

# The Repeater Rag

## Volume 33 Number 1

NEWSLETTER OF  
THE DENVER RADIO LEAGUE

*A CLUB DEVOTED TO  
QUALITY AMATEUR RADIO*

Published in Centennial, Colorado

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**REPEATER LOCATIONS:**

146.88Ø..... Warren Mountain  
146.64Ø..... Centennial Mountain  
449.6ØØ..... Warren Mountain  
145.Ø5Ø Digi ..... Warren Mountain

**Repeater Identifier: WAØKBT**

DRL website: [www.denverradioleague.org](http://www.denverradioleague.org)  
or [www.eoss.org/drl](http://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 only to  
Denver Radio League or DRL ~*

**Remit to: Jim Hart, WØNFD**

**6882 South Prince Circle**

**Littleton, Colorado 80120**

**For information, contact Jim at 303-794-0196**

**MEMBERSHIP MEETING**

**REMINDER**

**FEBRUARY 16, 2010**

**7:00 TO 9:00 P.M.**

**BEMIS PUBLIC LIBRARY**

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- ✍ Meeting Presentation: Flexradio – Software Defined Radio, by Gerry Villhauer, WØGV & Jim Beall, KØTOR
  - ✍ For Sale – items by Jack Pansini, WAØBDF
  - ✍ For Your Mobile - Install Your 12 VDC Fuse Taps Correctly, by George Stoll
  - ✍ From the Desk of the Prez, WBØTUB
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**FLEXRADIO – SOFTWARE DEFINED RADIO  
PRESENTERS GERRY VILLHAUER, WØGV  
AND JIM BEALL, KØTOR**

Software Defined Radio (SDR) is the new radio design technology that is emerging into amateur radio. Flexradio has several SDR models available on the market. SDR represents a new transceiver design which replaces the superhetrodyne circuit design which has dominated since the 1930's. SDR uses a quadrature product detector in place of the mixer/IF circuitry. The benefit is significant performance improvement. Also the majority of signal processing is performed digitally in the personal computer. Digital filtering far surpasses the analog circuitry. Flexradio being a predominately software-based radio, continues to be upgraded following purchase. And since the software has been established as public domain by Flexradio, all programmers are free to write and share improved applications. Improved performance characteristics will be presented and demonstrated at this presentation. Also, you can experience these performance improvements with you own demo.

A website that could be helpful to DRL members.

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

This website lists: Events and other items

1. VE testing, schedules and locations
2. Amateur license class schedules
3. Amateur radio contests
4. Hamfests
5. Amateur radio volunteer needs
6. Scheduled Nets
7. Aviation events (regional air shows and events)

**ITEMS FOR SALE**  
**CONTACT JACK PANSINI, WAØBDF**  
[jpansini@juno.com](mailto:jpansini@juno.com)

- ★ Hustler RM-15 mobile antenna resonator, 400 watt SSB power rating 3/8 inch x 24 thread - \$5.00 OBO
- ★ Hustler RM-10 mobile antenna resonator, 400 watt SSB power rating 3/8 inch x 24 thread - \$5.00 OBO
- ★ Cushcraft R7 vertical Antenna 10 - 40 meter 1800 watt PEP with manual - \$125.00 OBO

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**FOR YOUR MOBILE**  
**INSTALL YOUR 12 VDC FUSE TAPS CORRECTLY**

I recently saw a well done VHF ham radio mobile installation – except one thing. This person had used the small copper fuse taps that slip over the “hot” end of one of the legs of an existing fuse - and then plug into your auto’s fuse block. See figure 1 – showing one of these copper taps next to an ATC auto fuse. The idea is that you then slide a connector over the metal tab extending above the existing fuse, and install your own in-line fuse in the cable to your radio. But there are some problems with these. When you force the existing fuse back into the fuse holder with this added metal tab on it, your fuse with the extra large foot on it puts extra pressure on the fuse block. This stretches the connection so after a period of time, the fuse may vibrate out. And, another common problem, after a period of time the vehicle drives over a bump and the shock cracks the fuse block.



Figure 1 – Old style slip on auto fuse tap in front of an ATC style fuse

The right way to do this is to use one of the dual fuse mounting taps. With these units one of the fuses is for the existing auto circuit you are tapping for power, the other is a fuse for your tap circuit. See Figure 2. You then crimp on the hot wire to your radio. Not only do you have the holder for your fuse, you have a plug in device that won't stretch the auto fuse block contacts or at a later date, crack it. The examples in

Figure 2 are made by Cooper-Bussman and are available at most auto parts stores.

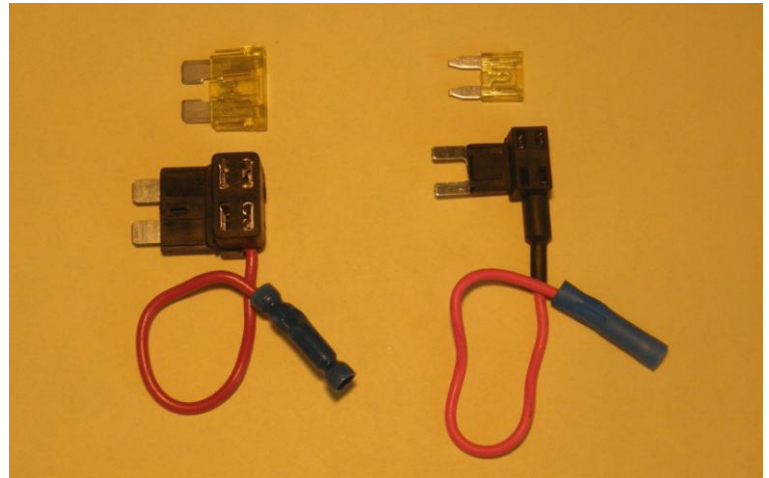


Figure 2 – Correct type of taps for the two common auto fuse sizes. The one on the left is a ATC style, the one on the right an ATM style.

Of course, this is only applicable to VHF-UHF mobiles or accessories drawing less than 15 amps. If you are trying to run an HF mobile or amplifier(s) – you need larger size wire and a direct tap to the battery. There is appropriate hardware for that, too.

73,

George Stoll  
WAØKBT

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**FROM THE DESK OF THE PREZ...**

A new year is upon us, all DRL repeaters are working fine (a little noise on 64 from time to time) and we have a meeting coming up that should pique your interest! See elsewhere in this issue for the Software Defined Radio program by Jim and Gerry...

We have a new VP! Jack Pansini, WAØBDF, jumped in the fray and agreed to serve as the Vice President for the Denver Radio League – thanks, Jack!

Dues are due this month so please get current if you are not...dues go to Jim, WØNFD (check to DRL only). See his contact info on the front page of the Rag. Look at your address label, if it says anything other than 2010 or later, you are due!

No shack shots for this issue – send in your photos so we can get an archive of shack shots so we (Eileen) will have some ready to go.

Here's hoping for a happy and prosperous 2010! See you at the meeting!

73!

Tim, WBØTUB  
President, DRL