

# The Signal Report

A Publication of the Greenwood Amateur Radio Society

VOLUME 14 ISSUE 5

MAY 2018

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

[W4GWD@ARLL.NET](mailto:w4gwd@arll.net)

## 2018 CLUB

### OFFICERS

#### President

David Russ, K4DWR

#### Vice President

Adam Shirley, WJ4X

#### Secretary

George Crane, W3RFX

#### Treasurer

Tedd Davison, AI4WN

#### Repeater Trustee

Buddy Willis, W4DEW

#### Activities Manager

Kevan Nason, N4XL

#### Editor in Chief

Michael Wills, KA4CSM

### 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 down, maybe for an extended time.

APRS iGate is up.

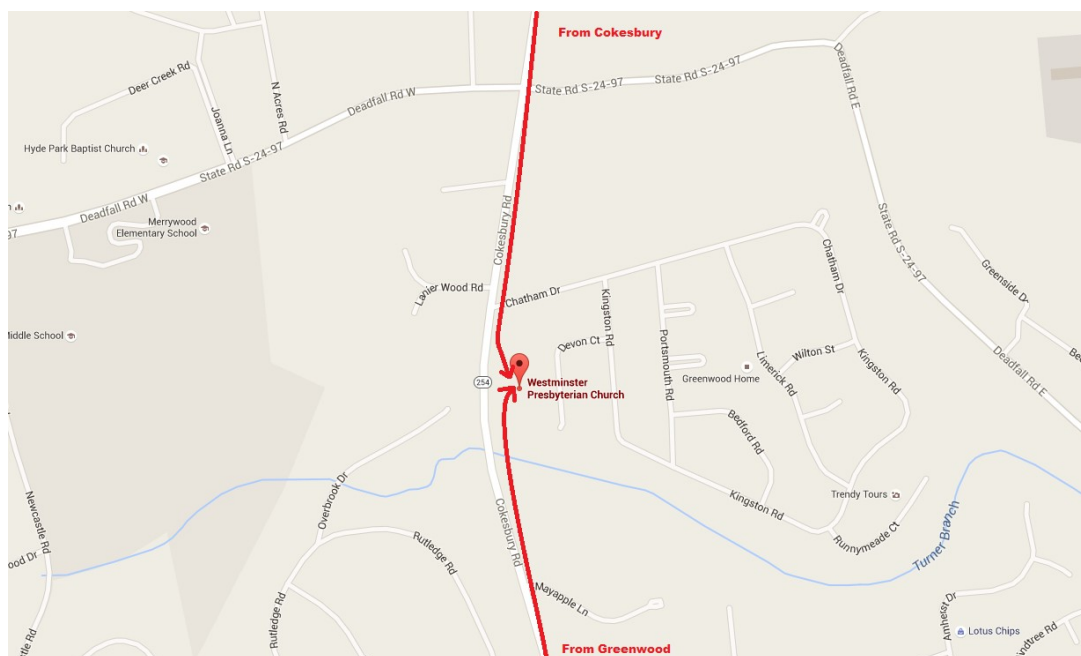
Packet Node is down when up it is connected to the Carolinas Packet System 145.010

Downtown Digi is up and operational

Repeater Linking Project—Linked now (undergoing testing)

## May Meeting

Our Club meets at the Westminster Presbyterian Church, located at 2330 Cokesbury Rd, Greenwood, SC. We meet on the 2nd Tuesday of each month which will be the 8th of this month. Meeting starts at 7:30 Sharp.





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

Phil's Corner:

Hamisms #363

When soldering wires, a "third hand" makes work much easier!

## Greenwood Amateur Society Events:

### Chat 'N' Chew

Every Friday at 11:30am the members of the Greenwood Amateur Radio society meet at a local restaurant. Please check in to our Thursday radio net weekly, as locations change. Everyone is welcome to have lunch or sip your favorite beverage

### Weekly Nets

The Greenwood Amateur Radio Society holds our weekly 2 meter net each Thursday night at 9 p.m. on 147.165 with a plus .6 mhz offset

Our UHF net is on 443.900 with a + 5 mhz offset is held Mondays at 8pm

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 contact Tedd Davison [ai4wn@arrl.net](mailto:ai4wn@arrl.net)

### VE Exam Session

The GARS ARRL Volunteer Examiners (VE) Team will have an exam session 7:00pm Tuesday, June 5th 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](mailto:w4dew@arrl.net)

## Congratulations!!

### Happy Birthday!

|                   |               |        |
|-------------------|---------------|--------|
| Theaster Willis   | Family Member | May 10 |
| Andy Bagwell      | KN4DYV        | May 17 |
| Teddy Johnson     | AE4TJ         | May 17 |
| Tom Blease        | KO4CM         | May 22 |
| Elizabeth Meadows | W2LIZ         | May 26 |

### Happy Anniversary

|                          |
|--------------------------|
| John & Cindy Penman      |
| May 9                    |
| Chad Robinson            |
| May 13                   |
| David & Margaret Haynes  |
| May 14                   |
| Dan & Christy Curry      |
| May 20                   |
| Arthur & Kathy Gillespie |
| May 26                   |

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>



## Businessman and friend to the Ham Community becomes a Silent Key.

<https://www.thewireman.com>

## Presidents QSO

Greetings Everyone! There's Lots of Information in this Month's News Letter about Field Day.

Plans are shaping up to produce an exciting, fun-filled event with some new twists. Read on! I want to say thanks to Adam Shirley, WJ4X, Mr. Vice President, for keeping the ball rolling by presiding during the April meeting in my absence due to a minor illness. I especially want to thank those of you who came forward with some truly great ideas for field Day activities. We still have two meetings left before June 23d. So we can keep on planning, adding or refining as the club feels necessary. Either way, I believe we are going to have an excellent Field Day! 73 de Dave, K4DWR

## Field Day Update

The Greenwood Amateur Radio Society will hold its annual Field Day on June 23, 2018. It will be held at the Coronaca Baptist church, located at 300 Highway 246 N. Greenwood, SC. The day will begin at 0800 with an introduction to the operation of the Clubs radio trailer. This will be a great opportunity to get to learn how to use it and its capabilities. Shortly after that rigs will be set up, and antennas erected/strung up. Later in the day club members will be offering classes on soldering and how to construct a simple antenna. Chef Adam WJ4X will be barbecuing hotdogs and sausages. Marsha KD4AYF, has volunteered to make her famous chili. Lunch will start around 1130 – 1200. Rigs will be operated and participate in field Day contacts.

Field day is an opportunity to showcase amateur radio to the public. Put it on your calendar, invite your family, friends and all your neighbors. Review the origin of Field Day that Tedd AI4WN wrote in the April newsletter.

## Update on Linking Project

Buddy Willis' W4DEW repeater (146.910) located in Saluda will be the next one added to the Greenwood link. Soon after, a link to the WARNS group (Wide area repeater network system) will be established. When this final link occurs, it will give us an additional sixteen (yes 16) repeaters. You can look them up at <http://warnsystem.org>.

**Big things are happening in your club, ask how you can be a part of them.**

## Interesting article from Teddy Johnson AE4TJ

<https://wattsupwiththat.com/2018/04/11/solar-activity-crashes-the-sun-looks-like-a->

## New Technician Class Question Pool Released CQ Mar. 18

The National Conference of Volunteer Examiner Coordinators (NCVEC) has released the new Element 2 question pool from which all U.S. Technician Class license exams will be composed between July 1, 2018 and June 30, 2022. The new pool contains 428 possible questions. A brief errata was also released, rephrasing one question, changing one correct response choice and correcting a couple of typographical and/or style errors.

## ARRL Requests Expanded HF Privileges for Technician Licenses

02/28/2018

ARRL has asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The FCC has not yet invited public comment on the proposals, which stem from recommendations put forth by the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its [Petition](#). "It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."

Specifically, ARRL proposes to provide Technician licensees, present and future, with phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz, plus RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters. The ARRL petition points out the explosion in popularity of various digital modes over the past 2 decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under the League's proposal.

ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills. Demographic and technological changes call for a "periodic rebalancing" between those two objectives, the League maintains.

"There has not been such a rebalancing in many years," ARRL said in its petition. "It is time to do that now." The FCC has not assessed entry-level operating privileges since 2005.

The Entry-Level License Committee offered very specific, data- and survey-supported findings about growth in Amateur Radio and its place in the advanced technological demographic that includes individuals younger than 30. It received significant input from ARRL members via more than 8,000 survey responses.

"The Committee's analysis noted that today, Amateur Radio exists among many more modes of communication than it did half a century ago, or even 20 years ago," ARRL said in its petition.

Now numbering some 378,000, Technician licensees comprise more than half of the US Amateur Radio population. ARRL said that after 17 years of experience with the current Technician license as the gateway to Amateur Radio, it's urgent to make it more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education "that inescapably accompanies a healthy, growing Amateur Radio Service," ARRL asserted.

ARRL said its proposal is critical to developing improved operating skills, increasing emergency communication participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about 1% per year.

## ARRL Requests Expanded HF Privileges for Technician Licenses (Continued)

The Entry-Level License Committee determined that the current Technician class question pool already covers far more material than necessary for an entry-level exam to validate expanded privileges. ARRL told the FCC that it would continue to refine examination preparation and training materials aimed at STEM topics, increase outreach and recruitment, work with Amateur Radio clubs, and encourage educational institutions to utilize Amateur Radio in STEM and other experiential learning programs.

“ARRL requests that the Commission become a partner in this effort to promote Amateur Radio as a public benefit by making the very nominal changes proposed herein in the Technician class license operating privileges,” the petition concluded.



I ran across this web page, it looked interesting ,so I thought I'd pass it along to CW and potential CW Operators [cwops.org](http://cwops.org)



### THE BOOTLEGGER

A bootlegger walks into a radio store and tells the salesman that he would like to buy the new HF rig over in the corner. The salesman says, "Sorry, we don't sell to bootleggers". He leaves, goes home, puts on a brown wig and sunglasses and goes back to the store and tells the salesman he wants to buy that new rig over in the corner. Sales guy says, "Sorry, we don't sell to bootleggers". Old boot asks, "How do you know I'm a bootlegger?" and the salesman replies, "Because that's not a rig, it's a microwave oven."



Yesterday I saw an Ad that said “Radio for sale, \$1, Volume stuck on full”

I thought, “I can’t turn that down”

UnKNOWN PUNster @2018



## Emergency Communications Planning, Part 1

Dan Curry, KM4AJ

When the topic of Emergency communications planning comes up the discussion usually goes either toward ARES, RACES or MARS. While these are important emergency radio services, they lack a basic level of practicality for the individual during a disaster. Traditional emergency radio services are focused on providing auxiliary communications services to state and local municipality's emergency services. The individual's needs are different from the needs of a municipal emergency service, thus it's worth taking some time to look at the needs of the individual to see what emergency communications planning would look like for an individual. In previous articles we've discussed various methods of maintaining power for radio use during a power outage. So for the purposes of this article we'll assume that you have sufficient power to operate your radios.

We'll break this down into two parts. First we'll talk about HAM to HAM communications, second we'll talk about HAM to non-HAM communications.

During a disaster such as a hurricane, there are several things that an individual may need for communications. First they may need to communicate with emergency services in order to request assistance. While it may seem tempting to look up the VHF frequencies of local Police, fire and EMS and communicate directly with them, there are problems with this approach. First of all most municipalities have switched over to the Palmetto 800 Trunked radio system and no longer use the VHF frequencies that are allocated to them. Since the Palmetto 800 is a highly available radio network, chances are good that it will be in operation during a disaster, so you can't count on the VHF frequencies to be monitored. Second, if emergency services are using the VHF frequencies, they will more than likely be using the frequencies to coordinate their operations so they won't appreciate someone interfering with their communications even to request assistance. The better approach would be to have the designated ARES frequencies programmed into your radio and participate in the ARES nets in order to practice using them. This would include VHF/UHF repeaters as well as the ARES HF nets. In SC there are weekly nets on the SCHeart linked repeater system as well as regular ARES HF nets. These nets would activate during an emergency event and give the individual HAM the ability to communicate with emergency services in an orderly fashion in order to request assistance.

The second need an individual HAM would have would be to receive information about the disaster in order to make decisions about staying put or leaving the area. Obviously there are TV and FM Radio broadcasts intended for the general public but there are additional information sources available for the HAM. HAMS will generally have the radio equipment necessary to monitor a variety of both federal and state emergency communications frequencies. There are two emergency communications plans that should be looked at to create a list of frequencies to monitor. The National Interoperability Field Operations Guide (NIFOG) is a federal level guide for handling communications and includes many frequencies used by federal agencies such as FEMA in a disaster. The [South Carolina Interoperability Channel Plan](#) is a guide for state agencies and includes many frequencies used by state agencies in a disaster. You may want to download and/or print copies of these plans as these online resources may not be available when you need them. These guides can help you to know what frequencies to monitor in order to get information about the disaster situation to plan for the safety of your friends and family.



## Emergency Communications Planning, Part 1 (Continued)

Dan Curry, KM4AJ

In addition to emergency services communications there are designated nets that activate to cover certain types of events. The Hurricane Watch Net for example is setup to provide information to HAMs about Hurricane weather events made available from the National Hurricane Center. I've monitored this net during the last few Hurricanes that came through South Carolina and have heard both information from the National Hurricane Center as well as real-time situational report from HAMs in the affected area. This can also be used to send or relay situational information to the National Hurricane Center from your area.

The next need an individual HAM may have is to send or relay information to fellow HAM about your situation. This may be just to let friends know that you're ok or to ask for non-emergency assistance from fellow HAMs. A good method of passing traffic to fellow HAMs is to utilize nets that have activated either over your local repeater or on HF. While this works well if everyone is on the air at the same time, it may not always allow you to link up with who you need to communicate with. In the event the other station is not checked into the net, you may want to use a Radiogram to communicate. A radiogram is a message that is passed from HAM to HAM in a standard fashion. Radiograms may be stored by one HAM until the destination station checks into the net or can be passed between HAMs in order to move the message over a greater distance. Nets such as the South Carolina Single Side Band net ([www.scssb.net](http://www.scssb.net)) on HF activates every night and routinely passes Radiogram messages. Since during a disaster is not the time to learn a new skill, anyone who thinks that they may want to use a radiogram should use nets like the SC SSB net to practice sending and receiving Radiograms so they are prepared to do so in a disaster.

Another communication method that can be used in a disaster is Echolink ([www.echolink.org](http://www.echolink.org)). Echolink is software that allows a computer that is connected to a radio to relay a signal that comes in over the internet to be retransmitted over the radio. Echolink nodes that operate over repeater frequencies are popular for extending the coverage of repeaters over great distances. As long as internet access is still online, Echolink can allow HAMs to communicate to those outside of the affected disaster area when HF frequencies are in use or HF antennas are down.

Another popular form of digital communications that could be used in a disaster is PSK31. PSK31 is a popular way to make digital QSO's over HF frequencies. Given the fact that PSK31 is only 50hz wide and operates within a 3Khz wide USB signal, multiple PSK31 signals can be simultaneously decoded. Using a PSK31 net during a disaster could allow many people to send event information and assistance requests concurrently. Currently, PSK31 is a digital mode that is used during ARRL Field Day to make contacts, but PSK31 nets are not widely used. The 3905 Century Club operates weekly PSK31 nets for those who would like to practice using PSK31 ([www.3905ccn.com](http://www.3905ccn.com)).

To be continued in the June newsletter.

## HAMFESTS and EVENTS:

### Blue Ridge Amateur Radio Society

Upstate South Carolina Hamfest

May 5, 2018

<http://brars.cc>

### Armed Forces Day Cross-Band Communication

May 12

### Dayton Hamvention

May 18-20, 2018

120 Fairground Rd.

Xenia, Ohio 45385

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

- \* 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://.sedxc.org>
- \* Spread The Word! 147.165 2m Net Thurs. 9pm
- \* Callsign info <http://www.ae7q.com>
- \* Track us on APRS: <http://aprs.fi>
- \* South Carolina DX Association <http://scdxa.org/>
- \* Swamp Fox Contest Group <http://swampfoxcontestgroup.com>

## Classifieds:

### Price reduced & component added

Hy-Gain TH7DX 10-15-20 M beam. Verified SWR 1.5 to 2.5 on all bands at 13' off ground. New plastic parts i.e. end caps and trap covers. Including an **Alliance Rotor** (has pitted bearings but races are smooth) Can be mounted inside tower or attached to mast. The connector and controller need to be replaced. Retail \$900, asking **\$300.00** Teddy AE4TJ [myemail122060@yahoo.com](mailto:myemail122060@yahoo.com)

Large black power supply, belonged to my Dad. Unmarked as to type, model, watts etc. Very heavy box of QST magazines. Best offer. Stephen Lyda, KA4PQA, [stephenlyda@yahoo.com](mailto:stephenlyda@yahoo.com)

Hope you have enjoyed reading our newsletter. Please contact me with any ideas/suggestions etc. Submit articles, including where you got it, for inclusion in future editions to me at [Mike31406@gmail.com](mailto:Mike31406@gmail.com)

*Mike*