

Northern Colorado Amateur Radio Club

P.O. Box 272956

Fort Collins, CO 80527-2956

The Tribander

The monthly Newsletter of the Northern Colorado Amateur Radio Club

**Club Meetings are held on the 3rd Saturday of each month
At the Golden Corral, 901 E. Harmony Rd, Fort Collins, CO.**

All are welcome and encouraged to attend.

**Bring yourself and your appetite at 8:00 am.
The Meeting begins at 9:00 am.**

NCARC Club Information

Club Officers

President	Steve Henry	N7GN	(970)226-2817	n7gn@arrl.net
Vice President	Eric Slutz	N0EAS	(970)282-3752	eric@redginger.com
Secretary	Dave Langenberg	KC9FOO		dave@thelangenbergs.com
Treasurer Membership Chair	Willis Whatley	WA5VRL	(970)407-6599	whatley@frii.com
Interference Coordinator	Mike Bates	N7DQ	(970)219-3225	n7dq@comcast.net
Newsletter	Willis Whatley	WA5VRL	(970)407-6599	whatley@frii.com
Technical Chair	George Salzmann	AB0SF	(303)961-0841	ab0sf@yahoo.com
Hamfest Chair	Michael Robinson	N7MR	(970)225-7501	michael@frii.com

NCARC Repeaters

W0UPS: 145.115 MHz – (144.515 MHz Input) 100 Hz CTCSS Subtone (1* on, 0* off) Autopatch (40-32.926N, 105-11.898W, 7229 ft) Horsetooth Mountain, west of Fort Collins, CO
W0UPS: 447.275 MHz – (442.275 MHz input) 100 Hz CTCSS Subtone Autopatch (40-32.926N, 105-11.898W, 7230 ft) Horsetooth Mountain, west of Fort Collins, CO
W0UPS: 146.625 MHz – (146.025 MHz Input) 100 Hz CTCSS Subtone (40-50.266N, 105-3.017W, 5600 ft) SW of the Rawhide Power Plant, 17.5 miles north of Fort Collins, CO
W0UPS: 146.850 MHz – (146.250 MHz Input) 100 Hz CTCSS Subtone (1* on, 0* off) (Various locations around N. Colorado)
W0UPS-5: 144.390 MHz – APRS Digital Repeater (40-32.926N, 105-11.898W, about 7229 ft) Horsetooth Mountain, west of Fort Collins, CO

Nets

ARES District 10 Information Net	Wednesday	9:00 pm	145.115 MHz
ARES Statewide Net	Sunday	8:30 pm	145.310 MHz
Central Colorado Traffic Net	Daily	7:30 pm	145.310 MHz
Tech Net	Tuesday	7:00 pm	145.115 MHz

Web Page

<http://www.ncarc.us>

TECH NET Announcement!

This is a reminder that the 145.115 TECH NET is held Tuesday evening 07:00 PM.
It is hosted by N0WIQ, Kerry. All amateur radio operators (with 2M privileges) are welcome to check in. It is an open forum net with Questions, Answers and Topics of interest.

If the 145.115 repeater is not available, the net will be held on the 447.275 repeater

CW Practice Session!

This is a reminder that the 145.115 CW Practice Session is held Friday evening 06:00 PM.
It is hosted by W0EP, Chris. All amateur radio operators (with 2M privileges) are welcome to check in or listen.

Some Upcoming Swapmeets**Pikes Peak Radio Amateur Association Inc. MEGAFEST****07/08/2006**

Lewis-Palmer High School, 1300 Higby Rd. Monument Doors Open at 8 AM
Table Cost: \$10.00 Admission: \$5.00

For more info: <http://www.qsl.net/ppraa/>

Denver Radio Club Hamfest**08/20/2006**

Jefferson County Fairgrounds in Golden 8:30 AM - 2 PM

Table Cost: \$10.00 Admission: \$5.00

Note Table price DOES NOT include admission

For more info: <http://www.qsl.net/w0tx>

Mountain Amateur Radio Club MARC Campfest**08/25/2006**

8649 Main Street (Not Hwy 24) Lake George, Colorado

For more info: <http://www.qsl.net/nx0g> or contact Paul Moraine at 719-638-0273

BARC Fest**09/24/2006**

Vendor Setup beginning at 6:00 AM

Doors Open to all at 8:00 AM

Boulder County Fairgrounds

9595 Nelson Road (corner of Nelson and Hover Roads), Longmont

Talk-in on 146.700 (-) Repeater

Admission \$5

Door Prizes Drawn Every Hour!

Breakfast & Lunch by Papa Carr BBQ Catering

Boulder VE Team – License Exam Testing Held at 10AM Sharp!

For More Information Contact: BARC70@arrl.net

New and renewing members for April:

KB0GVD – Mark N0WIQ – Kerry W0JIM – Jim W0MVS - Glen **The NCARC thanks you for your support.**

**Field Day 2006 is on June 24 and 25**

The **Mountain Moguls** will hold their field day activities on Crowder's Hill west of Loveland
Setup will be on Friday afternoon June 23rd and operations will be continuous throughout the allowed time on
Saturday and Sunday.

They need CW operators to assist with this event.

CAST for Kids Event

Volunteers are needed for the CAST event, June 10 from about 6am-noon.

If you are not familiar with CAST, it is an organization sponsored by the Bureau of Reclamation, which is the federal agency that manages Horsetooth reservoir. The event takes handicapped kids fishing on Horsetooth reservoir, with members of the bass-fishing club. Ask anyone who has done this before... It is a very rewarding experience and our help is greatly appreciated.

They will need about 10-15 people, some will be sea-bound, and some will be landlubbers, but all will have fun. Please contact Rick, WORCY, soon if you are interested and think you are able to make it at w0rcy@comcast.net or 482-7004.

Meeting minutes for February:

NCARC Meeting Feb 18, 2006

Location: Golden Corral

Called to order at 9:00 by Steve Henry

24 Members and 3 guests

REPORTS

Secretary

--Approved as read.

Treasurer

--Solvent -- checking \$11,296.

Tech

--Nothing to report.

Membership

--Overdue memberships with officers -- 7 more renewals this month.

--Suggestion for newsletter to add a swaplist.
if you want it in there you've gotta submit it.

--Suggestion to send in pics of your shacks.
send that in if you want it in.

Control Op

--Nothing major -- need to change Greeley message.

Interference

--Nothing reported.

Fest Update

--Sent mail to Art Bell asking if he'd be interested in speaking. Got no response. Will get the 3rd Saturday in January 2007.

OLD BUSINESS

--Events center repeaters -- waiting for somebody at events center to schedule a time to put it in.

--Library Donation -- Will find out in April.

--Hamcon -- Shameless plug by Rick 9-11 in June. Early bird pre-registration is good through 1st of March (\$10/adult). After 3/1 \$12. Posted list of forums and where they are scheduled. hamconcolorado.org.

-- LRA & NCARC need folks to sign up for 1 hour talk-in.

--ARES UPDATE -- next Saturday -- A meeting guest speaker on avian flu. Windsor Fire station 1300hr.

NEW BUSINESS

--Old town marathon is now Colorado Marathon. Sunday May 7, starts at 0600hr. Half marathon at Picnic Rock 0730.

--Fest folks would like to get a prominent name to talk.

--Bill & Slate -- balloon launch next Saturday 147.225 2000hr the night before. Taking 80 M tube, uncap it and take an air sample. Preparation starts at 0530h. Launching from Windsor CR-3, .5 miles south of Hwy 392.

--Website -- Ed & Steve updating website. <http://www.ncarc.us>.

--Need meeting presenters - please volunteer.

Meeting minutes for March:

NCARC Meeting Mar 18, 2006

Location: Golden Corral

Called to order at 9:00 by Steve Henry

22 Members present

REPORTS

Secretary

--Approved as read.

Treasurer

-- Checking \$11789.76.

Tech

-- No report.

Membership / Newsletter

-- 5 renewals this month -- still waiting on content (shack pics, swap stuff, etc) -- cutoff date 1st of month.

Control op

-- No report.

Interference

-- Just the 2m noise.

Fest

-- Loveland is thinking of tearing down fairgrounds. Will get refundable deposit if they do tear down the building.

Looking at alternative buildings.

-- idea to hold in HS Gym.

-- Possibly a Church.

Old business

-- Events center repeaters -- not much news.

-- 2m static -- George is gonna check out the antennas and feed-lines once the weather gets nicer.

-- Hamcon:

-- Jun 9-11 Estes park

-- Old Town Marathon May 7.

-- They are excited -- need 20 people have 8 signed up. Need t-shirt sizes.

-- Changed course -- west of stove prairie about a mile to Steven's creek?

-- mini marathon at gateway park.

-- 12 aid stations.

-- running on N side of road.

-- Friday and Saturday packet distribution at Marriott with auction.

--- 4-9 on Fri & 10-1 on Sat silent auction proceeds to the club.

New business

-- PSK 31 experiment 2000hr Wed 144.250 USB. Got signals from Estes to Windsor using generally 5-10 watts.

Next wed @ 2000hr.

-- VE3LYC is visiting in June and wants to meet up with DXer in Golden. If you know of one please contact at

VE3LYC@hotmail.com.

BPL Update

Bob Witte KØNR
Technical Coordinator
ARRL Colorado Section
bob@k0nr.com
(719) 488-0859
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.

There are things that will make a ham radio operator all wild-eyed and crazy. Kind of like poison ivy. A ham walking down the street in this condition will cause passers-by to take a wide berth and small children will hide behind the parents' coat tails. People will see the expression that has been permanently burned into hams' face and think that he knows something that they don't. Like some hideous creature is behind them or aliens are attacking. Some hams stutter or have a violent nervous tw...twi...twitch. Here's a look into the possible causes.

EGO: Most hams have an ego problem. They actually believe that they can homebrew a project cheaper and better than a commercially manufactured one. While this is true in some cases, generally the project will cost 3 times that of a commercial product. This is due to the repeated trips to Radio Shack (Cell Phone Shack). You can order the parts online and save money, but when you need a 47-uF electrolytic capacitor, you need it now. So, one ends up running into Radio Shack (Cell Phone Shack) only to pay 3 prices for something that would have been a lot cheaper online. Then of course, you have to look around to see if there is anything else you can't live without. You know, like remote control cars, a few connectors, or perhaps a cell phone. Did you know that Radio Shack (Cell Phone Shack) sells cell phones? But I digress...

The XYL: The XYL plays a major role in molding the psyche of the ham as well. For all the neat little toys we buy, we must compensate the XYL with a gift. Call it a bag of guilt. "Here honey, here's a dozen roses, because I love you... And...uh...well, I went ahead and bought that new radio we talked about. Oh, we didn't discuss that? I was sure we did...Boy, those roses smell great! Why don't you go find a vase to put them in, and I'll get this radio hooked up." This is about the time you get "the look". You know what I mean...the look. The one you get from the XYL after purchasing a new rig or accessory. The one you can feel burning it's way through the back of your head. Or was that the vase of flowers that just hit the back of your head?

Tweaking: With electronic equipment there is a fine line between optimal performance and thermal meltdown. A ham radio operator will try to "tweak" his rig for optimal performance. When that fine line is crossed, he will hurl out a stream of obscenities that will stunt the growth of nearby trees and stagger small animals. Been there, done that! Sometimes my cursing is interrupted by my nervous twitch.

The Brain Cramp: The brain cramp differs from tweaking in that while performing a tweak, one is purposely trying to reach an objective. The brain cramp is the direct result of not thinking at all. A friend of mine accidentally pumped 50 watts of FM carrier directly into his 2-meter handheld radio...Ouch! The queen mother of all brain cramps! I once spent 6 hours diagnosing a sound card interface only to find out that the mute button in the sound card control panel was checked! That is 6 hours of my life I will never get back! Like the results of a tweaking gone bad, the nervous twitch and the steady stream of obscenities usually follow the brain cramp, which explains the sickly trees and shrubs in my yard, why my fish have gone belly-up, and why my dogs have to see the doggie shrink on a regular basis!

IQ: There are a lot of very intelligent hams out there. Then there are the rest of us. We buy important looking books and technical manuals to keep in the shack so that we give the appearance of having an IQ higher than a box of rocks. I actually started reading a book called "General Rocket Science & Engineering". It's a good thing I fell asleep, as I may have been scarred for life! That kind of reading can be downright hazardous to a person's psyche. I also started reading a book called "Memory's voice: Deciphering the mind-brain code". It's a good thing I didn't finish either book and pursue a career, because between the two I would be looking for a job as a rocket psychologist!

Geekhood: When I was in High School there were always those kids who were into computers, chess, drama, and other things I didn't really understand. They usually had glasses that were taped together and a pocket protector. We called them geeks. Now I am one! I try to explain my amateur radio hobby to my friends and they don't get it, so I'm sure they think I'm a geek. I am a really cool geek, but a geek just the same. As my psychiatrist makes me repeat to myself over and over, "I'm a geek, and that's okay". The hard part is not to appear geeky. Just don't go out and buy a really tacky hat with your call sign on it. (Mine is hidden in the junk drawer of my shack!) My glasses are broken, but I refuse to tape them together. A pocket protector really is a good idea, but they don't keep me from ink staining the back pocket of my Wranglers!

And last but not least...

Budget: If you are a ham radio operator you know that this is an expensive hobby. One can spend thousands of dollars and still not be satisfied. Someone else will always have a better transceiver or antenna. That's where home brewing comes into play. I'm not talking about home brewing beer to drown your sorrows either. Being able to build something with your own two hands that actually works (the way it was intended) is one of the best ego-boosters known to man. Someday just for fun, I would like to build a tuna can radio and be able to send a Morse code signal for help from the backcountry while fending off a grizzly bear. However, any grizzly bear would only have to see the permanent expression on my face and my nervous twitch and he would know he has tangled with the wrong guy!

