



The Signal Report

A Publication of the Greenwood Amateur Radio Society

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JUNE

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

W4GWD@ARRL.NET

2017 CLUB

OFFICERS

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The W4GWD Repeater Network

147.165+ t107.2

Echolink: 584003

443.900+ t107.2

W4GWM/R

145.420- DV

W4DEW/R

146.910- t123.0

WJ4X/R

442.600+ t107.2 / DV

Infrastructure Update

Analog Repeaters are up.

DMR and D-Star is up.

Fusion is up.

Echolink is up.

APRS iGate is up.

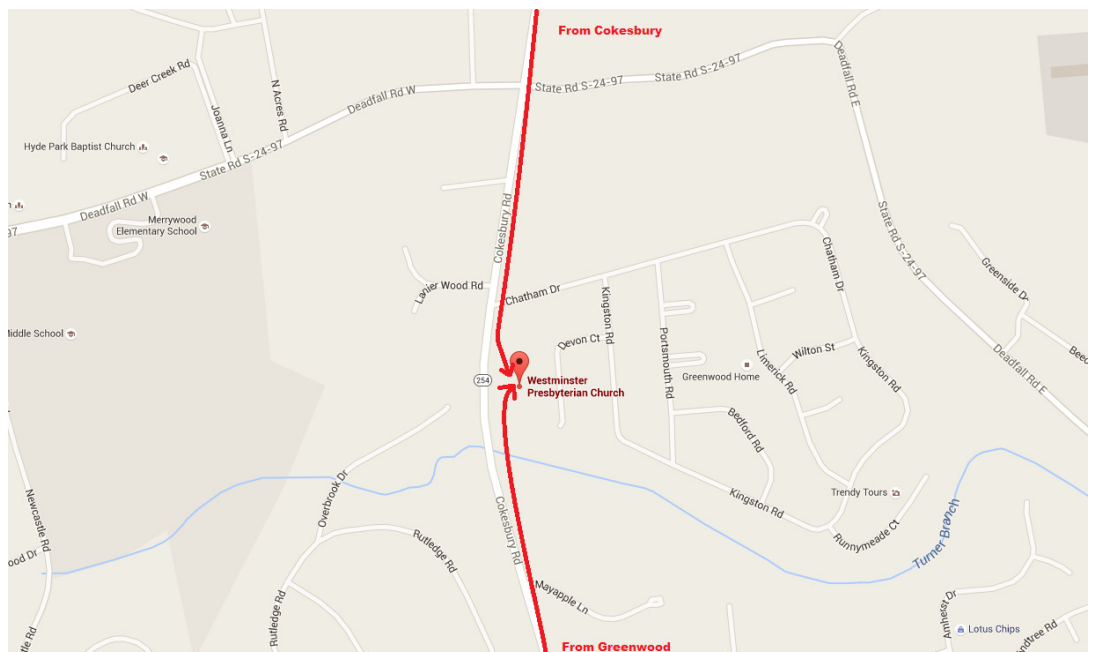
Packet Node is up connected to the Carolinas Packet System. 145.010

Downtown Digi coming soon. (equipment is sourced!)

Repeater Linking Project coming soon! (antenna is hung!)

June Meeting

This month's club meeting will be held at the Westminster Presbyterian Church, located at 2330 Cokesbury Rd, Greenwood, SC. The new meeting date is on the 2nd Tuesday, which will be the 13th this month. Meeting starts at 7:30 Sharp.



Society Events:



Like us on Facebook

facebook.com/
GreenwoodARS

If you have any ideas for books you'd like to see in the GARS Library, Contact Mitch KJ4JGP

Chat 'N' Chew

Every Friday at 11:30am the members of the Greenwood Amateur Radio society meet at a local restaurant. Please check in on radio to hear the new location. Everyone is welcome to have lunch or sip your favorite beverage and chat for a while. **Dutch treat.**

Weekly Nets

Each Thursday night at 9pm on the 147.165+ machine, The Greenwood Amateur Radio Society holds our weekly 2 meter net.

VE Exam Session

The GARS ARRL Volunteer Examiners (VE) Team will have an exam session 7:00pm Tuesday, June 4th at the Westminster Presbyterian Church. The address is 2330 Cokesbury Rd Greenwood SC 29649-9515 We hope to see you there. Please contact Buddy Willis W4DEW w4dew@arrl.net

Congratulations

Happy Birthday!

Kevan Nason	N4XL	June 6
David Russ	K4DWR	June 9
Richard Bowie	KK4BMK	June 10
Jim Cox	W3COX	June 14
Adam Shirley	WJ4X	June 15
Angie Barrouk	KG4VLN	June 17
George Crane	W4RXF	June 20
Di Litwer	N4DLL	June 24
Karla Cox	WB3LNX	July 4
Stephen Lyda	KI4ZSY	July 4
Elile Barrouk	KG4ZFD	July 5
Homer Banks	WB4MLU	July 10
Kevin Simpson	KJ4GAQ	July 14
Betty Jean Powell		July 15
Dustin Mosley	KM4LWJ	July 17
Mitch Litwer	KJ4JGP	July 24
Nathan Hermann	KK4ZZP	July 26
Jeremy Manning	KI4CCZ	July 28
John Penman	KC0CBD	July 30

Happy Anniversary!

Earl and Betty Jean Powell	June 5
Tedd and Gail Davison	June 15
Dustin and Laura Mosley	June 20
Brab and Elaine Dukes	July 6
David and Brenda McCall	July 7
George and Betty Crane	July 11
Kevin and Yvonne Simpson	July 12
Joe and Wendy Suddeth	July 12
Fred and Mary Pinson	July 18

Phil's Corner:

Hamisms #3589

When soldering wires, a 3rd hand clamp makes work easier.

MMDVM

Multi Mode Digital Voice Modem

The MMDVM is intended to be an open-source Multi-Mode Digital Voice Modem, which utilizes the power of an ARM processor and a simple analogue interface board. The Multi-Mode Digital Voice Modem is a combined hardware and software development of a modem to handle all amateur digital voice modes. Initially it will support D-Star and DMR, with System Fusion and P.25 coming later, as well as a built-in FM repeater controller. For all modes other than DMR and FM, the modem can be used in simplex or duplex mode, while for DMR and FM full duplex must be used.

It is aimed at the Arduino Due, Teensy 3.1/3.2 and mbed platforms, the only requirement for the hardware is to be ARM Cortex-M3, M4, or M7 based, and access to raw interrupts and ADC and ADC ports as well as digital signalling ports. For this reason the Raspberry Pi and similar single board computers are not being targeted as access to the raw I/O is mediated by the operating system kernel and does not provide the performance, nor does the hardware provide the necessary direct access to the I/O pins on the ARM processor. However such boards are very useful for hosting the interface of the modem to external networks such as ircDDB in the case of D-Star.

Hardware

Currently the only hardware device specified is the Arduino Due. However the requirements are common to all supported platforms. The modem requires one analogue input, one analogue output, and one digital output. A second digital output. The analogue input requires that the audio is low pass filtered with a cut-off of around 5 kHz and the output then level shifted so that a zero input signal provides an output of half the rail voltage (3.3V) for the ADC, it is important that the low frequency characteristics of this stage is very good with little or no low frequency roll-off due to any coupling capacitors in the signal path.

The analogue output has very similar requirements to the input filtering with the caveat that the output signal from the DAC will be at half the rail voltage for a zero output. Both the input and output can be inverted in software, The one required output line will be used to signal a transmit condition, the modem is capable of providing an inverted output if needed. The extra output can be used to drive a LED which is used by the modem to indicate that an incoming signal is being decoded.

One of these boards will soon power the WJ4X-R Multimode Digital Repeater System.

HAMFESTS and EVENTS:

Mark your Calendars! Greenwood Amateur Radio Society Hamfest at Piedmont Technical College January 2018

North Carolina State Convention
Start Date: 09/01/2017
End Date: 09/03/2017
Location: Cleveland County Fairgrounds
1751 East Marion Street
Shelby, NC 28150
Website: <http://www.shelbyhamfest.org>
Sponsor: Shelby Amateur Radio Club
Talk-In: 146.880- (no PL)
Public Contact: Tom Forgas, KB0PD
108 North Oakwood Drive Kings Mountain,
NC 28086
Phone: 703-201-1262
Email: chairman@shelbyhamfest.org

South Carolina Section Convention
Date: 10/07/2017
Location: New Kirk Baptist Church
175 Museum Road
Rock Hill, SC 29730
Website: <http://www.ycars.org>
Sponsor: York County Amateur Radio Society
(YCARS)
Talk-In: 147.030- (PL 88.5)
Public Contact: Andy Kunik, AE8J
1625 Restless One Lane Rock Hill, SC 29730
Phone: 803-324-4024
Email: Akunik@bellsouth.net

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:



2 Meter whip antenna for sale, Best Offer. Contact Stephen Lyda KI4ZSY stephenlyda@yahoo.com

Get into DMR quick and easy! Connect Systems 750, \$175 w/ software and cable 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