

## Q5er – The Official Newsletter of the Skyview Radio Society

### Summer Is a Busy, Busy, Busy Time

The last newsletter suggested that you get yourself subscribed to the Skyview K3MJW Groups.io Reflector (aka “the club reflector”).

I hope that you did, and that you have it setup to forward messages to your email. If so, that you are not missing anything. And you are now getting both the “Monday Report” and the “Morning After Report” in your In Box each week.

Cooky - WC3O tirelessly produces both of those reports each week. (He is even able to produce a Morning After Report for days that he was not even up at the joint on a Tuesday evening - how about that for being good?).

Anyway, while both of these reports focus on the goings on up at the joint on Tuesday evenings, they go way beyond that. During the late Spring, Summer, and Early Fall months, Cookie lists all of the activities going on in Western PA which need and welcome ham radio operator support.

As the Winter fades (again and again), the list of upcoming activities in Cooky’s reports gets longer and longer. Finally it seems like it gets to the point where it does not seem like there is time to sit down and take a break after doing one activity because it is time to go off and do the next one. Some of these activities have already passed by the time that you read this. But some are still in the future.

Of course there are lots of other Summertime activities that we all have to do, so it is not possible to just do fun ham stuff all Summer. But, you should pick out a few that you might want to try and block them out on your calendar.

I have always felt that one of the more interesting places to provide communications support is the Westmoreland County Air Show. Free admission, and an upfront location to watch the show from. Seems like some nice perks.

The various running and walking events that occur in Pittsburgh are all good to participate in. I guess the big plus there, in addition to being a valuable volunteer, is getting to watch a mass of humanity in spandex passing by !! Oh yeah, and usually a free tee shirt.

Some events, like the Rachel Carson Trail Challenge, let you get out into the wilderness. That is a great one to support, as they have been known to make a contribution to Skyview.

So read Cooky’s reports. Stay tuned in. And go do some of the Summer events.

**June 1, 2019**

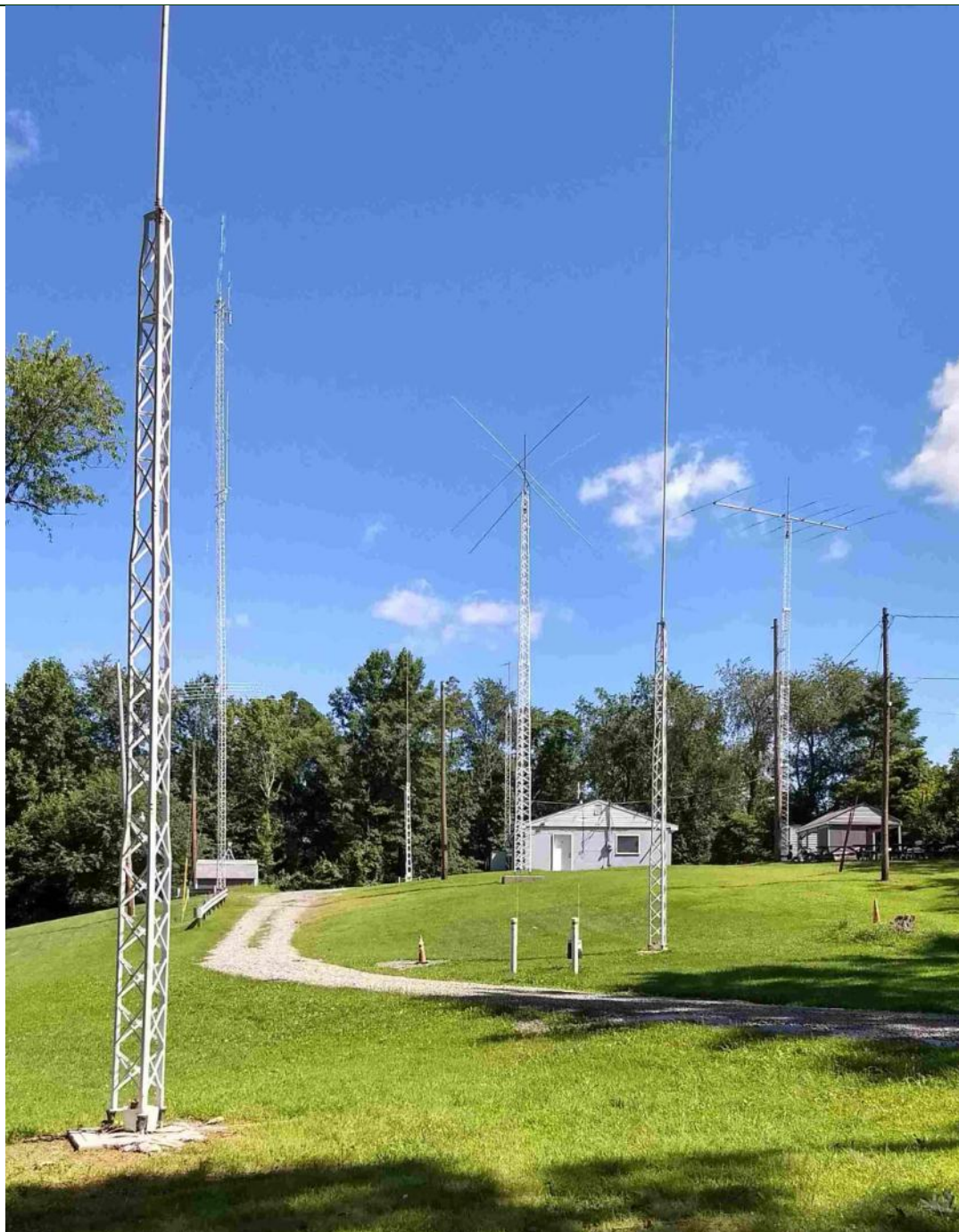
- 24 Tube Walkie Talkie
- 16 Tube All-Wave Radio
- Our Swap & Shop Coming
- Space Weather
- Why Two Logos?
- Wanted: EMCOMM Lead
- Free Antenna Book
- And More . . . . .

#### Sunsports?

**I don’t need no  
stinking Sunsports.  
I have 40 meters  
and 80 Meters.**

#### Inside this issue:

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## **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**

Well, I guess it is officially Summer (no matter what is going on outside). I don't know about you, but there are days where I hope for rain so I can stay inside and play with radios instead of doing work outside.

I am still enjoying playing around with small inexpensive QRP radios. Long time readers may recall the Bayou Jumper that I built a while back. While simplistic, with its throwback crystal controlled transmitter and its super regenerative receiver, it has been challenging, yet fun to use. Part of the fun was extending it to make it easier to use. This issue describes my latest QRP radio, which is much, much more modern.

And, I am still enjoying using them for the various low pressure events like the SKCC, NAQCC, Flying Pigs, Spartan Sprint, Second Sunday etc Google to learn about them.

I hope that you enjoy this issue. And I look forward to receiving your contributions to this newsletter.

Jody - K3JZD

### **From the Treasurer**

I'm pretty much settled into this role now. It took a little doing to setup a system for categorizing and managing the club's financial transactions. And I was able to come up with what I believe to be a good financial report format for the monthly business meetings. So, now it is just a matter of keeping it all going,

The financial reports presented at the monthly business meetings are simple (?) one page reports. However, they cover a lot. Whenever I was working in the engineering field, I was working with a Japanese Subcontractor who taught me that if it takes more than one page to tell the story, then it is too complex. So, I have stuck with that. There are a lot of behind the scenes details that go into that one page financial report. I can always provide you with any detail that you would like to see at the business meeting.

As this is being written, none of our major 2019 projects that we have funded have kicked off yet. Once they do, I guess I will get a little busier.

Jody - K3JZD

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### **Save the Date**

Our annual Swap & Shop will be on Sunday August 25, 2019. This is our once a year fund raiser. Your Dues (and any contributions sent in along with your Dues) cover all of our fixed operating expenses (they "keep the lights on"). The profits from our annual Swap & Shop pay for new radios, radio repair, new antennas, antenna repair, building repair, and grounds maintenance. In other words, "all else". So, this is an important date for all Skyview members.

So, save the date. Plan on assisting during the setup on Saturday August 24th, and/or working the event and/or the tear down and put away on Sunday August 25th.

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**The future is not what it used to be.**

**Robert Graves**



## From the Center Seat

de Bill - N3NMC

Well summer is almost upon us and there will be plenty of hamming activities to get involved.

The Breeze Shooters hamfest will be the first weekend of June . This hamfest has always been a good way to usher in the summer months. It has moved to two days and there is plenty of activities to keep up your interest. Good prizes, good food and plenty of vendors.

The end of June will bring us to one of the best events of the year, field day. This is a 2 day activity and can be as laid back or as hectic as you want to make it. The club will be having 2 sites again . One up at the club and the other at the N3TIN site. Come to either or both and enjoy the activities.

Also on that same weekend will be the annual Rachael Carson Walk. They are always looking for help. It is a real easy activity, and you can learn about public service events.

July brings us 13 colonies and the K2M station will need and welcome operators. It starts July 1st and will conclude July 7th. Always a fun activity and a good way to enjoy another aspect of ham radio.

We also will be having the annual ice cream social and corn roast in July. Stay tuned for the exact dates.

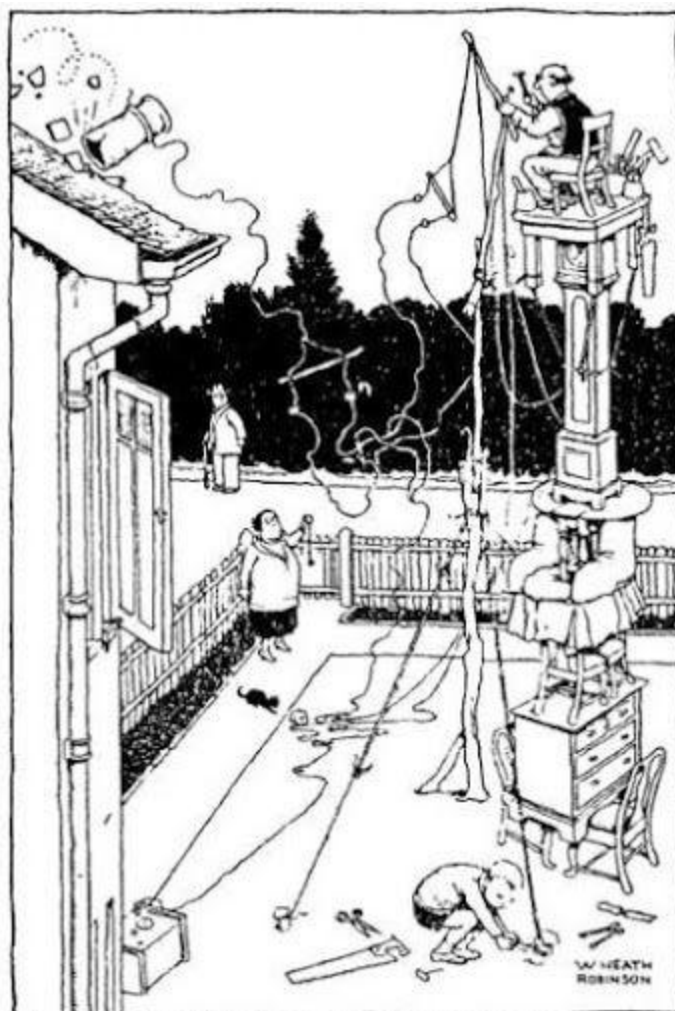
The end of August will be the annual Skyview Swap and Shop. This is a big money maker for the club and we always need plenty of help.

Our committees continue to look at various projects and we hope to have more information at the monthly business meetings.

Well as you can see there is plenty of hammy activities to take part in. Please get involved. Service is a big part of what we as hams do.

Come up on Tuesday's , laugh, cry, sit by the fire, play radio or just sit down and pass the old B.S. Hope to see you at the "Joint".

73 de Bill N3WMC



## The Hunt

de Jack - K3JAS

Since moving into the house about 6-1/2 years ago and setting up a small station I was aware of a nagging noise on the radio that was very, very intermittent and very broad banded. I did try to locate it a few times that I heard it but it was not on very long but long enough to record it and document the range of its influence. I observed it from 160 through 6 meters!! The blips were ~16kHz apart and at their maximum about 5 kHz wide. Sometimes they were less than 500hz but usually it was wider. See Fig.1. This thing was a monster but it was also very illusive. Well as time moved on and between work and doing things around the house it got less attention than it deserved IMHO.



I have other noises on the radio that are definitely of an arcing source and they to are intermittent. When they are at their finest, they are over S-9 and everything is lost in their wake. Those have come and gone, wet, dry, windy or calm they appear and vary in strength so you have to deal with them until they can be identified as to where they actually are. I have found two so far and have had them reported. Not fixed yet but reported. Normal band conditions change constantly as we all know so some of the noise heard is atmospheric in nature but some is manmade.

Sorry for the diversion, as to the 'monster' I did not give

it a lot of thought since I was only on the air, like the noise, very infrequently. So more time passed, many things have changed and now that I am using the radio a lot more I have noticed the noise a bit more but still infrequently. I did a lot of investigating in the house to see if it was being generated by something simple. (it actually was but I was not aware.) I proceeded to purchase this very sophisticated RF Interference Receiver to help in the hunt:



Many will think this a joke but this is one of the best tools for locating offensive RF stuff, a transistor radio. Great for locating arcing type noise along with other things. I also bought a new radio for the Station, an ICOM IC-7610 and this is where the rubber begins to meet the road hunting the 'monster'.

With the aid of two new radios and with time on my side the hunt was going to come to a finish. When? I was not exactly sure but I was confident that I would prevail in my quest. I started by moving through the house and listening, probing and looking. I did find 1 CCFL that was singing a tune and was getting into the radio but only to a small degree. Once eliminated I am sure the noise floor dropped a bit but I could not discern to what degree.

Ten Meters is a band we use locally quite bit for rag-chewing and sort of an intercom. There is the Breezer-Shooters Net on Monday evenings and the group keeps a good eye on the band conditions and there is a lot of talk about noise. It comes and goes and I would speculate a lot of the noise is from the aging infrastructure but who is to know. I personally was noticing spurs on 10 meters. I looked around and thought about the computers stuff I use for work and home. So I grabbed a Toroid and wrapped it with the CAT5 cable from the router and the spur noise dropped. Well there is a whole lot of CAT5 cable between the cable modem and the three computers in the system.

I purchased 25 MIX 31 toroids 2.4" x 1.4" x .5" and started to attack the CAT 5 stuff. AC line cords were not overlooked. The spurs are now gone and 10 meters is clean, almost. My TV was giving off stuff as was the Cable TV box. Toroids have been used and the signals are all but gone so you have to look for them to find them rather than bump into them. I did an exhaustive listen to all the other bands and they seem clean. It appeared that the house was cleaned up so I began to operate more and enjoy the time on the air. I felt good about what was done so I figured all I had to do was endure the Static arcing and the occasional 'monster' attack.

Fast forward about 4 months, I was working in the office and decided at lunch time I would run the clean cycle on the washing machine. (ah ha I was about to release the Kraken). I proceeded to do the deed and went up and made some lunch, watched the news on the tube and went back to work. The radio was on real low and I was listening to a bit of CW when to my surprise I here this awful stuff. It was back!! I quickly recorded a sound bite and did some screen shots. I

checked from 160 to 6 meters and WOW it is as strong as ever. Then it went away. WHAT is going on. Back it came and then it dawned on me, I just started the washing machine. Naaaa, that can't be it. Guess again, this thing is a high-tech servo driven RF generator. When I went down and was looking at it the sound of the drum moving seemed eerily familiar. I went back up to the radio and it sounded the same. I took the RF Interference Receiver back down to the washing machine and it was singing a song. The money was well spent. Having the 7610 to make the recordings and the screen shots is a great way to document what is going on for future reference.

[\[Ctrl\] + Click Here for a MP3 File to listen to.](#)

I was on CW and during the recording I switched to LSB you can tell the filter is a bit wider. About 3-4 seconds before the recording stops the noise stops and you can hear the sound of a noise free 40meter band.

Behold the 'MONSTER'





Now you may ask did I kill the Monster, well no, I identified it and now I know what the interference is and where it is being generated so no need to do away with it. Will I look into cleaning it up? Possibly I may try a toroid or two but for now since I am the one who uses it, it is ok the way it is. I have heard horror stories about furnaces that wreak havoc on the radio. That would need fixed straight away since you need the furnace system to be 100% for heat or Air conditioning.

That is the tale of the Hunt. And to add a bit more, here is the make and model of my monster: Kenmore Elite Oasis<sup>he</sup> Model 110.27092600.

Looking back at the whole episode I learned a lot and did hone a few skills as to sleuthing for rf stuff. The Hunt will never end and I am sure more fun times await.

Jack - K3JAS

**FM Walkie-Talkie** just announced by Motorola, Inc., of Chicago, Ill., will be popular among law enforcement agencies, fire protection departments, forestry services, railroads, etc. It has 24 tubes and weighs 19 lbs. A tip-up loudspeaker broadcasts over the operator's shoulder or to nearby listeners. It has a range of from five to seven miles, depending upon altitude and presence of physical obstructions.



From

Wireless Association of South Hills, Inc.

WASHRag

[www.n3sh.org](http://www.n3sh.org)

### US Amateurs by Class as of March 31st, 2019:

Novice	9,652
Technician	414,795
General	188,260
Advanced	43,774
Extra	153,498
Club	12,701
<b>Total</b>	<b>822,680</b>

All-Time High 02/11/2019 825,088

### Last 90 Days:

New Amateurs	8,180
Callsign Changes	4,690
Class Changes	6,188
No Longer Licensed	14,178
All Updates (*)	31,196
(*) Includes renewals, address changes, etc.	

Information gathered from FCC Daily Updates,  
courtesy of [Hamdata.com](http://Hamdata.com)

## **"Thunderstruck" - Yet Another Literary Column by Joe Birsá – N3TTE**

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A number of weeks ago, I received a set of coupons for Half Price Books. These coupons start with 20% off on a given Monday, then they proceed throughout the week to 50% off on the following Sunday. So one Saturday I found myself in Half Price Books with a 40% coupon, but unable to find a book on either railroads or fishing that I was interested in. And amateur radio and computer books seem to have vanished from the shelves there. But on a list of things to do that I keep on my smart phone was the book "Thunderstruck" by Erik Larson. So I bought it with my 40% coupon.

"Thunderstruck" was on my list because it was mentioned in a small item in QST as involving radio. "Thunderstruck" is a "real crime" book that describes how radio was used in 1910 to capture a fleeing murderer. The two plots in the book can be easily summarized as: Plot one, Marconi figures out how "Hertzian Waves", as radio was called then, could be used for communication, and through many trials, tribulations, and setbacks, develops commercial radio telegraphy. And in plot two, the meek Dr. Hawley Crippen is bullied by his overbearing wife, falls in love with a younger woman, has an affair, kills his wife, then tries to escape with his mistress to Canada. Both plots come together when the captain of the ocean liner Dr Crippen and his mistress, disguised as a boy, are on recognize them and has a Marconi-gram sent to England that they are on his ship. This was the first time radio was used to capture a criminal.

Of course the book takes many more words to tell the stories than I have done above. 391 pages, in fact. But the book is readable, not quite as readable as some of the techno-fiction (e.g. Clive Cussler) that I normally read for relaxation, but far more readable than the books that were inflicted on me in Literature Class. Because I'm a geeky ham, I definitively enjoyed, and appreciated, the Marconi side of the book. Before Marconi, radio was considered a curiosity, that is, interesting, but not much use. Because Marconi had earlier learned Morse code, as soon as he, out of curiosity, started experimenting with radio, he immediately recognized it's potential. In "Thunderstruck", the author describes, in decent techni-

cal detail, how Marconi went from exchanging messages around a half mile to across the Atlantic Ocean. He pioneered working DX the way we still do today: bigger antennas, more power, and higher ground. Because Marconi was not a scientist, his development of radio was via trial-and-error. (Lots of errors!) In that sense, Marconi was the prototype amateur radio operator. One thing that stood out to me was the massive size of the equipment he was using compared to what we hams use today. Even the largest contest stations today are just a fraction of the size of the stations Marconi built! Because, even though he was having success, most of his development efforts were focused in the wrong direction. Marconi was using brute force, that is BRUTE FORCE, to get a message through.

Two other things that stood out to me were jealousy of the scientific establishment and how they belittled Marconi as well as the cutthroat competition and "dirty tricks" from other inventors who jumped on radio once Marconi showed what was possible. Back then, many "scientists" did not want to get their hands "dirty" with practical applications, and the money that came out of them. It sounded to me, like those scientists had an aversion to starting a business and making money. That is, science for only science sake. Marconi, on the other hand, not only started a business, but initially he tried to monopolize radio. That is, until Kaiser Wilhelm II, of WWI fame, put a stop to him. (The Germans were his biggest competitor outside of England.) The book also mentions malicious interference and near the end, eavesdropping by reporters. All in all, the Marconi (radio) part is fascinating to read if you're a ham.

"Thunderstruck" also provides details as to Marconi's personality. He was a monomaniac. He focused on one thing, and one thing only, to the exclusion of everything else. And he seemed to be quite self-centered. Frankly, I doubt very much that I would want to work for him. Work with him, maybe, but certainly not work for him.



Now, the Dr. Crippen part of the plot is also entertaining to read, but for different reasons. Dr. Crippen ended up in a bad marriage with his wife Belle. But he couldn't divorce her because divorce wasn't allowed at that time, except for very limited reasons. So when he met and had an affair with a young secretary, Ethel, he murdered his wife, Belle. Then he disposed of her body in a very gruesome way. The book goes into the "blood and guts" of disposing of Belle's body and how the autopsy was performed to identify the body and discover the cause of her death. A bit grotesque and gory, but interesting nonetheless. Dr. Crippen did not cover his tracks very well, and eventually Scotland Yard came "asking" around. So Dr. Crippen and Ethel went first to Europe, then took a second class liner to Canada. But when the Chief Inspector found Belle's body he put the word out on Crippen and Ethel. The captain of the liner they were on then recognized them, and he sent back word via radio, which reached Scotland Yard. With this information, the detective took a fast liner to get to Canada ahead of them and make an arrest. How radio tracked the liners and how the arrest was made are very interesting. Finally, the book closes by following up on the main characters, except for Dr. Crippen, who was hanged, and how they went on with their lives.

If you're interested in the history of science and technology, "Thunderstruck" has lots of "name-dropping" and quite a bit of historical trivia; technical and non-technical. "Thunderstruck" also provides information on Marconi's main competitor in England, Oliver Lodge. Oliver Lodge, almost, almost developed radio telegraphy before Marconi. I believe that if he had known Morse code (CW) he would have seen the potential of radio and we would be recognizing him as the inventor of radio today. After Marconi came on the scene, he tried to catch up, but never quite made it. And since the book is about actual events, it has a sizable section of notes at the end.

To summarize, "Thunderstruck" is a good book to read if you're interested in the early days of radio, if you're interested in a classic English murder, or if you just like reading about historical topics in general. I'm glad I spent the coupon and my money on "Thunderstruck", and I'd recommend it to not only hams, but anybody who wants to read a good story. **73 de Joe - N3TTE**



### Space Weather News for April 11, 2019

<http://spaceweather.com>

<https://www.spaceweatheralerts.com>

**SOLAR CYCLE UPDATE:** An international panel of researchers led by NASA and NOAA has released a new prediction for the solar cycle. According to their analysis, the current solar minimum is going to deepen, potentially reaching a century-class low in the next year or so. This will be followed by a new Solar Max in the years 2023-2026. Visit today's edition of [Space-weather.com](http://spaceweather.com) to learn how this affects space weather and life on Earth.

**NEW:** Sign up for [Space Weather Alerts](https://www.spaceweatheralerts.com) and get an instant text message when geomagnetic storms are underway.

**Ham Radio is a Contact Sport**

## Why Does Skyview Have Two Logos?

de Jody—K3JZD



**OLD**



**NEW**

Well, this is something that I have wondered about from time to time. Now I know why. So I thought I would share it with you. Here it is, right from our own Logo Designer:

I just wanted to explain the idea behind the new logo. I developed the logo a while back because I thought it was not good to portray ham radio or Skyview to young people an old key and lollipop mic. I didn't see any reason to abandon the old logo and I don't think it causes much confusion. I figured it we were dealing traditional stuff we use the old logo and when wanting to look modern use the new log.

I know it's not too apparent but some of the ideas in the new logo are:

- The oval and sprite represent a satellite
- The star and center line is looking down the boom of a yagi
- The kinda-dome running through "SKYVIEW" is the earth's curvature indicating world-wide reach
- The two type faces indicate something old, something new.
- The flap on the S? The wind did that... hi

Bob - WC3O

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## Wanted – Emergency Communications Lead

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**Why** – Emergency Communications (EmComm) seems to be a constantly moving target

- Lots of different players, each with their own rules, agendas, activities, and drills.
- It is hard for individuals to keep up with what all may be happening around us.

**Qualification** – An Interest in EmComm

**Tasks** – TBD by the Lead !!

The big role that we need filled here is here is keeping up with the various organizations and then focusing us on where we might need to be more involved :

- What is now going on with “the government’s” NEMS program? (While Amateur Radio has been thrown into their AUXCOMM category that also includes many other services, we still have something to offer). We really do not follow it closely. Should we be more involved with them? Who is ‘them’ around here?
- It now takes some on-line training and certification to play in the government’s NEMS program. But, that seems to be a moving target also as far as what certification is required. What is required today?
- What is now going on with the ARRL’s ARES program? We really do not follow it closely. Should we be more involved with them? Who is ‘them’ around here?
- The ARRL has a Training Program, although it may be in the process of being revised to more closely align with the government’s NEMS program. What is required today?
- What is now going on in Westmoreland County? We really do not follow it closely. Should we be more involved with them?
- What is now going on in Allegheny County ? We really do not follow it closely. Should we be more involved with them?
- What is now going on in Butler County ? We really do not follow it closely. Should we be more involved with them?
- Are digital mode radios being utilized a lot? Different digital modes, or is it all DMR?
- What software is being used for message passing? Is there anything we should be learning how to use?
- What about the Mesh Network initiative? Is that still being pursued?
- Etc, Etc, Etc

Ideally the EmComm lead would keep track of the happenings in these different organizations. Perhaps establish a line of communication with each of them. And then give us a brief update on what is happening around us and focus us on things we might need to gear up for. Could be done in the newsletter. Could be done on the Groups.io reflector. Could be done at the business meetings. Could utilize all of those methods.

**Interested? Let one of the Skyview Officers know.**



## Butler County Amateur Radio Public Service Group

de Tom - KC3DNG

The Butler County Amateur Radio Public Service Group (BCARPSG) operates a regular NBEMS Digital Training Net on our Two Meter Repeater (147.300 at Alameda Park) with our 70cm Repeater (443.900 at the Butler EOC) serving as a backup machine. Both of these Repeaters are near the city of Butler, and both should be reachable by most Skyview members.

The purpose of the NBEMS Training Net is for participants to become proficient in the use of NBEMS software (such as fldigi) for digital communications. All amateurs are welcome to participate in the net, even those who are not familiar with NBEMS communications. It's a place to learn.

The current net schedule is:

Net	Week	Day	Time	Primary Repeater	Backup Repeater
BCARPSG Digital Training Net	1 <sup>st</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup>	Wednesday	7:45 PM	147.300+ (131.8pl)	443.900+ (131.8pl)

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## Narrow Band Emergency Messaging Software (NBEMS)

de ARRL

### Introduction to NBEMS:

Narrow Band Emergency Messaging Software (NBEMS) is an Open Source software suite that allows amateur radio operators to reliably send and receive data using nearly any computer (Windows, Mac, and Linux) and any analog radio without requiring a dedicated digital infrastructure or specialized modem hardware. NBEMS works on both VHF/UHF FM and on HF. In this presentation you will learn the basics of sending and receiving data using Fldigi. You will see how to easily send and receive verified files and forms using Flmsg. You will learn one way to integrate NBEMS with a high-speed Broadband Hamnet mesh network. NBEMS is the standard digital emcomm package for Western PA ARES.

[http://www.arrl.org/files/file/On the Air/Tutorials/Introduction\\_to\\_NBEMS\\_ARRL.pdf](http://www.arrl.org/files/file/On the Air/Tutorials/Introduction_to_NBEMS_ARRL.pdf)



Hallicrafters SX-101 Receiver

Once was 'the one to own'

<http://tinyurl.com/y6xthjhh>

<https://www.eham.net/reviews/detail/1683>

## Belly Buttons

de Bob - WC3O

The IC-7300 is like a belly button. Everyone has one. This is a radio that had a major effect on the ham radio market, both new and used. For around \$1000 bucks you can own a REALLY nice radio with a great receiver, great filtering, sounds great on both transmit and receive (as the radio came out of the box). One of the best features is the real-time spectrum scope. The radio also has great ergonomics and can be controlled through a single USB port. Overall, for the price you just can't beat it. ICOM sold around a bizzilion of these radios and sales are still going strong.

So is this the perfect radio? No. Despite all that this radio has going for it, there are things that could have been done better. These are somewhat nit-picking items, but these items could be better. Depending on what you do with the radio, these may or may not be important to you. I'm going to list a couple of modifications I performed to my 7300, and to the club's 7300. Both mods are inexpensive and I think both are well worth the effort.

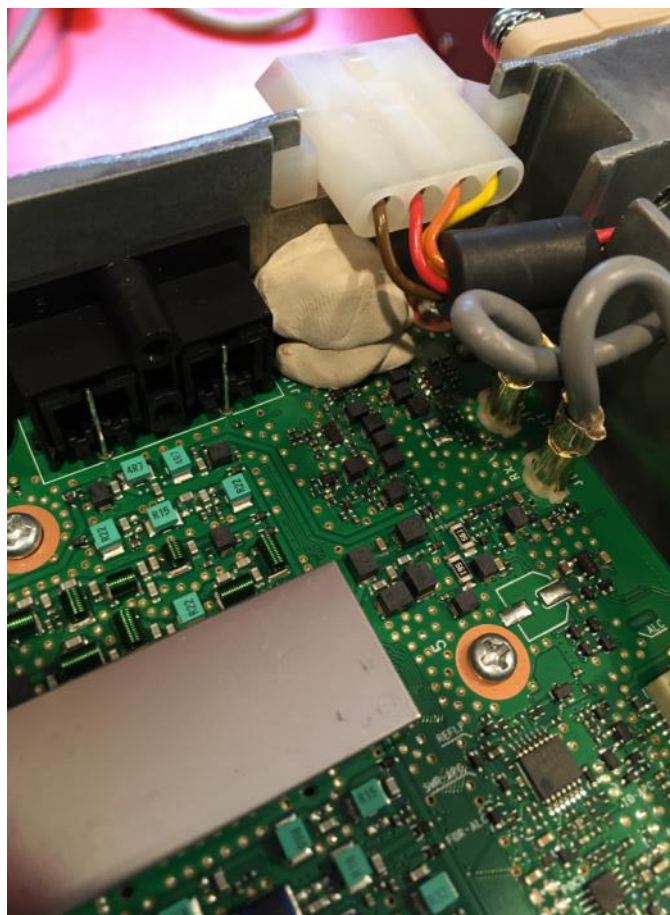
### Credit:

I give credit for both of these mods to people that performed them on YouTube. Big thanks to those that take the time to post these kinds of things.

### Issue 1:

The T/R (Transmit/receive) relay is quite noisy. This issue is much more important if you happen to be a CW op. If you are not into CW this mod doesn't do much for you. Doing CW with semi break-in, the T/R relay switches back and forth between most every word sent. If the rig is set to full break-in the relay clacks between every "dit and dah"! This gets old really fast. I found putting 3M adhesive putty P/N 18001 around the T/R relay that the noise is dramatically reduced. It is very simple to do. The offending relay is located just below the external antenna tuner connector with the radio top cover removed. Just get a blob of the putty and push it over and around the relay. It doesn't get much simpler. The relay noise is now at a reasonable level. Actually, I just did a search for the specific putty I used, only to find it has

been discontinued! But I am sure any putty such as antenna seal would work fine as long as it is non-conductive and doesn't release oils. Great, easy mod.

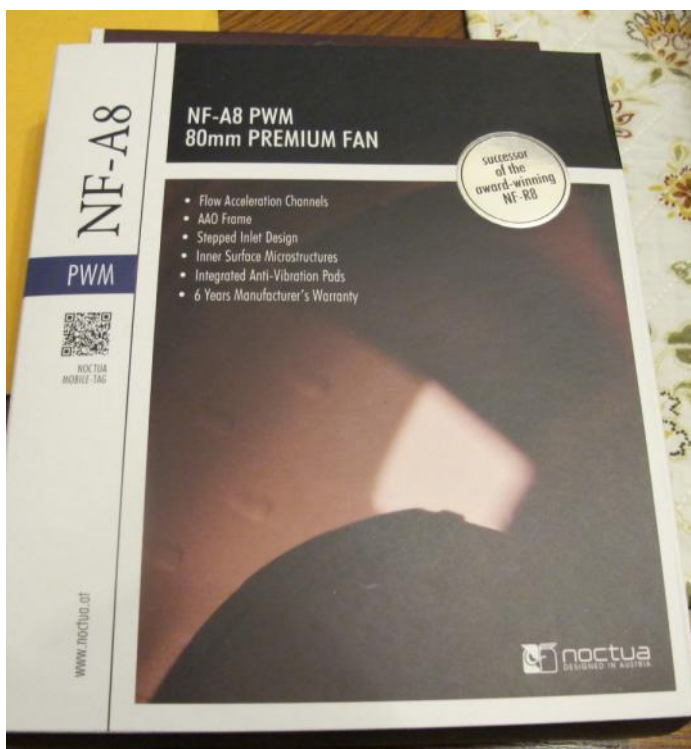


### Issue 2:

Every time the radio is keyed to transmit the cooling fan comes on full speed, then throttles back to a normal speed. Again, this gets old real fast when using CW. But it also gets old with other modes as well. We used the 7300 at the club for a RTTY contest. EVERY time the radio key – WEEEECH-shhhhhh. After a while I was really sick of hearing the fan. I was hoping that ICOM would come up with a fix, but no dice. Someone on YouTube came up with a MUCH quieter fan and Buddy, it is sooooo much better. You need to modify the fan wiring but it is no big deal and is easy to do. The fan wiring is accessed with the bottom cover removed. The fan size is 80mm and is rated to 12 volts.

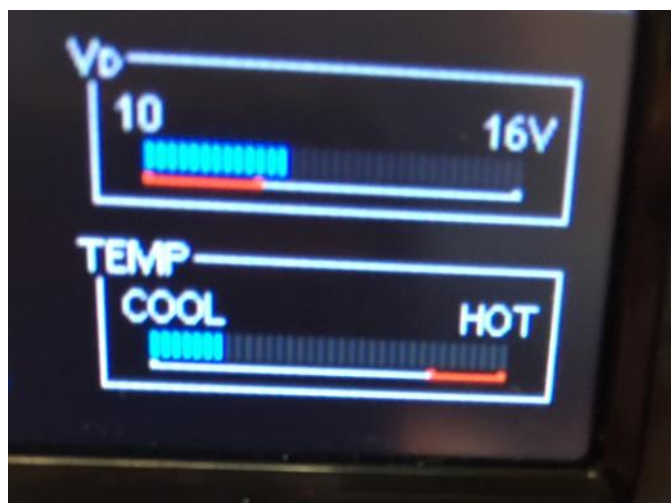
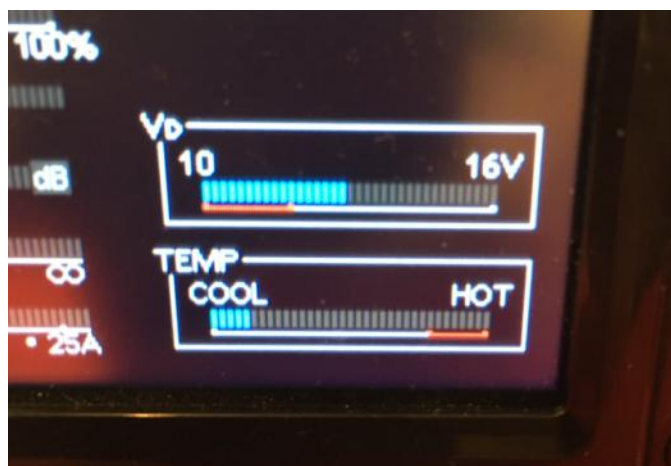


You have some options in terms of quiet fans. I used the same one the YouTube guy recommended. The new fan has four wires. You only need the yellow and black wires for our purpose. (I was unable to find out what the other



two wires were used for. I assume they are for speed control (which we are not using). The new fan is sooooo much nicer than the original.

Not wanting to mod the radios in a bad way, I wanted to do some testing. I don't have a flow meter to compare fans. I thought maybe a functional test would be the best way to check the new fan performance. I took my modified 7300 up to the club. The club 7300 was not modified, yet. I powered up both radios and let them run a while to match internal temperatures. After a half hour I set the power on both radios to 50 watts and set the mode to RTTY. This gives each radio a 50 watt carrier when keyed. The 7300 has a built-in temperature indicator that I used for comparison. I set my clock to 5 minutes and keyed both radios into dummy loads. After 5 minutes both temperature read-outs were the same. I kept the transmitter on for an additional 5 minutes. My radio had a slightly higher





temperature. I continued to transmit for another 5 minutes. (15 min total) My radio was still slightly higher, but still way down at the bottom of the scale. This was close enough for me. I figured even doing RTTY contesting does not come close to the test I was performing. Even after outputting 50 watts dead carrier for 15 minutes the fan speed never even increased from the base speed. Nice!

I installed the new fan in the club's 7300 and put the putty around the T/R relay. Life is good now. The radio is now much nicer to use without the relay or fan noise.

### A couple of notes:

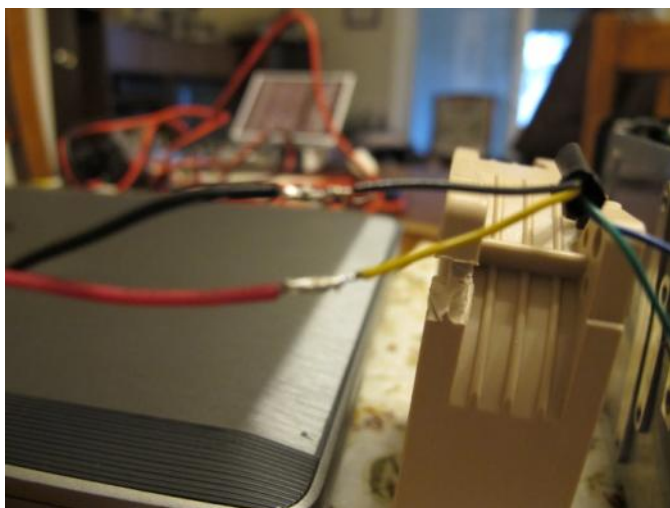
The fan blows the air OUT of the radio, not in.

If you use the fan that I used the 8 rubber mount insulators will need removed because the mounting screws are too short to leave them on.

You will need to cut out a small notch in the fan housing to allow the wires to feed into the radio.



The YELLOW wire connects to the RED wire and the BLACK wire connects to the BLACK wire.



That's it. I hope you find this article useful. Enjoy your belly button (IC-7300) and I will see you on the radio.

Cooky - WC3O

## Free Antenna Book

Palomar Engineers, the company that can provide you with everything that you need to tame RFI, has made an excellent Antenna Book called *Kurt Speaks Out* available as a free digital download. You can get it by going to:

<https://palomar-engineers.com/mlb-1-magnetic-longwire-balun/Kurt-Sterbas-Korner-c21444164>

Even though it is Free, you have to "order it" from their web page. As you go through the normal ordering process, you will eventually get to a page with a [Download] button.

If you want a shortcut, you can also obtain it from my Web Page at:

<http://tinyurl.com/yyvze243>

Jody — K3JZD

## QCX Transceiver – One Really Sweet Radio

de Jody - K3JZD

Yes, it is CW only. Yes, it is a Single Band Radio. Yes, it is QRP. Yes, it is a Kit. But, if you are someone who enjoys QRP CW and like to build Kits, then this might be the best \$49.00 that you ever spent.

I ordered one of these as soon as QRP Labs <https://www.qrp-labs.com/qcx.html> began to take orders. And then I waited for quite a while, as the initial demand for them was pretty high. But, once it did finally arrive, lots of other things got in the way of getting it built. So I did not get it on the air until early this April.

As of May 2019, 7124 of them have been sold. Some other Skyview member have also built QCX Transceivers (I know that W3IU, NM3A, and N2GBR have them). So, I'm not the first one in the club to one of these on the air.



I built the 40 meter version, figuring that would be the band that would be most available for a while. I connected it to my 40m Dipole and made a couple of QSOs right away. I got pretty decent Reverse Beacon Network (RBN) spots.

I then decided to use this QCX Transceiver during April's *Flying Pigs Run for the Bacon* event <http://qrpccontest.com/pigrun/>. I began calling CQ on 40 meters, right at 0100 UTC. Right off the bat I got RBN spots from Alberta Canada and the Canary Islands. So, it seemed to be getting the job done. I went on to make 12 QSOs in 10 different states during this two hour event. (the *Run For*

*the Bacon* is a small casual QRP CW event - that evenings overall leader ended up making 21 QSOs in 16 different states – antennas and location both help a lot when running QRP). May's *NAQCC Monthly Sprint* using this QCX was a lot better —> 48 QSOs / 25 states in 2 hours.

<http://www.naqcc.info/index.html>

Since this transceiver only weighs in at 5 Ounces, it will be a good radio for me to use for the *Adventure Radio Society's Spartan Sprints*. The *Spartan Sprint* is another casual QRP event, with a different kind of a twist. Your score is calculated as (Number QSOs divided by Pounds), with the Pounds being weight of your entire rig.

<http://arsqrp.blogspot.com/2009/02/so-whats-spartan-sprint-and-how-do-i.html>

Lots and lots of features in this tiny transceiver – see the details on QRL Labs website. The construction manual that is provided is exceptional – it is hard to go wrong during the build (although I did manage to put one resistor into the wrong place). It is all through-hole construction. However the parts are tiny and you will most likely need a lot of light and some magnification assistance to build it. And a decent circuit board holder is a great thing to have. Here is a clever way to view it :

<http://tinyurl.com/y2cq49xs> You can get a good idea of the size of this board from the dollar bill in the photo.

The QCX receiver is exceptional. Good sensitivity, good selectivity, and low noise. SDR Radios all seem to have very remarkable receivers. The software provides the filtering and noise reduction. The full QSK keying is flawless. I'm a straight key guy, but I'm told that the built-in electronic keyer works really great.

CW QRP is not for everyone. CW QRP is not really great for general rag chewing as most people will not listen to or respond to a signal that is not real strong. I have found using QRP to be most enjoyable whenever I'm operating in one of the casual QRP events where everyone is listening for and responding to weak signals. However, there are those, like John, K3WWP, who routinely chase DX using QRP CW, and are quite successful at getting through.

[http://home.windstream.net/johnshan/qrp\\_ss.html](http://home.windstream.net/johnshan/qrp_ss.html)



## QRPoMeter

de Jody—K3JZD



This is an interesting kit that I completed a few months ago. As the name suggests, it is an accessory for QRP powered radios. It will handle up to 15 watts. It is in-



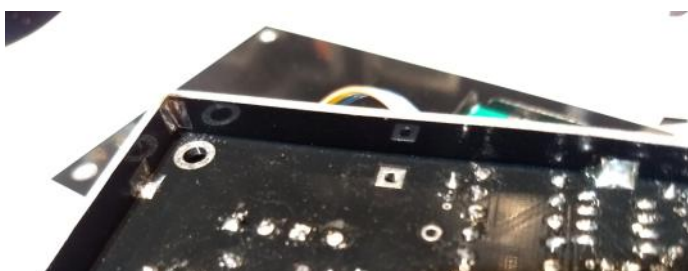
tended to be used between the radio and an antenna tuner. It is a Wattmeter, with a built in 50 ohm dummy load and it is a VSWR Meter with circuitry to clamp the maximum reverse power to protect a small QRP radio that does not have any high VSWR fallback protection. The worst that the radio will ever see when connected to an antenna through this device is a 2:1 VSWR.

The display reads your radio's output power into the 50 ohm dummy load whenever used as Wattmeter. The display reads Reflected Power whenever you are measuring VSWR. If the display reads 2.75, you have a 2.75:1 VSWR, no matter what power you are running (0 - 15w). Once you have your tuner adjusted to minimize the reading on the display (ideally down to 1.00), you then turn off the device, which puts it into bypass mode to eliminate any power loss. It functions as intended.



What made this kit interesting was that the case that was supplied with the kit is made from double sided printed circuit boards. Once the main circuit board was populated and tested, the ends and the sides were wrapped around the main circuit board and soldered together. Each inside corner was soldered in two places. Then the ends and sides were soldered to the bottom of the main circuit board in six places. The front and rear circuit boards are bolted on, using standoffs and spacers. Once assembled, it is very sturdy.





I think that the end product, with the patterns and lettering that is formed from the circuit board solder masking and silk screening is very professional looking. And it is certainly RF Proof. If there is a downside to using this approach, it is that using double sided printed circuit boards makes it heavier than it would be if an aluminum case had been used.

[https://www.tindie.com/products/NM0S\\_grp/arpometer/](https://www.tindie.com/products/NM0S_grp/arpometer/)



## Things I wonder About . . .

I wonder if all of the LED Light Bulbs that we are all busy installing everywhere will be taken out by a strong EMP (Electromagnetic Pulse) . . .

Jody - K3JZD

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**SENSATIONAL HIGH FIDELITY RECEPTION**  
This bigger, better, more powerful, clearer, smoother, super selective, flexible radio gives you absolute realism - assures you of life-like, crystal-clear tone - unlike anything you have ever experienced before. You will hear our more active - overtones - that cannot be brought in with ordinary radios. Now, hear every instrument, every voice, every shade and inflection of speech.

**Only Midwest Gives You Multi-Function Dial**  
This dial was designed in keeping with the trend of the times, yet is not an airplane dial! It is a many-purpose dial that performs many functions. Now, Midwest guarantees that inexperienced persons can secure good foreign reception. Send for FREE miniature of actual rotating dial which clearly shows these outstanding advantages:  
1. Dial calibrated in Kilocycles, Megacycles and Meters;  
2. Call letters of American Broadcast Stations printed on dial and illuminated;  
3. Slow-Fast, Smooth-Acting Tuning;  
4. Station Group Locator;  
5. Simplified Tuning Guide Lights;  
6. Automatic Select-O-Band Indicator;  
7. Illuminated Pointer Indicator;  
8. Silent Shadow Tuning - Improvement on Meter Tuning;  
9. Centralized Tuning.

**New Style Consoles**  
The Midwest 30-page catalog pictures a complete line of beautiful, artistic de luxe console and chassis in four colors. Write for new FREE catalog today! Midwest long-range radios are priced as low as \$27<sup>50</sup>

**DEAL DIRECT WITH LABORATORIES**  
Increasing costs are sure to result in higher radio prices soon. Buy before the big advance - NOW - while you can take advantage of Midwest's sensational values. No middlemen's profits to pay. You can order your 1935 High Fidelity radio from the new Midwest catalog with as much certainty of satisfaction as if you were to select it in our great radio laboratories. You save 30% to 50% when you buy this popular way - you get 30 days 30% FREE trial, as little as \$5.00 down plus a Midwest radio in your home. Satisfaction guaranteed or money back. Write for new FREE catalog today!

**MAIL COUPON TODAY! FOR OFFERING 30-DAY FREE TRIAL OFFER AND NEW 1935 CATALOG**

**MIDWEST RADIO CORP., Dept. 847 CINCINNATI, OHIO.**

Without obligation on my part and no cash on hand, I will send you the details of your liberal 30-day FREE trial offer. This is NOT an order.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

User-Agents Must Keep Extra Money Check Here ☐ Details ☐

**MIDWEST RADIO CORP.**  
DEPT. 847 - CINCINNATI, OHIO, U. S. A.  
Established 1920 Cable Address Mircoco. . . . All Codes

**I saved this space for  
YOU**

**But, I did not get anything from YOU**

**But, I will hold it open for  
YOU  
to use in the next issue**

**Submissions to : K3JZD AT ARRL DOT NET**

### **Ham Ads Accepted**

Have you bought some new equipment and need to sell something to make some room in the shack?

First try the real-time K3MJW Groups.io Reflector .

If that does not work for you, or if you want to include pictures, you can advertise here.

This newsletter goes out to other clubs and is also available to anyone who wants to go to the web site to get it. So, you may reach a larger audience.

Submit to : K3JZD AT ARRL DOT NET

### **Newsletter Fillers or ??**

While I will put some stuff in here that I have found in another club's newsletter or on the Internet, I would prefer to put your stuff in here instead.

I am always happy to get articles which discuss your opinion on some new radio, antenna, or other ham gear that you have purchased. I am not looking for QST type technical dissertations - am looking for operating experiences with it. What's great? What's good? What is not so great?

I am always happy to get your pictures: Shacks, radios, mobile setups, antennas, customizations, etc.

Lots of new folks will benefit from you sharing your experiences.

## Welcome New Members !!

Welcome the following Skyview Radio Society Members who have joined us since publishing the April 2019 newsletter:

**N3UIW - Richard Novotny**  
Export

**KS3N - Tom Straub**  
New Kensington

**N3YGN - Brian Gray**  
Tarentum

**WA3IKG - Thomas Conrad**  
Verona

**KG4LLQ - Ken Powell**  
New Kensington

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 31MAY19

NM3A	KA3HPM	N2MA	KB3SOU
WB3ACC	KB3HXP	KC3MBM	K3STL
W3ANX	AG3I	KC3MIQ	KB3SVJ
KC3AY	KC3IIO	K3MJ	N3TIN
NA0B	WA3IKQ	KC3MNN	W3TLN
N3BPB	W3IU	KC3MNO	N3TTE
W3BUW	K3JAS	K3MRN	AG3U
KC3CBQ	KC3JBS	N3MRU	NS3U
W3CDW	N3JLR	KG4MSB	N3UIW
K3CLT	KA3JOU	KS3N	K3VRU
K3DCG	N3JPB	KB3NSH	W3VYK
KC3DIA	ND3JR	AJ3O	N3WAV
KC4EGG	KC3JSF	WC3O	N3WMC
KC3EJC	KB3JXG	K3OGN	W3WTJ
AB3ER	KC3JXO	KB3OMB	KZ3Y
KC3EVT	K3JZD	KB3ORO	N3YJN
KB3EYY	KC3KEI	KR3P	KB3YJQ
KC3FEI	WA3KFS	NK3P	W3YNI
K3FH	KB3KHR	W3PRL	W3YNX
K3FKI	AC0KK	AE8Q	K3ZAU
KC3FWD	N3KNB	NU3Q	
N2GBR	W4KV	WQ3Q	
KC3GIL	KC3KXG	NJ3R	
KC3GIN	WA3LCY	KB3RBV	
AB3GY	KC3LHW	K3RMB	
KC3GZW	KG4LLQ	W3RRK	
NC3H	KC3LRT	I2RTF	
WD3HAY	AB3LS	KA3RXY	
KB3HGJ	KC3LVC	KQ3S	
WA3HGW	KC3LZH	KD4SBJ	

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





## Cell Phones and Ham Radio

*"Cell Phones allow you to talk to your friends.*

*However, Ham Radio allows you to make new friends."*

Ashton Feller - KD9HRG - Age 13  
(From June 2017 CQ Magazine)

### \*\*\*\* Skyview VE Testing \*\*\*\*

For EVERYTHING that you need to know, go to:

<https://www.facebook.com/SkyviewRadioSocietyHamRadioTesting/>

(This will tell you what you need to bring with you)

Skyview Radio Society Contact person: Bob Worek, AG3U  
e-mail: ag3u at arrl.net 724-410-1028

Location: Skyview Radio Society clubhouse. 2335 Turkey Ridge Road. New Kensington, PA 15068.

Directions, and map are on  
<http://www.Skyviewradio.net>

Please schedule in advance. While walk-ins accepted, exam may be cancelled if no candidates are scheduled.

### >>>>> WARNING <<<<<

A new 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.

This Space For Rent

**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**

## 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 . . . .

Those of you who use the Reverse Beacon Network for CW, RTTY, or BPSK, will appreciate this web page that locates the stations that are being spotted in a graphic format.

[https://dxcluster.ha8tks.hu/rbn\\_ct1boh/](https://dxcluster.ha8tks.hu/rbn_ct1boh/)

While many like to keep their wireless communications all wireless, it is pretty hard to ignore the various facilities on the web which facilitate whatever we are doing. It is getting pretty hard to find a station picture on QRZ which does not have one or more computer monitors front and center.

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

## Issue Wrap-up

I'm sure that you skipped over some of the stuff that you were not really interested in. Hopefully there was enough in here to make it worth opening.

I enjoy having to keep making the box that lists our members larger to be able to fit everyone in. A really big welcome to all of the new members who have joined Skyview in the last year. And a really big thanks to all of you who continue to remain Skyview Members from year to year. You are putting pressure on us to get the expansion to our clubhouse underway . (That is a little harder to do than expanding the size of the box in this newsletter).

As usual, not much real club boilerplate or timely club news in here. The club web page, the club Facebook page, and the K3MJW Groups.io reflector all have the basic club info and the more timely club news. This newsletter is really for 'all else'. So, send me your 'all else' stuff.

Jody - K3JZD

## Previous Issues

Previous Issues of the Q5er are available at  
<http://www.nelis.net>

**Next Newsletter will be June 1, 2019**  
**Closing Date For Submissions : May 15, 2019**  
[K3JZD AT ARRL DOT NET](#)

Here is what I feel is a very worthwhile Facebook group :

<http://tinyurl.com/y873zl6c>

It is called "*Amateur (Ham) Radio on a Budget*", and is a very dynamic group.

Lots of people exploring lots of ideas and lots of new people sharing experiences.

Kind of a on-line Elmering Group which would be helpful to new hams.

Jody - K3JZD



## 2019 SKYVIEW RADIO SOCIETY SWAP N SHOP!

SUNDAY AUGUST 25, 2019

LOCATED AT OUR CLUB GROUNDS NEAR NEW KENSINGTON PA

Aprox 13 miles northeast of Pittsburgh

2335 Turkey Ridge Road

New Kensington, PA 15068

Talk-in 146.640- 131.8pl

Admission \$5.00 – Table space is \$5.00 (Bring your own table)

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Great prizes

Door prizes

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Breakfast and lunch served

Get your Skyview Burger and your Skyview Dipole Hotdog!

Contact: John Italiano WA3KFS - 724-339-3821

[www.skyviewradio.net](http://www.skyviewradio.net)

Location is near the intersection of Rt. 366 and Rt. 380

## Q5er – The Official Newsletter of the Skyview Radio Society



Q5er Editor & Publisher: Jody Nelis - K3JZD

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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 ??