



The Repeater Rag

Volume 29 Number 3

NEWSLETTER OF

THE DENVER RADIO LEAGUE

**A CLUB DEVOTED TO
QUALITY AMATEUR RADIO**

Published in Centennial, Colorado

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DRL BOARD MEMBERS

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REPEATER LOCATIONS:

146.88Ø Warren Mountain

146.64Ø Centennial Mountain

449.6ØØ Lockheed Martin Company

145.Ø5Ø Digi - Lockheed Martin Company

Repeater Identifier: WAØKBT

DRL website: www.denverradioleague.org

or www.eoss.org/drl

The Denver Radio League is open to all licensed amateur radio operators. Repeater usage is limited to properly licensed hams.

Membership dues and renewals

*~ Please make checks (\$15) payable to
Denver Radio League or DRL ~*

Remit to: Al Cooley, NØAUS

6199 South Broadway

Littleton, Colorado 80121-8016

For information, contact Al at:

303-794-6511 or on the 146.88Ø Repeater



MEMBERSHIP MEETING

REMINDER

TUESDAY, NOVEMBER 14, 2006

7:00 TO 9:00 P.M.

BEMIS PUBLIC LIBRARY

PLEASE REMEMBER: WE MUST BE OUT
BEFORE OR BY 9:00 P.M.

1. DRL YOU ASK?
Al Cooley, NØAUS
2. YOUR BASIC REPEATER SHACK
George Stoll, WAØKBT
3. HUNTING FOR TROUBLE
Larry Noble, NØNDM
4. IRLP Presentation by Billy Guthrie, WØUNX
and David Markham, KCØVES



Happy Thanksgiving ...

Merry Christmas to All!



And **Happy New Year 2006 !!**

(Mouse Clipart Charming Tails by Fitz and Floyd)

DRL YOU ASK?

Just what is this “DRL”(Denver Radio League) thing? Never answer a question with a question, usually, but what DOES this group do? Are we just a ho-hum, yawn, I dunno, coffee klatch, or does the club offer something with substance in it? Okay, I’ll try to answer those questions.

If your interest is in emergency communications, the A.R.E.S. District 22 has a large number of members in the DRL, with “on-air” meetings every Sunday morning on 146.880 at 0930, and on the low-bands on 80 meters. The 80 meter nets are CW, Phone, and Digital, at 0800 Sunday mornings. These nets frequently lead to a variety of challenging “Fox-Hunts”. Contact David Markham, KCØVES, Emergency Coordinator, for more info.

Technical issues are discussed at the DRL meetings, and/or on the air on one of the three repeaters the DRL owns and operates (146.640, 146.880 and 449.600).

Many of the members are also involved in the Edge of Space Sciences club, which launches Helium filled balloons up to an altitude frequently exceeding 100,000 feet, carrying experimental payloads for several colleges and universities, as well as doing high altitude particle and gas sampling for N.O.A.A. This group has had 112 launches over a period of 15 years with a 100 per-cent successful recovery rate of the payloads. Contact Mike Manes, W5VSI, for more info.

If antennas and antenna towers are in your life, a group of DRL members has built their own “commercial grade” gin-pole, and they are willing to discuss that part of hamming with you.

The quarterly DRL meetings are held the third Tuesday or Wednesday of February, May, August, and November at the Bemis Library in Littleton. Exact date and time is announced both via the *Repeater Rag*, and on the Sunday morning nets.

Several of the members are active on the 10 through 160 meter bands, both as “rag-chewers” and QSL collectors. Contesting is alive and well in the DRL, not necessarily for all members, because we all have different sub-interests in ham radio. But for those who enjoy this challenge, we have an annual Field Day station operating, for the last few years using NØLP as the station call. Contact Nick Hanks, NØLP, or Benjie Campbell, WØCBH, for more on this.

If your interest is just in having a good time at a weekly breakfast, cussing and discussing almost anything, you’ve come to the right place. A varied number of DRL members, with other hams, meet each Saturday morning at the Country Buffet located in what used to be the

Cinderella City complex on Hwy 285 just to the west of South Broadway.

I believe we can eliminate describing the DRL membership as “Yawn”, Ho-hum”, “I Dunno”, or a “Coffee Klatch”. It looks to me, and I’m confident to you, also, that the club offers a lot. Encourage your other Ham friends to join us in the various activities that we share.

73, Al Cooley NØAUS

YOUR BASIC REPEATER SHACK

In my travels I get the opportunity to see a wide variety of radio, microwave and other types of telecommunication systems. And, working for gas and electric companies, most of them are quite well built, the kind of facility that you might expect to see standing there 20 years from now. So I wanted to share with you

one of the more basic remote radio installations I came across recently. I’m not talking about a pole mounted cabinet either – some of them are actually quite deluxe - even equipped with heating and air conditioning.



You can imagine my surprise when I found this site recently on a New Hampshire mountain. It is a converted out-house! The radio equipment in the front is a ham repeater, the equipment less visible in the back is a remote controlled low band base station used for commercial purposes. Yes, this is in full



service and has been this way for several years. Some light bulbs provide equipment heat in the cold New Hampshire winters. OK..... for my closing line..... this site gives new meaning to the saying – “we have some crap interfering with our radio channel”.

73 – George Stoll, WAØKBT

HUNTING FOR TROUBLE

LARRY NOBLE, NØNDM

The drive into work on Wednesday started off like most trips to the office, talking to friends on the DRL repeaters. The drive is more fun when sharing current events and plans for the upcoming weekend. This morning, Perry, W6AUN was talking about interference he discovered on the national APRS frequency of 144.390 MHz. He noticed while the offending station was transmitting, local APRS traffic was a fraction of normal. Trying to get information on the problem, our discussion continued with a series of questions. Did the interference appear to be deliberate? Were the transmissions continuous or intermittent? Could voices be heard in the background? Since work was a priority for the day there was nothing I could do until early evening. Benjie, WØCBH offered to assist in tracking down the problem. For now, we decided to just monitor the offending signal. If still transmitting after work, we would use direction-finding techniques to locate the problem.

Amateur Radio Direction Finding (ARDF) is a part of ham radio that has proven to be both challenging and great fun, something that requires a little skill along with the right equipment to be successful. This was a chance to show off our ARDF skills, identify a mystery signal, and be heroes in the eyes of our fellow hams.

The drive home from work was used to coordinate the hunt. Benjie and I would meet at my house in Aurora and we would use my vehicle and equipment. Bob, NØTI provided a lot of support information. He had been monitoring .390 most of the day and determined the source was north of Denver. The offending transmitter had been transmitting since Monday and the interference was causing problems with APRS weather stations to the point they could no longer I-gate weather data.

I was the designated driver; Benjie was assigned to the radio and navigation. This would be a long mission and we needed supplies. After a fast equipment install of a directional antenna, it was off to McDonald's.



Driving out with a sack full of cheeseburgers and fries

we started the hunt by following Bob's instruction and headed north on Tower Road. Near Alameda we shifted over to Airport Boulevard and continued north. When Peña Boulevard turned east toward DIA, and still getting a strong signal to the north, we decided to exit on Tower Road. At 104th Avenue, we parked on the side of the road. The signal now had a bearing of about 280 degrees so we turned west on 104th. Chris, KBØYRZ, Rob, KCØUUO, Rick, NØKKZ, and Chris KBØQQW heard us talking to Bob, NØTI on the 146.640 repeater about our progress. They decided to join in on the fun and headed to the area we thought the signal was coming from. After a short break at a local Phillips 66 gas station, the signal was now at a bearing of 355 degrees so we traveled north on Colorado Boulevard from 104th Avenue. At 132nd, we now were very close, and found the offending station a few blocks away.

Knocking on the door we introduced ourselves to the woman answering the door and explained the problem. Her husband is an amateur radio operator and the station belonged to him. Understanding the urgency of the problem, she let us into the house and showed us to the station. We quickly identified the



offending radio connected to an APRS weather station. The radio was set at 5 watts and did not have any problem with continuous transmit. Being an older radio there was no transmitter time-out timer.

After shutting it down, we were in the process of giving her our names and contact information when her husband came home. He knew right away there was a problem when he saw several vehicles with ham radio license plates equipped with directional antennas in front of his house. He of course was very embarrassed.

To celebrate the thrill of VICTORY it was off to the local DQ for a Snickers Blizzard and to share war stories with those who helped with the hunt. Thanks to all of you helping make this a successful hunt!