

# The Signal Report

A Publication of the Greenwood Amateur Radio Society (GARS)

VOLUME 19 ISSUE 5

MAY 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

### Librarian

Jack Witt, KN4SIK

### 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

## Ham Radio - Social Distancing for Over 100 Years



## May 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 May 11, 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. Although Vaccines are available to many *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.

## Congratulations!!

### Happy Birthday!

John Fradella	N4FJ	May 3
Jerry Smith	KO4NNR	May 4
Andy Bagwell	KN4DYV	May 17
Teddy Johnson	AE4TJ	May 17
Richard Donald	N4LRD	May 21
Tom Blease	KO4CM	May 22
Thomas Keadle	KN4IXH	May 23
Liz Meadows	W2LIZ	May 26

### Happy Anniversary!

David (AJ4PU) & Margaret (KJ4HDK) Haynes	May 14
Dan (KM4AJ) & Christy Curry	May 20
Thomas (KN4IXH) & Heather Keadle	May 31

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>

Like US on  
Facebookfacebook.com/  
Greenwood ARS

# Presidents QSO

Greetings to all as a windy April gives way to May. Similar comment opened last month's QSO. Anyone have an antenna damaged by this wind? Sure hope not. No trees lost here, so I'm good.

I shared on a net about going to the Tailgate Swap Meet April 10<sup>th</sup> sponsored by W4RRC [www.w4rrc.org](http://www.w4rrc.org) in Batesburg SC. Rained on the ride down, but weather was fine for the several hours I was there. Was able to meet several hams from the Aiken and Augusta area that are regular check-ins on the Augusta Nets [w4dv.club](http://w4dv.club). Also had the pleasure of meeting one of our own, KY4GM David of 96 and his young cable carrier. Was really good to see so many out and about and in-person.

Speaking of in-person, we really need to focus on Field Day as it is only 8 weeks away. Saturday June 26<sup>th</sup> will be here soon enough. With Mother's Day, Memorial Day and Father's Day, end of year school activities for kids & grandkids, work and honey-do lists we all stay pretty busy. My 1<sup>st</sup> Field Day was June 2019 and as you know 2020 was not in-person. So I have not coordinated one. No comments yet from anyone as to plans for the day. I will reach out to several of you more "seasoned" Hams about taking lead on this event. Here is a link for this years rules and resources. <http://www.arrl.org/field-day#rules>

We also want to extend another welcome and recognize our new members from the April meeting. N4WDC David (Regina) and KO4NNR Jerry (Krystal). Please let us know if there are any questions and how we can help in any way. Our next Meeting, On Air, 8:00pm Tuesday May 11<sup>th</sup>. I'm sure you will all agree it will be so nice to meet in-person, resume weekly Chat-n-Chews as well as scheduled VE sessions.

We realize Covid-19 has affected some of our own friends and families. Progress has been made, but we should all do our part and stay safe and well. It is always good to check-in to our 443.900 70cm 8:00pm Net on Mondays and 9:00pm Thursday 147.165 2M Nets. We are fortunate to have a committed team of Net Controllers and alternates. Each one takes time in preparation and calling orderly directed nets. New Net Control operators are always welcome. If you are interested in learning more about how you can become a Net Control operator just contact one of our current net controllers. And we appreciate those of you that promote our nets as you check-in with other clubs.

Of course the other component of a successful net is an effective and operational repeater. Our thanks to W4DEW Buddy, AF4E Darrell, N4LRD Richard, WJ4X Adam, K4XB Tommy and AI4WN Tedd for keeping them up and running. They also do a fine job as groundskeepers.

We commented last month on the importance of reaching out to our members and staying connected. In addition to on the air, check on other members, with a call, text, email or even in person. I appreciate what each of you do for our club.

*Russ, KN4TUI*



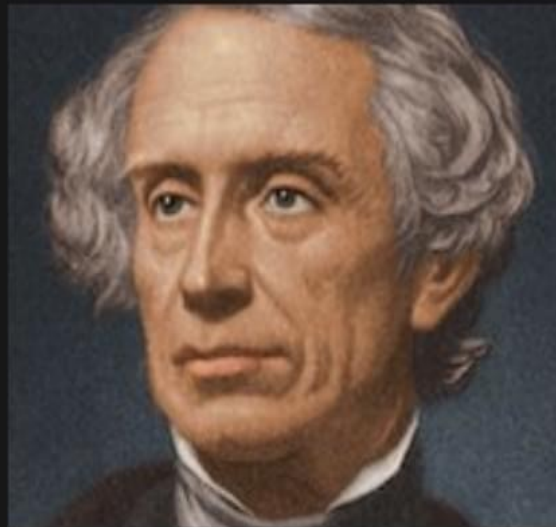
facebook.com/  
Greenwood ARS

# Please welcome our newest members

William David Collins, [N4WDC](#), he recently moved to McCormick County SC from King George, Va. He is a VE with an Extra Class License, works [Summits on the Air](#), [Parks on the Air](#), & [US Islands Awards](#), also our newest net controller.

Jerome N. Smith, [KO4NNR](#), he just received his Technicians License on March 1, 2021

---



**HISTORY  
HUSTLE**

In 1825 a painter named Samuel Morse got a letter that his wife was sick. The next day, he got another that said she was dead. Then, when he went there, he discovered that she was already buried. He was mad about the slow messages, and distraught at the death of his wife. Morse decided we needed a faster communication method, so he invented one. It's now called Morse code.



Like US on  
Facebook

facebook.com/  
Greenwood ARS

## Radio Amateurs help rescuers to locate lost hiker, courtesy of the ARRL

The keen and practiced eye of ARRL member Ben Kuo, AI6YR, helped to guide rescuers to a hiker stranded on a mountainside on April 12. Hiker Rene Compean, 45, had spent the night in a remote region of the Angeles National Forest after getting in a tough spot. After a concerned friend reported Compean missing on Monday, the Los Angeles County Sheriff's Department dispatched search-and-rescue (SAR) teams. Although amateur radio played no direct role in the rescue, Kuo cited his enthusiasm for technology and ham radio satellites and for Summits on the Air ([SOTA](#)) for helping him to develop the skills he needed to guide searchers to the most appropriate area.

"This is actually very applicable to being a SOTA activator -- map, navigation skills," Kuo told ARRL. "Also, understanding RF propagation was key to this. The SAR teams were searching the other side of the mountain, where there is no cell signal." Kuo knew that from having hiked there before. As Kuo described it, Compean was found between four SOTA peaks.

SAR teams were deployed in the Mount Waterman area of the San Gabriel Mountains to find the hiker. According to the LA Sheriff's Department, a low-flying helicopter team spotted him Tuesday afternoon between Triplet Rocks and the east bump of Twin Peaks in the San Gabriel Mountains, and he was airlifted to safety with no serious injuries. Kuo pointed the rescuers to the likely search area by matching satellite images Compean had transmitted over Twitter.

Kuo told the [Los Angeles Times](#) that he has an odd hobby of looking at photos and determining where they had been taken. He was able to employ his skill to determine the hiker's likely location using a tiny photo the hiker posted on Twitter that shows his legs and the valley below. As the newspaper reported on April 15, "When [Kuo] saw the photo posted by the Sheriff's Department, he set to work pulling publicly available satellite images and matching them to the vegetation and terrain below the hiker's legs."

Kuo's eye was good. He sent authorities the GPS coordinates of the most likely area, and the rescue team found Compean less than a mile from that location.

As the *LA Times* reported, the area where Compean was located on steep slopes and very difficult to access, requiring advanced climbing skills. The Sheriff's Department credited Kuo with saving them hours of fruitless searching. Kuo said this was the first time he'd been involved in a rescue like this one.





Like US on Facebook

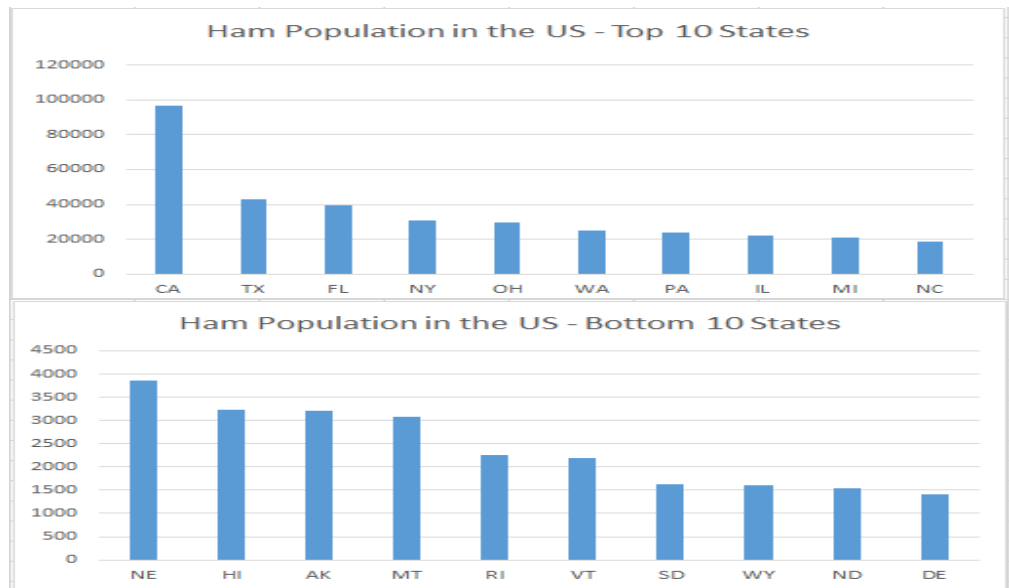
facebook.com/  
Greenwood ARS



I am looking for ideas on how to make our newsletter more interesting. One thought is publishing a different GARS club members profile each month. This would be of interest due to the limited interaction we have had over the past year and as a way to better get to know our members. If you would like to participate send a picture (of you and or your shack) and narrative of what ever you think would be of interest to our members to me [here](#).

Provided courtesy of the South Carolina Section Manager

Japan, whose amateur radio population is the largest of any country and roughly double that of second-place USA.. South Carolina currently ranks as number 30



Greenwood Amateur Radio Society (GARS) Net summaries for April 2021, courtesy of Tedd AI4WN

2m

check-ins 142  
traffic 6  
sessions 6

70cm

Check-ins 68  
Traffic 5  
Sessions 4



Like US on  
Facebook

facebook.com/  
Greenwood ARS

Grey Line Flagpole antenna, Paul, K04ALK  
(Actual picture of Paul's antenna without  
Flag and the tuner which will be installed  
at the base when it arrives)



I live in an restrictive community, so traditional antennas are not an option. After extensive research I settled on this antenna. The next step was getting approval from the Board to erect a flagpole. After succeeding with this I ordered the "[Greyline](#) Flag pole antenna". There web site will take you through all there Flag pole antennas. This antenna is listed as a vertical dipole, it is 20 foot tall. The big difference is that there is a tuner installed at the base of the pole. It is a 300 watt remote tuner (MFJ 993) and is compatible with my 7300. I buried the coax from the base of the antenna to the house.. No radials are required.

About 6 weeks ago I contacted the Ham Radio club in the Villages in Florida. They put me in contact with a Ham that is using the Greyline Flag pole antenna. Come to find out they are very popular in the Villages. He runs a 200 watt set up and is having a great time with it. He said, "From 10 Meters to 80 meters every band will tune under 1.5 . Still waiting for some of the components to ship. I will give an update when it is in operation.

*Paul*

## Worlds Largest Ham Shack

[https://qrznow.com/the-worlds-largest-hamshack-ham-nation-326/?fbclid=IwAR2qmojzbf\\_zG0M1sIJCW0SUufnElevp8\\_VYQuHkWQr8Gwt2ph09SN7DwI](https://qrznow.com/the-worlds-largest-hamshack-ham-nation-326/?fbclid=IwAR2qmojzbf_zG0M1sIJCW0SUufnElevp8_VYQuHkWQr8Gwt2ph09SN7DwI)



Field Day is fast approaching. Providing no new developments with Covid it will be held on the 26th of June 2021 at Coronaca Baptist Church, 300 Highway 246 N, in Greenwood.. Remember the success of your club depends on your involvement. We need your input as to what you would like your clubs Field Day to include. We also need someone to step up and volunteer to be take the lead in organizing it. Please bring your own food and drinks. If this interests you please contact [Russ](#), KN4TUI or [Andy](#) KN4DYV Bring all ideas, suggestions, resources, etc. that you would be willing to supply to any of our online nets.



Do you agree?

[https://images.saymedia-content.com/.image/c\\_limit%2Ccs\\_srgb%2Cq\\_auto:good%2Cw\\_590/Mtc2MjY4NDExNjkxODAzODIx/ham-jokes.webp](https://images.saymedia-content.com/.image/c_limit%2Ccs_srgb%2Cq_auto:good%2Cw_590/Mtc2MjY4NDExNjkxODAzODIx/ham-jokes.webp)





Like us on  
Facebook

facebook.com/  
Greenwood ARS



**"Welcome back, sir. Are you planning on being our guest for one night only, or will this be your usual extended stay?"**

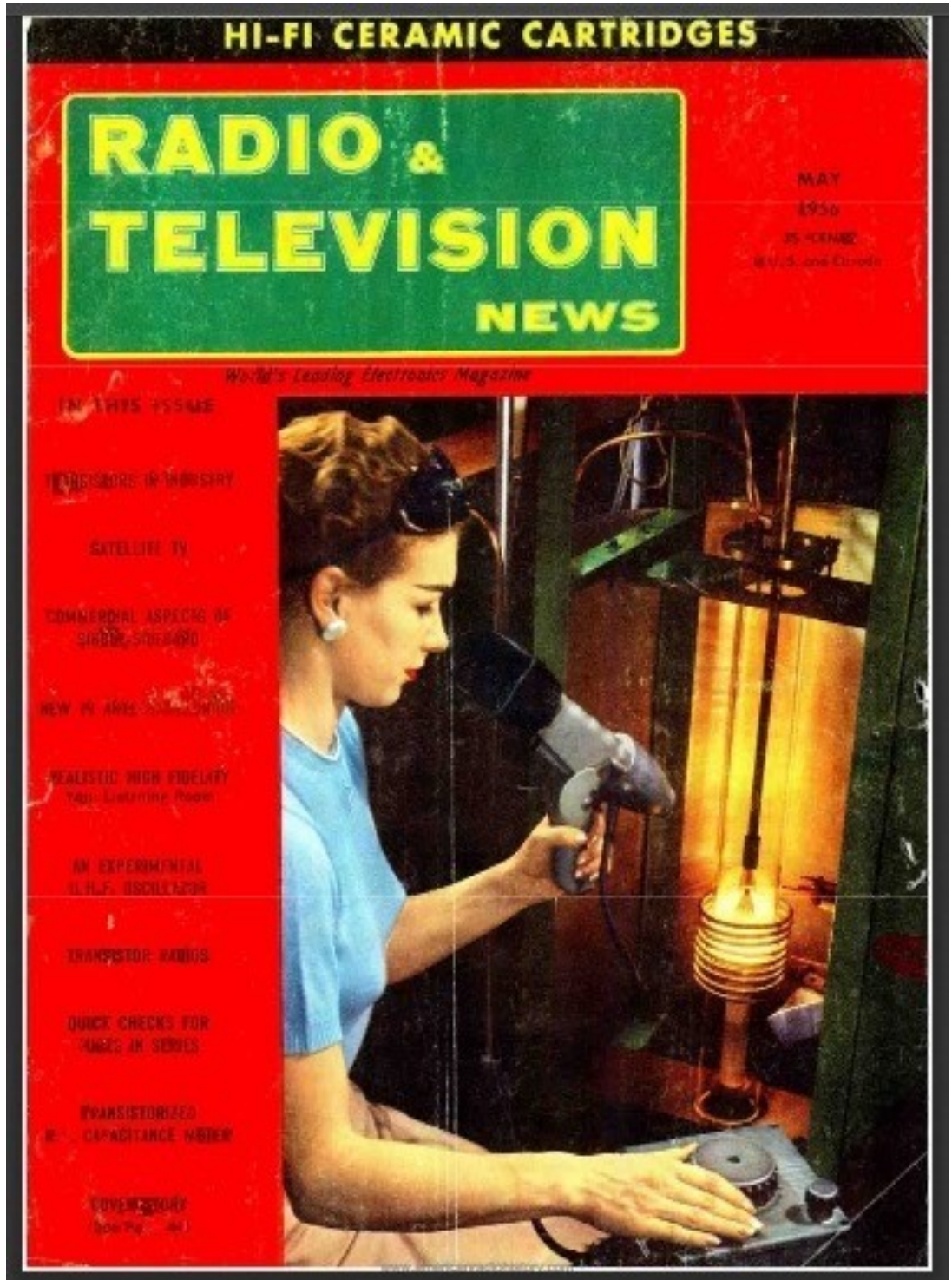


Like Us on Facebook

facebook.com/  
Greenwood ARS

Popular Electronics, May 1956, submitted by Darrell AF4E

<https://worldradiohistory.com/Archive-Poptronics/50s/56/Pop-1956-05pdf>







Like US on Facebook

facebook.com/  
Greenwood ARS



606

TECHNICAL DATA

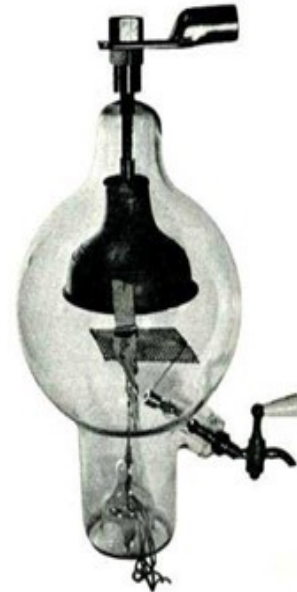
PHANTASATRON

**DESCRIPTION**

The Umac 606 is an infernal anode, helical beamed phantasatron having a dissipation rating. The unique vacuum in the phantasatron is of the double-pumped type, permitting a clear view of the non-emitting triple-processed plunger-type plate. Because of its unique self-flushing construction, this tube will remain usable throughout its useful life.

The grid is constructed of a rare metal senileium chosen for its total lack of emission.<sup>1</sup> Primary, secondary, and tertiary electrons are fully suppressed by a left-hand inclination toward the ecliptic extending from the nadir to the zenith. This also compensates for aberrations in azimuthal displacements common in tubes of previous design, wherein the focal point was improperly focused due to chromatic sphericulism.

The urinated tungsten filament is unique. This process is secret.<sup>2</sup> The uranium used for the urination is of the triple distilled, single isotope variety with all neutrons removed. This material is obtained direct from the AEC-Los Alamos.



**GENERAL CHARACTERISTICS**

**ELECTRICAL**

Filament ..... Urinated Tungsten  
 Voltage } ..... { Adjust until half as  
 Current } ..... { bright as flashlight  
 Direct Interelectrode Capacity ... 8.874 gallons

**MECHANICAL**

Maximum Overall Dimensions  
 Length ..... 1.076 cubits  
 Diameter ..... 0.643 cubit  
 Net Weight ..... 0.069 stone  
 Shipping Weight ..... Not shippable

**APPLICATION NOTES**

**COOLING** -- In operation, the 606 requires a minimum air flow of 5000 cubic feet per second through, around, and above the base. This air flow must be passed through the base in both directions in such a manner that none of the

seals can exceed a temperature of -20° Kelvin. The pressure drop measured at the hole is equal to three fingers of Old Crow. Forced air cooling of the blank is recommended at all frequencies above 60 cycles. Ordinarily a fan

**NOTES:**

1. Refer to page 42, paragraph 6, "Notes from the I2U Conference" translated from Russian by A. Popoff.
2. See IS/MFT report, "Secret Process -- One Shovel Full to One Shovel Full".



facebook.com/  
Greenwood ARS

**606**

**APPLICATION NOTES**

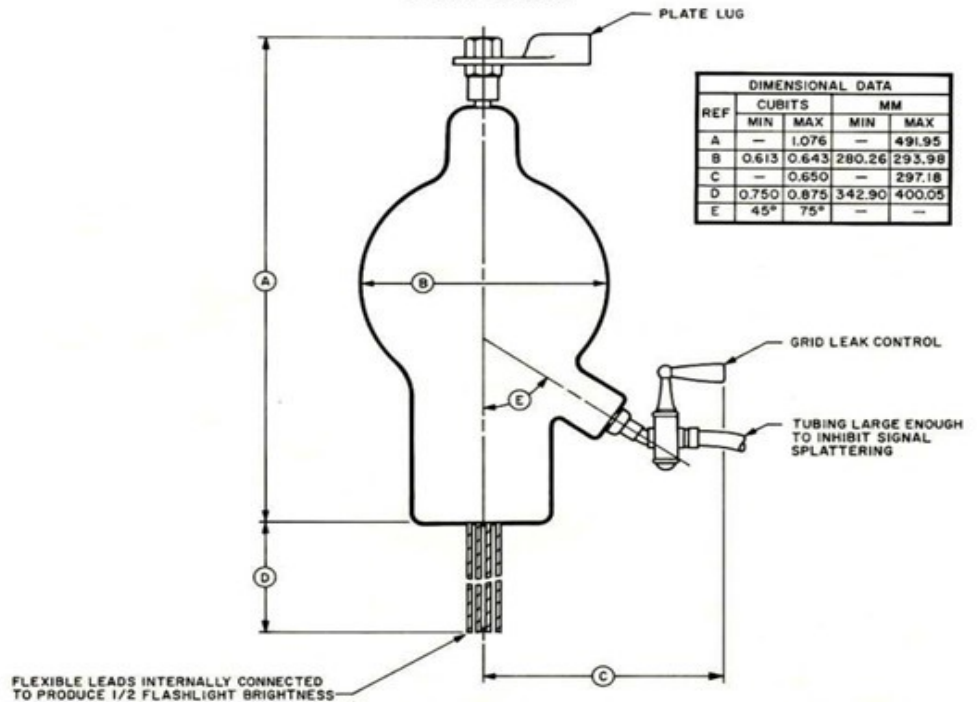
with an 8-foot blade 6 inches from the tube will suffice for envelope cooling. At high altitudes, special precautions should be taken in regard to cooling. Any tube failure is probably due to insufficient cooling and is undoubtedly the customer's fault.

**OPERATION** -- Because of its unique construction, the 606 can serve as an oscillator, modulator, or amplifier. It usually serves as all three simultaneously. No specific operating conditions are available. Ratings will be avail-

able however, as soon as our competitors issue their catalogue. Exhaustive tests in our advertising department have shown that the 606 will give 50 per cent more output than you will obtain. In case of tube failure, our tests show that you have exceeded the safe limit, regardless of output. In such cases, more air is recommended.

**BIAS VOLTAGE** -- To prevent splattery signals, a large leak is recommended.

**OUTLINE DRAWING**



Anyone interested in giving a short presentation, talk or leading a discussion online, please step up and contact [Andy](#), KN4DYV.

## HAMFESTS & EVENTS

Greenwood Amateur Radio Society (GARS) Field Day, June 26, 2021, Coronaca Baptist church, Coronaca SC

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

Greenwood Amateur Radio Society Hamfest (GARS) January 8, 2022.

[Hamcation](#) , Orlando, Florida 11-13 February 2022,

- 
- \* The American Radio Relay League protects our rights as Amateur Radio Operators <http://www.arri.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](mailto:Mike31406@gmail.com) to place a classified ad or with any ideas/comments/suggestions etc.

*Mike*