

The Signal Report

A Publication of the Greenwood Amateur Radio Society

VOLUME 11 ISSUE 6

JUNE

[HTTP://WWW.W4GWD.ORG](http://www.w4gwd.org)

W4GWD@ARRL.NET

2015 CLUB

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The W4GWD Repeater Network

147.165+ t107.2

Echolink: 584003

443.900+ t107.2

W4DEW/R

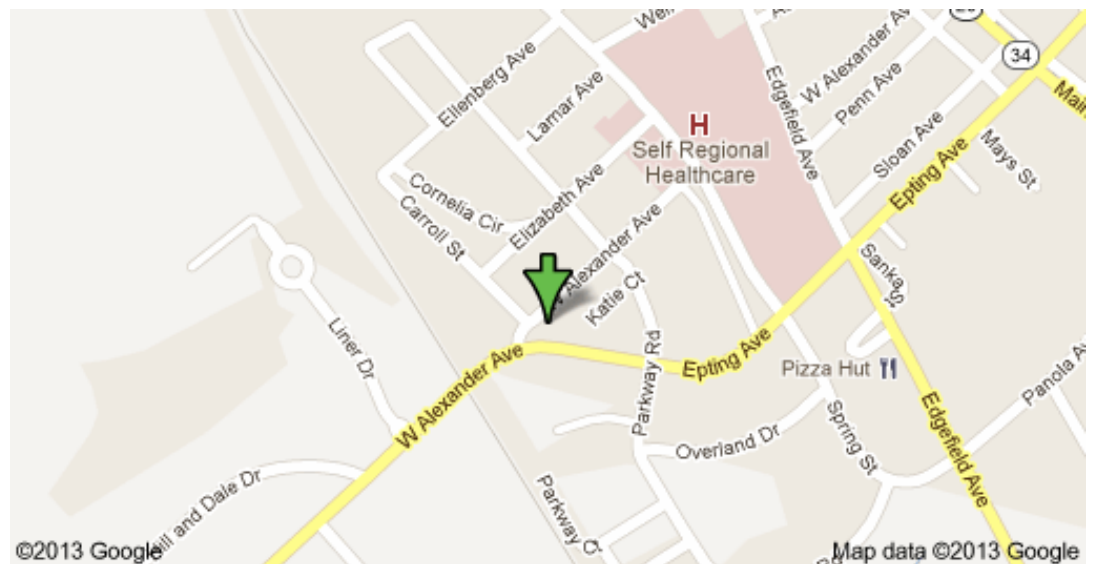
146.910- t123.0

W4GWM/R

145.420- DV

May Meeting

This month's meeting will be Monday, June 15th. The Greenwood Amateur Radio Society now meets at the American Red Cross building, 520 Epting Ave. Greenwood, SC. Please join us at 7 for light refreshments. The meeting starts at 7:30 sharp.



Digital Update

D-Star is up, and regularly connected to Reflector 30C.

Echolink is up.

WJ4X-7 Packet Node is up and connected to the Carolinas Packet System.

APRS iGate is up.

Downtown Digi coming soon.

Like Us on
Facebookfacebook.com/
GreenwoodARS

Society Events:

Chat 'N' Chew

Every Friday at 11:30am the members of the Greenwood Amateur Radio society meet at **Ryan's**, Bypass 25 NW, Greenwood.

Everyone is welcome to have lunch or sip your favorite beverage and chat for a while.

(Dutch treat).

VE Exam Session August 4th, 2014 7:00pm

GARS ARRL Volunteer Examiners (VE) Team will have an exam session 7:00pm Tuesday, August 4th at The American Red Cross Building 520 Epting Avenue, Greenwood, SC 29646.

Weekly Net

Each Thursday night at 9pm on the 147.165+ machine, The Greenwood Amateur Radio Society holds our weekly 2 meter net. Help spread the word for everyone to check-in to our net. If you would like to fill in or be a backup net control please let Tedd Davidson AI4WN know

Congratulations

Happy Birthday!

Kevan Nason	N4XL	June 6
Edna Elledge		June 9
Dave Russ	K4DWR	June 9
Richard Bowie	KK4BMK	June 10
Jim Cox	W3COX	June 14
Adam Shirley	WJ4X	June 15
George Crane	W3RXF	June 20
Karla Cox	WB3LNX	July 4
Homer Banks	WB4MLU	July 10
Joe Mimms	K4GBH	July 13
Kevin Simpson	KJ4GAQ	July 14
Betty Jean Powell		July 15
Jeremy Manning	KI4CCZ	July 28
John Penman	KC0CBD	July 30

Happy Anniversary!

Earl KC4AXY and Betty Jean Powell	June 5
Tedd AI4WN and Gail Davison	June 15
Joe K4GBH and Jewell KI4WJO Mimms	June 16
Brab WB4TRF and Elaine KA4PLU Dukes	July 6
David W4MCC and Brenda McCall	July 7
George W3RXF and Betty Crane	July 11
Joe KK4RVC and Wendy Suddeth	July 12
Kevin KJ4GAQ and Yvonne Simpson	July 12

Phil's Corner:

Hamisms
#6603a

Well? CQ!

If you have any ideas for books you'd like to see in the GARS Library,
Contact Jim AK4EK

TVI Tuning Stubs by Adam WJ4X

Do you have television interference (TVI) when transmitting high power on your 2 meter rig?

I did. Even today's Digital Over The Air (OTA) broadcasts are not immune to intermod from very close FM transmitters. When I relocated and upgraded my house 2 Meter antenna to the same mast my OTA TV antenna was located on, I started experiencing receiver overload when transmitting on 2 meters at higher power levels. I determined the issue lie within the inline amplifier or the TV receiver itself being wideband and Part 15. How do I notch the 144-148MHz band from my OTA antenna installation?



I came up with several different ideas to solve my problems. First, I considered a band reject cavity, much like the ones used in repeater installations. Cost and availability nulled this idea quickly. Next, a CATV channel 18 notch filter. CATV channel 18 is roughly our 2 meter band. Several companies make these, and after searching for one, they seem to be unobtainable readily. Even off the shelf reject filters are hard to find. Well... The fix was quite simple, and practically free: the transmission line open tuning stub. Tuning stubs are used quite often in multi-transmitter installations, and work very well, so why not!

The math goes a little like this:

Wavelength(Freespace-146MHz) = $300\text{m/s} / 146\text{MHz} = 2.054 \text{ Meters}$

...divide this by 4 to get 1/4 wave: $2.054 \text{ meters} / 4 = 0.513 \text{ Meters}$

And since we live in the land of feet and inches: $0.513 * 39.370 = 20.19 \text{ inches.}$

We multiply this by the velocity factor of your transmission line.

In my case, foam RG 6 is 0.81: $0.81 * 20.19 = 16.3539$

I cut my stub a little shorter than $16 \frac{5}{16}$ to account for the "Tee" connector and F connector. Folks with access to an antenna analyzer can quickly check their stub length. The stub must be inserted before any inline amplifier or impedance matching such as a splitter or distribution tap. My particular stub has a reject bandwidth of approximately 5 mHz, and completely cures my problem. The hardest part was tracking down an F connector Tee that contained no impedance matching.

Sometimes the best solutions to our problems are the easiest and cheapest!



Are you an ARRL Member? Joining ARRL helps protect our rights as Amateur Radio Operators as well as providing education, QSL Bureau, technical advise, and the ARRL VEC. <http://www.arrl.org>



HAMFESTS and EVENTS:

Mark your Calendars! Greenwood Amateur Radio Society Hamfest at Piedmont Technical College January 2016

07/25/2015 WCARS Hamfest Haywood County Fairgrounds 758 Crabtree Road Waynesville, NC 28785 <http://wcars.org> Western Carolina Amateur Radio Society Talk-In: 146.91- T91.5 146.775- T127.3 Contact: Jeff Weller, KJ4TEI 828-275-3297 kj4tei@gmail.com

09/05-06/2015 Shelby Hamfest Cleveland County Fairgrounds 1751 East Marion Street Shelby, NC 28150 <http://shelbyhamfest.org> Shelby Amateur Radio Club Talk-In: 146.880 Contact: Ben Melvin, KM4C 980-295-5151 km4c@me.com

Greenwood Amateur Radio Society Meeting Refreshments List:

2015

June 2015: Joe & Jewell

July 2015: Kevan

August 2015: Buddy

September 2015: Tyrone & Warn

October 2015: George & Betty

November 2015: Phil & Jo

January 2016: Open

February 2016: Open

March 2016: Open

April 2016: Open

Let's fill those open slots!

Send an email to adam@wj4x.net to reserve your spot!

We will ask for volunteers for the refreshments list over the next few weeks, so be thinking of what month you'd like to volunteer!

Packet Cluster:

- ◆ The American Radio Relay League protects our rights as Amateur Radio Operators <http://www.arrl.org>
- ◆ Support for SERA supports proper coordination! <http://www.sera.org>
- ◆ Remember your local and regional interest clubs!
- ◆ Southeast DX Club <http://www.sedxc.org>
- ◆ Spread The Word! 147.165 Net Thurs. 9pm
- ◆ Callsign info <http://www.ae7q.com>
- ◆ Track us on APRS: <http://aprs.fi>

Classifieds:



Kenwood TM-D710A Dual Band Dual Receive VHF/UHF. Built in TNC for APRS and other digital modes. \$400 Contact Joe Mimms K4GBH k4gbhjoe8@gmail.com 864-746-9517

Do you have an old MFJ TNC you want to use on packet but it's broken or misbehaving? MFJ will repair older TNCs (1270,B or C models, 1278, etc.) The cost to troubleshoot is \$20 and repair which includes calibration and alignment usually runs \$45 to \$50. Please contact Adam WJ4X adam@wj4x.net for more info.

Kenwood TS-2000 All mode, All Band, complete shack in a box. Built in TNC, sub receiver for V/UHF and packet. \$1100; Contact Adam WJ4X adam@wj4x.net

If anyone has any Ham radio stuff to sell or trade... list it in this column by calling Buddy, w4dew@arrl.net, 864-445-7574

If you want to see your article or wish to advertise in The Signal Report, please send an email to the newsletter staff via newsletter@wj4x.net