

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

### Shaky Looking Sky — But Good Swap & Shop



**October 1, 2018**

- End Road Work Protest
- Electronics Tinkering
- Strawberry Picking
- FT-817nd Modifications
- 60 Years a Ham
- WSPR Mode Reports
- FISTS Membership News
- The Blinks . .
- And More . . . . .

#### Sunsports?

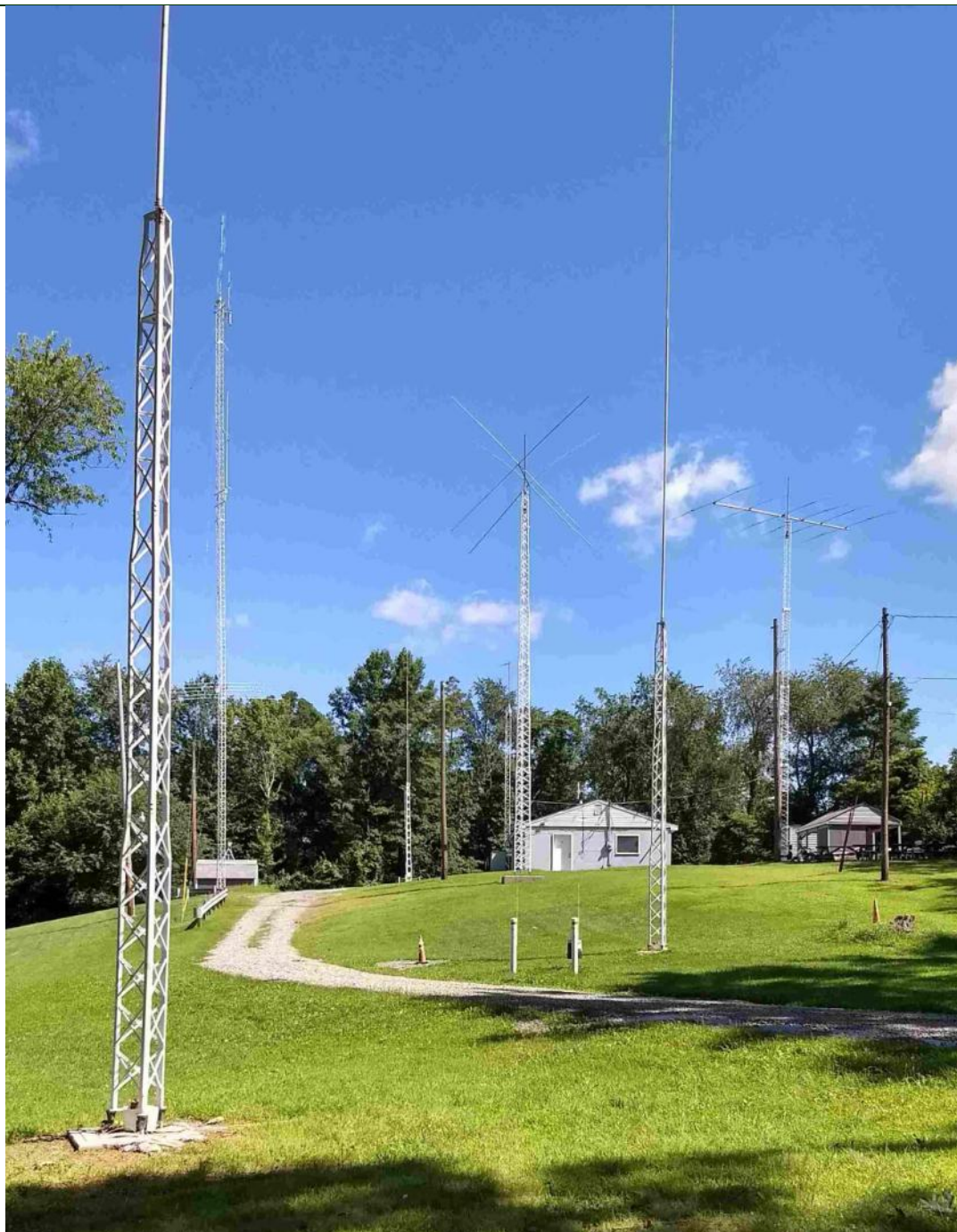
**I don't need no  
stinking Sunsports.**

**I have 40 meters  
and 80 Meters.**

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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 Yahoo Reflector: <https://groups.yahoo.com/neo/groups/K3MJW>  
(You must be logged into your personal Yahoo Account to get into the Skyview Yahoo Reflector )

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

Guests are always welcome !!

### From the Editor

Well, the Skyview 2018 Swap & Shop is history. Thanks to all who supported it in any way.

An outdoor event like we have always presents a risk. Money gets committed to the event, and it has to go on, rain or shine. This year we provided some better Main Prizes. When the weather was gloomy looking early in the morning, that was looking like a it might have been a bad idea. But, in spite of a little thunder and a few early morning raindrops, the parking lot eventually began to fill up. At the end of the day, we were relieved to find that we had a little above our average attendance.

This issue is made up of quite a few contributions from others. One by one, you budding authors are finding out that it is not hard to put something down and send it to me. We each have some areas that we seem to be most interested in and we each have had various experiences that are worth sharing. Yes, you can recount them on the air or at the clubhouse, and pass them along to a few people. But you can also publish them here and reach a wider audience.

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

Jody—K3JZD

Ham Radio is a Contact Sport



**ARRL WPA Section Manager Joe Shupienis  
W3BC Continues To Represent Us**

Congratulations Joe on a job well done.

And, in your own words.....

73 and Press On.

Jack, KA3HPM

Here's something I often wonder about as I drive. I believe that **I've seen these protest signs** in every State I've ever traveled in. In fact, multiple times, in many cases.



It seems to be the work of a well organized and widespread group. I don't know about you, but sitting in a miles-long traffic jam caused by highway construction is certainly not something I enjoy. So the question is, given their widespread presence, **why have these signs had so little effect?**

*de Quicksilver Radio Newsletter August 2018* <http://www.qsradio.com>

If you need a parachute and don't have one you probably won't need one again.

## From the Bully Pulpit

de Rich - WQ3Q

As you know I announced early on in my term that I wanted to explore making the club building bigger to accommodate the increased membership, the attendance of the Swap and Shop, the Ice Cream Social, the KORN roast and other club related events. I am still interested in that concept, as I see Skyview as the gem of the area in ham radio. By making it a great place to visit, we can increase membership, hold more public events to encourage interest, as well as, add to the comfort of our members. I love to hear when other hams talk about how Skyview is a neat place to visit.

There are now several our members who are taking to heart how it is necessary to take care of this joint. Thank you to all of you who are doing this. And to aid in our aim to keep the club house clean, please clean your glasses or places you were sitting when you leave. Don't leave your dirty glasses or peanut shells for someone else to clean. On to the rest of the thoughts:

We've been asked to do a presentation on Amateur Radio at the People's Library. Here is a great way to introduce new people to our hobby. I would like to have several folks show the different aspects of ham radio rather than just one person do this. I would like someone to handle SSB, another CW and another digital (RTTY?) to say nothing of another who can show how EmComm impacts our local community. This way those in attendance can see the diversity of opportunity that being a ham can offer. Please contact me directly so we can plan this out. Let's do this!!!!

Bill Dillen will be our next president and as such is searching for a vice-president candidate. Please accept his request if you are approached to fill this position. We need a solid and concerned set of officers who will take care of our organization today and plan for its thriving into the future. Bill is a committed member of Skyview and it is my hope that whoever is elected to the position of VP will help perpetuate our club in the same manner.

Thank you to those of you who submitted items to consider for our 2019 budget. The items will be reviewed and discussed by the officers and formally presented to

the board of directors in October. The final budget, per the statutes of our organization will be approved at the January meeting of the board and voted upon by the membership in the regular meeting afterwards.

I have no further information regarding ARES, or other EmComm items as I have been busy with other obligations. If there is anyone of our members who would like to be engaged into the emergency communications aspect of ham radio and as such, be the Skyview liaison to the Allegheny County ARES group, please let me or Cooky know.

Congratulations to Cooky and Cil on finally getting to visit Piero Begali and the family in Brescia, Italy this month. I know they have been very hopeful that he could make the trip for a number of years. I hope all went well. Also happy birthday to Skyview's friend, Piero Begali on his 80<sup>th</sup> birthday. He is a great friend to our club and hobby.

Lastly, if you have any ELMER night request, send them in to any of the officers. I would like to see if we can even use SKYPE to contact experts across the globe as well as here in the states, to increase our knowledge and appreciation of amateur radio.

-73,

Rich/WQ3Q - President





## Skyview 2018 Swap and Shop Report

de John - WA3KFS

The 2018 hamfest is now history. I would like to thank everyone that helped and supported the event. As you well know, it takes many hands to pull this fund raising event off.

The set-up on Saturday went very well. Many members had showed up well before the 10:00 A.M. meeting time, and had much of the heavy lifting already (those old yellow wooden tables) completed. I could not have asked for any better group of hard working hams.

On Sunday morning, the weather was suspect for a hamfest. As I arrived at the club at 6:00 A.M., there were several members already getting things in shape up. We were quickly set up for business. There was ominous clouds and thunder with sprinkles at kick-off time. Fortunately, Skyview has the most loyal hamfest followers. The paid attendance (approx. 230) and gross dollars received were about the same as last year. Our treasurer, Pat, NK3P, is working on calculating the net proceeds, once he has paid for all of our costs.

### The lucky Door Prize Raffle winners were:

8:30: Personalized Mug by AC0KK —James Painter KQ3S

9:00: \$25 ARRL Gift Certificate—Dewey Chauvin W3VYK

9:30: CQ Personalized CQ World Map—Ralph Geiyer K3VL

10:00: \$25 ARRL Gift Certificate—Duncan MacGregor KF6YYT

11:00: \$50 ARRL Gift Certificate—Bill Dillen N3WMC

### The lucky Main Prizes Raffle winners were:

Yaesu FT7900R Mobile 50 watt 144/440 Transceiver  
Melvin Musulin N3BJY

Astron 25 Amp. 13.8 v, Power Supply  
Edward Crossley N3BUG

Peet Brothers Weather Station  
John Young AC0KK

\$100 DX Engineering Gift Certificate  
Curtis McCormick KC3HJP

\$100 DX Engineering Gift Certificate  
Robert Hoffman N3CVL

Large Number Station Clock  
Bob Buchwald KC3JBS

WA3BKD J Pole Antenna for 2M, 220, & 440  
William Hill W3WH

Sam Sarraf KE3PO took home \$87.00 in cash from the 50-50 Raffle.

And, the BIG PRIZE: The Begali Pearl Key was won by:  
John Italiano WA3KFS

Again I would like to thank everyone that helped make this hamfest a success.

John Italiano - WA3KFS  
Swap & Shop Chairman



Photos in this issue are by Jody - K3JZD

More Photos are on the facebook page

## Tinkering With Electronics

de Jody - K3JZD

Regular readers know that I like to tinker with electronics. I do not design and build transceivers or any other major projects. I tinker with small stuff where my investment is not very high. That way, if I smoke something, I am not losing very much time or money. Getting a ham license requires that you know a little bit about electronics. Often that is soon forgotten. Tinkering actually teaches you about electronics.

I started my tinkering whenever diodes and transistors came onto the scene. Transistor circuits use harmless low voltages and a simple battery can power the circuit. Some of my first 'getting started' books were written Forrest M Mims III. There were a number of them. Each of these inexpensive books in the Mims series contained a number of simple projects. They were very tutorial, and each project could be accomplished with just a few simple parts. I see what was probably the first book in that Mims series can be viewed at <http://tinyurl.com/yctuyohq> or can be purchased at <https://www.adafruit.com/product/517>. Still a great book to own today.

Whenever I am building something new to investigate some idea, I am often experimenting with the values of the different parts to zero in on the values that work best in a circuit. So, soldering things together right away is never a good plan. Back in the old days, various approaches were used for assembling an experimental circuit. One of the most popular techniques was to use an actual wooden kitchen breadboard. Here is a short video that illustrates how it was typically done back then: <http://tinyurl.com/y93kwc9m>

As that video showed, it was not so easy. It took about as much effort to take apart a circuit as it did to create it. And often the leads broke off of the parts and they could not be used in the permanent circuit. Today, life is much, much simpler. Today we have super easy to use solderless breadboards. Just push the component leads and jumper wires into the solderless board to create a circuit. The holes in each row on each side are all connected. These really make it easy, and do not destroy any of the parts. You have probably seen some of my projects that I have posted here in the newsletter that were breadboarded before being built. Here is a 'small sampling' of some sim-

ple and more complex projects that have taken advantage of these solderless breadboards: <http://tinyurl.com/y9u8dt99>

Today, the Internet and Google make it so very easy to get started in tinkering with electronics. Anything that you could want to know is out there for the asking. Want to know how to use these solderless breadboards? - Just ask Google like this : <http://tinyurl.com/y8h2dlom> And Google will soon lead you to the many sources who can provide you with complete electronics experimenter kits containing solderless breadboards, jumper wires, and a bag containing all of the parts needed to build the various circuits in the kit's manual. And, if there is something else that you want to build, Google on that and you will most likely find that someone has put a circuit that is close to what you are considering out there on the Internet. You can shop for your parts on eBay or the many parts supply web sites that cater to electronics hobbyists. Multimeters are often free at Harbor Freight.

Start out slow and build momentum. Initially you will find it is rewarding just to get LEDs to blink in a pattern. Diddle with some of the parts in the circuit and you can change the LED blink pattern and/or frequency of the blinking. Generate various sounds. Change the frequency and/or pattern of the sound by diddling with some of the parts in the circuit. You soon learn how useful a potentiometer is when experimenting. Experiment with various sensors to see how they can affect your circuit. Everything is really about having some kind of an 'input' to your circuit and some kind of an 'output' coming from your circuit. Small successes are educational. All of this tinkering leads you up to the day when you sit back and say "I need something to do that job. I think I'll build something".

We have more than enough Wintertime here in Western PA. Those indoor days provides us with plenty of time to do some tinkering with electronics. Solderless breadboards make it easy. It is inexpensive. Get one of the starter kits. Give it a try.

Jody - K3JZD

## RFI Ruminations

de Dan - NM3A

Radio Frequency Interference (RFI) is a constant issue with all amateur radio operators. Some are obvious, like the Over the Horizon radar, the nut who thinks its *HIS* frequency, AM station harmonics, and ignition whine from the older cars. And we can generate some, too, although with modern rigs and few using Over-the-Air TV signals, that is not such a big issue anymore.

Some are really hard to find and can drive you nuts. One of these is lighting fixtures causing RFI. I have had a few experiences with this and will share them. I hope some find it useful.

### Garage Door Openers

Remember when the local CBer or amateur operator would open a neighbor's garage? Well, that doesn't happen anymore, but garage door openers (GDOs) can be interfered with. A couple years ago, I had a GDO CFL type bulb burn out. I replaced it with an LED type bulb. Shortly after I noticed intermittent poor response from the remote controls. As the GDO was fairly new, I emailed Chamberlain and asked about this. Their response was that LED bulbs interfere with the ~300MHz control receiver. They gave me a list of LED bulbs they had tested that did not interfere. So, I bought one of the bulbs on the list- the exact model they listed. Same result- remote control had extremely short range. So, I put a CFL bulb back in and the problem went away.

Fast forward to two months ago. Another GDO gave up the ghost and I replaced it. While shopping at the big box store, there was a display right next to the GDOs with Genie Interference Free LED Bulbs for GDOs. <http://tinyurl.com/y8hgclxy>  
<http://tinyurl.com/yb2qfowt>

So, being curious, I bought one. I put it in the new GDO and *voila*, no interference. Thinking the new GDO might be immune, I put it in the old, problematic GDO and again, no interference.

CFLs can also create interference, but I have not had a problem with GDOs. I suspect that these 'interference free' GDO bulbs will be lower RFI across the board, not just near the GDO radio frequency, although I have not actually measured their emissions. So, if you have a bulb RFI issue, you might want to try one of these. Only downside I see is the nearly \$10 cost.

### LED Replacements for Fluorescent Tubes

I am sound coordinator for my church. As such, I had a lot of complaints about noise in our Assisted Listening Devices (ALDs). They are small wearable units about the size of a pager and have a mini stereo jack for an earpiece or a headset. They operate at about 70MHz. When I tested them myself, I found lots of areas in the auditorium where there was substantial interference. On investigating, I found that the electronic ballasts for the fluorescent lights in the room below the auditorium were the cause.

As replacing the fixtures was not an option, I wanted to replace the tubes with LED tubes and remove the ballasts. So I searched for interference free LED replacements. I did not find anything that was sure to be RFI free. I emailed all the manufacturers I could and asked them. Those that answered seemed not to know that RFI even existed! I heard some good reports and some bad. I tried a couple of the 'good' ones and found RFI in them. After a couple years I found the **Toggled** company's product. These have an LED driver built into the tube itself and run on 120VAC, similar to many other LED bulbs of all types. <http://tinyurl.com/y9jddw2j>

I emailed them and the engineer quoted me the specs and certifications (FCC class B)- someone who actually knew about RFI! After we exchanged

a few emails, I asked why they did not put FCC class B on the packaging or advertise that they are interference free. He said he didn't know, but that I had a good point. Since then, I noticed that Home Depot is advertising **Toggled** bulbs as 'No Electromagnetic Interference'! I haven't checked the **Toggled** packaging yet.

Since then, we have disconnected all the noisy fluorescent ballasts and wired those fixtures directly for 120VAC. We did not replace all the tubes and ballasts as some were RFI free. The **Toggled** bulbs have performed flawlessly and the ALDs are much improved. Price is reasonable - \$7-15 for 4 foot tubes - considering how long they last and no longer having a ballast to go bad. (Many LED replacement tubes for fluorescent fixtures reuse the old ballast as it is simpler to replace just the tube. I would not recommend these as you still have an inefficient and possibly RFI or audible noise prone ballast remaining. In addition, it is another part to go bad in the future.)

The bulbs we used are dimmable as well and are instant on. They also make non-dimmable bulbs (these have a slight delay in startup, similar to many fluorescents). I tried both and found them to be RFI free. All are available in a few different colors: Cool White, Daylight, Soft White and Grow Light. I also used these to replace a few noisy electronic ballasts at home and am very pleased with the results.

Dan - NM3A



## Robots Picking Strawberries

*ED: The last issue had a little blub in it about robots flipping burgers. It seems like everyone wants to put a robot to work nowadays. This is from : <https://slashdot.org>*

[Robots Are Trying To Pick Strawberries. So Far, They're Not Very Good At It](#) ([npr.org](#))

Posted by msmash on Wednesday March 21, 2018 @02:51PM from the closer-look dept

Robots have taken over many of America's factories. They can explore the depths of the ocean, and other planets. They can play ping-pong. [But can they pick a strawberry?](#)

From a report: "You kind of learn, when you get into this -- it's really hard to match what humans can do," says Bob Pitzer, an expert on robots and co-founder of a company called Harvest CROO Robotics. (CROO is an acronym. It stands for Computerized Robotic Optimized Obtainer.)

Any 4-year old can pick a strawberry, but machines, for all their artificial intelligence, can't seem to figure it out. Pitzer says the hardest thing for them is just finding the fruit. The berries hide behind leaves in unpredictable places. "You know, I used to work in the semiconductor industry. I was a development engineer for Intel, and it was a lot easier to make semiconductor chips," he says with





## What DMR Handheld Should I Buy For Digital FM?

de Tony - KB3HGI

Someone recently emailed me asking “What DMR handheld should I buy”. It’s a totally loaded question and one that I thought others might find my answer helpful, so I thought I’d share with the group.

There has been a surge of new dual band DMR radios to market from Chinese manufacturers in the last year. Since our closest repeater is 2m, I think this is where most of our interest should be focused.

I’ll start off by saying my absolute favorite DMR radio is the TYT MD-390. It’s waterproof. It has rock solid firmware with the features I need. And it will hold the whole DMR database. But there’s a large but: it’s 440 only. No 70cm DMR around here. So I can use it at home, I can use it in Raleigh, NC, but not around town. :-)

So this leads us to the field of dual banders. The MD-2017 (AKA RT82) is a good choice. If you can live with the trackball for navigation you can even get these at a pretty good price these days. They hold the whole database and are made by TYT, so their firmware is a little less buggy than most.

I think as a response to folks hating that trackball, TYT also put out the 2017 hardware in an MD-380/MD-390 package. The MD-UV380 and MD-UV390 have to trackball and similar firmware to the MD-2017. They’re also a fine choice.

There is a notable mention in the Radioddity GD-77. I have one, it performs really well. Firmware features aren’t as good as the TYTs, No call permit tone. Also, you can only load 10k users into it, so not the whole database. But you can fit all of PA. And it can be had for under \$100, frequent sales on Amazon put it under \$70. But the programming software on the Windows side is so bad that Roger Clark wrote a new one called the Community Edition CPS. The Baofeng RD-5R has almost identical firmware to the GD-77 in a UV-5R package. I can’t tell you if it performs as well.

Pricing for the RD-5R is about the same as the GD-77. I prefer the GD-77 package. Here’s where I think I need to admit making a mistake. I missed the features from the MD-390 whenever I got the GD-77. But I was able to use

the W3WGX repeater. So I went looking for a dual band upgrade. I had to chose between the AnyTone D868UV, MD-2017 or the Ailunce HD1. The Ailunce is made by Retevis, who sells the 830/390. It had stellar reviews. So I bought it. I have not been pleased with the performance. The features are kind of nice, it functions more like a big 3 handheld than a commercial Part 90 radio, but the RX is not near as sensitive as even the GD-77.

The HD1 is waterproof like my old MD-390, which I preferred. I tried putting a big Nagoya 771 antenna on it. It helped a bit, but still not where I’d like. I probably should have bought the AnyTone. I know a guy in WEARS who has one. He seems to like it. There’s also a BTECH version, DMR-6x2, that you can buy now. Same hardware, slightly different firmware. The HD1 and AnyTone (BTECH) both can hold the whole database, so you see who’s calling. The HD1 advertises 10W output, but when it can’t hear, it’s not very helpful. The AnyTone and BTECH are 7W.

So this leads me to the conclusion. It really depends on what your needs are as to what radio to buy.

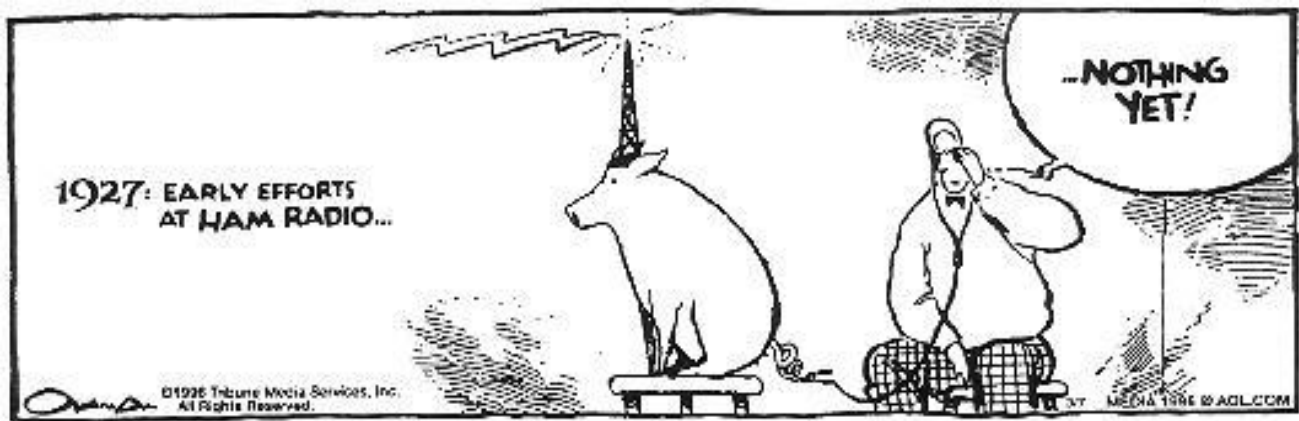
The GD-77 is a good performer and probably good for many. It doesn’t have a battery hogging color LCD either. So if that’s not important to you, it’s a good choice, and a bargain.

For the full featured HT, it’s a tougher call. The MD-2017 (RT82) and AnyTone (BTECH) are perhaps the best options. The MD-UV380 is a good choice only if you want the MD-2017 features but hate the blackberry style trackball. It’s new and a bit unproven. The best part is you could buy them all of the price of an ID-51A Plus 2. :)



If you want to check out the MD-2017, see AG3U. I have the GD-77 and HD1 if you want to take a look at one of those. If you do happen to take the dive into DMR, there’s more activity every week on TalkGroup 3142 (PA Statewide).

73, Tony - KB3HGI



Found this on Facebook — in the “Amateur (Ham) Radio on a Budget” group — was titled as “Weekend Project - 42’ Wooden Tower”. No callsign was provided. The gentleman lives in a suburb South of Nashville TN where they get an occasional tornado. Kept the picture large to show the detail. Made me say Hmmm . . . . Jody - K3JZD





## It Can Get Lonely When Out in a Park Working QRP

de Jody - K3JZD

As Dave - NI9M said when he posed this picture on the NAQCC (North American QRP CW Club) Facebook Page:

*"QRP Afield 2018...One QSO in the first two hours. Time to take a break".*



Looks like Dave loaded up and went out to a local park. Great way to spend a nice day. There he strung up a wire antenna, and sat down to make some QRP QSOs.

But, as I have also found out, it not so easy. I too have come home with very few in the bag. I have looked at the RBN (Reverse Beacon Network) and I have seen that I was getting out. So it was not a poor job of hanging my antenna and apparently my radio still transmits. Most people tend to go right by the weak signals that are wailing out CQs. They tend to look for someone stronger.

I have had a whole lot more luck in making QSOs, albeit just brief signal exchanges, when I chase SOTA (Summits on the Air) activators whenever I'm out in a local park. I use the free "SOTA Spotter" App on my cell phone to alert me when an activator is on and where they are. The SOTA activators will listen for weak signals and respond. There are no requirements to be a SOTA Chaser. Anyone can do it at any time. It is like contest operating - you just throw your call out each time that activator stands by. When he acknowledges you, give him a signal report and your state. You will generally always get the contact. Just tune into some activation and listen for a

little bit to get the pattern. Chaser Points are awarded if you want to keep track of your progress. Details are at <https://www.sota.org.uk/>. But signing up there and tracking your chaser points is completely optional.

SOTA Activators are out there somewhere every day. There are plenty of them, as this summary shows:

### SOTA Statistics as of 05AUG18

Registered Users :	12909	<u>ACTIVATOR QSOs BY BAND</u>	
SOTA Associations :	153	7MHZ :	1864150
SOTA Regions :	1105	14MHZ :	1095969
Summits :	130952	144MHZ :	892923
<u>CHASERS</u>		10MHZ :	403314
Number Of Registered Chasers :		5MHZ :	86504
6556		433MHZ :	76511
Chasers Who Are Also Activators:		18MHZ :	73879
4086		24MHZ :	64544
Number of Chaser Contacts :		21MHZ :	50756
3078511		3.5MHZ :	48356
Total Chaser Points :		28MHZ :	44462
14285053		50MHZ :	31068
<u>SUMMIT TO SUMMIT CONTACTS</u>		70MHZ :	9287
Number of S2S Contacts :	176278	1240MHZ :	4542
Total S2S Points :	1088135	1.8MHZ :	2837
<u>ACTIVATOR QSOs BY MODE</u>		10GHZ :	835
CW :	2130238	2.3GHZ :	528
SSB :	1754566	220MHZ :	325
FM :	853188	Microwave :	294
Data :	11292	5.6GHZ :	253
AM :	1292	UNKNOWN :	128
Other :	1000	900MHZ :	113
DV :	288	24GHZ :	101
		3.4GHZ :	97
		VLF :	88

So, next time that you are out in a park to enjoy some portable operation, and you are having the same luck that Dave was having, try looking for some SOTA Activators. The above list shows the most popular bands and modes.

Jody - K3JZD



## During a Discussion . . . . .

This bit of wisdom was provided during a lively NA SOTA forum discussion about optimizing multiband portable antennas . .

I hope it works out for you. As you ponder, be aware of:

Maxwell Principle: "If you get RF current into a conductor, it will radiate an electromagnetic wave."

Maxwell Corollary: "All electromagnetic waves will eventually reach all destinations."

Fly Poop Principle: "In any endeavor to optimize anything, at some point you will be trying to pick fly poop out of the pepper."

Pepper Principle: "Pepper is visually indistinguishable from fly poop."

73,  
Fred ["Skip"] K6DGW



Now is the time to get those antennas put up

## 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 Yahoo 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 ??

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.

## 60 Meter CW with the Yaesu FT-817nd

de Jody - K3JZD

Whenever I bought my Yaesu FT-817nd radio in 2016, it supported SSB and Digital mode operation on 60 meters. CW was not permitted on 60 meters at that time. (As I recall, the 60 meter CW mode became available on January 1, 2017). So the 60 meter CW mode was locked out on my 2016 FT-817nd.

That did not bother me until I found that the Summits on the Air (SOTA) activators were beginning to use 60 meter CW to allow local chasers who could not hear them on 40 meters with an opportunity to work them.

Since we are allowed to modify our commercial gear, I did some research to find out how to resolve this. I found that there was a pretty simple software based solution for the original FT-817s, but none for the newer FT-817nd model that I had. Yaesu had no plan to do any kind of a firmware update. However I found that there was a hardware modification. This hardware modification is sometimes called the 'FT-817nd MARS Modification' and sometimes called 'Widebanding the FT-817nd'.

'Widebanding the FT-817nd' is probably the most accurate definition because it removes all transmit restrictions from the rig. After doing the modification, the transmitter will no longer be limited to just the amateur bands, and there will not be any transmit mode restrictions anywhere. Once 'Widebanded', it becomes a true broadband transceiver which may be used on the MARS frequencies that are outside of the amateur bands, and CW may be used on 60 meters.

The details of the modification are well documented here: <http://www.pa1ca.nl/my-first-mod/> and here: <http://tinyurl.com/y77fkvat>. So I will not go into any detail about how to do the modification here. All you are really doing is changing the jumpers that tell the microprocessor that controls the front panel user interface how to behave. Nothing inside of the 'radio' gets modified.

I made the 'XXXX00000' modification following these steps and cautions. I had no difficulty, and the radio still functions fine. I now have my CW mode on the 60 meter channels. And I'm all ready for the possible widening of 60 meters and any other new HF amateur band that may show up.

(In my research, I did see that there was a 'XXXX00000' modification that was suitable for some other models of the FT-817 that were in between the original FT-817 and the FT-817nd. So, if you happen to have one of these tweener FT-817 radios, that may be what you need.)

As an aside, while I was in there I changed the speaker. There was a lot of chatter on the forums which identified a replacement speaker for the FT-817. Those that had installed this replacement speaker raved about how much better the audio sounded. So, I went ahead and put in one of these recommended Massmoth 8241020 Loudspeakers. While I mostly use headphones to conserve my battery whenever I'm out on a SOTA activation, I did notice that this speaker does produce better sound quality.

As another aside, the FT-817nd has now been superseded by a FT-818. The FT-818 has a larger capacity internal NiMH battery, a more stable oscillator (which is important when using digital modes), and produces 6 watts of output power. And it supports 60 meter CW right out of the box. Other than that, it is basically the same radio. A lot of the FT-817 fanboys are disappointed that it is not more than that. The general consensus is that some of the components in the FT-817nd have reached end of life, and that the radio needed to be tweaked a little to use currently available components. Calling it a FT-818 seems to be more of a marketing thing than anything else.

The FT-817 (FT-818) is an enjoyable radio. Whenever you are using it, and are making QSOs with it, it is very easy to forget that you are running QRP power. In addition to using my FT-817 out on SOTA activations, I will also use it at home for SOTA chasing, various small operating events, and rag chewing. Whenever I'm using it at home for SOTA chasing or during small operating events, I will jump right into the pile ups and make my calls. And I will often be the one that gets the contact. I will often 'run a frequency' during the small operating events (thinking big). Pretty amazing.



Jody - K3JZD

## New Modes For The HF Bands

de Chuck - K3CLT

This past year has seen some big changes come along with new programs for the HF bands. Most notably is the coming of a program called FT8.

### JT9 and JT65

FT8 is a digital program that followed JT9 and JT65. The popularity of JT9 and JT65 were the fact that you could make a contact in poor band conditions. It was done automatically in 1 minute bursts. You transmitted for a minute and received for a minute and he had your call sign and location and you had his. Another minute of transmit and another of minute of receive and you could have his signal report, location and say 73. It wasn't real fast but did work well in poor band conditions. In a time frame of 4 minutes you could have the contact. Not too bad considering you could spend way longer than that working cw or phone to make the contact.

### FT8

Now along comes the next big thing, FT8. Now the transmit times are reduced to 15 seconds and you can complete the whole contact in 1 minute. BAM, FT8 took off and now you can find activity on just about all the bands all the time. FT8 really took the bands by storm. The software is easy to download and get set up and running. You could probably get awards for WAS in a week-end if the conditions were good. Ask Tall Guy K3STL.

FT8 transmits for 13 seconds and decodes for 2 seconds. In that 13 seconds it sends your call sign and your grid location. The fact that it was much faster and worked well in poor band conditions makes it very popular.

One of the major problems with FT8 is that you are limited to the size of the message. You can have a regular QSO but the limited characters in a single line would make it a real task.

### FT8call

Now along comes FT8call. I just started playing with it over the past couple of weeks and here is what I have found:

- It is very much like FT8 in appearance and operation.
- It is very different from FT8 in appearance and operation.
- The main difference is that you can send messages of any length. It breaks the message down to 15 second packages.
- You can do an Open Call to anyone or a Direct Call to a single station.
- When you click on Direct it opens a drop down list of micro messages (abbreviation) you can use.
- You can call CQ or you can turn on the Beacon option.

There is one very important thing to remember with the current FT8Call software. It is in the experimental stage and still being developed. Because of that and to prevent problems the software quits working after 10 days and the newer version with all the improvements must be downloaded again.

<http://www.k0pir.us/new-mode-ft8call/>

### Summary

Both FT8 and FT8call do much more than I have covered here.

So with the crappy band conditions we see right now, both programs will give you some air time. FT8Call is new so there are not a big pool of operators out there yet—so do a little searching with it to see what time it comes alive.

Good Luck and enjoy

Chuck - K3CLT



### 60 Years a Ham

de Jody - K3JZD

I just crossed over 60 years as a ham. A lot of RF has gone over the horizon in those 60 years. From my Novice days, where I lived in a second story apartment in Fort Smith Arkansas and had to look down from that second floor window to see my 40 meter dipole, to today where I can now look up to see my antennas.

I have seen a few sunspot cycles come and go. Some sunspot cycle peaks were fantastic. Some sunspot cycle peaks were not so fantastic. The sunspot cycle dips were all pretty much the same. Some sunspot cycle peaks were not fully taken advantage of due to work and life's other events pushing ham radio onto the back burner for many of my mid-life years – a typical story.

Crossing over this sixth decade milestone got me to looking back and reflecting. There are lots of things that have come and gone during this 60 year period. The Novice Class License is no more. The Conditional Class License, which was given to me by volunteer hams way back in the days when they were not trusted as much as they are today is no more. The Advanced Class License is no longer available. Knowing where in the US that someone is located by hearing their call sign is no more. Knowing the relative experience that of someone has in this hobby by their call sign is no more.

Some things have come and stayed, like Incentive Licensing which took away privileges away from General and Advanced Class License holders. Some new bands have become available. And, the need to know CW in order to obtain a ham license is history – the dreaded requirement has been replaced by those who now learn and use CW just for the fun of it.

Two Meter narrow band FM Repeaters appeared and eventually everyone of us replaced our 6 meter AM mobile radios and 10 meter AM mobile radios with 2 meter FM mobile radios. While one cannot argue that this change has made local communications much easier and more reliable than it was when we were riding around using AM on 29.000. I seem to recall that these repeaters led to the demise to clubs like the WPA Mobiles – everyone began to cluster around one or two

favorite 2 meter repeaters instead. That kind of fragmented the WPA hams. The Greater Pittsburgh VHF Society, which capitulated and converted over to a repeater based organization with an Autopatch for it's members, bought some more time before eventually closing up shop after affordable cell phones made the repeater Autopatches obsolete.

SSB mode replaced the AM mode on HF. Today only a few vintage equipment collectors still gather to use their AM radios on the HF bands. Glass Teletype Display Units with Keyboards and an Interface Unit replaced mechanical teletype machines for RTTY operation. Packet Mode, with the dumb terminals and the dedicated TNCs that gave us the rudimentary ability to utilize a store and forward network to send messages to distant locations was the rage for a while. But no more.

The requirement to keep a logbook went away – we used to have to log all contacts, and even whenever we got on got the air and called 'CQ Test' !! And trying to keep a log while using 2 meter mobile in a drive-time roundtable was a real trip. I do not think that ARRL sells very many log books nowadays.

Crystal manufacturers went the way of buggy whip manufacturers as analog and then digital VFOs took over the job of frequency control. No more crystal filters for receivers either. The Skyview repeater went from being the 04-64 repeater to the 146.64 repeater. Transmitters and Receivers morphed into Transceivers. Kit transmitters, receivers, and transceivers from US companies like Heathkit, Johnson, Knight, Eico, and others disappeared whenever the rice boxes arrived and took over.

Transistors took over the job that tubes had done for years. Transistorized transceivers were broadband, so no longer any need for any manual Grid, Load, and Plate transceiver adjustments. But, very few antennas were a perfect 50 ohm match, and the final output transistors were being smoked. So, along came the automatic foldback circuits to keep the final transistors from smoking. Which created a whole new market for external transmatches (aka tuners) because the fold-

back circuits were lowering the output power to save the transistors. So, we were right back to doing that manual tuning to match the antenna to the radio again. At least until the automatic transmatchers (aka automatic tuners) arrived to do that duty. Tubes are only found in some of today's linear amplifiers.

We used to use a reliable and simple way to calculate Input Power in our transmitters (final amplifier volts times amps) . Now we deal with Output Power and trust the radio itself or an external watt meter to tell us our Output Power. The power supplies have moved out of the radios and into to separate external boxes. The big and heavy, but repairable, analog power supplies are being replaced by the smaller and lighter switching power supplies, which are not quite so repairable. The radios also used to be bigger and heavier, but with discrete components which allowed most to self-repair. Now they are smaller and lighter, but you need to know who to send them to whenever they break.

The filtering provided by the Digital Signal Processing (DSP) that is in today's receivers is a great improvement – one only has to use a classic receiver, especially one without a crystal filter, for a short time to remember how wide the barn door used to be. But, in those days, one would tune around a bit to listen for an answer to a CQ, and not require the caller to be within a few Cycles (now called Hertz) of your narrow receiver's passband. So those wider receivers may not have been so bad in their day.

Electronic keyers, with paddles and their various keying modes and message memories, put most of the straight keys and bugs on the shelf. Ham Radio Satellites with transponders showed up in the sky. We had to use printed orbit data and a crude circular acquisition calculator made out of cardboard and a clear plastic overlay to figure out the local time for the satellite acquisition and it's location in the sky. It was a lot more difficult than using an app on your Internet connected cell phone to tell you all of that.

Obviously personal home computers and the Internet both showed up during this 60 year period. Today, it is a rare shack that does not have a computer screen in a prominent location. So many station pictures on QRZ

now show big, and often multiple, flat screen monitors and tiny radios. All of the digital modes that we now enjoy, other than RTTY, were not here before these personal shack computers were installed. Somehow we lived without the Internet based Spotting pages and the computerized contesting and logging stuff that we now have. Printed QSL Cards requiring postage stamps to mail out are still being used, but are now pretty rare - the electronic confirmation sites like Logbook of the World, eQSL, QRZ, etc. now doing the bulk of that work.

These personal computers with their digital to analog sound cards opened up the path for Software Defined Radios (SDRs) where software and just a little bit of hardware provides a fully functioning transceiver with a spectrum analyzer.

Yes, a lot has changed in these last 60 years. I have only covered some of it in my nostalgic look back. Hard to image what changes the next 60 years will bring to our hobby. But, 60 years ago, no one could have predicted all of the changes that have taken place to get us to where we are today.

The things that made this hobby so attractive to me 60 years ago are no longer as unique and captivating as they were back then. Sure, it is still world-wide wireless communications, just as it was back then. But thanks to the first demonstration of the ARPANET that occurred on October 29, 1969, and the first demonstration of a wireless mobile phone that occurred on April 3, 1973, it no longer looks so unique and captivating to younger eyes.

Jody - K3JZD

This was supposed to be an old picture of a young lad who was proudly sitting at his 1958 ham station holding up his homemade call sign desk wedge.

But, I was unable to locate the photo album where I believe that old black and white photo would be. (Going to have to get busy throwing out obsolete junk).

So, you will have to just use your imagination.

## Remote Temperature Monitoring

de Jody - K3JZD

Two things happened around the same time late in March. The furnace at the joint was acting up during a cold spell, which was requiring folks to periodically go up there to check the temperature. And I saw an article on <https://hackaday.com/> that talked about remote temperature monitoring. The concept that was described in that article seemed to be what we needed. <http://tinyurl.com/y8qecuo5>

The approach was based on using a “NodeMCU ESP8266 breakout board”. I have never worked with any of the various ESP266 boards. But I have seen where they have been utilized for a number of IoT (Internet of Things) projects. So, it seemed like a good a time as any to learn how to use them.

The article was written in a tutorial fashion, and provided a specific Bill of Material for the parts. And it even provided links to online sites where the parts could be purchased. Only three parts were really required to get it to work. But some additional items would be required to house it and to allow for maintenance. I used Google to locate the various possible sources for the specific parts and to compare prices and delivery times. And then I submitted orders to eBay and AliExpress..

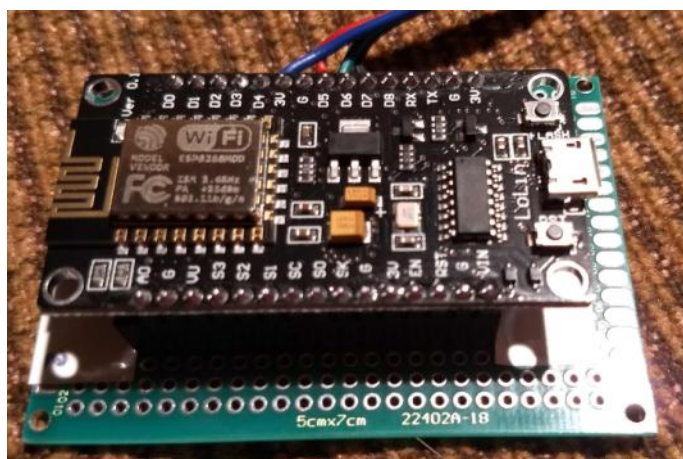
The NodeMCU ESP8266 breakout board is a remarkably capable little development board. The shipped cost was only \$3.42.

<http://tinyurl.com/y7ao4hy4>

It has a built in USB port for connecting it to your PC for power, programming and debugging. It has built in WiFi, which makes it very attractive for many IoT projects. It has an adequate number of General Purpose I/O ports that can be used for PWM, I2C, 1-wire and digital I/O. Using a development board like this for a project may cost more than just using the ESP8266 chip and adding only the components that you actually need to support it. Whenever you are building thousands of them, it pays to do that to keep the cost down. But, whenever you are just doing a couple of them, you want to make it easy on yourself. I'll spend the couple of extra dollars that it takes to get a full featured development board like this every time.

The DS18B20 Temperature Sensor is also a remarkable device. It comes in different form factors. I ordered five of the recommended waterproof ones for \$7.40 shipped. That seemed like the most useful form factor. This spec sheet shows a different form factor, but it describes the features of this smart temperature sensor quite well: <http://tinyurl.com/yb7cu4jg>

The third item on the Bill of Material was a common 4.7k resistor that I had in stock. I also had some 16 pin female headers and some 50mmx70mm prototyping perf boards in stock. I wanted to solder those 16 pin female headers to the perf board so that I could plug in the NodeMCU ESP8266 breakout board rather than solder directly to it – that way if I let some of the magic smoke out of it, I could easily just plug in another one. Plus, using a perf board gave me an easy way to mount the NodeMCU ESP8266 board in a case.



I ordered a plastic project case to house it – I needed plastic because the WiFi antenna is etched right onto the NodeMCU ESP8266 breakout board.

I had some small 4/c cable connectors leftover from an earlier project where I had to buy 10 sets in order to get the one set that I had needed – those would work great for connecting the 3/c cable coming from the temperature sensor to my perf board.

While waiting for the parts to arrive, I used the links in the article to obtain the library files that were needed



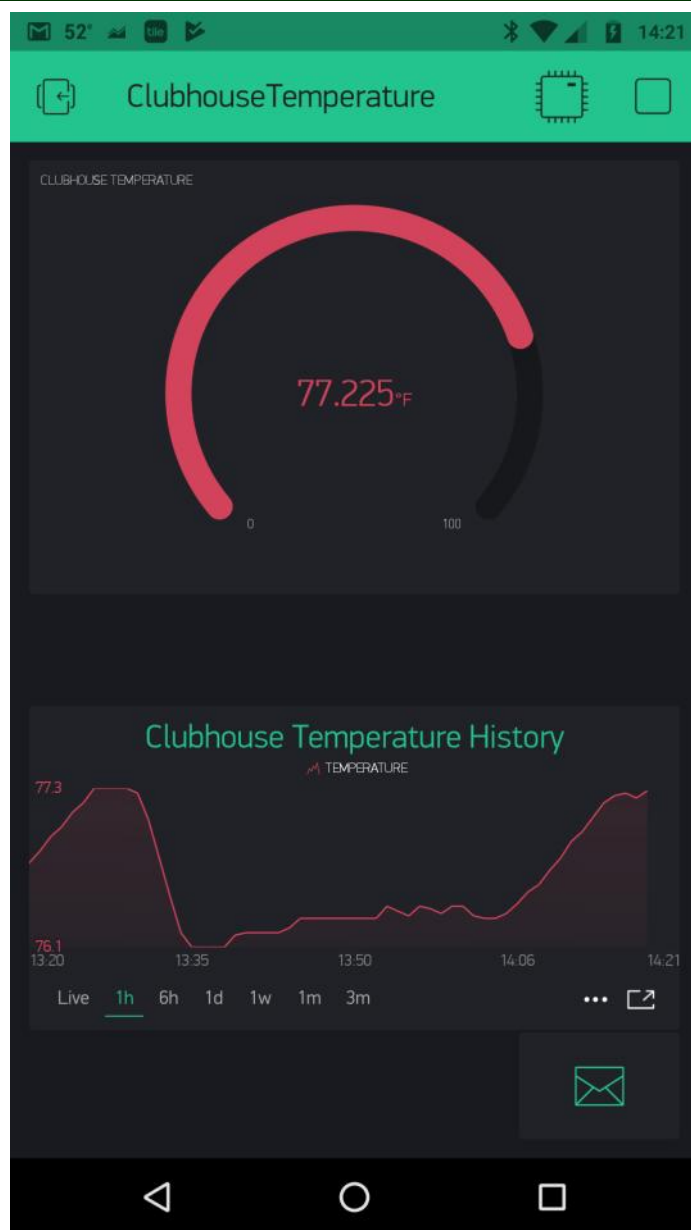


for this NodeMCU ESP8266 board and this DS18B20 Temperature Sensor and I added them into my Arduino IDE (Integrated Development Environment). While that was pretty straight forward, it involved reading a lot of instructions very carefully.

The software for the NodeMCU ESP8266 was also available to download. So I downloaded that and began to look it over. It was actually pretty simple – the device libraries did all of the heavy lifting. I also started to become familiar with the Blynk cell phone App which is used for this application. <https://www.blynk.cc/> But I could not do much with either of them until I had assembled the temperature sensor unit.

Whenever my parts all arrived, I assembled the temperature sensor. With only three active parts, it was more of a mechanical project than a complex electronic project. Not much solder smoke at all. I then uploaded the as-received software to it, and tested it. It worked on the first try – I was seeing temperatures being reported in the Arduino IDE's Serial Monitor window. That was great. But, the temperatures were being reported in Centigrade, not Fahrenheit. So, right away it became necessary for me to modify the as-received software to 'personalize it' by adding in a C to F conversion.

Once I had the temperature sensor unit assembled and tested, it was time to learn the Blynk stuff. That actually turned out be pretty easy, once again thanks to the detailed step by step instructions in the article. I just followed those instructions and then spent a little time getting my cell phone screen display arranged to my satisfaction, adding my labels, and choosing my colors.



The Current Temperature is displayed at the top. Below that is a Temperature History chart. The history chart allow you to see what the temperature has been for the last hour, last 6 hours, last day, last week, last month and even the last 3 months. More than you need to know. This is possible because all of the temperature points that were sent by the temperature sensor unit are being retained up in the Blynk Cloud. So, anytime that you open up this App on your cell phone, it retrieves that data and you will see what has happened while you were not looking. It is a little bumpy looking in this display because I was doing some testing – normally one

would expect to see more of a 'rolling hills' pattern displayed during the Winter as the furnace cycles on and off.

An additional piece of good information can also be obtained from this tool. The remote temperature sensor unit at the joint is powered from a Cell Phone Charging Cube with a USB port. That Cell Phone Charging supply is plugged into the joint's 120v supply. Whenever this cell phone App is not seeing any live readings coming in from the remote temperature sensor at the joint, it will put a big red dot on the status icon in the header. Touching that red dot will tell you what time that the Blynk Cloud application had lost communications with the remote temperature sensor unit. So, whenever we see that red dot in the header on this cell phone screen, we will know that we have lost our commercial power up at the joint.

I also modified the software that runs in the NodeMCU ESP8266 board to have it send out an email message to some of us whenever it detects that the temperature has dropped down to five or more degrees below the furnace thermostat's setpoint. That email, which will be sent every 30 minutes as long as that low temperature condition exists, will alert us to open up this App to look at this screen and see what is going on.

So how is it doing you ask. Well right now it is doing just fine. We are considering the Summer as a trial run. Just something to look at once in a while. But, just like when the temperature rises in the Winter, temperature fluctuations in the Summer can indirectly tell us that someone is up at the joint. And if it remains cooler for longer than expected in the Summer, we can probably assume that someone failed to turn the Air Conditioning off whenever they left. So far, it has reported loss of the commercial power during a couple of summer storms.

So, we will now know more about what is going on up at the joint than we did during last Winter.

Jody - K3JZD



The buttoned up unit with the temperature sensor.

## The Blinks. . . .

de AA6EH

*ED : This seemed to be the flip side of the earlier article by Dan - NM3A . . . . . This one came from <https://www.reddit.com/r/amateurradio> (There are lots of ham radio groups on social media) .*

### It is Scary Being a Kid

Our regular evening routine is that once the kids are ready for bed, I read them a story and then it's lights out and I go to the shack see what stations are on 40 meters. Usually I spend several minutes listening before I start transmitting; it's rare that I start with my own CQ.

Last night was no different up until I was about to leave the room. My son, 4, doesn't want me to go. Grabs my arm and says he's scared of "the Blinks".

"What do you mean? What Blinks?"

"The blinking lights!" he says. I look around; there are no blinking lights in his room or outside. I said that I didn't see any blinks and it was late and he needed to get to sleep. He wouldn't let go. "The Blinks are so scary!" He had a real look of terror on his face.

"Okay, let me go and close your eyes; if the Blinks start, just call me for me and I'll come and make them stop." Easy to promise when you know it's just his imagination.

"I don't want to do that. It's too scary. I'm so scared! The Blinks!"

"Well, I'll stay with you for a few minutes and make sure nothing blinks." The lights are all off so I'm starting to get sleepy. Probably no QSOs tonight.

Of course, nothing blinks. He probably just had a bad dream last night; it happens once in a while and he gets up in the middle of the night and comes to our bed.

His bed is chest-height, so I sort of half-lay myself down on it, or at least my shoulders and head, and close my eyes. I try to figure out if there's a way I can arrange my legs so that I can fall asleep without falling over. My son is still clutching tight to my arm but I'm nodding off. My knees are locked out which makes me feel sort of stable but they're starting to ache. I try to soften them but it makes me feel like I'm going to collapse into a snoring lump on the floor. "Henry," I beg with a muffled mostly-

asleep voice, "I got to go. Nothing's blinking, dude. Just go to sleep."

"NO! I can't! I'm so scared of the Blinks!"

Okay this is crazy. I've been here for ten minutes and nothing has blinked. Why, I wonder, is he so terrified that the Blinks would start as soon as I leave the.....

. . . . . Oh . . . .

I tell him I think I know what the Blinks are, and would he like to come with me to make the Blinks go away? He nods and I carry him to the radio room, which is one door down from his bedroom. I sit him on the chair in front of the iambic paddle, fire up the rig, and find a quiet spot around 7090 kHz. I stand in the hallway outside the room so I can see into both rooms and have him squeeze the paddles (which he's done before). Sure enough, his room lights up with alternating short and long flashes of spooky white light. We'd set up the kids' chest-height beds with "caves" underneath for the kids to play in, and strung LED rope lights up around the underside of the frame, and they are picking up my CW transmissions. This probably hasn't been an issue before since most of the time he's asleep before I start transmitting.

I orient him so he can see out the door to the radio room and I have him squeeze the paddles again; he can see the Blinks on the opposite wall, perfectly synchronized with the dit-dah coming from the radio. "See? It's just me talking on the radio. The lights in your room can hear me talking and when they hear it, they blink. Not scary, right?" He nods. "Ready to go back to bed now?" No response. "Okay, no talking tonight." He nods again, satisfied, slides down off the chair, and goes more-or-less happily to bed. And insists that I leave the lights on.

-- Epilogue --

I get into bed and tell my wife this story. She uses her scary-story voice to say, "and that's when they realized... *it wasn't even plugged in!*". Yes, I point out, it doesn't need to be plugged in. The energy for the Blinks comes from the received signal, not the wall. "God, it really is black magic," she replies. Hopefully I didn't give her nightmares.



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

#### Skyview Radio Society Roster as of 30SEP18

NM3A	WA3HGW	N2MA	KD4SBJ
W3ANX	KA3HPM	K3MJ	KB3SEU
KC3AY	KC3HRO	K3MRN	KB3SOU
NA0B	KB3HXP	N3MRU	K3STL
N3BPB	KC3IIO	KG4MSB	KB3SVJ
W3BUW	W3IU	KB3NSH	N3TIN
KC3CBQ	K3JAS	AJ3O	W3TLN
K3CLT	KC3JBS	AK3O	N3TTE
K3DCG	N3JLR	WC3O	AG3U
KC3DIA	KA3JOU	K3OFX(sk)	K3VRU
KC3EJC	N3JPB	K3OGN	W3VYK
AB3ER	ND3JR	KB3OMB	N3WAV
KC3EVT	KC3JSF	KR3P	K3WKP
KB3EYY	KB3JXG	NK3P	N3WMC
KC3FEI	KC3JXO	W3PRL	W3WTJ
K3FH	K3JZD	AE8Q	KB3YJQ
K3FKI	KC3KEI	WQ3Q	W3YNI
KC3FWD	WA3KFS	NJ3R	W3YNX
N2GBR	KB3KHR	KB3RBV	
KC3GIL	AC0KK	N3RHT	
KC3GIN	N3KNB	K3RMB	
AB3GY	W4KV	W3RRK	
KC3GZW	WA3LCY	I2RTF	
NC3H	KC3LHW	K3RWN	
WD3HAY	KC3LRT	KA3RXY	
KB3HGJ	AB3LS	KQ3S	

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



## CQ 52 Simplex

de John - K3STL

After a few busy summers of not getting out and about, I decided to take time off this summer and go sightseeing. Since March, I put almost 20,000 miles on my vehicle. I went to a lot of places, saw many things, but one thing was missing... A call back when I would call CQ on 52 simplex.

When I say 52 simplex, I am talking about the National Simplex Frequency for Amateur Radio 146.520 MHz! (see the 52 in there?) Some call it the National Calling Frequency. Some say it's great to label it the National Calling Frequency, others say it's bad because it discourages people to QSO on 52.

So what's this "simplex" stuff? Well, remember as a kid (or as an adult) when you would talk to someone on a cb walkie talkie? Perhaps you talked on channel 19? There was no offset frequency or a repeater; it was straight back and forth talking on a single frequency. That's simplex. We, as hams, can talk on 146.520 MHz, which is simplex... but it's better because ham radio is cooler than any of those other radios! Hi hi

I drove many miles... many, many miles and would throw my call out on 52 every once in awhile (every 20 minutes during the boring parts of the trips) with hopes to have someone return my call and talk about the area, places worth visiting, or places to eat. Out of all of those calls I put out there, guess how many came back to my call? Zero! Not a single Ham! Come to think of it, not a single Pirate came back to my call either! I did hear a brief QSO in Chesapeake VA, but didn't break because of wanting to actually hear a QSO on 52.

My 52 dismay caused a Google search about what happened to 146.520 simplex. Sure enough, a lot of websites articles are out there, and one website article was about something called Project Take Back 146.52. Many websites had articles asking if 146.520 is dead. So many website articles out there, so many Hams wondering, which brings the question to mind... What happened to 146.520?

John (aka Tall Guy) - K3STL

## WaveTalkers. . .

A new site to help you get licensed or upgrade :

When I upgraded to Extra last month I wanted a way to help new hams get licensed and existing hams upgrade to General and Extra, so I created the new site <http://wavetalkers.com>

The site gives you instant feedback on every question for all 3 exams and there's a Quick Review feature that lets you focus just on the correct answers. The site is designed to be mobile first, so it works great on all Android and iOS smart phones and scales all the way to the desktop.

My goal was to create a great companion site for any Ham Class, or self study with either the ARRL books or the Gordon West books.

The site just launched this morning ( Sept 19, 2018 ) , and I'll be adding additional features as time goes on.

Please let me know what you think of the site.

73!

KM6PVT

chris mattia

*ED—Is brand new, so may be some growing pains . . .*



## WSPR Propagation Reporting

de Jody - K3JZD

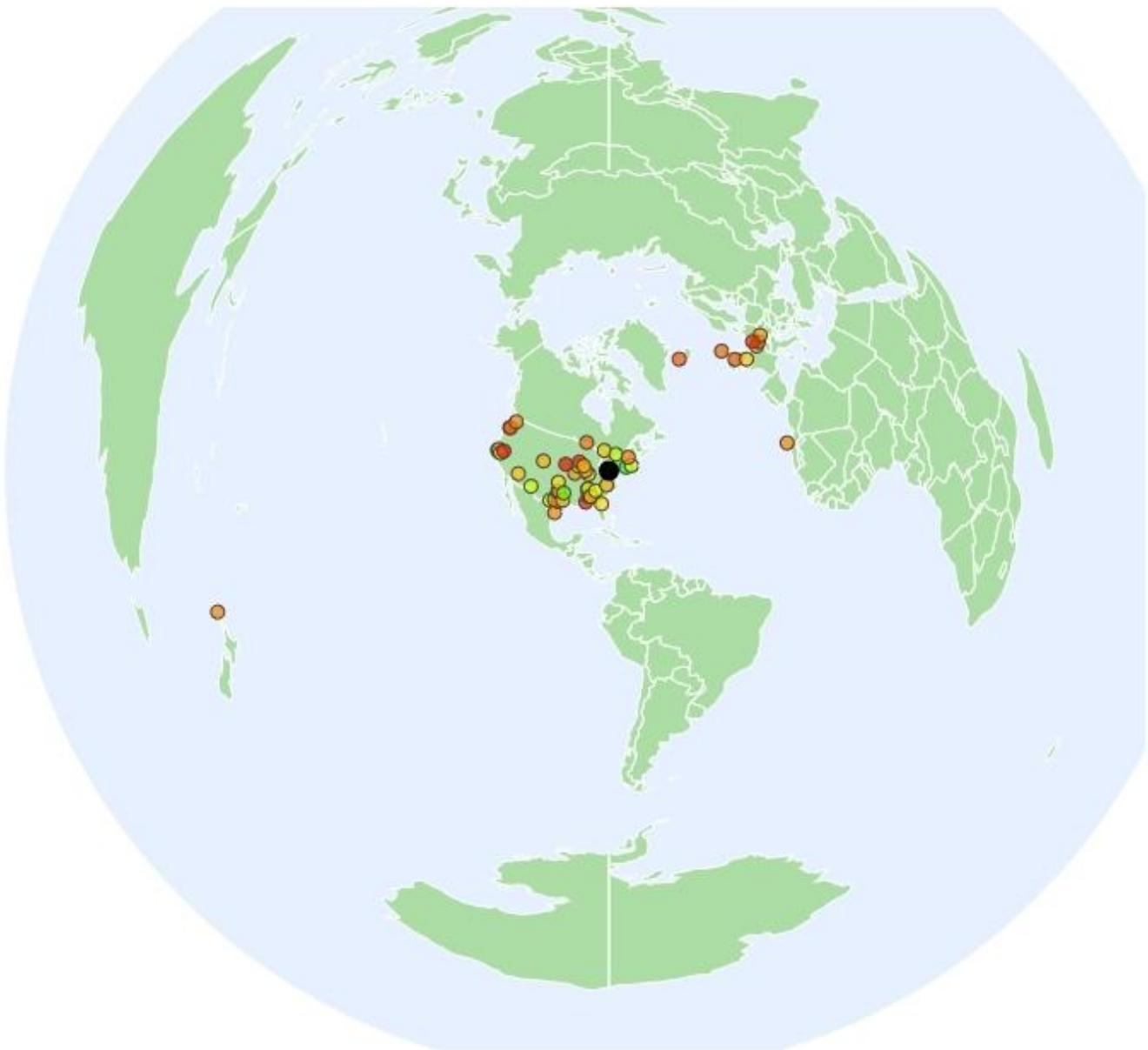
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Amazing what 200 milliwatt WSPR signals can do on a day with 'very poor conditions'.

This was from a 24 hour period on August 22-23, using a 3 el tri-band beam pointed to the WSW.

1 hour 3 hours 6 hours **1 day** 1 week 30 days Menu Help

Spots: K3JZD - 14 MHz - 200mW



Each circle is a location where I was received - the different colors reflect how many times I was received at the location during this period. There were around 600 total spots reported during this 24 hour period.



## We Are Here — Not There

After lots of opinions, debate, and measuring, we now know that we are here, and not there. Let us now rejoice and plant many more towers.



## FISTS Americas Chapter News

24AUG18

### Changes to *Americas Chapter* Membership Dues

[1] A "one time" extension of two FREE years membership has been added to all expired memberships from Jan 1, 2017 to Aug 15, 2018, due to no Keynote newsletters being produced during that time frame. This two year extension will start on Aug 15, 2018 and will take a few weeks to process.

[2] All paid memberships as of Aug 15, 2018 will receive a "one time" FREE extension of two years membership.

[3] Any previous members with lapsed dues (not included in item [1] or [2] above), that wish to renew their membership, may ask for and receive a "one time" two year FREE extension of membership, from the date of their request.

[4] If you wish to join FISTS as a "New Member", you will receive a FREE "one time" two year complementary membership.

[5] If you are 80 years old or over, you will receive a FREE "Life Time" membership.

Offers [1], [2], [3], and [4] expire on Aug 15, 2020.

To take advantage of these offers, send e-mail with your Call, Name, Address, and Telephone Nr. to:

Dennis K6DF, FISTS Membership Manager at

[membership@fistsna.org](mailto:membership@fistsna.org)

**DO NOT SEND ANY PAYMENTS !**

The International Morse  
Preservation Society



<https://fistsna.org/index.html>

## 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.

## Welcome New Members !!

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

W3ANX - George Anestis - Apollo

W3YNX - Herb Gilliland - Sarver

KC3LRT - Brad Hoover - Cheswick

K3DCG - Bob Kalan - Mars

None Yet - Joel LeFevre - Pittsburgh 15239

K3JAS - Jack Stoner - Greensburg

If you are a reader who is interested in becoming a member, then go to: <http://www.skyviewradio.net/> for information.

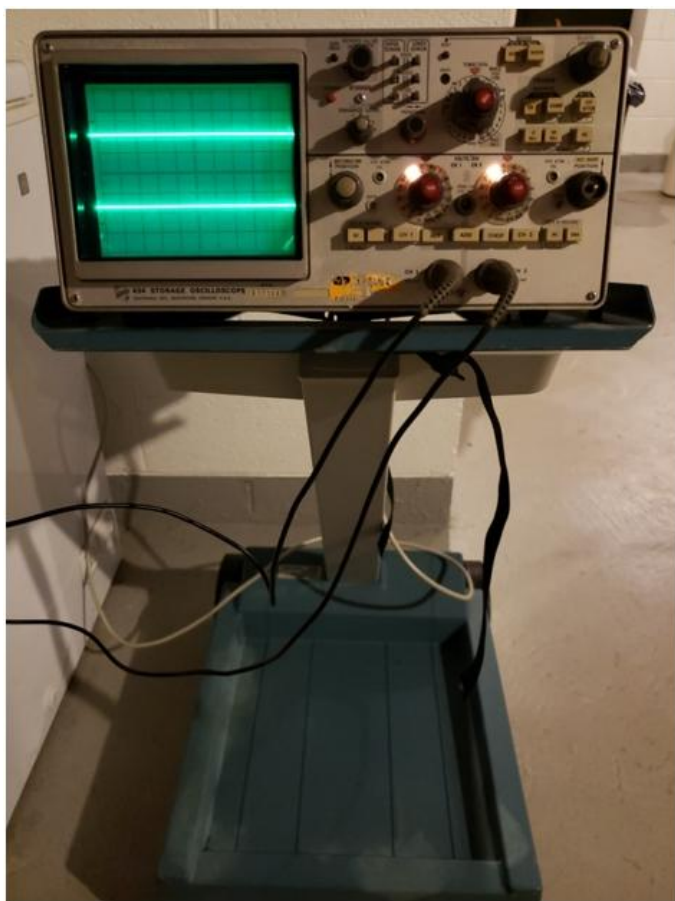
If you are a reader who is not yet a ham, and you are interested in becoming a ham, , then go to: <http://www.skyviewradio.net/> for information.

## 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](mailto:K3JZD@ARRL.NET)

----- For Sale -----



TekTronix 434 Storage Oscilloscope. Includes a copy of the users manual: \$60

John - K3STL - k3stl AT arrl DOT net

----- For Sale -----



**Tech Special:** Radio Shack HTX-242 2 Meter Transceiver with copy of the users and service manuals. Transceiver powers ON, but 'EEPErr' code appears upon start-up: \$20

John - K3STL - k3stl AT arrl DOT net

**Tech Special:** Kenwood TS-120S Transceiver with Matching Power Supply, and Matching Speaker. AS-IS. FREE. Some issues though: (1) The radio has one segment that is out on all of the numbers on the digital display, however it also had an analog dial; (2) the -600 Hz transmit offset is a little off whenever using CW, requiring you to use the RIT; and (3) the analog power supply has just started shutting down whenever drawing transmit current. It is OK on receive current. No Manuals - but they are available on-line.

Jody - K3JZD - 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 . . . . .

Have any use the a Space Shuttle Repair Manual? Well, Haynes has one for you: <http://tinyurl.com/y7825qk7>

Some more information on the Space Shuttle's avionics is available by starting here: <http://tinyurl.com/y9zm6h4v>

It is often said that locks are to keep the honest people honest. As this shows, there is a lot of creativity applied to the art of lock picking: <http://tinyurl.com/y7m4hj8u>

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 December 1, 2018**  
**Closing Date For Submissions : Nov 15, 2018**

[K3JZD AT ARRL DOT NET](mailto:K3JZD@ARRL.NET)

## 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.

Seems like I should have more photos in here - too much text probably makes it hard to read. But so much of our day to day activity gets documented in photos on our facebook page. And I do not like to repeat any of that here.

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

Jody - K3JZD

Here is what I feel is a 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 people sharing experiences.

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

Jody - K3JZD

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

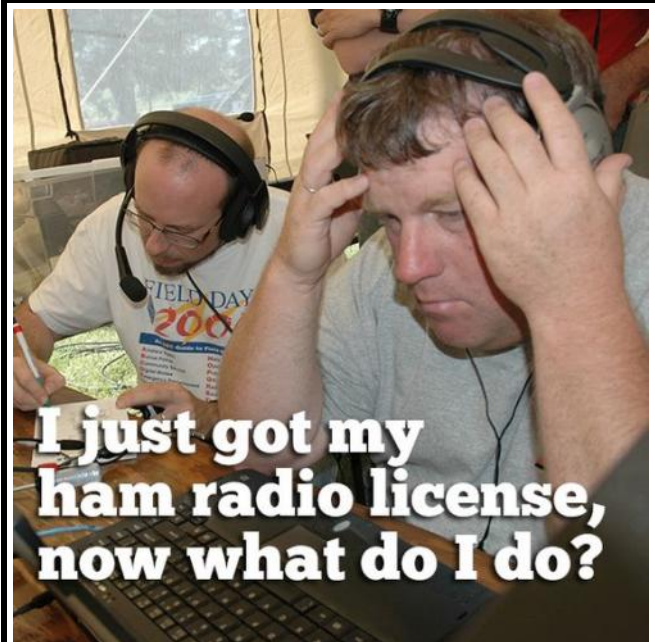


Q5er Editor & Publisher: Jody Nelis - K3JZD

This newsletter may be freely forwarded.

Permission is granted to other Amateur Radio publications to reprint articles from this issue, provided the original author and "***The Skyview Q5er***" are credited.

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>

See Yahoo Reflector for All Current News & Activities : <https://groups.yahoo.com/neo/groups/K3MJW>  
(You must be logged in with your free personal Yahoo Login ID to get into the Skyview Yahoo Reflector )  
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 ??