



Q5er – The Official Newsletter of the Skyview Radio Society

February 1, 2021

Amendment of the Schedule of Application Fees Set Forth in Sections 1.1102 through 1.1109 of the Commission's Rules

FCC 20-184 Adopted: December 23, 2020

Section III.A.34 AGC argues that amateur radio licenses should be exempt under section 8(d)(1)(B) as they are "operating for all intents and purposes as non-profit entities" because they provide public safety and special emergency radio services in times of crisis on a volunteer basis.⁶² While we are very much aware of these laudable and important services amateur radio licensees provide to the American public, we do not agree that amateur radio licenses fit within the section 8(d)(1)(B) exemption Congress provided.⁶³ These specific exemptions do not apply to the amateur radio personal licenses. Emergency communications, for example, are voluntary and are not required by our rules.⁶⁴ Further, there is no indication that most or all amateurs solely use their license for emergency communications; even the section of our rules allowing certain amateur operators to broadcast civil defense communications limit such authorization to periods of local, regional or national civil emergencies.⁶⁵ As we have noted previously, "[w]hile the value of the amateur service to the public as a voluntary noncommercial communications service, particularly with respect to providing emergency communications, is one of the underlying principles of the amateur service, the amateur service is not an emergency radio service."⁶⁶

Section III.A.38 We agree that the applications for amateur licenses, and other personal licenses, are largely automated, and for that reason the cost-based fee we adopt is only \$35. With respect to the amateur licenses, while review is highly automated, staff must maintain the processing system to ensure applicants are qualified, vanity call sign procedures are followed, and off-lined applications are individually reviewed.⁸³ Therefore, we cannot conclude that there are no costs involved in processing the applications and we do not have the discretion to exempt this service from application fees

ED Summary: Each of these items will now cost \$35 : New License, License Modification, License Renewal, Special Temporary Authority, Rule Waiver, Vanity Call Sign.

ED OPINION: This thing is 97 pages long. I have excerpted two sections here. The first shows that our supposed value in voluntary emergency communications is no longer worth anything in the eyes of the FCC. The second points out that while the volunteer examination program takes some of the load off, the FCC still has some work to do. The FCC emphasized that it was up to Congress to exempt the Amateur Radio Service, not them. Read the whole thing here <https://tinyurl.com/y86pyu5p>

- QRZ CDs ??
- USPS Progress ??
- COVIS-19 Humor ??
- Skyview 2021 Officers
- What's Inside That Device?
- Japanese Screwdrivers
- FISTS CW Club
- And More

The Sunspots Are Coming

Keep Trying those Dead Bands !!

Inside this issue:

FROM THE EDITOR	3
FOREVER TIE WRAPS	4
NEW ANTENNA IN TOWN	5
DIGITAL SIGNAL STRENGTHS	8
WQ3Q SHACK UPGRADE	10
ELECRAFT W2 WATT METER	15
ANTENNA ANALYZER FIX	16
NEW MEMBERS	20
KUL-LINKS	21

2021 is Skyview's 61st Anniversary !!



The Skyview Radio Society Clubhouse is the “Every Tuesday Place” . . .

Something is going on at ‘the joint’ each and every Tuesday evening, from about 1900 hours to whenever.

See the general schedule of Tuesday events on the Skyview Web Page: <http://www.skyviewradio.net>

For the latest up-to-date plan, check the Groups.io Reflector at : <https://groups.io/g/K3MJW>

Directions are on: <http://www.skyviewradio.net>

Guests are always welcome !!

From the Editor

All of Skyview's 2020 social activities, including our Swap & Shop were cancelled. It was a difficult year. However, by postponing the projects that were planned for 2020, we were able to keep our expenses under control. The full funding that was set aside for those 2020 projects will carry over into 2021.

In case you didn't notice, there was not any Skyview Banquet in January. I think you know why.

We are coming up on the anniversary of the only local hamfest that was held in 2020—the February South Hills WashFest at South Park. We have come full circle, because now their 2021 event has been CANCELLED. We will have to watch whoever is next in the lineup.

NOTE: As this is being published, the Skyview Clubhouse is adhering to PA State Government requirements and is open at limited capacity.

Members Only. Use at your own risk.

Follow <https://groups.io/g/K3MJW> for updates.

Jody - K3JZD

From the Treasurer

I'm still here for another year. Look in this issue for the complete list of 2021 Officers and Board Members.

For all of you who have renewed for 2021, I say Thank You for sticking with Skyview. I for one am looking forward to getting back to our normal meetings and all of our events. I'm sure that you are also.

We will soon be able to sit around the fire and laugh about all of the stuff that we had to put up with in 2020. Unlike most, we already had the means of staying social. Hopefully you took advantage of the increased stay at home time to improve your antennas and radios, and you spent much more time than normal getting on the air.

NOTE: Anyone who has sent in a Donation along with their 2021 Dues (or anytime during 2020), or has made any other kind of a Donation anytime during 2020, and has not already received a Receipt Letter for that Donation, but needs one for tax purposes, please notify me at [k3jzd \[at\] arrl.net](mailto:k3jzd@arrl.net) and I will get a letter headed your way.

Jody - K3JZD

Skyview Radio Society is recognized by the Internal Revenue Service as a charitable non-profit organization under Section 501(c)(3) of the IRS Code. Donations to the Club are tax deductible to the extent permitted by law.

Ham Radio is a Contact Sport
(Minimum QSO : 6'-0")

Make Your Own Tie Wraps de WC3O

Make your own tie-wraps for outdoor cable management:

I've been working on antennas and feedlines outdoors for many years. I've used many tie-wraps to hold cabling in place. And over the years, I've found many tie-wraps laying in the grass that have fallen off due to the sunlight degrading the plastic. There are many brands of UV stable tie-wraps out there. I've found many UV stable tie-wraps laying in the grass. Despite the type of plastic used, the sun eventually always wins.

Over the years I've found that the best thing to use for outdoor cable management are pieces of Romex wire. This is your common house wiring that you can pick up any hardware store. I like 14 AWG the best for this purpose.

The length of the pieces that you cut the Romex wire into depends on what you are using it for.

For holding cabling to the leg of a tower (Typically 1 1/4 inch diameter legs) might be around 8 inches.

This is usually enough wire to go around the tower leg and cable/s, and still have enough wire left to twist by hand, then give it a tighter twist with common pliers.

Cut the desired lengths of Romex, then push the three wires out of the outer sheathing. Use the two insulated wires - Do not use the bare copper wire for this purpose because it can cut into your cables. When using these to secure your cabling you can make these as tight or loose as you like.

You don't want to crush your coax, but you do want to keep the cable in place.

You can cut these wire ties a little long to accommodate adding more cables as time goes on. Your new home-brew cable ties are reusable. Bend the two wire ends inward so that you don't accidentally cut yourself on them.

The sun can shine as much as it wants and you will never find your wire ties in the grass, ever. These are all I ever use now. Go ahead and give it a try.

Cooky

QRZ CDs de Cooky - WC3O

Anyone remember when QRZ was not online? You had to buy new CDs if you wanted updated information! But what a wonderful advancement over looking callsigns up in the book. Common logging programs such as LOG-EQF would have a setting to go to your CD drive when you entered a callsign to auto-fill the information. It was a wonderful time.



There's a New Antenna In Town

de Bob - WC3O

Many years ago I installed a very low dual-band fan dipole antenna for 40 and 80 meters. The idea was to use it for NVIS (Near Vertical Incidents) applications. It worked ok, but for good NVIS application it should be up around 20 feet off of the ground. This antenna was only around 5 feet! It did work for close-in communications, but not as well as other 80 meter antennas at the club. One day I looked at that antenna and said hmmm. Since it wasn't being used anyway, why not convert that 40/80 fan dipole into a 30/60 meter dipole? To make it work well I wanted to improve the height of the antenna to around 20+ feet.

At Skyview we have any number of antennas at our disposal for just about any common amateur band. Two bands that we did not have antennas for were 30 and 60 meters. We could use the tuners to adapt other antennas, but that does not work very well. Both 30 and 60 are great bands to operate on. Recently 60 meters has been used for local ARES operations. I thought it would be good if we had a proper antenna for the band.

I had mentioned this idea on the club reflector some time ago and shortly after I received an email from Nathan, KC3GMM. Nathan said that he had some of those fiberglass military mast sections that he would donate to the cause. BINGO! That's perfect. Shortly after Nathan made a run up to the clubhouse and true to his word, donated the needed mast sections. Excellent.

The new antenna was to be installed at around the same location as the old 40/80 dipole. To hold the mast in place we used a piece of 6X6 Wolmanized lumber. Chip, KC3LHW brought his power auger to the club one evening and drilled the needed hole. One piece of 6X6 and a bag of cement we had a mast holder!



To hold the mast to the wood I found two old mast clamps from an old Hygain beam antenna. The old beam antenna is long gone, but I do love reusing old parts! They are perfect!

Add some lag bolts and that is it for the brackets. I painted the fiberglass mast white using the same paint that we use on the towers. (PPG PITT-TECH industrial paint) This will keep the fiberglass from, well, you know. To add some rigidity to the mast I slipped PVC pipe inside the mast. It seems pretty good.

If the new dipole looks a lot like the old dipole, there's a reason. It IS the old dipole! One afternoon at the club Tom, WA3IKQ and myself cut up and modified the old 40/80 fan dipole antenna. We re-used the dollar-store plastic coat hanger wire spacers that Bill Bell, W3RSR/SK made for me YEARS ago. They've stood up to the sun brilliantly over these many years!

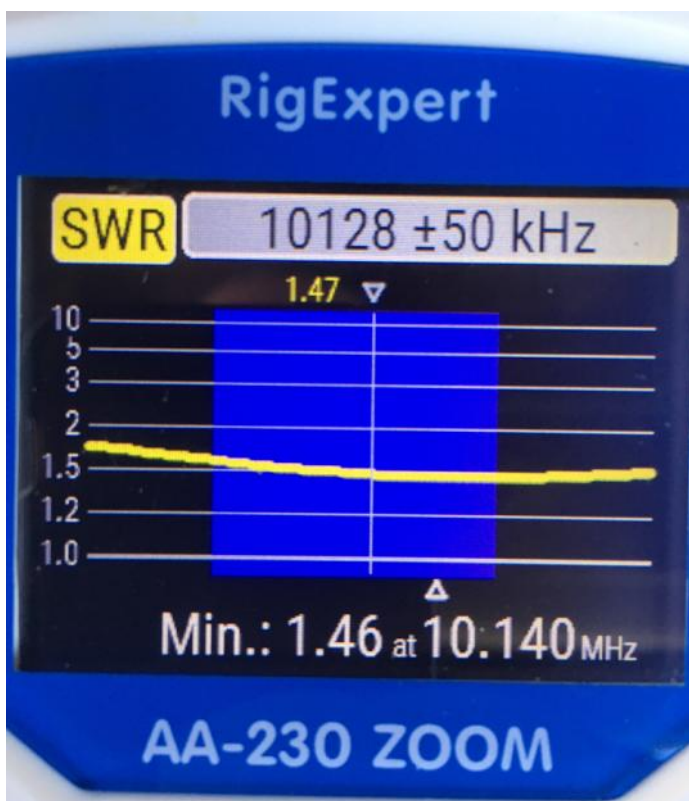
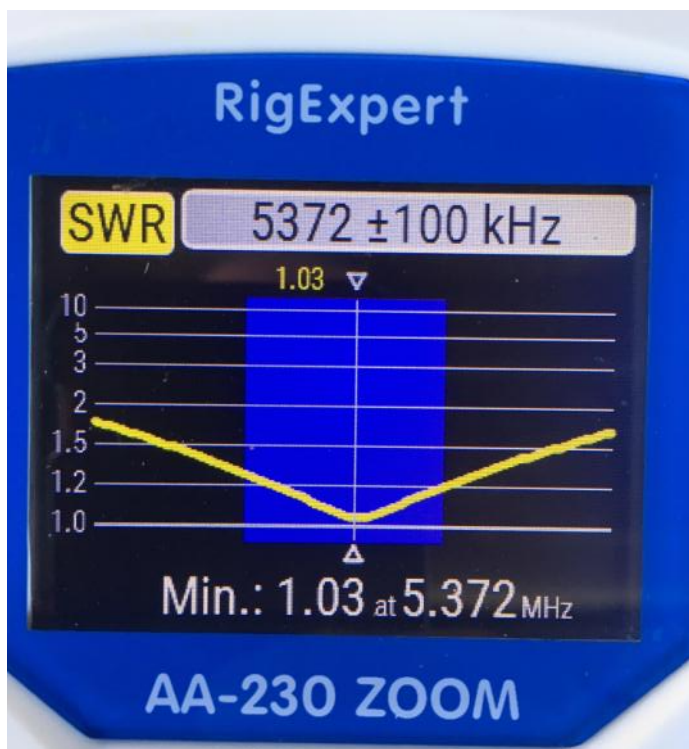


I built up a balun using a section of RG-400 coax that I found at a hamfest (Dayton) for cheap-cheap and wrapped it around two 240-31 ferrite cores. I secured the coax to the cores with ty-raps. The balun is actually not installed in an enclosure, but is simply wrapped up with electrical tape with holes on the bottom so that no water can accumulate. The center of the dipole is a bracket that DX Engineering had for sale in a bargain box at one of their events. It was around \$3.00?



The coax used to feed the antenna came from an SK estate (Bob Benna). One side of the dipole is tied off to a tree branch and the other end is tied off to the 40 meter tower.

When Tom, WA3IKQ and myself got done tuning the antenna it has great SWR peaked in the middle of each band!



The antenna is connected to Antenna Switch #1 in the pavilion. The wood pole in the ground is situated to allow the mast to easily be tilted over by one person and clear all obstacles. The coax feed is looped up in the pavilion and can be un-looped so that the coax does not need to be disconnected to lower the mast.

I programmed all three HF radios at the club with the 60 meter channels in memories 1, 2, 3, ...

In the end the most expensive part of this project was by far the 6X6 piece of lumber! Some stuff was cheap. Some stuff was FREE. Feel free to use the new antennas. They do not require a tuner and perform well. Access them through remote antenna switch #1, position 2. It's clearly marked.



Another whacky idea...

Since 30 meters is such a great DX band, I am thinking of building a 30 meter vertical back behind the repeater shed. We already have all of the stuff it would take to build! Stay tuned!

Bob - WC3O
Skyview Radio Officer

USPS Progress ??

de Jody - K3JZD

I can remember back when I would get a DX QSL Card in the mail that was addressed to:

Jody - K3JZD, Trafford, PA

No last name, no street address, and no postal code (aka zip code). But I would get it. Maybe some of you have also had that happen.

Those were the days when your local Post Office did the mail sorting, and your Mail Carrier knew his customers.



Sadly, those days are long gone. The USPS Mail Sorting Automation in huge computerized processing facilities has eliminated that local sorting operation..

Let me give you an example:

I sent a Christmas card to: 792 Meadowbrook Rd.

Eleven days later it was returned to me with a yellow "Not At This Address" sticker on it.

Here they had moved to 785 Meadowbrook Rd.

Across the street and three doors down. Surprise : The Same Mail Carrier delivers to both of those houses.

So, if you don't get that rare DX QSL you have been waiting for, maybe it wasn't 'properly addressed'.

Or perhaps the USPS Mail Sorting Automation had it for lunch that day.

Jody - K3JZD

Digital Signal Reporting de Chuck - K3CLT

Is a -13db signal better than a -19db signal report?

Back whenever Skyview was doing the Digital Challenge I got to wondering about what the signal reports meant. We all know that a S-9 report is stronger and in most cases better than a S-6 report. But what about these strange digital signal reports that we get? Is a (-) minus number better than a (+) plus number? Well after looking at what I had on my computer screen and the number in my spreadsheet log I had to find the answer.

I went out to the internet and tried to find something there but for the most part I struck out. It could have been to the way that I ask the question or just the number of Internet Experts lurking out there that I could not get an answer.

Well where to look or ask now? I have it; I will go right to the top. I sent out an e-mail to Joel Hallas (*The Dr Is IN*) at QST and ask him the question. Now we are getting somewhere, or so I thought. I actually got a double reply from Joel, and here is part of the first one:

db is an abbreviation for "decibel" a logarithmic expression of relative strength, or power ratio. And it goes on from there for a page and a half talking about increasing signal from 100 watts to 500 watts and formulas to computing that. Along with a little table: db to Power Ratio

1 : 1.25	6 : 4.0
2 : 1.6	10 : 10.0
3 : 2.0	20 : 100.0

He finished with 'I hope that made sense and answers your question.

Not to be one to leave something hanging out there in the QRM Joel wrote me back again later that evening. He had passed along my question to Steve Ford WB8IMY. Steve is the Editor in Chief for QST and the local digital modes guru. Here is Steve's reply:

The RRR-13 in my example is the signal report provided by the other operator. A report of -13 means that Chuck's signal is 13db below the other operator's noise floor. If Chuck is receiving the guy at -19db, Chuck's signal is 6db stronger at the other fellows station. When it comes to JT-9 or JT-65 (or FT-8) signal reports, the lower the negative number, the stronger the signal. A report of -5 means you have a very powerful signal at the other end of the path. Minus 1 is considered rock crushing and if it crosses into + territory, it is outrageous.

Covid-19 Humor

But is it really humor ??

1. The dumbest thing I ever bought was a 2020 planner.
2. I was so bored I called Jake from State Farm just to talk to someone. He asked me what I was wearing.
3. 2019: Stay away from negative people. 2020: Stay away from positive people.
4. The world has turned upside down. Old folks are sneaking out of the house & their kids are yelling at them to stay indoors!
5. This morning I saw a neighbor talking to her dog. It was obvious she thought her dog understood her. I came into my house & told my cat. We laughed a lot.
6. Every few days try your jeans on just to make sure they fit. Pajamas will have you believe all is well in the kingdom.
7. Does anyone know if we can take showers yet or should we just keep washing our hands?
8. This virus has done what no woman has been able to do. Cancel sports, shut down all bars & keep men at home!
9. I never thought the comment, "I wouldn't touch him/her with a 6-foot pole" would become a national policy, but here we are!
10. I need to practice social-distancing from the refrigerator.
11. I hope the weather is good tomorrow for my trip to the backyard. I'm getting tired of the Living Room.
12. Never in a million years could I have imagined I would go up to a bank teller wearing a mask & asking for money.
13. The spread of COVID-19 is based on 2 things:
 1. How dense the population is.
 2. How dense the population is.

Upgrading My Shack - Part 3

de Rich - WQ3Q



Well, the Thanksgiving holiday came and along with it the cold weather... including snow! Arrgghh.

I knew it was going to happen sooner than later. In any case, I had to keep moving forward as much as I could. The delay caused by the weather and the holiday cost me about two weeks of inactivity. I guess I could use the rest as my stamina is not what it used to be. C'est La Vie. (pronounced "Silahbee", according to Cooky. Go ahead ask him why.)

So, it is time to start assembling the tower. Well, it isn't as easy as I thought. I have three sections of tower that have two holes in the legs for bolts and 3 sections of tower that have only one hole for a bolt. I guess that is what happens when you get them from different people.

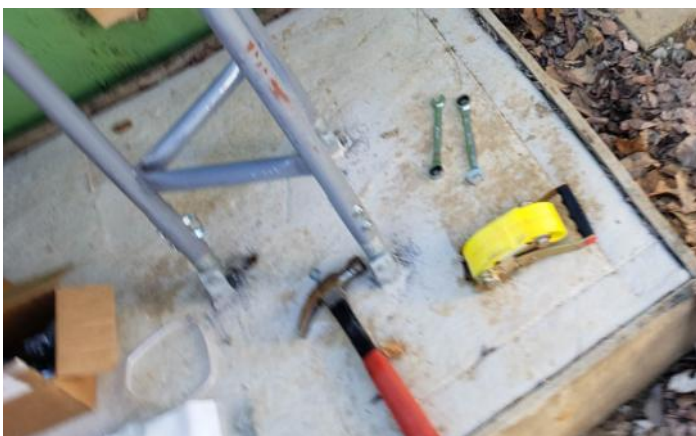


The first issue is to determine what order would be best for the strength of the tower sections. The top section that holds the mast has two holes, and the cement base has connections for two holes. So, I need the first (bottom) section to have two holes on it. The top section has two holes so now I need to determine how to fit those one-hole sections in place.



Cooky advised me before I poured the cement to make sure the base posts will align with the tower sections. I took one of the sections and found it fit over the stubs that will protrude from the cement, so I figured all was good. Well, as the famous philosopher *Aristotle Bastone* once said... "Yes and No."

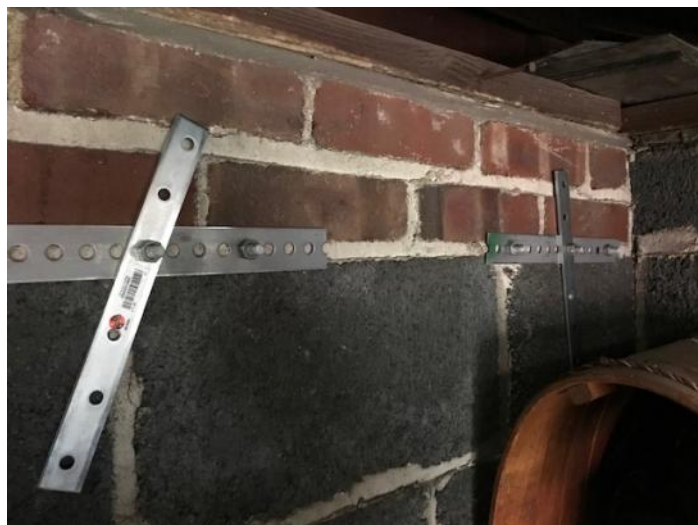
I placed the first section onto the base but found that the holes are off a bit. I can get the bolt in one side, but it is off just a bit preventing it from coming all the way through. I was able to maneuver the base connectors to see if perhaps they need to go in a specific position. I found the combination that made getting that first section in place easier.



Once the first section was set in place, the next thing to do was attach the tower bracket to the side of the garage wall. In my last article I showed how this took a little bit of figuring BEFORE I even poured the cement base. I had to be sure I would have the tower close enough to the wall so the bracket could be used. I successfully got that done.



Placing the bracket in position to establish where the holes are to be drilled, I then drilled the six holes into the garage wall and secured the bracket with bolts and washers and a cleat on the inside wall to add to its structural integrity.



I placed extra bracing strips on the inside of the garage wall where the bolts came through to help distribute the stress among several courses of the bricks and cement blocks.

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Now with the first section attached at the base and in its proper place when upright, I needed to get a group together to assemble the rest of the tower and then raise it. That required helpful hands from the club members. To that end I found Cooky, Tall Guy, Tin Man, Bill Dillen (why doesn't he have a nickname? Maybe I should just call him Coach.) and Captain Jack were able to come by. The weather had been crappy right up to the Saturday that I wanted to do this, but the day we got together, it was perfect!



Too bad everything wasn't perfect though.

As I mentioned previously, of the tower sections I have, two connecting holes are on some of them and only one hole on others. After some finagling the gang found ways to work with it and got the tower assembled up until the top section.



There was no way to connect it as planned, so it was decided to exchange the top section with another one I had. It would need a thrust bearing though, which I didn't have. It also had a very slight bend. Nothing big but it was not completely straight. We went with it and completed the work. The tower now measures approximately 45 feet tall. The big question was could it be lifted to vertical without any unnecessary deaths or injuries.



The plan was to use two of my heavy-duty tie-down straps attached at about the 30 foot location on the tower, then to position myself in the attic by the window to use them to pull the tower up. The “ground crew” began lifting the structure as much as they could while I pulled my straps from that upper level.



It was difficult for the crew to get it started. Fortunately, Tall Guy’s height along with the others helping to push, offered just enough height that I was able to have the



leverage above to get the tower to vertical with a bit of effort.

Whew! I can’t say enough for the group of guys that helped. Again, Skyview members show why they are the best of the best.

That just left one other thing to be done. Getting the straps off the tower. Once again, our intrepid tower monkey, Cookie, came to the rescue and climbed up and

untied them. Looks like he’s climbing a stairway to heaven.



All of this got done on the one day that the weather cooperated. The next day it rained and got very cold and snow soon followed. It felt good to get that much done before winter fully set in. Next Spring, I will resume outside work, like getting the guy ropes in place and putting up the antenna rotor, and the thrust bearing not to mention the actual antenna too. I am also considering getting a winch to raise and lower the tower.



Now I'll turn my attention to other things to do, like clearing out the junk, and remodel the attic above the garage to house my shack... and my N-gauge trains! More on that in next Q5er.

73,

Rich / WQ3Q - QuackQuack

Skyview Club Officers for 2021:

President: Marty AG3I
Vice President: Scott AC3GB
Secretary: Don WA3HGW
Treasurer: Jody K3JZD
Radio Officer: Bob WC3O

Skyview Committee Chairs for 2021

Membership: Tom AB3GY
Facilities: Dave N3TIN
Kitchen: Bob WC3O
ARES: Andy AD3AD

For Skyview 2021 Board of Directors see:

<http://www.skyviewradio.net/members/>

Belated Silent Key Notice

Unbeknownst to any of us, **Frank Stroncek - KB3RBV** became a Silent Key on January 30, 2020. Frank lived in Baldwin and had been a Skyview Member for many years. Since we got into the COVID-19 shutdowns not long after that, with all normal Skyview meetings and social activities getting put on the shelf for the rest of 2020, none of us missed Frank.

We unknowingly sent a 2021 Renewal Form to Frank. His wife, Rose Ann, responded and told us that Frank had become a SK. She also sent a \$100 Memorial Donation to Skyview.

We lost two other Skyview Members during 2020 which were not previously reported here either :

Howard Coleman - W3WTJ

Charlene Dera - KA3RXY

Lets all take a moment of silence to remember

Frank, Howard, and Charlene

RIP

Elecraft W2 Watt Meter

de Bob - WC3O

Let's take a look at a piece of equipment that we use at the clubhouse on all of our HF stations.

It's the Elecraft W2 watt meter. I had purchased one for myself years ago and immediately realized what a great watt meter this was.

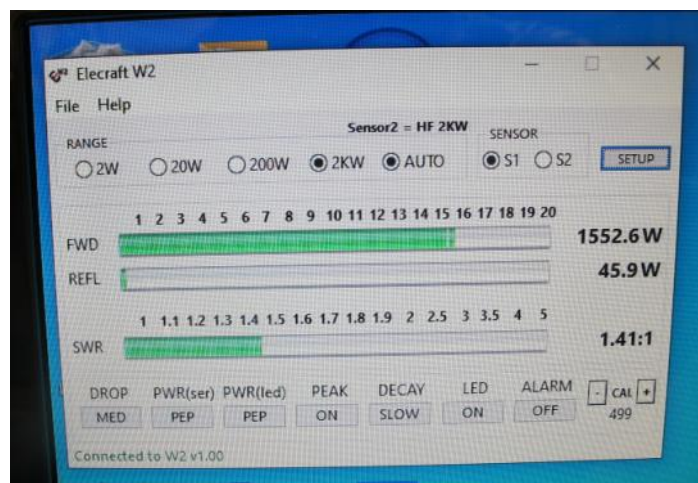


The meter can be purchased either as a kit or pre-assembled. I bought the kit. Actually, there is no soldering involved as the board is fully built out. All you need to do is assembly the case for the meter. It turned out that by far the hardest part of the build was cleaning the paint off of the case panels where they are to be bolted together. I don't know what kind of paint they use but holy cow! Scrape it with a knife? Yeah right. A file? Nope. No way. I needed to take a grinder to the paint to make clean connections. Hopefully since then they've decided to mask off the contact areas! [ED: They have not done that. .]

The meter uses one (or two) remote sensors. The unit comes with one sensor, either 200 watt or 2000 watt sensor - You decide when ordering. I bought the 2000 watt sensor. They are calibrated and ready for action when you receive it. What's nice about a remote sensor is that you don't have heavy coax trying to pull your meter off of your table. Just put the sensor inline with your coax where convenient. The sensor is connected to the meter with a supplied cable that uses common RJ connectors. The meter can either auto-range or you can set the range manually. (20, 200, 2000 watts) The 200 watt sensor has resolution down below 2 watts. (Actually the 2000 watt sensor has good resolution down very low as well).

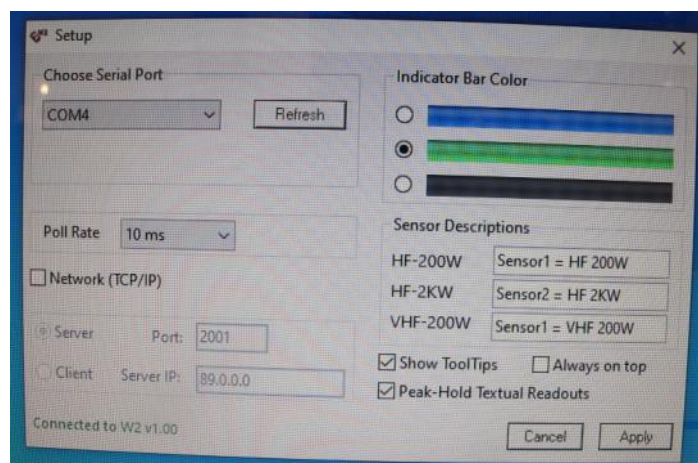
Another thing that makes this a great watt meter is the free software that you can download from Elecraft. The meter itself has LED bar graphs to indicate forward power and SWR. Green is good. Red is bad. Easy to look at. If you want higher resolution just look at the software! There you can see your exact numbers including forward power, reflected power and SWR. Also from the software, you can change display metering options including PEP/average power, peak hold, decay time and more.

There is another feature that is great if you own an amplifier. You put the amplifier key up line through the two RCA jacks on the back of the meter. If your SWR goes over a preset threshold the meter un-keys your amplifier for protection! You will



be unable to key up the amp until you cycle the power on the meter. This is a GREAT feature if your amp does not include self-protection circuitry.

The meter connects to your computer via a single USB cable. The software creates a virtual COM port. Via the software the meter can also be connected through the internet. I've never used this but if you do a lot of remote operating I could see that being a great feature.



From what I've seen the meter is very accurate. The meter itself or the software aspect of the meter has never been affected by high RF levels. The price point of the W2 is better than other similar options such as the popular LP-100 meter. I'd like to say something bad about this meter, but I can't. We use them on all three HF stations at the clubhouse and they've always been rock solid.

I think that's it?

Cooky - WC3O
Skyview Radio Officer

Antenna Analyzer Problem and Solution

de Don - WA3HGW

Antenna analyzers are a very useful tool for all kinds of things. Most often they are used to check antennas for SWR, or to trim new antennas to obtain the best SWR. I have two antenna analyzers. My first one is the ubiquitous MFJ-259B and now a new Comet CAA-500 MkII I won as an hourly prize at last year's Orlando Hamcation. Both work well, and have their advantages and disadvantages. I won't go into a product review here though.

I occasionally run an SWR sweep of my antennas to set a baseline and to check and see if anything changes. In the past I've made dipole antennas out of soft drawn 16 AWG copper wire. After some amount of time, I found the wire would stretch, and the resonance point would change. But the wire was free, and shortening the antenna occasionally was easier than lengthening it. After all, the antenna did that on its own! Therefore, an occasional SWR sweep, or doing one if I notice any changes in the operation of the antennas, can point me in a direction to fix a problem or at least know that all is well.

For HF frequencies, I presently have three antennas; an 80 meter end-fed half wave, a Mosley TA-33 tri-band beam and a Ringo Ranger vertical for 10 meters. I have no problem running SWR sweeps on either the TA-33 or the Ringo vertical antenna. The problem is with the end fed half wave. While the TA-33 and Ringo are resonant antennas on their respective bands, the end fed antenna is intended to be useful on all the HF frequencies from 80 meters on down. As a result, it is pretty good at receiving a wide range of frequencies.

It seems that the WJAS AM antenna is located less than 2 miles, and a direct line of sight, from my house. Their 7 kW (daylight) and 3.3 kW (nighttime) signal is picked up very nicely by my end fed antenna. My Icom radios have no problem with that signal, but neither of the antenna analyzers can handle it. When I connect the end fed antenna to either analyzer, it drives the meter into spasms. These antenna analyzers work by sending a low-level RF signal into the antenna, via the feed line, and measuring the return signal to calculate SWR and

usually reactance.

In my case, the problem is caused by the AM broadcast signal being picked up by the end fed is larger than the analyzer signal being reflected. I don't see this problem on the resonant antennas because they pick up much less of the AM broadcast signal, which is far out of resonance for those antennas.

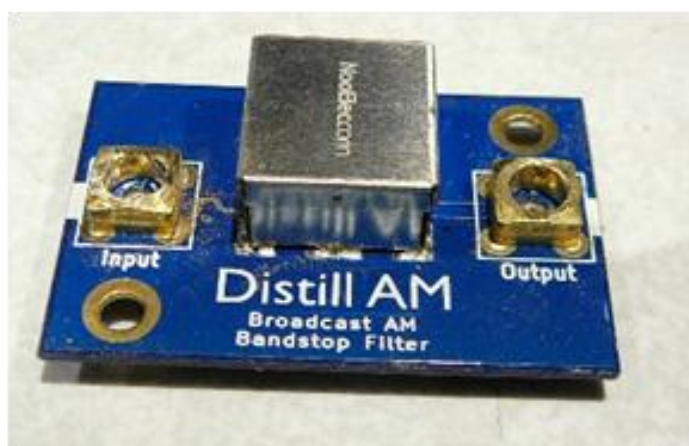
So, what to do? Boats, W3BUW, and others suggested making a broadcast band filter or trap to block the AM broadcast signals. Boats even gave me some Ferrite rod I could use to wind a coil and then add in a variable capacitor to make a trap. I didn't have a suitable capacitor, and there being no hamfests during the year to find one, I put that project aside.

Then I took a look on the web, and found there are a variety of AM broadcast bandstop, or notch, filters available for sale. These are intended to be used with SDR receiver modules that are also plentiful on the web. Many of these SDR modules do not have much, if any, front end filtering, and can therefore be subject to overload from strong local signals.

I found one such filter on Amazon, the Distill AM Barebones, for \$10.55 including tax. It is just the filter on a circuit board with female SMA connectors on the input and output. They are also available in an enclosure for a few dollars more.



Comet Analyzer - No Filter



My antenna analyzers use common UHF connectors and I didn't want to use a bunch of adapters to mate with the SMA connectors on the filter. I fabricated my own enclosure using double sided PC board material.



A Dremel with a metal cut-off wheel allowed me to cut off the right angle SMA connector. I tried unsoldering the connector, but the circuit board seemed to be some kind of metal base, which conducted a lot of heat. The board was getting way too hot to touch long before the



solder on the body of the SMA connector started to melt. Cutting off part of the connector seemed the easier path. The center pin of the connector unsoldered easily.

To mount the filter board in the box, I soldered two 4-40 brass screws to the box. A couple of 4-40 nuts spaced the board away from the bottom of the box, with a third nut to secure the board. My trusty Weller WP-25 25 watt soldering iron was sufficient to do all the soldering, including the box joints.

After completing the build, with the exception of soldering on the bottom of the box, I tested it out. There was still no problem measuring SWR on the TA-33 or Ringo, and now both analyzers worked well on the end fed antenna. Filtering out the broadcast signals did the trick. I could even measure the end fed antenna on the 160 meter band, albeit the expected high SWR there. The filter is rated at 3dB from 778 to 1800kHz and 8dB from 526 to 1710 kHz. Not a huge amount of attenuation, but enough to do the job for me. Now I can check all of my antennas should the need arise.



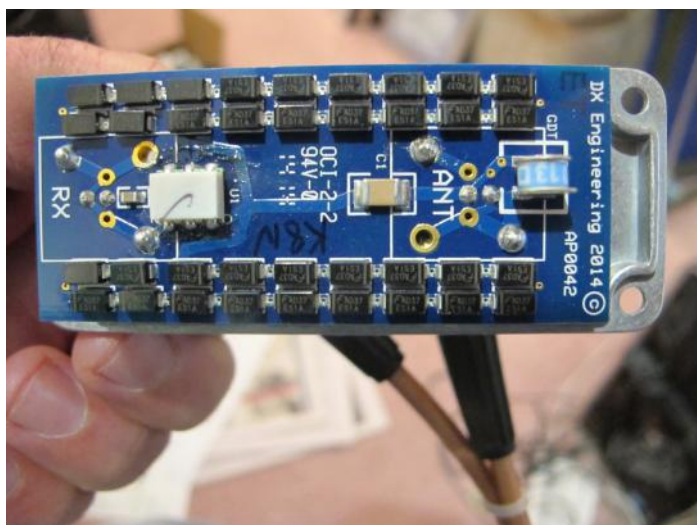
Comet Analyzer - With Filter



Don WA3HGW

Ever Wonder What's Inside? de Cooky - WC3O

Have you ever wondered what was inside the DX Engineering Receive Guard? I did.



I must admit that there's a lot more in there than I thought I'd see. Actually the only thing I recognize is a gas discharge tube. (Static build-up protection) The rest of it? I have no idea.

I guess those are diodes stacked along the sides? The Receive Guard keeps excessive voltage from damaging the receiver in your radio. You might not need this for your home station, but at the club where we are running high power on multiple stations at the same time this could prevent damage to the radios.

The one in this picture will be used on our remote radio to keep it from getting damaged if someone is using the remote radio while others are active on the other radios at the clubhouse.

While kinda expensive, I've heard nothing but good things about these units.

Cooky - WC3O



"One day, son, all of these perfectly good A.C. adapters, which have long outlived the products they were originally designed for, will be yours."



You Need New Screwdrivers de K3JZD

If you are not careful, you can learn something new each day. I just learned that what look like Philips head screws on my Kenwood, Yaesu, and Icom radios are not Phillips head screws.

If you do not want to hose up the appearance of the screws on your radio by rounding out the grooves, then you need to be using Japanese screwdrivers which have a JIS-1, JIS-2, JIS-3, or JIS-4 designation.

From the top, the screws look pretty similar. But, as you can see when using the wrong screwdriver, it is not a good firm fit into the screw head, causing damage.



Phillips driver
in JIS screw



JIS driver
in Phillips screw

The biggest difference, and what causes the heads of the Japanese radio screws to get buggered up whenever you are using a Phillips head screwdriver, is in the geometry of the driver end.



The blunt JIS driver ends go all the way down into the JIS screws. The pointed Phillips driver ends do not.

Jody - K3JZD

FISTS CW Club de K3JZD

The FISTS CW Club has been around since 1987. FISTS is "The International Morse Preservation Society". It originated in the UK, and grew to be a worldwide organization.

A "FIST" is a CW operator's reference to another CW operator's keying characteristics. That probably had more meaning in the days before electronic keyers. But, even with electronic keyers, CW ops have a style.

Up until January 1, 2021, the FISTS Americas Chapter was a dues paying organization. That was a limitation, as we hams all like stuff that is Free, like in beer.

Now, FISTS Americas Chapter membership is free. A reorganization has resulted in more of an online approach, relying on PDF distributions and web site access rather than mailings, eliminating the cost of mailing stuff. Now, like many other organizations, they are relying on donations.

FISTS does two Sprints each quarter. And encourages "Activity Tuesdays". Suggested gathering frequencies are shown on their web site. FISTS operators will slow down as required for new CW operators during the events. It is all about encouragement and help.

Unlike the Straight Key Century Club (SKCC) which requires Straight Keys during their events, and unlike the North American QRP CW Club (NAQCC) which does events using QRP power, you can use electronic keyers and the power of your choice during the FISTS events. That should make it attractive to those of you who have learned to send CW on electronic keyers.

Organized events like the FISTS Sprints are a good way to build your CW skills. The format for the brief exchanges during the Sprints is consistent. So, you know what to expect. And the free GenLog Logging program utilizes the FISTS members database to provide you with some assistance in verifying your copy.

If you do CW, check it out. Sign up online and get a FISTS Membership Number to use in the FISTS events :

<https://fistsna.org/>

If you have a lapsed membership, get reactivated with an email to Dennis at : k6df@fistsna.org

Jody - K3JZD

Welcome New Members !!

Welcome the following Skyview Radio Society Members who have joined us since publishing the December 2020 newsletter:

N3PUR - Michael Thompson - Pittsburgh 15213

N3VXT - Robert Shine - North Versailles

WB3LIQ - Vince DiMalta - Latrobe

NY9H - Bill Steffey - Prosperity PA

Remember that something is going on up at 'the joint' every Tuesday. Sign up for the K3MJW Groups.io Reflector to get the latest news and event announcements by email.

If you are a reader who is interested in becoming a Skyview member, then go to:

<http://www.skyviewradio.net/> for information.

If you are a reader who is not yet a ham, and you are interested in becoming a ham, , then go to:

<http://www.skyviewradio.net/> for information.

Skyview Radio Society Roster as of 31JAN21

NM3A	KB3HGJ	AB3LS	WQ3Q
WB3ACC	WA3HGW	KC3LVC	KC3QIR
AD3AD	KA3HPC	KC3LZH	NJ3R
W3ANX	KA3HPM	N2MA	KB3RBV (SK
KB3APD	KB3HXP	KC3MBM	K3RMB
KC3AY	AG3I	KC3MIQ	W3RRK
NA0B	KC2I	K3MJ	I2RTF
N3BPB (SK	KC3IIO	KC3MNN	KQ3S
W3BUW	WA3IKQ	KC3MNO	KD4SBJ
KF3C	W3IU	K3MRN	KB3SOU
KC3CBQ	K3JAS	N3MRU	K3STL
W3CDW	KB3JGG	KG4MSB	KB3SVJ
K3CLT	N3JLR	KS3N	N3TIN
K3DCG	KA3JOU	G4NFS	N3TIR
KC3DIA	N3JPB	KB3NSH	W3TLN
KC4EGG	ND9JR	KC3NYN	N3TTE
KC2EGL	KC3JSF	AJ3O	AG3U
KC3EJC	KB3JXG	WC3O	NS3U
AB3ER	KC3JXO	KC3OCA	N3UIW
KC3EVT	K3JZD	KC3OCB	W3UY
KB3EYY	KC3KEI	KC3OCC	K3VRU
WB3FAE	WA3KFS	K3OGN	N3VXT
KC3FEI	KB3KHR	N3OIF	W3VYK
K3FH	AC0KK	KB3OMB	N3WAV
K3FKI	N3KNB	KB3ORO	K3WM
KC3FWD	W4KV	KR3P	N3WMC
N2GBR	KC3KXG	NK3P	K3WWP
KC3GIL	KC3KXZ	K3PC	KZ3Y
KC3GIN	WA3LCY	KC3PEM	KG5YFN
KC3GPM	KC3LHW	K2PMD	N3YJN
K3GT	K0LIN	KE3PO	KB3YJQ
AB3GY	WB3LJQ	W3PRL	W3YNI
KC3GZW	KG4LLQ	N3PUR	W3YNX
NC3H	KC3LNG	KC3PXQ	WA3YWU
NY9H	K3LR	AE8Q	K3ZAU
WD3HAY	KC3LRT	NU3Q	

Notes: Only Call Signs are being published. Refer to QRZ.COM for more information. (Unable to publish those without Call Signs.)



Kul - Links

Jody - K3JZD

There is lots of stuff out on the Internet... Some of it can brighten your day. Some of it can educate you.

I can't really copy and past it all in here. But, I can point you at some of it

Have an IC-7300 ?? If you do, this may be your most comprehensive resource for IC-7300 Info

<https://www.k-state.edu/ksuarc/IC-7300.html>

**Ham Radio Needs To Embrace The Hacker Community
Now More Than Ever**

<https://tinyurl.com/yybmtesf>

I'll consider any Kul - Links that you find.
Email then to me at: K3JZD AT ARRL DOT NET
They might just end up in the next issue

Previous Issues

Previous Issues of the Q5er are available at

<http://www.nelis.net>

Next Newsletter will be April 1, 2021
Closing Date For Submissions : March 15, 2021
K3JZD AT ARRL DOT NET

Become Well Known Publish in the Q5er

**The Q5er goes to other clubs and is
available to all on our web site.**

Submissions to : K3JZD AT ARRL DOT NET

>>>>> **WARNING** <<<<<<

An Alarm System has been installed up at
the joint. Do Not go in there on your own
until you learn how to disarm and rearm it.

**** Skyview VE Testing ****

For Testing Dates, See :

<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

Time: Usually 8:15 AM

Location: Skyview Clubhouse Meeting Room
2335 Turkey Ridge Rd
New Kensington PA 15068-1936

Contact: William C. Dillen
(724) 882-9612

Email: bdillen@comcast.net

Please E-Mail or call to register!!!

While walk-ins are accepted, the exam session may be
cancelled if no candidates are scheduled.

Q5er – The Official Newsletter of the Skyview Radio Society



Q5er Editor & Publisher: Jody Nelis - K3JZD

This newsletter may be freely forwarded.

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email your comments and article submissions to: **K3JZD AT ARRL DOT NET**



That's Easy . . .

Come up to the Skyview Clubhouse on any Tuesday and ask !!!

All General Information about the Skyview Radio Society is at <http://www.skyviewradio.net>

Subscribe to K3MJW **groups.io** reflector for All Current News & Activities : <https://groups.io/g/K3MJW>

If you want to keep up with what is going on NOW, that is the place - have it forward msgs to your email



Is this how your dining room looks ??

Where are the pictures of your shack ??