



# The Signal Report

A Publication of the Greenwood Amateur Radio Society (GARS)

VOLUME 19 ISSUE 3

MARCH 2021

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

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

## 2021 CLUB

### OFFICERS

#### President

Russell Myrick, KN4TUI

#### Vice President

Tommy Owens, K4XB

#### 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



## March 2021 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 March 9, 2021. **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. 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:



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### 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!

Happy Anniversary!

None Reported

Andy (KN4DYV) & Amy Bagwell

March 1

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>



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Congratulations to **Russell Myrick, KN4TUI** our newly elected President, and **Tommy Owens, K4XB** our newly elected Vice President. We look forward to working together with you both.

## Presidents QSO

Fellow Amateur Radio Operators:

Covid-19 continues to impact everyone. Each of us have seen changes and restrictions in our lives, activities and events. Many have experienced firsthand, illness, loss of income, business, even life of family and friends. Having said that, missing a few in-person club meetings is a minor inconvenience. Thankfully we have the option of conducting on air meetings using equipment, processes and protocols of the core and purpose of our local club and the larger body of Amateur Radio. I hope and pray my thoughts find you safe and well and things will continue to open up as more and more people receive vaccinations.

Now to some items of interest to our club. Membership dues payments (\$25.00 Licensed member, \$2.00 family member) should be made by check to GARS and mailed to G.A.R.S., 116 Mountain Shore Drive, Greenwood SC 29649. Thank you to all that have already made payment.

No indications when monthly meetings will resume. When that time comes, each member will attend or not based upon their preference and comfort level. Also remember if you have a topic you would like to present or perhaps a topic you think would be appropriate, please pass that information to Andy Bagwell [KN4DYV](#).

VE Sessions continue to be cancelled until further notice. There are some discussions and preliminary plans for Field Day Saturday June 26<sup>th</sup> at Coronaca Baptist Church. If a committee has not already been formed, how should one be formed and continue with planning? VE Sessions continue to be cancelled until further notice. We have also missed conducting Ares training exercises. Perhaps we could conduct one "on air" in the fall. Perhaps a Saturday morning 10:00am-Noon?

I look forward to the next year of our club and open to input from you as to ways we can continue working together for the best interest of all members.

*Russ*, [KN4TUI](#)

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

# Please Welcome our newest members

William D **Straw**home, [KG4WDS](#)

Robert Wiener, [N2OEE](#)

Remember Mr. Wizard? Some may find this interesting, six ways to produce electricity.

<https://m.youtube.com/watch?v=yYbXZqY9Uj0&fbclid=IwAR1gDID2BxdZOGILLUs39QYWaWWWISEyOM42EACVZb34ZzY4N66Za6e7QNM>

**DON'T  
BE  
A  
Cap'n  
Kerchunk**



The proper method for kerchunking is to key the radio and say your callsign, followed by the word "Kerchunking." This method identifies your station and simultaneously indicates the purpose of your transmission.

Popular Electronics, March 1956, submitted by Darrell AF4E

<https://worldradiohistory.com/Archive-Poptronics/50s/56/Pop-1956-03.pdf>



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## Dummy Load, AF5NP

Radio amateurs should be familiar with the term dummy load, which is a RF-friendly substitute for an antenna when testing a transmitter or piece of equipment such as a Watt meter.



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

A [dummy load](#) is somewhat generic, also having industrial and commercial uses. As applied in ham radio, it electrically simulates an antenna to allow a transmitter to be tested without radiating radio waves, typically at  $50\Omega$  to match transmitter output impedance.

T7C01-2018: What is the primary purpose of a dummy load?

**To prevent transmitting signals over the air when making tests**



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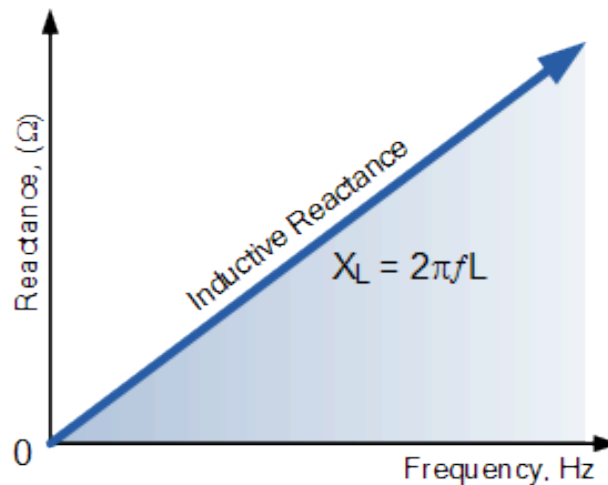
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## Dummy Load, AF5NP

Dummy loads are rather simple— just a big resistor and some way to dissipate heat, all in a package that must be non-reactive, meaning it provides insignificant capacitance and inductance.

T7C12-2018: What does a dummy load consist of?  
***A non-inductive resistor and a heat sink***

Why must a dummy load be non-inductive? Because of [impedance](#) (practically speaking, AC resistance), which increases with frequency based on the formula of inductive reactance  $X_L = 2\pi fL$ .



Most common power resistors are wire-wound, which have significant inductance. So RF dummy loads must use resistors with little or no inductance.

As an example, this four-resistor series combination using common Dale metal-clad resistors measures  $49.4\Omega$  at 0Hz (DC). Sounds like a perfect dummy load, right?





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## Dummy Load, AF5NP



Unfortunately it also has about 80 microhenries ( $80\mu\text{H}$ ) worth of inductance. So it's pretty obvious that a non-inductive resistor is needed. Capacitance can also cause reactance and non-linear impedance in a load but nowhere near the extent of inductance.

Since all the transmitter power is going into a resistor, the energy is converted to heat that has to go somewhere or risk burning up the load. To dissipate heat, a dummy load might have a large mechanical (finned) heat sink. Alternately—or additionally—forced air can be employed, typically a compact fan or blower. Conduction or convection heat sinks are “dry” loads.

To provide even more heat dissipation, some dummy loads bathe the resistor in a sizeable volume of electrically non-conductive oil. The old Cantenna designs used this “wet” load.

By the way, a dummy load is an inexpensive, simple, and useful [DIY project](#) for any ham to develop some practical radio amateur skills.



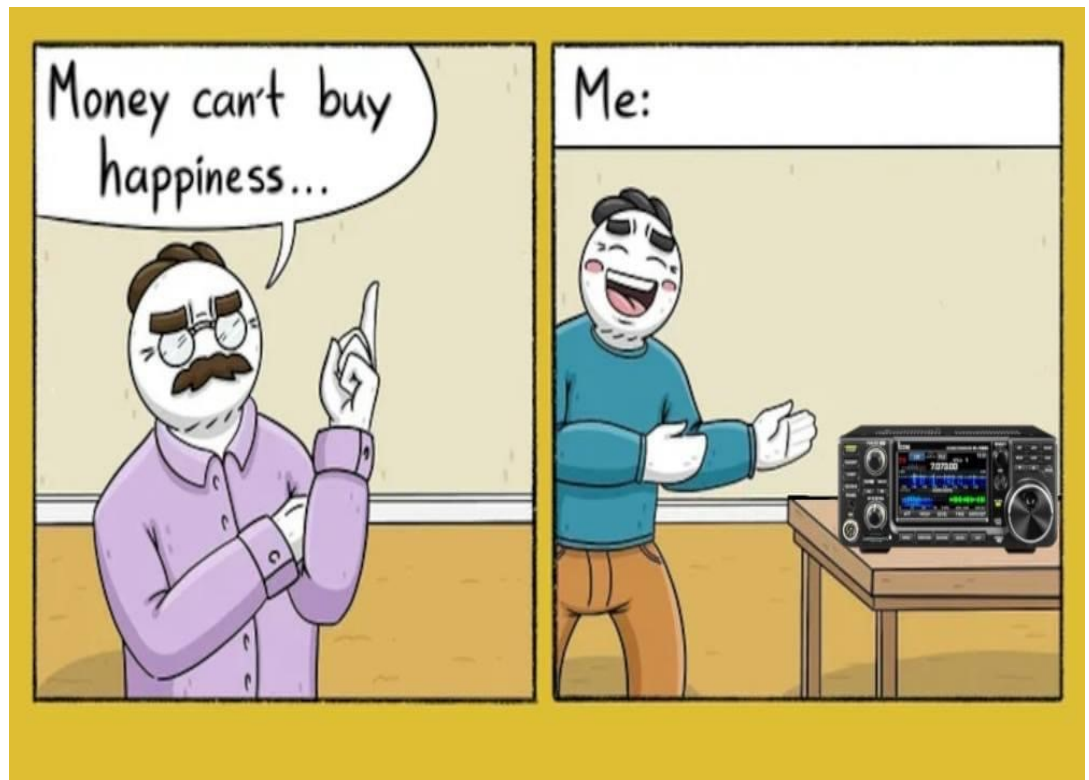


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Field Day is fast approaching. Covid willing it will be held on the 26th of June 2021 at a location to be determined.. We need your input as to what you would like your clubs Field Day to include. also need someone to step up and volunteer to be take the lead in organizing this.. If this interests you please contact Tedd, [AI4WN@arrl.net](mailto:AI4WN@arrl.net) or Andy [KN4DYV](mailto:KN4DYV) Bring all ideas, suggestions, resources, etc. that you would be willing to supply to any of our online nets.

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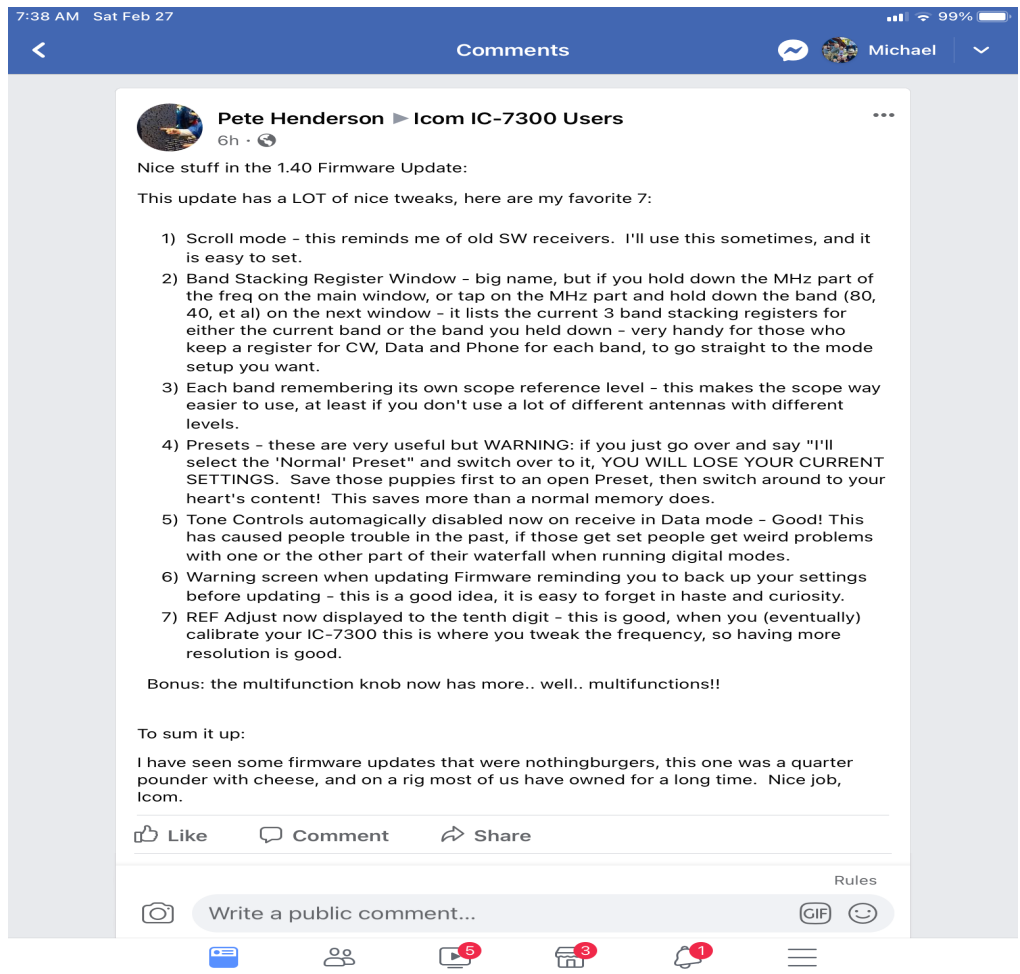


New firmware update (1.40) for the Icom 7300

[IC-7300 | Firmware / Software | Support | Icom Inc. \(icomjapan.com\)](https://icomjapan.com)

7300 firmware update procedure

<https://m.youtube.com/watch?fbclid=IwAR3UmXVIWOJkwVq5Rz9v7nxvKqxmt7HK6RAC0KBXV5tbrQIcj9zh-yNdUOA&v=ep2qQURI91g&feature=youtu.be>





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Please mark your calendars. **Annual dues** for the Greenwood Amateur Radio Society (GARS) are due to Tedd Davison AI4WN, by April 1. \$25.00 per individual membership, plus \$2.00 for spouse, plus \$2.00 more per student.

Please mail the checks to our Treasurer Tedd Davison, 116 Mountain Shore Dr. Greenwood, SC 29649



Anyone interested in giving a short presentation, talk or leading a discussion online, please contact Andy, [KN4DYV](mailto:KN4DYV).

# HAMFESTS & EVENTS

[W4DXCC](#) Contest Convention, Pigeon Forge, September 24 & 25, 2021

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**

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- \* 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>

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## 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.

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

*Mike*