

Colorado QRP Club
The Low Down

Promoting QRP Since 1994

Club News...

**Colorado QRP Club sponsors
ARRL Rocky Mountain
Hamocon 2006 in Estes Park
June 9, 10 and 11 2006**

Featured speaker will be Riley Hollingsworth, K4ZDH, FCC Special Counsel for Amateur Radio Enforcement, Dr. Evelyn Patterson Professor of Physics at the US Air Force Academy, Harold Kramer, WJ1B COO of the ARRL, Brian Mileschoky, N5ZGT, Rocky Mountain Division Vice-Director of the ARRL and Ann Trudeau, KA0ZFI, Founding member of the Edge of Space Sciences.

On Sunday June 11 at 10am the Colorado QRP Club members Rich High W0HEP and Dick Schneider AB0CD, will present QRP Basics 101. For more information check the HamCon Colorado 2006 web site at www.hamconcolorado.org

CQ CQ CQ Net controllers

The Colorado QRP Club is in need of Net Controllers for the Monday night 2M nets. It's easy and it's fun. We provide you with the script and you can take it from there to develop your own "Net-tique". If you live on the Denver Front Range from Ft. Collins to Colorado Springs please consider a try at the mike. Contact Jim Pope - KG0PP at Ejim@aol.com



NO2D - President 2006-2007 - Colorado QRP Club

CQC Elections – 2006

By – Vince Kumagai – KI0RB

On May 10, 2006 Jim Pope – KG0PP delivered departure speech and his thanks to the CQC membership as the outgoing club president. Thanks and Certificates for Outstanding service to the Colorado QRP Club was presented to Jake Groenhof, N0LX, Marshall Emm, N1FN and Vince Kumagai, KI0RB

Jim, who did not stand for reelection, has retired from his job as a math teacher for the Aurora Public School system and is planning to move to central Texas within the next year. We would like to thank Jim for all his contributions to the Colorado QRP Club over the years. Jim, who carries member number 4, was one of the original founders of the club back in 1994. Jim

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For more information, visit our website at www.cqc.org

Issue 58 May/June 2006

Picture credits to

Vince Kumagai - KI0RB
Marshall Emm - N1FN
and
Pete Inskeep - NO2D

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Our next Regular meeting will take place
Saturday, July 8, 2006 at 10:00 am
Meeting Location: Offices of
Milestone Technologies
10691 East Bethany Drive,
Suite 800
Aurora, Colorado



Colorado QRP Club
Post Office Box 17174
Golden CO 80402-6019

The Low Down

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The Low Down

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Newsletter: Some articles in The Low Down are copyrighted. Written permission is required to reprint any article. Articles for The Low Down are encouraged. Articles must be submitted electronically in Word, Word Perfect or ASCII Text format. Email articles to LOWDOWN@CQC.ORG. Graphics or scanned photos should be in GIF, TIF, BMP or JPG format. Photos or graphics may be submitted to be scanned. Material submitted to the Low Down become the property of The Colorado QRP Club and cannot be returned. The Low Down is published bi-monthly in Feb., Apr., June, Aug., Oct. and Dec. The Low Down reserves all final decisions whether or not to publish submissions. The Colorado QRP Club does not warrant any item advertised, reviewed or described in this publication.

QRP Information Net: The Colorado QRP Club also meets on the air every Monday evening at 2000 local time on the 147.225 repeater serving the eastern slope of the Rockies from Cheyenne, WY, to Pueblo, CO, with linked repeaters in Boulder (145.46) and Colorado Springs (145.16). Backup frequency: 145.145. The Club's Denver metro simplex liaison frequency is 146.445. Meeting Dates: 2004 Meetings: Jan. 10, Mar. 13, May 8, July 10, Sept. 11, Nov. 13 at a location to be determined. Annual Picnic: Sat. Sept 18, 2004. Annual Banquet: To Be Announced. Changes will be announced on the Monday evening Net and posted on the WWW,CQC.ORG website, if time permits.

Informal Monthly QRP Gatherings: Members meet informally at a local restaurant -- details on the web-site. Annual Dues: \$12.00. Join via the internet at WWW.CQC.ORG. Or, send dues and requests for membership applications to: CQC, POB 17174, Golden CO 80402-6019.

Internet: WWW.CQC.ORG. Information, membership, renewals, officers, activities, CQC Swap List and CQC-List subscriptions.

Correspondence: Editor, The Low Down POB 17174. Golden CO 80402-6019.

CQC Logo mugs

Don't leave your shack without it!! Vince, our club Secretary, arm-wrestled a half dozen vendors until we got a good deal on a few dozen of these beautiful, cobalt-blue coffee mugs. Get yours while supplies last!!

Photo courtesy Marshall Emm N1FN



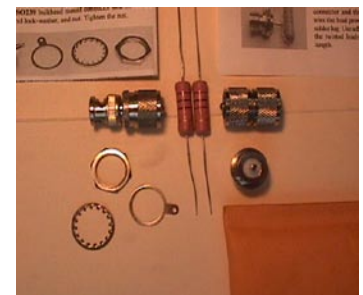
Photo courtesy Marshall Emm N1FN

\$10.00 (Pick one up at our meeting or other gathering)
\$4.00 (Shipping and handling if we mail one to you...) Order from our web site using our PayPal secure service.

Photo courtesy Marshall Emm N1FN

CQC RFL-10 QRP Dummy Load Kit

The kit consists of 2 5W metal oxide resistors an SO239 socket and includes adaptors for connecting to either SO239 or BNC antenna sockets. Rates to 10W continuous power for at least 60 seconds, with a flat SWR across the HF spectrum.



\$7.00 - Members
(Includes Shipping and Handling!)
\$9.00 - Non Members
(Includes Shipping and Handling!)

New CQC Logo Tee Shirts

These beautiful tees are 100% cotton with the club logo and motto. Your call sign and name call can be added for \$2
Available in sizes XXL, XL, L and M

Photo courtesy Marshall Emm N1FN



Photo courtesy Marshall Emm N1FN

\$12.00 plain or \$14.00 with Call and/or Name
\$4.00 Shipping and handling
Order from our web site or pick one up at the next meeting and please specify size.

Photo courtesy Marshall Emm N1FN

Tentative Meeting
Schedulde for 2005/2006:

May 13 - Regular
June 10 - Chat 'N Chew
June 24 - Field Day
July 11 - Regular
Aug 12 - Chat 'N Chew
Sept 9 - Regular
Oct 14 - Chat 'N Chew
Nov 11 - Regular
Dec 9 - Chat 'N Chew

Regular Meeting Location:
Offices of Milestone Technologies
10691 East Bethany Drive,
Suite 800
Aurora, Colorado

also is in charge of the club's Monday night 2M net controllers and has contributed many articles to the Low Down. Jim is an avid QRPer, homebrewer and contesteer. We want to wish Jim well in all his future QRP endeavors and to keep in touch with us all. Jim will continue as a 2M net controller till is departure to his new home.

Marshall Emm – N1FN was the 2006 CQC Executive nominations chairman. Marshall job was to create the select list of candidates for the CQC executive positions. The list of nominees was presented to the membership at the meeting on May 10, 2006 and voted on.

Election Results 2006 –

President – Pete Inskeep, NO2D
Vice President – Steve Finch, AI0W
Treasurer – Roger Wendell, W0JNR
Secretary – Vince Kumagai, KI0RB

Our new President is Pete Inskeep – NO2D. Pete has been involved with club events, is always found at area hamfests and is one of our new 2M net controllers.

The following bio was copied from Pete's QRZ bio:

While interested in ham radio since my high school days in the 1950's, I did not sit for my first license exam until 1978, while living in North Andover, Mass. I was issued N1ABB. I upgraded to extra in the early 1980's, but kept the same call until we moved to Long Valley, New Jersey. There I received a new call, NO2D. In 1992 we moved again, to Pewee Valley, Ky., where I was active in the Oldham County Amateur Radio Club. While there my spouse, Metta, earned the call KE4YSK.

'Tis a good thing that I did not apply for a 4 area call sign, because we moved in 2002 to Parker, Colorado. Living in zero land with a call like NO2D seems at times like a curse. The call is often confused on CW and SSB.

Continued on page 5

BPL Update

Bob Witte KØNR

Technical Coordinator

ARRL Colorado Section

bob@k0nr.com

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21 April 2006

You've probably heard about Broadband over Power Line, commonly known as BPL. This technology uses an electric utility's power lines to deliver broadband Internet to its customers. Sounds pretty good until you understand how many of these systems cause interference to the ham bands. This is an update on what is happening around the nation and in Colorado concerning BPL.

First, the good news. We have formed an amateur radio BPL team in Colorado to monitor the situation and deal with any interference issues. Here's more good news: we have not heard of any BPL deployments in Colorado. Some utilities have looked at the technology but so far none of them have deployed it. If you hear of a BPL deployment in the state, please contact me at the email address or telephone number shown above.

BPL Deployments - Nationwide

Here are some recent developments across the US concerning BPL and ham radio:

- City of Manassas (Virginia) and COMTek continue to deny that BPL interference is occurring, presenting flawed measurements from a third party. ARRL continues to call on the FCC to shut down this BPL system. The local ham community is doing an excellent job of documenting the interference.
- BPL interference continues in Briarcliff Manor, New York. The ARRL sent a letter that takes both BPL operator Ambient Corporation and the FCC to task, documenting continued interference on Amateur Radio frequencies.
- Cinergy Corp's BPL deployment in Cincinnati, Ohio, using Current Technologies equipment, has proceeded without major interference problems. This is good news as it indicates that not all BPL deployments are a problem to ham radio.
- A BPL field trial in Cottonwood, Arizona, that drew complaints from Amateur Radio operators from 2004 until earlier this year apparently has shut down for good. The small system, which Mountain Telecommunications Inc (MTI) operated under FCC Part 5 Experimental license WD2XMB, is now silent.
- The Southern Maryland Electric Cooperative ([SMECO](#)) has ended a limited broadband over power line (BPL) pilot project, concluding that the technology is not yet ready for prime time in its service area.
- [Avista Utilities](#) announced this week that it's re-evaluating its plans to deploy a broadband over power line (BPL) project in Northern Idaho. The company, which serves some 330,000 electrical power customers in three western states, said it and a BPL vendor had "mutually agreed" to end contract negotiations for the test deployment.
- The latest FCC statistics on the status of high-speed Internet services indicate a minuscule market share for broadband over power line (BPL). [FCC Wireline Bureau report, "[High-Speed Services for Internet Access: Status as of June 30, 2005](#),"] Fundamentally, BPL is failing in the marketplace.

Technology Developments

It is important to note that several BPL equipment vendors are having success with avoiding interference to ham radio frequencies. The ARRL has correctly taken the position that the amateur radio community is not opposed to BPL, but is opposed to BPL systems that cause interference on the amateur bands. These technical developments are encouraging:

- A demonstration at ARRL Headquarters of DS2 BPL equipment suggests the manufacturer is working to minimize--if not altogether eliminate--interference from its products on amateur bands. The new DS2 technology is capable of 40 dB notches in the ham bands.
- Current Technologies BPL equipment has been deployed successfully in Cincinnati without significant amateur radio interference. Current has avoided putting high-frequency energy on the medium-voltage lines by using low-band VHF (30-50 MHz) instead. Current's system uses Homeplug modems, which avoid all ham bands except 60 meters, to connect to individual customers.
- A Motorola "Powerline LV" BPL system has been installed and tested at ARRL Headquarters, operating without interference to ham radio frequencies.

BPL Team

If you hear about a BPL deployment in Colorado, please contact the Colorado BPL Team via Bob Witte bob@k0nr.com, <http://www.k0nr.com/bplteam.html> Members of the Colorado BPL team are Bob Witte KØNR, Ron Hranac, NØIVN, Randy Reynard, NQØR, Jim Pierson, N1SZ, and Kit Haskins, KAØWUC.

Favorite on the air activities include contesting, DX'ing, ragchewing, and the QRP FoxHunts. CW accounts for most of my activity as it gets out better with modest wire antennas. KE4YSK and I can be found operating SSB mobile on our long trips to the four corners of the USA.

We are members of the Colorado QRP Club, (member numbers 748 & 749). My SKCC number is 463. I enjoy the simple pleasure of making contacts with a hand key. See you on the bands.

73's, Pete, NO2D.

The Colorado QRP Club would like to express it's thanks to Mel Minnick, KØMEL, for his donations to the CQC Garage Sale. Donations to CQC are used to sponsor club projects and activities such as the Field Day Trailer project and HamCon 2006 (See articles in this issue). If you are clean out the shack and would like to donate equipment contact Vince Kumagai, KIØRB, at KIØRB@arrl.net. The Colorado QRP Club is listed with the Colorado Seceraty of Sate as a "Not for Profit" organization. Donations maybe tax detuctable. Check with your tax prepare for details.

The South Carolina Experience

Al Dawkins K0FRP

May of 2003 After an early day start and problems with the airline tickets. I arrived at my new home away from home in Aiken SC. Aiken is located just 20 miles from Augusta Ga., home of the Augusta Masters golf tournament. As the door of the airplane opened I could feel the humidity and it hits like a wet wall never did get used to the humidity. As we drove into the apartment complex, I could see the apartments were built amongst the 80-100 foot pine trees. To me they were wire antenna hangers.



Upper right is the apartment and balcony

We did sign an agreement not to have any outside antennas. I assumed it was meant for satellite dishes. Of course just a wire or two would not be seen through the trees!

For a starter I put up a coaxial dipole for 20 meters, which I had brought with me. I used screw hooks on the balcony to hold the dipole in place. Our Apartment was on the second floor so it was up about 20 feet. This antenna yielded 23 European contacts in a weekend DX contest. Europe is easy from the east coast.

I was slated to be the 20m Fox, I knew the coaxial dipole up 20 would not do for the FOX hunt. I proceeded to erect

a 20 loop and used the 500foot Cable TV tower. With my Zebco fishing reel and sling shot, I got the loop up about 45 feet. I managed to work a multitude of hounds but this is not my Colorado Aluminum at all. Hey I did my best. I even worked a few Foxes from the apartment with the coaxial dipole. It was too much trouble to put up the loop in the cable yard every week.

The Spring ARCI contest was approaching and I needed a better antenna as I was limited to 20/40 with my borrowed K2. My antenna was to be a 40 meter loop with tuned feeders and a tuner to get me on 20 meters as well. My target height was 85 feet, the first set of guys on the tower. My sling shot just did not have enough horse power to make it to 85 feet so I met it have way, by getting in a bucket truck to 40 feet and the shooting from there. The second try was a winner and up went the ropes to support the loop. The loop performed well as I operated from the headend building where all the cable channels are produced. On Sunday one of the air conditioner units went out and it was over 90 degrees in the building. It felt cooler outside. Not my usual score but this was not my Colorado Aluminum. At the apartment I had my eye on a branch at 60 feet on the tree just a few feet away from the balcony. I tried to shoot it but a lower branch was in the way and just wrote it off. The winter ice storm of 2004 yielded 1-2 inches of ice on everything thousands of tree branches came down, power cable and telephone were all out. Power was out for three days at the apartment and it got cold, 18 degrees outside and the temperature gauge in the apartment went down to 40 degrees and it was below 40. At night there was no sound except cracking tree limbs followed by the fall to the ground. It took weeks to get all the damage repaired by all concerned.

One day I took a look at the tree that held my limb at 60 feet, yep it was there and my lower obstructing branch was gone. A clear shot to the 60foot level. I needed 60 feet because my balcony is 20 up so that left 40 feet to hold my 33 foot 40 meter vertical wire.

60 feet was about all the sling shot could do so it had to be a good strong shot. Four time but the 5th shot was a winner. I used 20 pound fish line and green coated # 22 wire Two radials were run at about 20 feet through the trees. It was tough to see. I still had my 20 meter coaxial dipole and it being black was much more visible.

I received a notice about 3 weeks later. Please remove all antenna wires. Well the must have seen the coaxial dipole, down it cane and a green wire dipole replaced it and I used alligator clips on the coax and only hooked it up when I used the antennas. No notice for a month "yes" my stealth antennas were stealth. One day I was at the apartment at noon and an eagle eye inspector saw one my radials shining in the sun, OOPs busted. I took down my radials and the 20 meter dipole. I left the 40 meter vertical wire which was impossible to see. When operating I threw a radial off the balcony and used a tuner on 20 meters and I was fine. A year without another notice. I took it down last Thursday just prior to leaving.

I received an email from K0ZA John Hizer who used to live in Aurora Co. I looked up his call on QRZ and he was in Georgia. Expedia maps located Harlem Ga as being 40miles away. I called him and he asked me where I said Aiken and we got together the next weekend an talked over old times and looked at his setup.



KOZA FT-1000D works great QRP

Stories and pictures for the CQC Low Down are provided by CQC Club Members. Please consider sharing your QRP experience with other members and friends. All stories are welcome and appreciated. They can be submitted to KI0RB@arrl.net



The log periodic at 100 ft. other 6 and 2 m Yagis.

A 100 foot tower, 10 element log periodic, 40m loop 80m dipole with a FT 1000D feeding them. Well I was slated to be the Fox again in a few weeks so I asked, and the answer was yes. I have been the FOX in CO, SC and GA worked the Fox hunts in CO, SC, NC, MD, IL, OH, and MO. In the months after I operated ARRL 160 Contest using Jeff Spence KA0QEJ (another company engineer in Aiken) IC 702. The Spring ARCI in SC , I used my TS-120.

A 160m dipole at 85 feet worked well, the ends were about 400 feet apart so the ends were 20 feet or more off the ground. I used the same antenna by bringing the ends together forming a 40m bi-square loop for the ARCI

contest.

I have two weeks here at home with my Colorado Aluminum. I worked the Colorado Gold rush this weekend and made a few Q's. I was in Telluride, CO for a month.



11,500 ft above Telluride and Mountain Village

I tried to work the fox from the hotel (in Placerville) but it was at 7,500 ft in a valley
Off to Texas for 2 months dipole all ready up. One Fox worked from TX.

I'm back to South Carolina as of January 11, 2006, the project is back on.

AI K0FRP /4

*Happy Fourth of July from the Colorado QRP Club
Support our Troops and men and women in uniform.*

The CQC Field Day Trailer Project

By Vince Kumagai – KI0RB

It's no surprise to anyone that has visited the Colorado QRP Field Day site that the secret to successful contacts is the antenna system. This is especially true at QRP levels. So it was not a surprise that when the CQC Field Day trailer was last refurbished in 2001 it was put on the scale and weighed in at a whopping 2200 lbs. Included in the inventory are 3 crankup towers, a 40 meter beam and 15 meter beam and 2 meter 11 element beam. The side cabs were filled with feedlines, guying lines, tools for raising and anchoring the towers and an assortment of wire antennas. So while W0CQC maybe transmitting 5 watts it's going into a QRO antenna farm. How copy?

The trailer was donated to the Colorado QRP Club years ago by the now disbanded Arapahoe Radio Club. The trailer was originally built by Larry Weinstein – K0NA member of the Arapahoe Radio Club. The trailer has served the CQC well over the years. Wocqc has logged top ten finishes in both 2A and 3A classes. However, since the Field Day site was moved to Rampart Range Road, in Douglas County, hauling the trailer to the site has become a Field Day experience. Why? Well the trailer has a solid axle and the CQC Field Day site is at the end of 9 miles of unimproved road. Along with the solid axles the trailer was rolling on car rated tires of suspect quality. Enough said on that. Four years ago the trailer project was born to equip the trailer with a set of leaf springs. It was a noble effort that turned into a true epic journey, The Lord of the Ring – The Three Tower Hauler. It started with the purchase of the springs and mounting hardware 4 years ago. It soon became apparent that the conversion from solid axle to springs was going to be difficult because the original design did not allow enough room to mount the springs. The project stalled and the springs and such have been stored in my garage since. A constant reminder the no good deed goes unpunished. It is with great pleasure then that I can now announce that the journey is over in 2006. Starting with the February CQC meeting funds were requested to get an early start on Field Day starting with reviving the CQC Trailer project. The funding provided from a very successful CQC hamfest Garage Sale year. Funding approved at the meeting has provided the trailer with renewed license plates, new trailer rated tires and a spare replacing the automobile tires with the separating tread. New steel structural channel was purchased to mount the spring shackles and welded into place. The springs were mounted and the axle repositioned to give more tongue weight and a better ride.

So the next time you start your QRP project, such as the Yaesu FT-301SD sitting on my work bench, just remember that the pleasure is in the journey and not the destination. In this case the journey is 9 miles of bad road but should be effortless in 2006.

73,

Vince Kumagai
KI0RB

The CQC Field Day trailer after re-design and refitment. The 4 year project was to make the trailer safer and improve the ride for 2200 lbs of antennas, towers, feedline and support gear. The trailer has served the club well and led to top ten finishes for W0CQC these last 10 years.

