-month and year record 86 missions. Team jackets changed from against to for due to visibility. Two new vehicles coming on line.

State Coordinators: No report.

**Board Meeting:**

Bruce Fosdick - President

Bill Young Vice - President

Brian Stuebe - Secretary

Mike McDonald - Treasurer

# Douglas County MLSO Class



They said that if you scheduled it, they would come. These words did not hold true the first time the class was scheduled. This time, however, they did come to the Highlands Ranch Law Enforcement Training Facility in Douglas County to partake of the new Managing Land Search Operations (MLSO) class that was held January 25-26 and February 1-2.

For four grueling days, bulbs burnt out and minds expanded with the wealth of information being presented by a host of "OI' Mossbacks" while energy levels were maintained by the ever-present "cookie box". This box played a larger role than some may have realized!



Members from many walks of emergency services showed up for the class, the second of the new curriculum being taught. Luckily for the students, there were more than the usual amount of instructors on hand to iron out the kinks that you always get when you are starting out with a new lesson plan and materials. The students also play a hand in critiquing what works and what does not so the class can be further refined in the future.



Students learned the fine art of Search Management as well as the host of acronyms that are injected into the process. LKPs, PLSs, PODs, POSs, POAs, and IPPs flew around the classroom with reckless abandon oftentimes colliding with the likes of Mattson and pre-plans.



Giddy with their newfound knowledge, the students dove into the tabletop map exercises with a new sense of being. They rapidly discovered how much fun it is to stay in base and work on the overhead team! Segmenting, prioritizing, assigning, planning, and strategizing, they were feeling their way into a new realm of Search and Rescue. Many came away with a renewed respect for the IC, Ops, and Plans Chiefs. Their job, physically less demanding than being in the field, sure was a lot more demanding mentally and emotionally! No wonder so many of them have gray hair (or very little hair)!

We can make light of the class and how fun it was, but the fact of the matter is that it is serious business. We need competent, new search managers to work their way up into the roles that are being vacated by the old-timers. New methods are being introduced while the tried-and-true methods need to be passed down to the new crop. This class is an excellent start towards that goal. We thank Douglas for hosting the class and all the instructors for their time.

## PLB UPDATE

The FCC regulation on PLBs released last October requires the beacons to meet the requirements of "RTCM Recommended Standards for 406 MHz Satellite Personal Locator Beacons (PLBs)," Version 1.1, RTCM Paper 76-2002/SC110-STD. It also requires the PLBs to transmit a Morse code "P". The RTCM standard didn't cover this. RTCM has issued an addendum, dated February 4, 2003, to address this.

The recommendation is for the Morse code "P" to be transmitted after the pause in the 121.5 MHz signal when the 406 MHz signal is transmitted. So when listening to a PLB on 121.5 MHz, it would sound something like this: *sweep tone - no signal or audio (2 seconds max) - Morse code "P" - sweep tone*. The audio signal can be an upward or downward sweep tone.

The no signal break occurs every 50 seconds (+/- 2.5 seconds) when the PLB transmits a digital burst of data on 406 MHz. Morse code "P" is dit dah dah dit and will take about 1.5 seconds to transmit. The Morse code "P" only applies to PLBs sold in the US. This is to distinguish them from 406 MHz ELTs and EPIRBs which have been legal in the US for about 10 years and don't transmit a Morse code identifier.

Other details from the RTCM standard: The power output on the 121.5 MHz signal is 25 to 100 mW max. (For those who just have to know, the actual PLB requirement is 25 mW -0 dB, +6 dB, Peak Equivalent Isotropic Radiated Power (PEIRP), which is the power supplied by the transmitter to the antenna multiplied by the gain of the antenna.)

A PLB (or any 406 beacon) may have a built-in GPS or a port to attach to an external one. On beacons so equipped, the GPS position is transmitted as part of the digital burst.

!\*\*\*! Although the beacon transmits the position data once a minute, and the GPS is updating itself continuously, the requirement is that the GPS shall not update the beacon more than once every 20 minutes.

!\*\*\*! If the PLB stops getting position data, it shall retain the last position for 4 hours, then reset to default which is no position data.

!\*\*\*! The transmitted beacon position is limited to a maximum precision of 4-seconds (of lat/lon).

GPS precision = how precisely (the number of decimal points) the GPS provides the data. This has nothing to do with GPS accuracy = how close the GPS can determine its position. A GPS can precisely give you an inaccurate position.

Minimum operating time for the battery is 24 hours at its expiration date.

There are two categories of PLBs: Category 1 which can float and Category 2 which can't. Category 2 PLBs must have a label that says "This satellite PLB will not float." (readable underwater?)

The beacon requires at least two independent mechanical actions to activate it. The PLB should have a visual and/or audible indicator that it is activated.

The PLB should have a test control button or switch that automatically returns from the test position without passing through the "ON" position. In test mode, the beacon is supposed to transmit a code that indicates it is only a test transmission. Interestingly, all beacon data except position data is transmitted as part of the test message. The test transmission on 121.5 is not to exceed 3 sweeps or 1 second, whichever is longer.

The actual frequency range is 406.0 to 406.1 MHz, in 3 kHz steps. The original 406 beacons transmitted on 406.025 MHz. The Cospas-Sarsat system has maxed out on beacons on that frequency, so beacons built after January 1, 2002 transmit on 406.028 MHz. When they max out that frequency, new beacons will transmit on 406.031 MHz, etc. The 406 signal is 5 watts nominal.

Mike McDonald

(cont. from page 1)

requests. They are used to dealing with paid personnel being able to leave immediately. When teams take hours (even days) to call back with personnel, FEMA went elsewhere and filled the orders without Colorado. We were initially asked for 1 week and then five additional weeks. So far we have filled two and maybe three. We were cut out of several weeks due to delays in teams calling back.

The second lesson is that since the federal government was involved FEMA and the US Forest Service used the Incident Command System - not some half-baked off-shoot of ICS, but a complete set-up. People wishing to be deployed should have a thorough knowledge of ICS and this was used to determine some of the assignments amongst the personnel. We would suggest that all teams work towards a total acceptance of the ICS program and not try to change everything to suit themselves.

Becoming federalized is a paying job. Members became part of the USFS while deployed. What a concept!

# Colorado Search and Rescue Board's Annual J. Hunter Holloway Spirit Award

J. Hunter Holloway had an enormous influence upon SAR in Colorado. Through his years of work in public safety education, training of SAR team members, promotion of Colorado's SAR team efforts to the public, field responses and mission management, SAR team as well as CSRБ leadership, and representation of our SAR community on the Division of Wildlife's SAR Advisory Board, Hunter worked tirelessly to advance the skills and professionalism of Colorado's SAR responders and SAR system. His ultimate goal was to insure the public could travel the backcountry of our state, having in place the nation's foremost SAR community to provide aid when needed. His spirit is remembered by presentation of this award to those in Colorado who best exemplify his dedication to Colorado SAR.

Past recipients of the award include:

- \* Tim Cochrane, Vail Mountain Rescue Group, 1993 and Dixie Ferrick, United SAR, 1993
- \* Mineral County Sheriff Phil Leggett, 1994
- \* Stan Bush, Arapahoe Rescue Patrol, 1995
- \* Ron Bookman & Charley Shimanski, Alpine Rescue Team, 1996
- \* Earl & Betty Berger, Colorado Wing, Civil Air Patrol, 1997
- \* Joanne Stone, Gunnison Co. S.O., 1997
- \* Howard M. Paul, Alpine Rescue Team, 1998
- \* Drew Davis, Larimer County SAR Team, 1999
- \* Tom Frazer, El Paso County SAR Team, 2000

Any individual, whether or not directly affiliated with a SAR team, is eligible for this award by having demonstrated their dedication to the Colorado SAR community, or to (a) subject(s) of a SAR mission in any of the following areas:

- \* Personal effort in public preventive safety education.
- \* Personal effort in professional education of the SAR community.
- \* Extraordinary efforts in a search or rescue mission, either afield or in mission management.
- \* Extraordinary efforts in ongoing support of SAR missions during the entire year.
- \* Personal commitment to the professional advancement of Colorado's SAR community.

Nominations will be accepted from any member of the CSRБ or CSRБ member organization, or any Colorado county sheriff.

Nominations are due to the CSRБ by April 1st. The award will be presented at the Annual CSRБ SAR Conference in May.

Nominations must include, at the minimum:

- Name, address, organizational affiliation and telephone number(s) of the nominee
- Name, address, organizational affiliation and telephone number(s) of the nominator.
- Complete SAR biographical profile of the nominee
- Relevant personal biographical information
- Complete details of the events, or ongoing service, for which the nominee has been chosen.

The greater the detail of the above information, the easier it will be to evaluate the appropriateness of making such an award.

Mail nominations to:  
**J. Hunter Holloway Spirit Award**  
**Colorado Search and Rescue Board**  
**7645 North Union Blvd., #424**  
**Colorado Springs, CO 80920**

## SARDOC UPDATE

I hope you had a wonderful holiday season.

As with all the SAR groups, the management of SARDOC has once again been modified. I will be serving as the 2003 SARDOC Coordinator, overseeing training, testing, and fielding of all SARDOC resources.

As a refresher for those familiar with SARDOC and new information for those not familiar, we are a state-wide SAR dog group, in existence for 20 years. We have operational dog teams throughout the state, but primarily along the front range/I-70 corridor, with some western slope/southwest participation.

SARDOC serves as a training/testing organization for canine only. We do not train the individual in their personal skills. We require that all SARDOC operational personnel, whether field support or handler, be personal skills fieldable with their local agency prior to any type of SARDOC testing. They are not allowed to field prior to certification without special permission from the SARDOC Coordinator. Our primary focus is wilderness search, however, we are called to participate in urban searches, water, evidence, cadaver, and disaster. The bulk of our dogs are wilderness search operational with a few resources water, evidence and cadaver qualified.

Although our personnel field through their local agency per local agency protocols, we do offer a dispatch service to provide closest available SARDOC resources if the agency does not have direct access to a SARDOC resource or other qualified resource. To access this service contact the **Larimer County Sheriffs Dept. Communications Center at 970/416-1985 and**

**asked to have the ON CALL SARDOC DISPATCHER return your call.** LCSO changed their phone number about two years ago, so you may need to update your current information sheet. **It is imperative that you specify to have the On Call SARDOC dispatcher return your call, as LCSO dispatches for LCSAR, Dive, Wildfire and other ES personnel as well.** The Larimer County canine personnel and other LCSAR personnel assist in handling the SARDOC dispatch rotation, but not giving full information to the dispatcher may result in receiving a call from an entity other than SARDOC, creating a time delay.

I also have a request for agencies/entities utilizing our resources. Should you run into problems obtaining resources, problems that arise during a mission, or have a problem in receiving a return phone call when requesting the on-call to contact you, please call the same LCSO dispatch number and have them request to have the **SARDOC COORDINATOR** paged to return your call. In the past, we have had personnel call individuals directly that weren't involved in the particular situation, and this generates a lot of round about sorting out. The SARDOC Coordinator is responsible for the fielding/dispatch portion of SARDOC and would be happy to address any concerns/issues that you have.

We and our canine companions look forward to working with you this year.

Have fun training and be safe searching!

Cheryl Kennedy  
Search and Rescue Dogs of Colorado  
SAR Dog Coordinator

## A Great Tool for Recent MLSO Grads!

### SAR Program Development Toolbox

A SAR program development "toolbox" has been posted on the All Hands Consulting website. Contents: Listing of SAR Program Elements; Outline (how to do) SAR Hazard Vulnerability Assessment; Components of a Comprehensive SAR Plan; Summary of the Major Job/Responsibility of the Search

Manager; List of IC SAR Tools; Suggested Personal Equipment for Search (for the search manager); an Example Mandatory Training for Search and Rescue Coordinators.

To download this "toolbox" go to:  
<http://www.allhandsconsulting.com/toolbox/SAR%20Program%20Development.pdf>



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

### Upcoming Calendar of Events

DOLA Grant Input/Receipts	4/1/03	Grand Junction
Holloway Nominations Due	4/1	CSRB
UTS Track Aware/TK1 Class	5/9-11	Colorado Springs
NASAR 31st Annual Conference	5/28-31	Reno, NV

***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.***