



## RACES – Mountain District – Mile High Radio Club

PO Box 1204

Idyllwild, CA 92549-1204

E-mail: [mhrc@arrl.net](mailto:mhrc@arrl.net)

[www.milehighradioclub.org](http://www.milehighradioclub.org)

Repeater Station WA6SSS 146.895 (-) pl 118.8



**Officers** - President: Bill Baker KN6JV, Vice President: Jim Kent KF6TYZ, Secretary: Vi Hallacy K6VBH, Treasurer: Paul Miglin KG6TIL, **Board Members**: Rick Foster KG6TIJ, Tom Unwin WA6SSS, Bill Tell KD6KTV

# MOUNTAIN FLASHES – NEWSLETTER

## SEPTEMBER 08

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### September – Wednesday Roll Callers – 1900 Hours:

3<sup>rd</sup>: Vi K6VBH                      10<sup>th</sup>: Carroll K6PRB  
17<sup>th</sup>: Bill KN6JV                     24<sup>th</sup>: Bill KD6KTV

### County wide Monthly Roll Call

*Will be on Sept 8<sup>th</sup> -- It is usually on the 1<sup>st</sup> Monday but this month it's a holiday. Roll call normally starts around 1845 and ends when a stand-down order is issued.*

*Mountain Roll Call is on the Idyllwild repeater 146.895(-) 118.8.*

### KN6JV's Korner

I swear one of you folks has stepped on the calendar accelerator. Zip! And the year is going away.

Last Meeting: Thanks to Bill KD6KTV for his presentation on COAX cable and assemblies. As he shared with us, coaxial cables are used in various applications. It was very informative and an amazing array of very sophisticated cables.

Fire season: Most things have been quiet in the District. Glad to have no fires but remember the toughest months are ahead with the Santa Ana winds. No word yet on having fire watches as yet. I met and briefly talked with Bn. Chief Richard Gearhart about watches and he wants to meet with me in Sept. to discuss it further.

The Jazz Festival: Communications planning is finished (this is being written before the Festival) so no comments in this letter. We're ready!

Misc: I was asked by OES to attend a meeting of agencies and local camp directors to explain the value and purpose of Amateur Radio and how it might help us all if the camps had licensed amateurs and



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communications equipment. Three camps were represented and seemed willing to consider and/or undertake efforts in that direction. It will be interesting to see what happens. There may need to be some help in setting up equipment although there seems to be more interest in portable applications. We may need to consider having another license class if it looks like it will be needed. If so we'll target the short form with most of the effort being on the part of the "students" and follow-up with a couple of heavy classroom reviews.

September's training will be a combination of types of phonetics commonly used and language issues common to County Fire communications. Christy KG6ATV will be the presenter.

Events coming up: We haven't had any kind of field / fun event in some time and a Fox Hunt has been suggested. Your input on this would be welcome as well as suggestions on other field events using our radios. Along with that, setting up such events needs to be considered.

William B. Baker, KN6JV,  
R.A.C.E.S. Emergency Coordinator,  
Riverside County Mountain District

### NOTICE TO ALL RACES MEMBERS – Be Prepared

In view of the fact, that we have recently had a number of small and some not so small earthquakes, it would be advisable for all RACES members to download the most recently available RIVERSIDE COUNTY RACES MEMBERS MANUAL.

The manual is frequently being updated, but the most recent copy can be found at [www.rivcoraces.org/](http://www.rivcoraces.org/)

This manual is very informative about RACES activities and should be read often by RACES members until they are familiar with all aspects of RACES operations. It also has a list of what you should have in what we have been calling your "**Get-Away Bag**". It's time for all of us to take a look at our "Bags" and see what we have taken out to use and not replaced, such as batteries and who knows what else. When the call comes we need to **BE PREPARED**.

Vi Hallacy, K6VBH  
MHRC Secretary

### MHRC/RACES - August Meeting Minutes

The meeting was called to order at 1640 by President Bill Baker, KN6JV, Mountain RACES E.C. There were 7 members present. Vi Hallacy, K6VBH, Secretary, asked members to read the minutes in the last Newsletter. Paul Miglin, KG6TIL,

Treasurer gave the financial report. There is \$2,390.38 in the RACES account, \$1,713.28 in the Club account and \$877.46 in the Repeater account for a total of \$4,981.71.



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Bill B. submitted a letter, written to Bob Turner, KI6DIP, of Perris regarding use of our repeater, for the member's approval. It was approved with minor changes and will be mailed. Bill asked members to consider a By-Laws change and after discussion Jim Kent said he would write the change stating that only members living in the Mountain district would have voting rights, the Mountain District consisting of Idyllwild, Fern Valley, Pine Cove, Mountain Center, Poppet Flats, Garner Valley and Pinyon.

Bill has sent a letter to Gerri Sue Haney of Guaranty Bank requesting a donation to cover the cost of a portable repeater and a cross band radio set. The cost of such equipment is estimated to be approximately \$5,700. Other ways of getting funds were also discussed and Vi Hallacy will look into getting a grant from the Idyllwild Community Fund. Gina Moran-McGough, Riverside County OES, has said she would send Bill an e-mail of another possibility for a grant.

There was a short recess for refreshments furnished by Christy Huss, KG6AVU, and the RACES part of the meeting was started.

Bill Tell, KD6KTV, gave us a very interesting and informative talk on cables. He passed around several examples of the cables made by South Bay Cables here in Idyllwild where he is employed. Many of these cables are used by the U.S. Navy to provide communications between submarines and naval ships.

After Bill T's talk, he reported on the repeater inspection for August. A new sign-in sheet is needed and he would like to have another person learn how to do the inspection, also. Christy Huss and Paul Miglin volunteered to help. Bill B. stated there has been a loud noise on the repeater occasionally lately. If you hear this, he asked that you turn off the repeater for a time and then turn it back on. He and Tom Unwin, WA6SSS, are working on solving this problem.

The Pine Cove Water Dept. which owns the building the repeater is in wants the Anza repeater cabinet rotated so the doors open in a different direction. Bill B. is working on this and Bill T. and Rick Foster, KG6TIJ, said they would help also.

Bill B. announced that we would be participating in the Great Shake-Out Drill to be held in November on the 13<sup>th</sup> and 14<sup>th</sup>. More to follow in the next couple of months. He asked if we would like to have a booth at the Idyllwild Health Fair to increase our community exposure and the group agreed this would be a good idea. Bill will look into this.

Several people have volunteered to work at the Jazz Festival August 23<sup>rd</sup> and 24<sup>th</sup>. This is a RACES event and RACES members participating are asked to wear RACES uniforms.

The meeting was adjourned at 2020. The next meeting will be on Sept.11.2008 at the Idyllwild Fire Station.

Vi Hallacy, K6VBH  
MHRC Secretary



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## Radio Direction Finding made easy



Whether you call it Radio Direction Finding (RDF), hidden transmitter hunt, or foxhunting, the objectives are the same; find a radio signal using triangulation. Hello, my name is Chris Milford and I have enjoyed RDF'ing for several years in my North Dakota club. This hobby of amateur radio has many facets for us to spend out time on, from HF contesting to weak signal VHF'ing there seems to be something in it for anyone. If you're like me, you may have gotten into amateur radio working repeaters and operating FM from handhelds. There is a lot more that you can do with your handheld then just talking with friends on the repeater. One of these activities is Radio Direction Finding.

There are several reasons to participate in RDF, a few of these reasons include: locating malicious transmitting stations (Jammers), locate the bearing of a new repeater, hunting high altitude balloons and probably the most important reason for mountain folk to participate in RDF'ing is to assist in finding lost persons.

You may have seen people using directional antenna's or you may have heard of high tech Doppler shift systems that people like the FCC use to track down pesky jammers, but these may seem difficult to obtain or build for the first timer. When my club in the Dakota's got me into RDF'ing we used all manor of antennas, but with a little experimenting I was able to discover a much easier way to find a hidden transmitter, using my handi-talki (HT).

Practice makes perfect, and our club used to practice each week during our Sunday night dinner/coffee meet. The way we would start out is to meet and decide who would be the hidden transmitter and how many teams would go out to find them. Once we picked the hider we gave them about 15-20 minutes to get hidden, the rules to hide are simple, we had to be in a public location, somewhere within the city limits, and once hidden we couldn't relocate. Transmitting would take place 1 time every 3 minutes and we would have to be on the radio for 30 to 40 seconds. It helps to isolate a frequency away from repeaters, and we were not allowed to use any repeater frequency, (doing so would lead everyone to the repeater site).

As for equipment I started out using a 5 element yagi antenna hooked up to my handheld radio, after using this large balky equipment for awhile and hopping out of the car, hooking the antenna up and spinning 360 degrees every few minutes I realized this is not efficient. True a high gain yagi will narrow your search area quicker; you will spend time setting up your system and loose on time. We discovered that you hold in your hand a directional radio equipped with a good enough antenna. So after putting my yagi to more useful operation on my base station mast I went to a HT only direction finding setup.

You may be saying that the HT only has an omni-directional rubber ducky antenna, not a highly directional antenna, and that is true if you ignore your own body. The body is an awesome attenuation device and you can prove this for yourself, try pinging a repeater some distance away from your location and then turn your back to the repeater and try hitting it again with your transmission. Something that helps is a S-meter on your HT, what you are looking for is for a lower rating on the meter when your back is to the repeater then when you are facing it. If you do not have a S-meter on the radio then use the audio coming from your radio speaker.



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To locate a hidden transmitter using your HT, have the radio as close to your body as you can, usually next to your chest this area provides the most attenuation, the signal has to go through the mass of your body, and then it's as simple as spinning around in place and listening to the signal of the transmitter. When the signal is at its weakest stop spinning around, the transmitter is located usually directly behind you.

There are some helpful tools that can make finding a hidden transmitter quicker, of these tools include a well detailed map of the area, what you usually need to do is to take one reading quickly after the hunt starts to get a general idea of where the hider is located, mark your location on the map and draw a line in the direction of the signal you hear, then relocate yourself some distance away and take a second reading, if these lines cross you have a pretty good idea of where the hider is located. Once you start getting close the signal may be too strong to get a good bearing on, a neat tip here is to change the frequency of your HT to 1 to 2 kHz off frequency and continue direction finding. There are a few "special" frequencies which have a harmonic in the UHF band, I believe one of these is the 146.565 to 446.565 and this sometimes works good to use when you are really close within 1 to 2 blocks from the transmitter, I have had friends use this trick, but since I usually only had a 2M radio that didn't work well for me.

Radio direction finding can help save a life, several hikers I have heard maintain communications with each other using FRS (Family Radio Service) frequencies, and if they do get in trouble it may be the only means of communications that they have. Most scanners and some HT radios are able to monitor these frequencies. Techniques remain the same if you use UHF or VHF and even CB frequencies, knowing how to find hidden transmitters with equipment you already have is an invaluable skill.

This activity gets everyone together, its fun, and provides good exercise both physically and mentally. As encouragement to the Mile High radio club I propose to anyone who is interested a chance to play a little with this activity. I have been talking with Bill Tell about this for some time, but I think its time to put the rubber to the road and organize one of these hidden transmitter hunts. With my work schedule the way it is I am only guarantied to have my Sunday afternoons off, so if people are up for it we could meet in the mid-afternoon for a hunt and then maybe do coffee or dinner later. I promise not to make it a hard hunt and could help people out with their equipment; we would need to decide on a meeting location and a simplex frequency. Radio Direction Finding is really training hidden by a fun activity, our club worked with a neighboring club to locate a radio jammer, most of the members of the other club spent a lot of time trying to find this person, while after about 45 minutes our group went out and zeroed in on the jammer, so I see the potential of this activity not to mention getting together with fellow hams for a few hours of social fun can't hurt either. Embrace the power of your HT, go out and find a hidden transmitter with me.

73

Chris Milly Milford (KC0CRU)

## Radio Quiz

- 1). The maximum harmless current through the body is \_\_\_\_:  
a). 100 to 300ma    b). 6A    c). 50ma    d). 5ma
- 2) The current through the body that will cause a pain and "can't let go" effect is:  
a). 100 to 300ma    b). 6A    c). 50ma    d). 5ma



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## Mile High Radio Club – R.A.C.E.S. Emergency Communications Repeater

The Mile High Radio Club (a 501 (c) 3 Non-Profit Corporation), in Idyllwild, CA, is seeking funds to expand its emergency communications capability.

Mile High Radio Club, through its Radio Amateur Civil Emergency Service (RACES), is the emergency communications resource for the Mountain areas of Idyllwild, Pine Cove, Mountain Center, Poppet Flats and Garner Valley. Amateur radio is often the only communications working after a disaster.

We have in place fixed sites for communications. However, our greatest fear is that we may face events that will require communications in field areas that will not be accessible to those fixed sites. Mountain areas present unique difficulties for communications.

We want to purchase “field suitable” equipment (portable repeater systems) that will extend our communication capabilities into and out of such areas.

If you are able, please donate to the Mile High Radio Club/RACES Repeater Fund. You may send your check to: Mile High Radio Club, P. O. Box 1204, Idyllwild, CA 92549-1204.

## Communications (Jazz) in the Pines



This year the Jazz Festival in the pines communication efforts went very well. The Mountain District Radio Amateur Emergency Service (RACES) set up camp for two days at the School of the Arts in Idyllwild. Mike Taggart headed up the campus security and overall communications plan. Our responsibility, under the supervision of Bill Baker KN6JV was to provide the communications and interconnection between the various groups of EMT's, security staff, volunteers, stage hands and campus logistics'. We handled many messages to and from the three music stages, reported on minor medical aid calls and even got musicians musical equipment moved when requested. The communications experience gained by

all of our RACES operators and staff was invaluable. It goes to show no matter what the message is that's being communicated, the relay was made and the operations went smooth and all was taken care of on the other end. Relaying the messages in tact is critical to smooth operations, no matter what the circumstances are. During the two days of communications, we were also able to discuss how improvements can be made for such a large operation. Over the next few meetings our organization will be sure to discuss and implement the improvements for future communication events. Many thanks to Bill Baker KN6JV, Vi Hallacy K6VBH, Rick Foster KG6TIJ, Fran Unwin KG6TIR, Christy Huss KG6AVU, Bill Tell KD6KTV and offsite communications by Chris Johnson KI6LOD for a job well done!



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## Comic Revue

A woman calling a local hospital said “hello”, I’d like to talk to the person who gives the information regarding your patients”. I’d like to find out if the patient is doing better, as expected or getting worse”.

The voice at the other end of the line said, “What is the patient’s name and room number?” The caller said, “Sarah Finkle, in room 407”. “I will connect you with the nursing station”.

“4A nursing station, how can I help you”?

“I would like to know the condition of Sarah Finkle in room 407”. “Just a moment, let me look at her records”.

“Oh yes, Mrs. Finkle is doing very well, in fact she’s had two full meals, her blood pressure is fine and her blood work just came back as normal. She’s going to be taken off the heart monitor in a couple of hours and if she continues this improvement, Dr Cohen is going to send her home Tuesday at twelve o’clock.”

The woman said “Thank God”! “That’s wonderful.” “Oh! That’s fantastic.” “That’s wonderful news.”

The nurse said “from your enthusiasm, I take it you must be a family member or a very close friend!”

“Not exactly, I am Sarah Finkel in room 407! And nobody here tells me anything!”

## September Meetings & Events Mark Your Calendars!

**MHRC Bd. of Dirs. Mtg., Thurs., September 11, 6:30 PM, Idyllwild Fire Department**

**MHRC/RACES Meeting: Thurs., August 14, 6:30 PM, Idyllwild Fire Department**

**ALL AMATEURS are cordially invited to attend any of the above meetings.**

## MHRC Website

You may access the MHRC website at [www.milehighradioclub.org](http://www.milehighradioclub.org)

Answers to quiz: 1). d); 2). c).