



The Signal Report

A Publication of the Greenwood Amateur Radio Society (GARS)

VOLUME 18 ISSUE 11

NOVEMBER 2020

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

[W4GWD@ARRL.NET](mailto:w4gwd@arrrl.net)

2020 CLUB OFFICERS

President

Adam Shirley, WJ4X

Vice President

Ken Trapnell, KQ4RB

Secretary

George Crane, W3RXF

Treasurer

Tedd Davison, AI4WN

Repeater Trustee

Buddy Willis, W4DEW

Activities Manager

Andy Bagwell, KN4DYV

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

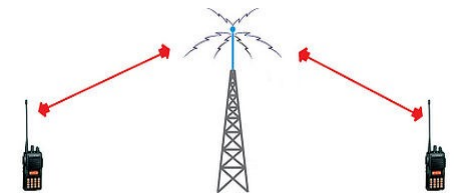
WJ4X/R

442.600+ t107.2 / DV

Ham Radio - Social Distancing for Over 100 Years



November 2020 Meeting



Our Club normally meets at the Westminster Presbyterian Church, located at 2330 Cokesbury Rd, Greenwood, SC. We meet on the 2nd Tuesday of each month making our next meeting on November 10th.

Unless notified otherwise it will be held "On the air" at 8 p.m.. A net roll call will be taken and it will become the official attendance roster for this meeting. The clubs 2m (147.165) and 70 cm (443.900) repeaters will be linked during that time. It's still with us so continue to **practice social distancing, the frequent washing of hands and the wearing of masks, Covid-19 is still with us and continues to take lives.**



Greenwood Amateur Society Recurring Events:



Like US on Facebook

facebook.com/
Greenwood ARS

Chat 'N' Chew

Every Friday at 11:30 a.m. the members of the Greenwood Amateur Radio society meet at a local restaurant. However, due to Covid-19 they have been temporarily suspended until further notice.

Weekly Nets

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

Our UHF net on 443.900+ is held Mondays at 8pm

Help spread the word for everyone to check-in to our nets. If you would like to fill in or be a backup net controller please contact [Tedd Davison](#)

VE Exam Session

The next GARS ARRL Volunteer Examiners (VE) Team exam date is to be determined. Currently suspended due to Covid-19.

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

Congratulations!!

Happy Birthday!

Al West B4RA Nov. 15

Happy Anniversary!

Mark (KT4KY) & Debbie Tussey Nov. 27

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>



Time changes on November 1



Like US on Facebook

facebook.com/
Greenwood ARS



Charles K Kayhart W4KKP, became a SK on 10-26-2020. He was a member of the Dutch Fork Amateur Radio Group and the Columbia Amateur Radio Club. He was first licensed in 1937 and in 2016 was recognized by ARRL as the “Worlds Oldest Operating ham” at 105 years old. He was a WW2 Veteran who witnessed the raising of the US Flag on Mount Suribachi, on Iwo Jima. While on Iwo Jima for six months he saw a lone B29 flying over which he later learned was the Enola Gay on its way to drop the atomic bomb on Hiroshima. Check out his QRZ page for more details.

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



November 3rd is election day. This is a very important one for all of us. Please don't vote for personalities, or political parties but rather place your vote based on past record and what he will do for our country in the future. Do your own research, don't simply listen to the news who may well be (is) biased. There is much to learn on the internet.

Guide to Morse code Proficiency

https://www.g4ifb.com/FOC_Guide_to_Morse_Code_Proficiency.pdf

The military renaissance in high frequency communications

<https://www.c4isrnet.com/battlefield-tech/it-networks/2020/09/22/the-military-renaissance-in-high-frequency-communications/>

October 2020 Net results. We can do better than this, particularly with the Monday night net. (70cm.)

2m

check-ins	119
traffic	6
sessions	6

70cm

check-ins	44
traffic	4
sessions	4



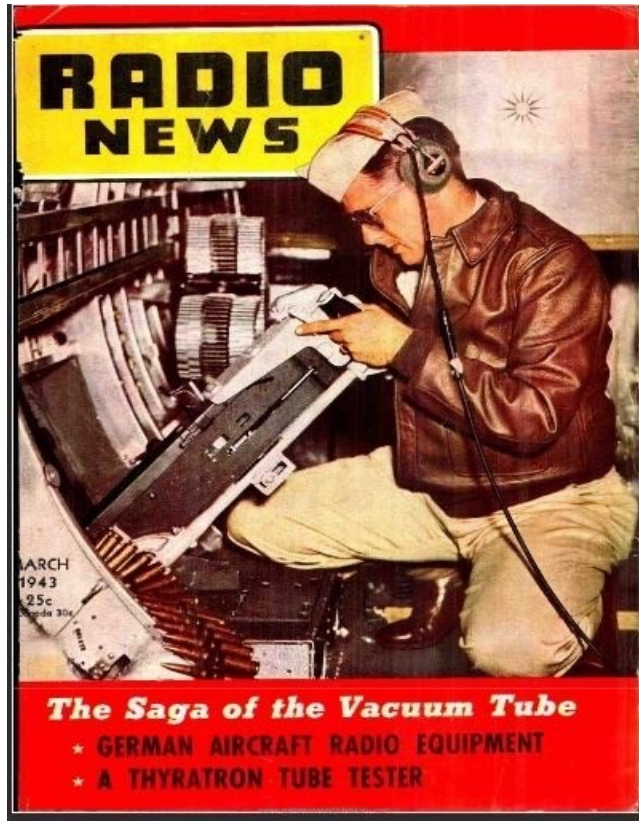
Its essential to the well being of our club that we all check into both the 2m and 70cm nets whenever possible. We are all busy in our lives but please take the time to support your club with a simple check in to both these nets weekly. The number of check-ins is submitted monthly to ARRL affiliates and can be used for everything from future frequency allocation to determining priority of repeater tower use. Our club officers can “market” ham radio as a viable public service more effectively to community leaders if we can show that both nets are used regularly. Ham Radio is an alternative form of emergency communications and considered a valuable asset to many, This is much more important than you think! We are currently looking for Net Controllers, it’s a great way to learn more about our hobby. Contact me if interested. *Tedd, AI4WN*



Like Us on Facebook

facebook.com/
Greenwood ARS

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





Like US on
Facebook

facebook.com/
Greenwood ARS

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



Veterans Day is November 11, 2020. It is a time to remember our veterans and the many sacrifices they made during their service to our country. Some of you have served our country in many different ways. For one reason or another you have chosen not to have your names listed here. The time you spent as a Soldier, Sailor, Airman or Marine, whether it be in peacetime or in harms way, is something you should be proud of; your Nation is. Thank you and for you Vietnam Vets; *Welcome Home.*

Kevan Nason, N4XL, MMC(SS) ret. Assignments included Engineering Watch Supervisor on two Ballistic Missile submarines and while on the commissioning crew for a new construction Fast Attack boat, Lead Nuclear Planner on a destroyer Tender, Reactor Plant Technology Instructor, and Nuclear Prototype Instructor.

Michael Wills, KA4CSM, Command Sergeant Major (CSM) ret. US Army 1969-1993, Vietnam 70-71, started career as a turbine engine repairman and served the next 20 years in the Field Artillery mostly on 105mm and 8" howitzers. Retired as a Brigade CSM.

Allen West, KB4RA, United States Navy 1962-1966, ATN2. Served as an airborne radio operator and technician in VW-11 for two years. Based in Argentina, Newfoundland, and Keflavik, Iceland. Crewmember on EC-121-K Lockheed Super Constellations in the North Atlantic as an airborne extension of the Dew Line radar defense during the Cold War era.. Tracked the Russian Bear aircraft flying down the Atlantic supporting Cuba. See Bio. of VO1NWP on QRZ.com for more information. During my tenure I had the pleasure of watching an island being born off the coast of Iceland, now called Surtsey, (See Wikipedia.) The volcano that built Surtsey is now dormant but I saw it before it broke the surface as a hole in the ocean. Also in the Navy with me was Larry (K9HXT), Sam (K3KLC) and Jack (KB5TXS). We have kept in touch for the last 50 years by various means including phone

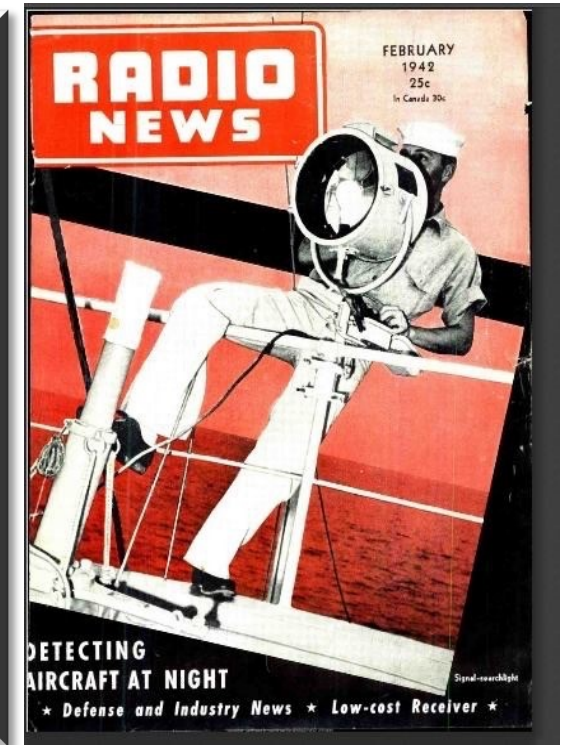
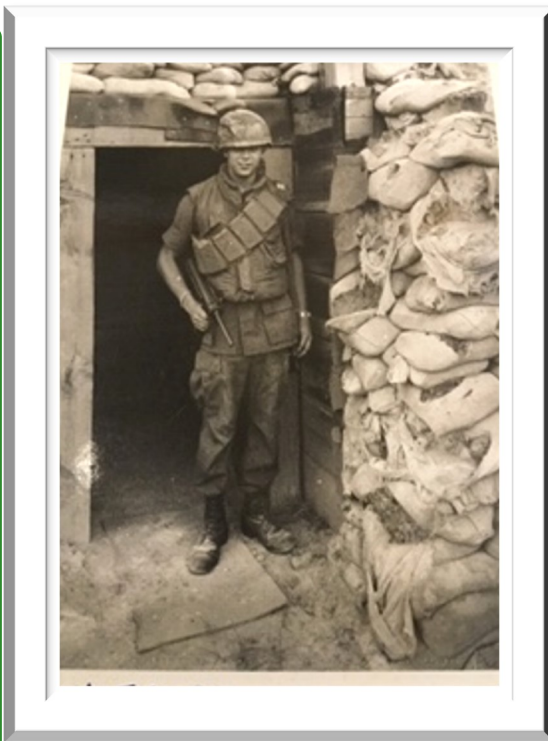
Ken Trapnell, KQ4RB is an Army Veteran who was on active duty from 1968-71. He served in Viet Nam 1970-71 as a 1LT in the Infantry.



Like US on Facebook

facebook.com/
Greenwood ARS

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





Like US on Facebook

facebook.com/
Greenwood ARS

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

Two Patriotic songs by Sailor Jerri. The first is titled “Hallelujah—Veterans version” (my favorite) there is another version immediately after, watch the video and listen to the words. Not ham related but all American!

<https://youtu.be/msYPbjFC50w>

“I’m going anyway”

<https://www.youtube.com/watch?v=VwmVSZvUPSs>



PTSD is real, many live with it everyday. The below link is a “Soldiers Memoir” a powerful PTSD song dedicated to them.

<https://www.youtube.com/watch?v=RFACrnTV58Y>

“Angel Flight” This one always brings tears to my eyes.

<https://youtu.be/nO3rrPHQwbs>

Interesting article about Slim Pickens, a radio operator during WW2

<https://www.warhistoryonline.com/war-articles/slim-pickens-stated-his-profession-was-rodeo-the-recruiter-heard-radio-slim-spent-ww2-as-a-radio-operator.html>

An Admiral addresses a graduating class—excellent motivational speech

<https://www.youtube.com/watch?v=yaQZFhrW0fU>

Popular Electronics, April 1955, submitted by Darrell AF4E

<https://worldradiohistory.com/Archive-Poptronics/50s/55/Pop-1955-04.pdf>

Like US on
Facebookfacebook.com/
Greenwood ARSIf you have any ideas for books you'd
like to see in the GARS Library,
Contact Mitch KJ4JGP

Relay Cleaning and Life, Part 2

Submitted by Kevan Nason, N4XL

Failure to Connect on Receive

Failure to return to receive is often mistakenly assumed to be a "sticky relay". This assumption probably occurs because "bouncing" or cycling the relay, running RF through the relay, or manually lifting the contact carrier restores receiving.

Receiving connection failures are common. This problem occurs because the relay operates in near-zero current and near-zero voltage contact operation. The real problem is a very thin film, usually just a few molecules thick, builds up on contacts. Without sufficient voltage to punch-through the insulating layer, and without enough current to "clean" the very thin film away, only mechanical wiping and pressure break through the thin insulating layer. The wiping and cleaning pressure is often higher in small contacts, because the contact area is very small and the contact carrier is more flexible...

High contact resistance is by far the single most common amplifier and antenna switch relay issue. Large relays suitable for high transmitter power have a large contact. For a given return spring tension, a larger contact has less pressure per unit contact area. This means less mechanical pressure to push through non-conductive surface contaminants...

The source of this contamination is well-documented. It comes either from environmental air quality in open frame relays, or from contaminants out-gassing from materials used inside sealed relays. The predominant problem with enclosed plastic case relays is leaching of gasses from the plastic as the plastic cures or ages. This contamination is worse in new relays, and actually decreases with relay age..

Cleaning a Relay

There are *three contact cleaning methods*. The goal of cleaning is to remove a very thin layer of contamination without removing plating, and without depositing contaminants like paper fibers. The normal thickness of problematic layers for low-current low-voltage connections are just a few molecule layers thick. It does not take much to remove the contamination.

Physical Cleaning

If your amplifier has an open frame relay, wet a piece of solid *glossy* paper with cleaner (WD40 is actually good for this) and fit it between the closed contacts. Proper physical cleaning involves drawing the hard glossy paper, soaked in a mild cleaner and polishing lubricant, back-and-forth between the contacts. **DO NOT** soak the relay. Do not use colored paper, dirty paper, or paper that leaves fibers. WD40 makes an excellent cleaner. If a cleaner leaves a residual wetness, be sure to do a final cleaning with 100% pure alcohol or another light pure hydrocarbon, or blast the contact dry with clean air.

Contacts should normally not be left wet or lubricated, unless it is a very special situation. Very high current relays, for example, might require a special contact lubricant. Low and medium current contacts are normally best when non-lubricated. Manufacturers will generally tell you where special cases require lube or greasing of contacts.

Like US on
Facebookfacebook.com/
Greenwood ARSIf you have any ideas for books you'd
like to see in the GARS Library,
Contact Mitch KJ4JGP

Relay Cleaning and Life Part 2 (Continued)

Submitted by Kevan Nason, N4XL

Safe Electrical Cleaning

Electrical cleaning can be just as effective, if not more effective, than physically cleaning a contact. If you have a few parts, and some ingenuity and electrical aptitude, electrical cleaning can be one of the fastest and safest cleaning methods for restoring weak signal or dry switching operation. Some relays are enclosed, giving us no choice but to electrically clean. (Either electrically clean them, or replace sealed relays. When replacing, be aware a new relay will often have a low-signal problem right out of the box, and might require cleaning.) (See [Tom's web page](#) for information on how to do this – Editor)

RF Cleaning (See [Tom's web page](#) for information on how to do this – Editor)

Mechanical Failures

A less-common failure is contact welding, pitting, or pocking... While filing, tinning, burnishing, and other harsh repair methods might temporarily restore operation, plan on replacing the relay.

A second cause of mechanical failure is physical damage. This can be designer error aggravated by carelessness, such as locating a relay where an excessive length cabinet screw can push into the relay. Often times people lose screws, and someone just grabs a random length screw to bolt a foot or cover back on. The designer, through poor hole or parts placement, in essence set the system up to fail. Several commercial amps have screws entering directly in-line with the relay, and just fractions of an inch away. Before closing up any cabinet or changing hardware, look to see what components the screws might hit.

Accidents also happen, so try not to mechanically shock the relay by dropping equipment. Pack well for shipping, with at least 2 to 4 inches of *proper density* closed cell foam supporting any amplifier you ship.

Happy Thanksgiving



Take the time to be thankful for all your blessings!

The below link is a great way to locate Hams using a variety of methods. Use the zip code function and look at all the hams in your area. Makes me wonder why they are not more in our club.

Courtesy of Kevan, N4XL

<https://haminfo.tetranz.com/>

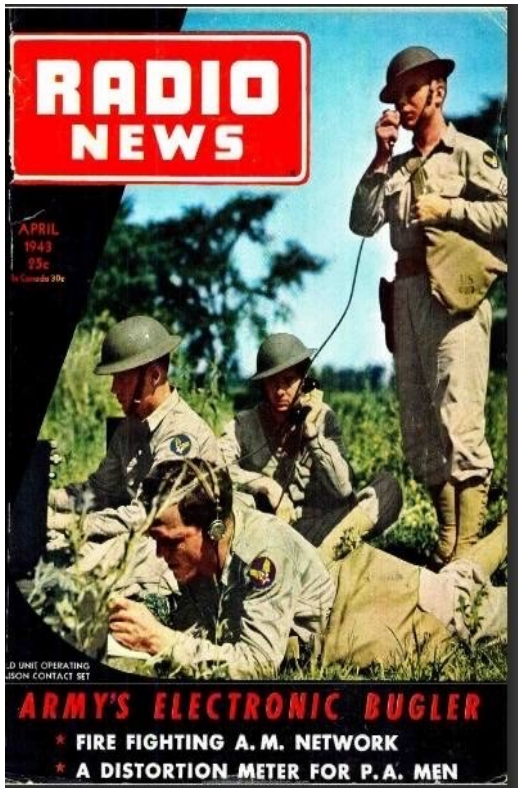
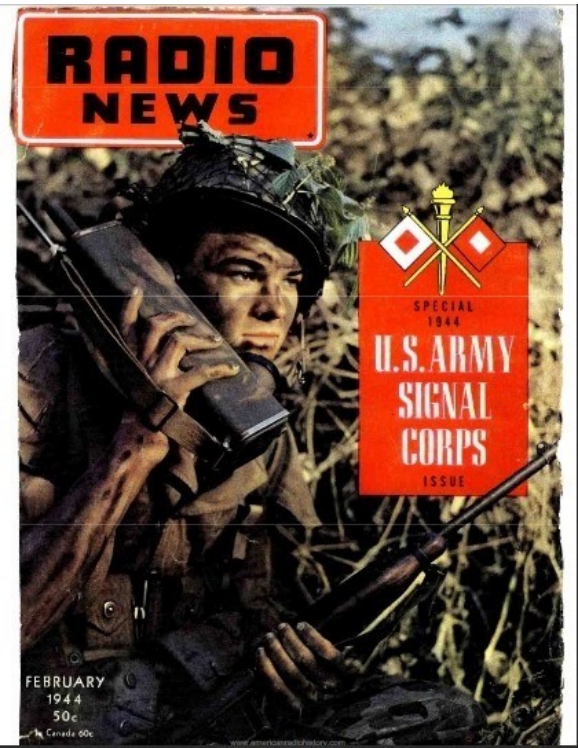


Like Us on
Facebook

facebook.com/
Greenwood ARS



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



HAMFESTS & EVENTS

[Stone Mountain Hamfest](#), November 7 & 8, **Cancelled**

Greenwood Amateur Radio Society Hamfest (GARS) January 9, 2021

Postponed until January 8, 2022

[Hamcation](#) , Orlando, Florida 11-14 February 2021, **postponed until Feb. 11-13 2022**

-
- * 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 GARS weekly nets: 147.165 2m Net Thursdays 9 p.m.
443.900 70cm Net Mondays 8 p.m.
 - * Callsign info <http://www.ae7q.com>*
 - * Track us on APRS: <http://aprs.fi>,
 - * Swamp Fox Contest Group <http://swampfoxcontestgroup.com>

Classifieds:

Classifieds will be run for 3 consecutive months then removed. They may be may be posted again after a 3 month period. 3 on then 3 off.

I hope you have enjoyed reading our newsletter. Please contact me at Mike31406@gmail.com to place a classified ad or with any ideas/comments/suggestions etc.

Mike