## Repeater Rag Volume 32 Number 2

### **NEWSLETTER OF**

### THE DENVER RADIO LEAGUE

### A CLUB DEVOTED TO OUALITY AMATEUR RADIO

Published in Centennial, Colorado

#### **EDITOR**

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### DRL BOARD MEMBERS

Tim Armagost, WBØTUB, President
Lisa Hurdlebrink, KØLMH,VP/Treasurer
Daniel Krohn, ABØZY Secretary
Mike Manes, W5VSI, Member at Large
Curtis Willoughby, KAØVBA, Member at Large
George Stoll, WAØKBT, Repeater Trustee

### **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

~ <u>Please make checks (\$15) payable to</u> <u>Denver Radio League or DRL</u> ~

Remit to: Lisa Hurdlebrink KØLMH

9728 Laredo Street, #27C

Commerce City, Colorado 80022

For information, contact Lisa at:

303-475-6866 or on the 146.88Ø Repeater

MEMBERSHIP MEETING
REMINDER
WEDNESDAY, MAY 20, 2009
7:00 TO 9:00 P.M.

BEMIS PUBLIC LIBRARY

- ➤ HAMCON COLORADO 2009
- OUR FIRST FEATURED HAM SHACK NØUA
- AN OLD BUG
- ► MEETING PROGRAM AND UPCOMING DRL PICNIC

## HAMCON COLORADO 2009!



Once again, The Denver Radio League is one of the proud sponsors of HamCon Colorado 2009!

The dates will be May 29, 30 and 31, 2009 and the location will be in Estes Park.

Sign up today! Time is running out to save money!

### Our First Featured HAM SHACK Vince Lawrence, NØUA



**HF Transceivers:** Icom IC-7700 (with external monitor), IC-756ProIII, IC-706MKIIG

**Amplifier:** Alpha 78 (converted to use 2 \* 3CX800A7) – setup for QSK (CW). Amplifier offers no-tune mode for 80, 40, 20, 15, 10 Meters. Amplifier was enhanced/modified to operate on WARC bands.

**VHF, UHF Transceivers:** Kenwood D710A, TM-241 (Packet)

**SWR Equipment:** HF Wavenode WN-2 with 4 sensors (2 HF, 1 VHF, 1 UHF), Vectronics VHF/UHF cross meter.

**VHF Amplifier:** 2- meter MFJ 160 Watt amplifier in "antenna room/attic" with full remote control, power and SWR monitor via WN-2 (second RM-60 in attic for power – remote on/off).

**Transverters:** 2 meter and 432 linear transverters.

**Digital Mode Equipment:** PK900, also sound card interface (generic) for RTTY, PKS31, Olivia, and others. RTTY scope – Heathkit SB-610 monitor.

**HF Antennas:** resonant 20 meter delta loop (vertical plane oriented – in trees grown for the purpose), 80-10 meter vertical with SG-235 tuner at base (#4 wire run vertically next to tree), NVIS dipole (80-10) with SG-231 tuner – both tuners remote controlled. Note: antenna restricted neighborhood – all antennas are "stealth".

**VHF/UHF Antennas:** dipole in antenna room/attic for 6 meters, Yagis for 2 meter and 432 in attic with rotor and remote controlled preamps. Dual band 2M/70CM vertical in high attic with preamps (remote controlled). Eggbeaters (antennas) for 2 and 70 cm.

**Computer:** assembled Intel based P4 3.0 Mhz CPU, 1 GB RAM, 150 GB disc, DVD R/W, 2 monitors, networked with server, internal hardwired and wireless network all on high speed DSL, OS is Microsoft XP.

**Ham Software:** MixW (digital modes), MixW Buttons, WaveNode WN-2 software, easy-term (FSK mode software), WinCap Skywave Analysis (for propagation), SatScape for ham satellite orbit prediction, TRX-Manager, and others.

**Other:** 13.8V power supply Astron RS-60M with battery charge circuit and 80 AH gell cell for power backup. Note wiring "closet" behind equipment contains all interconnects and P.S. Two circuits of 220-V/20 amp service in shack (in wiring "closet"). Two isolated 110V/20 amp circuits for other shack power.

Vince Lawrence, NØUA

### AN OLD BUG ...

I was chatting with Mike, W5VSI, the subject was the CW net and what kind of key 'each of us' was using. I mentioned I had a vibroplex bug that my uncle had given me and Mike told me that I should use it on straight key night, as the bug qualifies as a straight key. I thought that was a great suggestion so I pulled the key down from the mantle where it was on display – wow! I didn't realize how cruddy it was, so I decided to restore it.

### Down from the mantle shot:



A day or so later I was talking to Mike, W9CN...we got chatting about the bug and the restoration and he suggested I write it up for the DRL group and do some before and after shots. Another great idea!

Here is that write up:

In my research to find 'the best way to restore a Vibroplex Lightening Bug', I discovered many things –

My particular key, serial number 145060, is a 'Number 6', built in 1945 in New York City. I also discovered that my key was in particularly good condition and a great candidate for restoring!

I began by buffing the flat stock with very fine steel wool (you can see my first effort on the damper bar on the left in the 'before' shot – I had started before Mike suggested the article), then decided to take it all apart so that I could clean the base with soap and water. That worked so good that the entire job was completed with a tooth brush and dish washing

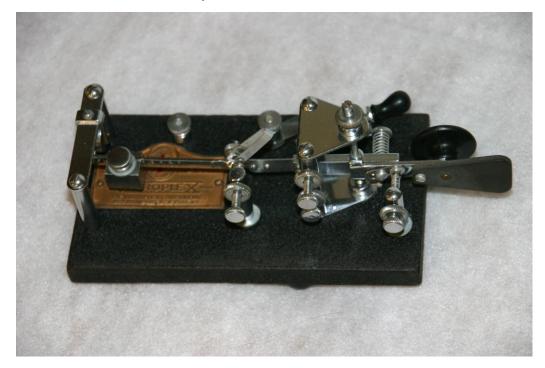
detergent. In the W9CN conversation we had joked about just scrubbing off the tobacco residue, since EVERYBODY smoked in 1945...turns out that was exactly right!

I was able to download the adjustment procedure from an article by Brian Murphy, VE2AGO, which was published in QST magazine, so now, with a bit of tweaking, I'm gonna have a CW QSO with my 64 year old semi-automatic key!

73!

Tim, WBØTUB

"I'd buy it, new as it looks now!"



### MEETING PROGRAM AND UPCOMING DRL PICNIC

The meeting will be held May 20th at 7pm at Littleton Bemis Library, 6014 S Datura. We are still having some difficulty booking the room on the dates we want, so bear with us...this meeting will be the 3rd Wednesday, rather than the 3rd Tuesday.

We have a super program lined up...John Maxwell, NØWBW, of Rocky Mountain Ham Radio, will talk to us about the communications trailer, from inspiration to design and finally reality! The trailer supports VHF, UHF, HF – it has a satellite link, an internet link, it's own power and on and on and is for amateur radio groups to use during times of stress or just for fun. See a fun description by Mike Davie, NØJBY, on youtube by doing a search on my call, WB0TUB, and the only video I have posted is called "Why?"

We hope to get most of the business done at the executive board meeting, so we will have a *short* business meeting and jump right into the program.

### **DENVER RADIO LEAGUE PICNIC!**

Mark your calendar for <u>Saturday</u>, <u>July11, 2009</u>, for the <u>DRL picnic at Dekoevend park</u>! It will be held in picnic area A from 11am until 3pm. The League will provide hot dogs, hamburgers and the buns to put them on, plus refreshing drinks to wash everything down with. You bring a side dish or dessert to share with the group. This picnic is being put together by George Brady, KCØYHA, and I'm sure he would welcome your input and help! More info at the meeting...we hope to have an HF station there as well, so if you can help with that effort, please jump in!

73 from your president, Tim, WBØTUB!

### ARRL ROCKY MOUNTAIN DIVISION CONVENTION REGISTRATION



### "AMATEUR RADIO – RESILIENT, RELEVANT, READY!" MAY 29, 30, AND 31, 2009



### LOCATED IN THE BEAUTIFUL ROCKY MOUNTAINS at Estes Park, Colorado

### **Accommodations:**

### Holiday Inn Estes Park Conference Center

101 South Saint Vrain Avenue (Colorado Hwy. 7 at US Hwy. 36)

### Reservations

1-800-803-7837 or 1-970-586-2332

www.rockymountainparkinn.com

\$89.00/night + tax, Single or Double Occupancy:
Request the "SPECIAL ARRL HAMCON RATE"
Special Rates are good from 2 days before the
Convention until 2 days after!

### HAMCON ADVANCED

(prior to May 15, 2009) \$15.00/Adult \$8.00/age 17 and under \$3.00 Convention Logo Pin

### **Estes Park RV/Campground**

### Reservations

1-800-562-1887

### http://estesparkcvb.com

2051 Big Thompson Avenue

### **Estes Park General Information**

For shopping information, things to do and see ... 1-800-443-7837 or

www.estespark.us

### HAMCON AT THE DOOR

beginning at 0900 Friday, May 29, 2009 \$20.00/Adult \$10.00/age 17 and under \$3.00 Convention Logo Pin (while supplies last)

Please	complete the registration form below, cut		•			
. Name:		Call Sign:	Tech Session Speaker? ✓one: Yes No			
Additio	nal Attendees (w/call sign if applicable – full nam	nes are a must): (Teo	ch Session S	peaker & Spouse only, I	Free I	Registration)
2. Name	e: Call Sign:	4. Name:	Call Sign:			
3. Name	e: Call Sign:	5. Name:		Call Sign:	:	
Address	:	City: _				
State: _	Zip Code:	Phone:	<del>-</del>	(includ	e area	a code)
E-mail:		(for registration confirm	nation)			
	Tech Session Sneaker & Sn	ouse Only Free Registration	# Reg.	Advanced Tech Session Speaker	=	<b>Total</b> N/C
Tech Session Speaker & Spouse Only, Free Registration:  Adults:  Youths (17 and under must be accompanied by adult):  Friday Night Keynote Address:  N/A  X  Tech Session Sp  X  \$15.00 ea  \$8.00 ea  Free to all						100
					_ = _	
					_ = [	N/C
				\$25.00 ea	_ = .	
*	Saturday Night Banquet (please make selection)	8 oz. Ribeye Steak Dinner:	X	\$42.00 ea	_ = .	
* Friday Night Keynote Address & Saturday Night Banquet each include a MAJOR PRIZE drawing! Total Due:					_ = -	
* Frida	y Night Keynote Address & Saturday Night Band	juet each include a MAJOR Pl	KIZE drawi	ng! Total Due:	_ = _	

MAKE CHECK OR MONEY ORDER PAYABLE TO HAMCON COLORADO, INC.

Remit to: VICKI KRENGEL, Co-Chairman, Hamcon 2009 Registration,
2950 South Bannock, Englewood, Colorado 80110-1519

Visit our web site at: www.hamconcolorado.org

### HAMCON COLORADO 2009



# ARRL Rocky Mountain Division Convention "AMATEUR RADIO: RESILIENT, RELEVANT, READY!" May 29, 30, and 31, 2009

Located in the beautiful Rocky Mountains at Estes Park, Colorado



~ FRIDAY NIGHT ~ 5 TO 6 P.M. ~

KICKOFF SPEAKER: BRIAN MILESHOSKY, N5ZGT, ARRL ROCKY MOUNTAIN DIVISION DIRECTOR

~ FRIDAY NIGHT KEYNOTE ADDRESS ~ 7 TO 8 P.M. ~

HAROLD KRAMER, WJ1B, QST MAGAZINE PUBLISHER AND ARRL CHIEF OPERATING OFFICER

~ SATURDAY TECHNICAL SESSION & BOOTH ~ SCHEDULE TO BE ANNOUNCED ~

MIKE GRUBER, W1MG, ARRL EMC ENGINEER AND CONTRIBUTOR TO "THE DOCTOR IS IN" QST COLUMN

~ SATURDAY HAMCON LUNCHEON ~11 A.M. TO 1 P.M. ~ GUEST SPEAKER: CHERYL MUHR, NØWBV

~ SATURDAY NIGHT BANQUET ~ 7 TO 9:30 P.M. ~

**GUEST SPEAKER: RICK RODERICK K5UR, ARRL VICE PRESIDENT** 

~ SUNDAY ARRL ELKHORN BUFFET BREAKFAST ~ 8 TO 10:00 A.M. ~

GUEST SPEAKER: GORDON HARDMAN, WØRUN, DESECHEO ISLAND 2009 DXPEDITION, 3YØX PETER I DXPEDITION, ALPHA RADIO PRODUCTS

### TECHNICAL FORUMS AND

#### OPERATING SESSIONS (AS OF 03/18/09)

- ✓ Amateur Radio Emergency Service (ARES)
- ✓ Amateur Radio License Exam 9:00 a.m.
- American Radio Relay League (ARRL)
- Antenna Tower Safety
- ✓ APRS Intro & Advanced Topics
- ✓ ARRL Buffet Breakfast
- Desecheo Island DXpedition Tentative
- ✓ D-Star Intro & Advanced Topics
- DXCC, WAS, & VUCC card checking
- ✓ DXing
- ✓ Edge of Space Sciences Student Presentations
- ✓ HamCon Luncheon
- Lightning Safety
- ✓ HamCon Luncheon
- Meteor Scatter
- Military Affiliate Radio Service
- ✓ Mountain Topping The Colorado 14'ers
- ✓ Operate W1ÂW/Ø HF, VHF/UHF, Digital
- MARS Phoenix Lander
- ✓ Pileup Contest Tentative
- Power Line Noise ARRL QST Magazine "The Doctor is In"
- Prizes Hourly each day!!!

- ✓ OLF Contest
- **✔** Receiver Performance
- Remote Control of Your Amateur Radio Stations via the Internet Intro
- ✔ Public Service Nets Forum
- ✓ Salvation Army Team Emergency Radio Network (SATERN)
- ✓ Saturday Evening Social Meet old friends and new hams!
- Saturday Midnight-Wouff Hong-an "enlightening" adventure!
- ✓ Software Defined Radio (SDR) Intro & Advanced Topics
- Stardust Extended Robotic Deep Space Mission Using the NASA Deep Space Communications Network
- ✓ Switching Power Supplies
- ✓ Test Equipment
- Transmitter Foxhunt (BYO Equipment) 10:00-11:45 a.m.
   Sunday
- ✓ VE Testing Exams
- **✔** VHF Roving

Even more to come ...

Visit our web site at: <a href="https://www.hamconcolorado.org">www.hamconcolorado.org</a> for additional information!

RETAIN THIS FOR REFERENCE.