SKYVIEW
Skyview Radio Society, K3MJW
K3MJW
2335 Turkey Ridge Road
New Kensington, PA 15068

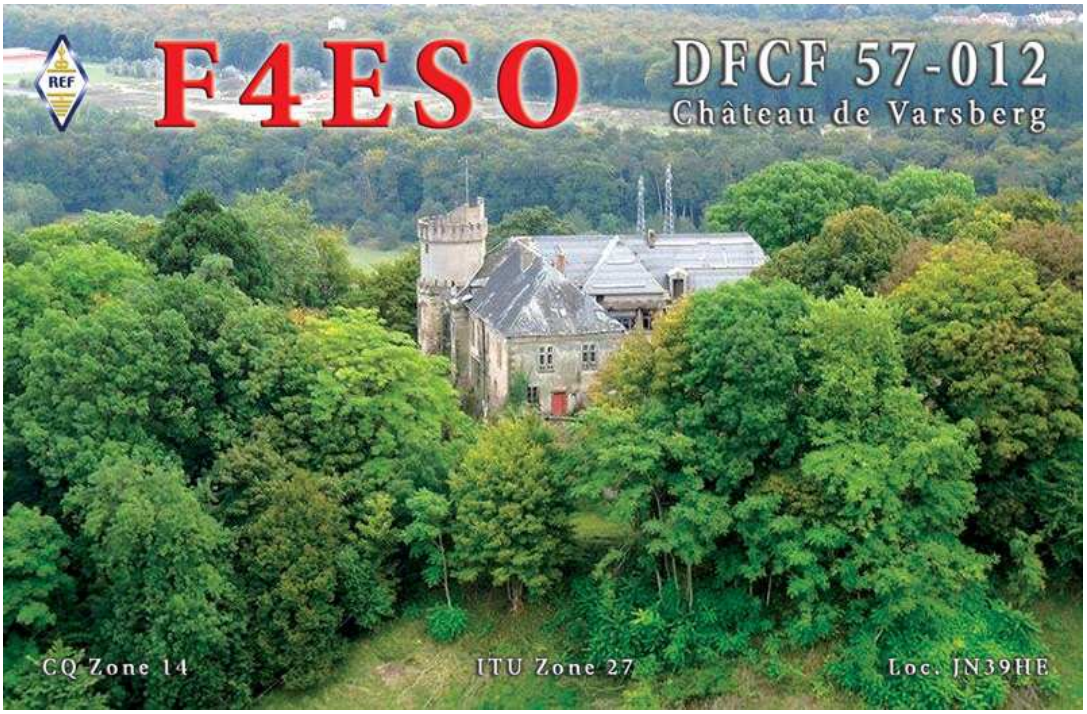
Q5er – The Official Newsletter of the Skyview Radio Society

June 1, 2017

A Castle With Antennas On It

While most HOAs seem to disagree, a Ham's Home should be His Castle and he should be able to do whatever the h*** he want to do there.

Well, according to F4ESO's QRZ page, he is the "Permanent Owner" of this French castle. And if he wants to put antennas on it, he puts antennas on it !!!



Misdirected At-A-Boys

At the last couple of Business Meetings, I have been given an At-A-Boy for these Newsletters. I'm always caught off guard by that, and I fail to state that the At-A-Boys should really be going to the contributors. Yes, I add a little content to each issue myself. But the bulk of each issue consists of items that have been sent to me to publish. As Editor, I simply assemble these items into the publication and add an index.

So, to all of you Contributors , here is a big At-A-Boy for you. de Jody—K3JZD

- Ham Engineer Reminices
- A Look at the APRS
- SOTA Adventures
- Car Computers
- Space Weather
- Raspberry Pi, Aurdin, Etc
- Digitsl Challenge Scores
- Free Towers - Part II
- And Much More . . . . . .

The Skyview Swap n Shop will be on August 27, 2017

Keep That Data Open

Inside this issue:

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 in to 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

The trees up at the 'the Joint' now have a lot of green on them. But the Fall picture that is currently on the previous page (which Cooky took) sure highlights the towers.

I hope that you enjoy this issue.

Jody—K3JZD

I have entered a few events sponsored by the Russian Digital Radio Club.

I am always impressed by the Certificates that they email to every participant.

Definitely something different to hang on the wall. Jody - K3JZD

ARES/RACES Report de WQ3Q

EMCOMM vs PUBLIC SERVICE COMMUNICATIONS

EmComm specifically refers to communications support required to manage an emergency situation such as a hazardous material spill, a wildfire, tornado, flooding, etc.

Public Service Communications relate to communications support for some type of a community event such as a walk-a-thon, marathon, parade, etc. Fortunately, most of the ham radio communications in our area do not involve real emergency traffic and we are needed in community events.

As you heard, or seen on the Skyview Reflector on in the Q5er itself, Skyview hams help with a number of community events such as the Pittsburgh and Latrobe Air Shows, Pittsburgh Marathon, Rachel Carson Run, to name a few. Doing this helps you hone your communication skills that offer a large benefit to our local communities and keep ready just in case we are needed in a real emergency. This is also another reason that the ARES (Amateur Radio Emergency Service) encourages participation too, so as to maintain preparedness through some "fun" events used as training.

So you should be interested in being helpful, by using your skills as a ham. Even newbies should consider this type of involvement as it gets you into the community of hams quickly. There you'll learn how to check-in, provide proper details in such a check-in and a whole lot more. In fact if you haven't already been joining us on Thursday nights around 9:00pm on the 146.640 club repeater, give it try. That is really a good way to start learning how we use a repeater for passing along club news and to offer any personal information to share with other hams. This is good initial training even if only using an HT.

This is only a surface-scratching of how we as hams can have fun, but still be available to play a vital part in helping to keep our communities safe and our emergency responders informed.

In the next Q5er, we'll look into some other organizations and teams that hams belong to and how they differ but still provide needed communications. In the meantime, start thinking about being of service to our community through this great hobby.

73,

Rich WQ3Q
Quack Quack

There is a very interesting story in the May 2017 edition of the Wireless Association of South Hills *WASH-Rag* regarding a Simulated Emergency Test that they fully participated in. Here is a quote from that article :

"We did well and added value, which was appreciated by COMMAND – *they came to us when their circuits failed.*"

You can read the entire article in the May 2017 issue. Got and get it from here:

http://www.n3sh.org/washrag.htm

Breaking News ::

The FCC said changes to the decades-old Citizens Band (CB) rules will remove outdated requirements, including certain labeling requirements. DXing on Citizens Band will become legal too. Once the new rules are effective, CBers will be allowed to contact stations outside of the FCC-imposed — but widely disregarded — 155.3-mile distance limit.

(Now all they will need is some sunspots)

You Too Can Be a Part of the 2017 Scout Jamboree!

In the previous *Q5er*, we described the vision and some of our plans for the K2BSA operation at the 2017 National Scout Jamboree.

While there will be close to 40 hams on site at the Bechtel Summit Reserve to work with the scouts, we also need many others, at the remote end of the circuit, to make sure every youth who comes through the tent will have an opportunity to make an over-the-air contact. That's where all of you come in. As you are able, please give some time to making contacts with the Scouts.

We will begin setting up our tent and equipment at the Jamboree on Saturday, July 15th. We expect to have equipment on the air by Monday, July 17th. The first nightly net (see below) will also take place on that day. Scouts begin arriving at the Summit on Wednesday, July 19th. We expect to be seeing some of them at our tent by early afternoon.

Daily Operations: Wednesday, July 19 through Thursday, July 27th – 8:00 a.m. to 5:00 p.m., EDT. Scouts taking the Radio Merit Badge (see below) will need to engage in extended contacts. Non-MB contacts can be shorter. Contacts appreciated via HF, D-Star and EchoLink. Once you have contacted K2BSA, please hang around to talk with other youth. With an expected 4,000 folks wanting to each make their own contact, it is most helpful if we don't have to search for a new external contact for each scout.

Extended Operations: Monday, July 17th through Thursday, July 27th. Before 8:00 a.m. and after 5:00 p.m., EDT we plan to have one HF station on the air for those who only want to make a brief contact with K2BSA. The demo team has plans to operate this one station remotely, so we can offer extended contact hours.

Frequencies and Modes: The following frequencies and modes are suggested for contact with K2BSA at the Jamboree:

- **SSB** in MHz: 28.390, 24.960, 21.360, 18.140, 14.290, 7.190, 3.940
- **PSK-31** in MHz: 28.120, 24.920, 21.080, 18.100, 14.070, 10.142, 7.080, 3.580
- **EchoLink**: K2BSA-R Demonstration Station (node 4566), WV8BSA-R VHF Repeater (node 6544), W6BSA-R UHF Repeater (node 9877), Conference *JOTA-365* (node 480809)
- **D-Star**: WV8BSA Repeater and Reflector 033A
- **CW**: There will be limited operation on CW as time permits.

Nitely Net: Daily from Tuesday, July 17th through Thursday, July 27th – 7:00 p.m., EDT. This net operates on the two WV8BSA Repeaters (146.700 Mhz and 444.025 Mhz – PL 123.0) located at the Summit. Off-site hams can participate through EchoLink Conference *JOTA-365* (node 480809).

QSL's: All contacts will be logged and posted in real time to ClubLog and daily to Log Book of the World. QSL cards, confirming your contact, will be available after the Jamboree. Information on how to obtain a QSL will be provided later.

Radio Merit Badge: A new class will start every hour beginning at 9:00 a.m. EDT, with the last daily class starting at 1:00 p.m., July 20th through July 27th. Classes run for 4 hours. Scouts taking the class need to engage in a 10 minute on-the-air contact (or multiple contacts totaling 10 minutes). If, when contacting K2BSA, you happen on one of these students, please try to engage them for the full 10 minutes, if possible.

When speaking with Scouts: All K2BSA stations at the Jamboree will have a licensed operator who likely will initiate the contact and will be available to assist the youth in making their contact. Through experience we have found that even the most vocal youth seem to become shy and hesitant to speak when put in front of

microphone. Consequently, the Scouts will have available this card with sample questions to serve as discussion starters. We suggest that you also have some topics/questions in mind to help better engage the youth. Remember that if you stay on the circuit and speak to more than one scout, you can re-use the same topics and questions with each of them.

K2BSA RADIO SCOUTING

LIVE SCOUTING'S ADVENTURE 2017 NATIONAL JAMBOREE

Participant Name _____

Operator Signature _____

JAMBOREE CONTACT LOG

Date	Time UTC		Frequency (MHZ)	Mode	Station Called/Worked	Report		Remarks
	Start	Finish				Sent	Rec'd	

2017 National Scout Jamboree
July 19-28

QRM	Are you being interfered with? / I am being interfered with
QRN	Are you troubled by static? / I am troubled by static
QSB	Is my signal fading? / Your signal is fading
QSL	Can you acknowledge receipt? / I am acknowledging receipt
QSO	Can you communicate with ... Directly? / I can communicate with ... Direct
QTH	What is your position (location)? / My position (location) is ...
CQ	Looking for contacts (example: "CQ CQ CQ from K2BSA")
73	Best Regards

RADIO SCOUTING

Signal Reports, RS; R=1-5, **R**eadability; S=1-9 **S**ignal Strength

Suggested Discussion Topics

1. Where do you live?
2. What are your hobbies?
3. What ham radio activities do ingage in?
4. What are your favorite sport teams?
5. Were you (or Are you) involved in Scouting? in what capacity?
6. What is your favorite thing to do outside of ham radio?
7. What is your favorite car?
8. Do you have any pets? What kind(s)?
9. What is your favorite food?
10. What do you like to do for entertainment?
11. Do you take vacation? What is your favorite vacation location?
12. Are you a member of a ham radio club?
13. Where is your home located?
14. Have you lived in other states/countries? Which ones?
15. What is your favorite movie?
16. What is your favorite TV show?
17. Do you do any type of camping?
18. What outdoor activities to you like?
19. Do you have any children? Grandchildren?
20. What is your favorite type of vehicle (car/truck, etc.)?

The Phonetic Alphabet

Alpha	Juliet	Sierra
Bravo	Kilo	Tango
Charlie	Lima	Uniform
Delta	Mike	Victor
Echo	November	Whiskey
Foxtrot	Oscar	X-ray
Golf	Papa	Yankee
Hotel	Quebec	Zulu
India	Romeo	

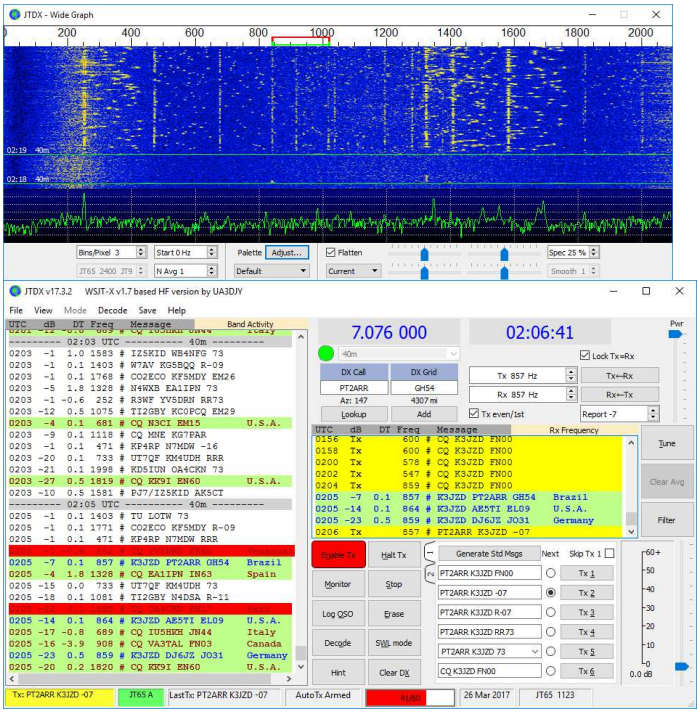
K2BSA

"Kilo Two Bravo Sierra Alpha"

THANK YOU, THANK YOU, THANK YOU! We can't say it enough. We greatly appreciate any time you are able to give to help these youths and introduce them to the wonders of ham radio.

Bob - K3RMB

New JT65/JT9 Software de K3JZD



I discovered a new UI for the WSJT-X software. This software, created and made freely available by UA3DJY, is JTDX.

JTDX is a UI wrapper for WSJT-X version 1.7. I had been using WSJT-X version 1.6 because I could not get WSJT-X version 1.7 to run on my computer. So, quite honestly, I do not know if the improvements that I am seeing with this JTDX software are due to the newer version of WSJT-X that is embedded in it, or if they are a result of the JTDX UI.

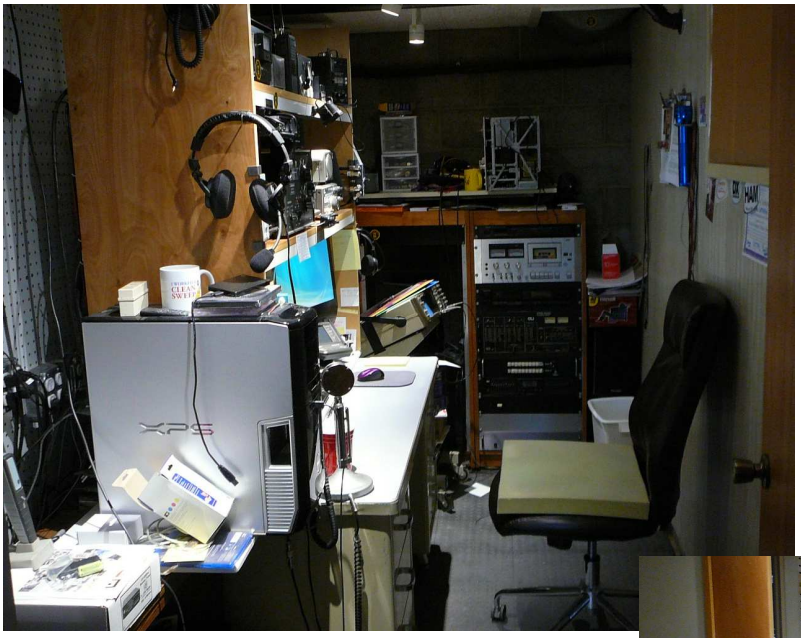
Whenever I call CQ using JTDX with the JT65 Mode, I am now seeing more than one station responding to me. (See above. They are all three essentially on my frequency.) I have always wondered about the "who wins" whenever I get multiple answers to my CQ's. I figured the software was showing me just the strongest caller. Now, with this software showing me more than one station calling me, I have the ability to choose which one to continue on with. If I'm looking for DX, I will usually choose to continue on with a DX station, even if they are weaker.

I am also seeing many more stations listed in the Band Activity window. Some of it is because of the multiple stations that are on the same frequency that are being shown. But I'm also seeing much weaker station are being decoded.

However, I do not see this happening when I am using JT9 with this JTDX software.

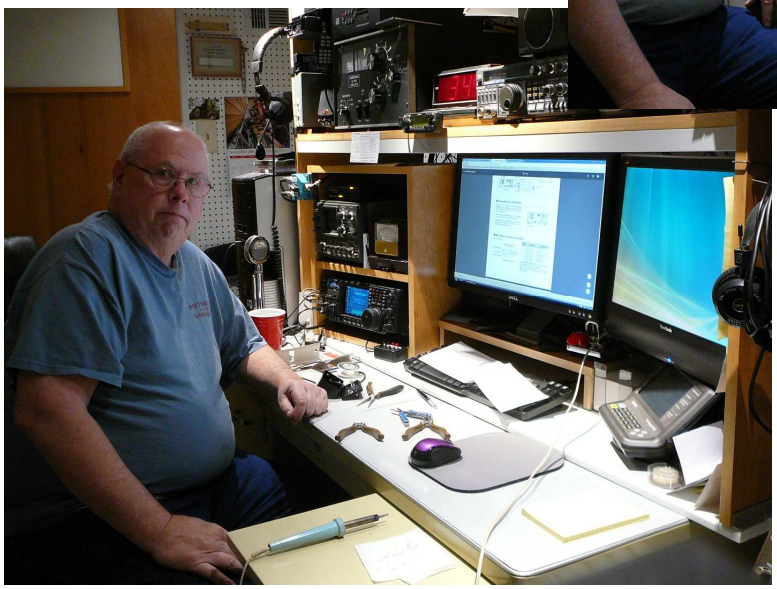
Show Me Yours and I'll Show You Mine

The Featured Hamshack for this issue belongs to: Don - WA3HGW



Don provided these three views, which he titled as :

- Messy
- Clean
- Project



Tracking At The House of the Mouse

March 30, 2017 by Dan Maloney

If it's been a few years since you've been to Disney World, you're in for a surprise on your next visit. It seems the Happiest Place on Earth has become the Trackiest Place on Earth thanks to the Disney MagicBand, a multipurpose wristband that acts as your pass to all the Disney magic.

Adam recently returned from a Disney vacation and brought back his MagicBand, which quickly went under the knife for a peek at the magic inside. It turns out the technology is fairly mundane — a couple of flex PCBs with trace antennas and the usual trappings of an RFID transponder. But there's also another antenna and a chip identified in a separate teardown as an NRF24LE1 2.4 GHz transceiver and microcontroller. The whole thing is powered by a coin cell, meaning the band isn't just being interrogated by RFID – it's actively transmitting and receiving.

What exactly it's doing isn't clear; Disney was characteristically cagey about specifics when [Adam] looked into the details, saying only that the bands "provide information that helps us improve the overall experience in our parks". If you put aside the privacy concerns, it's truly mind-boggling to think about the systems that must be in place to track thousands of these MagicBands around the enormous Disney property. And we can't help but wonder if some of Disney R&D's EM-Sense technology is at work in these wearables.

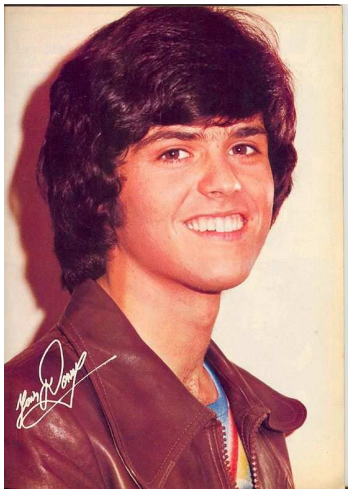
Disney World isn't exactly special in this sense. It is the most magical surveillance state on Earth, though.

de www.hackaday.com

A DIY Lamp with USB Charge Ports

(Probably not suitable for your living room)

----- Famous Hams -----



Donny Osmond—KA7EVD

(no current info found on QRZ however)

An American singer, actor, radio personality, and former teen idol (1971-1978 tine frame)

In more recent years has hosted various TV shows.
https://en.wikipedia.org/wiki/Donny_Osmond

All that NOISE NOISE NOISE! Part II

de WC3O

So in my last article I wrote about the idea of why you would want a receive antenna. One the low bands you typically have LOTS of signal, but also even more noise. The receive antenna's job is to improve the received signal to noise ratio so that you can copy weaker signals that are otherwise buried in the noise.

At the club we installed a DX Engineering NCC-1 receive antenna phase controller along with two active antennas that are installed in the woods near our property line. The idea is to keep the receive antennas as far as possible from the transmit antennas. The spacing between the two antennas is approx. 67 feet.

An "active" antennas is an antenna system that uses a pre-amplifier to boost the received signal. The actual antenna is only a 108 inch stainless steel whip. Power is supplied to the two pre-amplifiers (mounted to the base of each antenna) via the same coax cable that also supplies the receive signal.

There is a jack on the back of the NCC-1 controller that goes in parallel with the linear amplifier keying line. When the radio is switched to transmit, power is cut to the two Pre-amps at the antennas. This helps protect the active antennas from being overloaded by the strong, nearby transmitted signal.

The NCC-1 was designed to be very versatile in how you can utilize the system. You can use as we have, two equal receive antennas, or you can use two different antennas such as one dipole and one vertical. Because of this, the control box has two attenuator controls (One for each antenna input) as well as a balance control. This way the two "different" antennas can be equalized to maximize the effect of adjusting the phase difference between the two antennas. Did that make sense?

The main thing that you will be using on the controller is the nice BIG knob on the right. This is the phase control. This knob allows you to adjust the phasing between the two receive antennas and allows you to both

maximize the desired station and/or to minimize the received noise. It works GREAT! Feel free to adjust and play with the other controls on the unit. Sometimes the balance control can effect the noise or signal. You can't hurt anything by turning any knob or switching any switch on the unit. Feel free to experiment. The bottom line is to adjust the box for the best received signal possible.

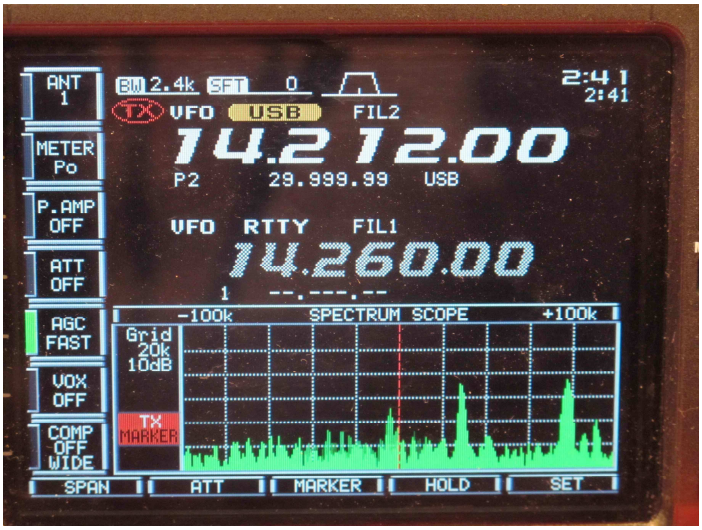
To use the receive antenna with an ICOM Pro III transceiver:

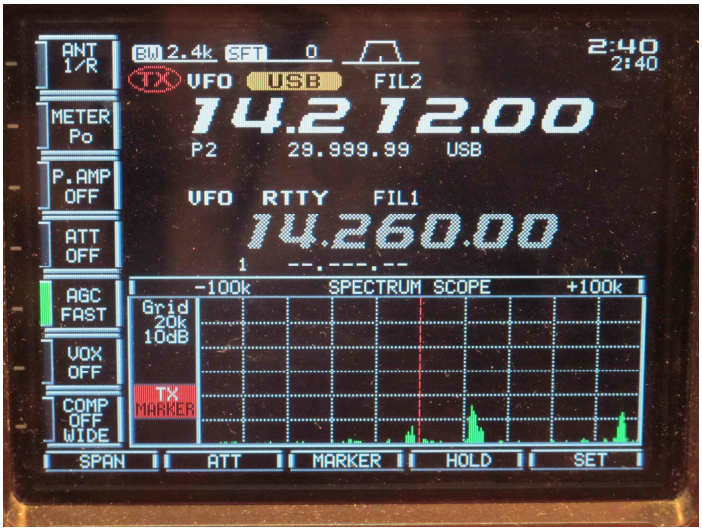
Looking at the display on the radio, in the upper left corner, you will see "ANT 1" That means the radio is transmitting and receiving on radio antenna port #1. It can also be put on "ANT 2", if we used antenna port two, but we don't. If you PUSH AND HOLD the select button to the left of the display you will see "ANT R/1". You are now receiving on the receive-only antenna port on the back of the radio, and transmitting on port #1. Now you are listening to the NCC-1. Naturally, the NCC-1 needs to be turned ON to operate. The power switch is on the lower-left of the unit.

There are two switches on the NCC-1 marked INPUTS Rev/Normal and B PHASE Rev/Normal. One way to peak a desired signal is to adjust the unit to null out the desired signal, then switch the phase switch in the opposite position. You are now fully peaked on your desired signal. Switching the inputs switch has a similar effect. Me, I just peak the desired signal and that's close enough for me. But you can do either.

There is also a switch marked L/H (LOW and HIGH). This refers to the frequency range you are operating in. Set the switch to L if you are operating on 40, 80 or 160 meters. Switch to H if you are operating above 40 meters. This simply optimizes the unit for the frequency range you are operating in. Again, you are hurting nothing if you have any switch in any position. Feel free to experiment.

If you have a noise source coming from a specific direction, this is where the NCC-1 really shines. Using the big phase knob you can null the noise source down to about nothing! It makes all the difference in the world. This unit does the best on 40, 80 and 160 meters. It also works fine on the upper bands. Because of the lower receive signal level, on the upper bands feel free to use the pre-amp in the radio to boost signals. On the lower bands there is typically no reason to use the pre-amp in the radio and it should be left off for best results.





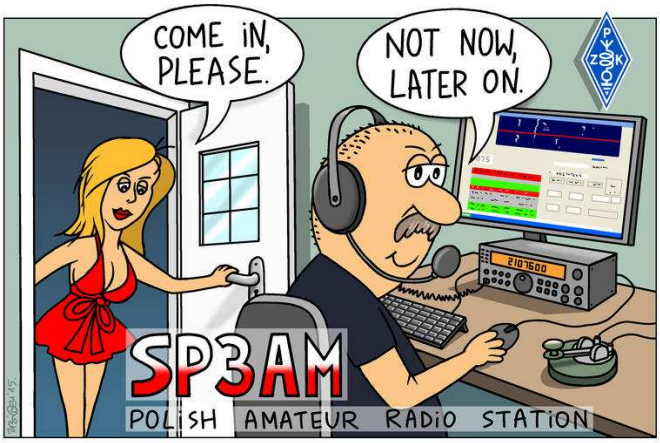
So go ahead and play. Once you get the hang of this thing you will wonder how you ever got along without it. Enjoy.

Cooky - WC3O

When working stations using JT65 or JT9, you do not learn anything about them other than where they are.

As soon as the QSO makes it into my log, I search for them on QRZ.com to see if there is some info there.

When there is info there, there is certainly a lot of variety in what people choose to post. Some pictures are very formal, some are very casual. This station posted his QSL Card, which I thought was 'different':



But then again, I was probably working him on 40 meters around 0200 UTC. So . . . . . de Jody - K3JZD

Reminisces of an Engineer – Ham Episode 1

de Joe Birsa - N3TTE

Introduction

One item that I have consistently seen on job search websites is to never, NEVER, **NEVER** list your hobbies on your resume. I think that this advice needs to be followed judiciously. If someone has a hobby that overlaps the job they are applying for, it could give them an advantage. And amateur radio overlaps a tremendous number of technology positions. And now that I am recently retired from full time employment, I'm looking back at the times that being a practicing ham has aided me during my career as an electrical engineer.

Over the years, there were numerous instances where my ham radio background and "ham-genuity" came in handy on the job. I've picked some interesting ones from each company I worked for to describe here

VOX vs Doritos

I got into ham radio in my forties. About two years after I got my technician license, I was on a project team to evaluate how well nuclear plant operators adapted to a modern control room. The traditional nuclear plant control board is 80 to 100 ft long and covered with switches, meters, indicator lights, light boxes, recorders, and so forth. The modern control room is like the bridge on the Starship Enterprise! The test plan was to connect a mockup of the modern control room to a nuclear training simulator, familiarize the operators with the new technology, and then record their reactions to simulated 'events'. We had 6 or 7 engineers on the program and I was responsible for the building and installing mockup.

Since the mockup was some distance from the nuclear plant simulator control room, the testing team needed communications. Because of my experience doing ham radio public service for the Pittsburgh Marathon, I immediately thought of using radios. About this time, family band radios came out, so after a quick demonstration using my 2m HT's, we bought some family band radios through my local ham radio shop.

Now one of the other engineers discovered that we could purchase VOX headsets and wanted them. I mean he WANTED them!! But after working the Pgh. Marathon, I knew that VOX was not a 'good idea' for what we were doing and so I blocked the purchase. Later, when I went on vacation, he convinced the project manager to buy five VOX headsets. It turned out that my ham experience was correct and the VOX headphones lasted about 2 hrs before they were put on the shelf. The engineer who was operating the simulator brought a bag of Doritos to work and all the test team heard on the VOX headsets was 'CRUNCH, CRUNCH, CRUNCH'!

I Can Buy It; You Can't

Another project involved instrumenting a missile test range. Because of the age of the existing equipment we had to interface to, we had to use radio transceivers to send RS-232 signals around the range. And I ended up doing some calculations to verify that the design was feasible; calculations directly taken from the Extra exam, and the ARRL Amateur Radio Handbook, in fact.

When I looked into getting RF amplifiers to include in the system, I discovered that RF amplifiers for the 900 MHz frequency the transceivers we would use could only be legally sold to legitimate ISP's or licensed hams. In other words, my company could not buy the amplifiers, but I could. My manager failed to see the humor in that. (We eventually decided that the amplifiers were not really needed.)

ED: *Regarding listing your hobbies on your resume, Joe said "I think that this advice needs to be followed judiciously." I would suggest that your Amateur Radio hobby should always be listed. No matter what kind of work you are looking for. I did what the Resume Experts say to do one time. I did one of their wishy-washy high-level two-page Resumes just like they say to always use. And of course it did not list Hobbies. Got nowhere with it. I too have done engineering work in various different areas and have had a lot of exposure to a lot of things. All of that was lost in this "proper resume'. So I went back to my many-page very-detailed resume and I got interviews. I have always had a section at the very end of my very-detailed resume called "Other Interests" where I have always listed "Amateur Radio" along with some 'hands on things' like Woodworking, Vehicle Maintenance, Home Maintenance. I wanted the Amateur Radio "advantage". And in several instances it was noted by the interviewer and was discussed because they had an appreciation for the skill set that comes from that ham radio involvement. And, who knows how many people might have noted it during the early vetting process. . . . . Jody - K3JZD*

A Look At The Amateur Packet Reporting System (APRS)

Jody – K3JZD

I had looked into the Amateur Packet Reporting System (APRS) many years ago. But at that time I did not see anything there that made me want to become involved. Having other people track my movements was not a high priority for me. I became re-interested in the APRS due to my current SOTA Activation activities. It seemed to me that having something like the APRS to track my whereabouts while I'm out wandering around in the woods could be a good thing.

I found lots of APRS stuff to read on the Internet. I did not find any Yahoo APRS newsgroup, but I did find and subscribe to the aprssig@tapr.org newsletter to try to get some insight into what all is going on. I found the http://aprs.fi web site and saw that there is some local activity. I saw a whole lot of weather stations, but very few digipeaters. That was a bit concerning. But I did see vehicles being tracked.

It seemed like what I needed would be periodic APRS position beacons being generated from my 5 watt 2 meter HT while I trudged around on foot. I figured that the only way to really get a handle on the feasibility of that would be to try it. After doing some research, I purchased an inexpensive lightweight TNC from Mobilinkd https://store.mobilinkd.com/. I also purchased the APRSdroid App for my Android cell phone which had the necessary GPS in it. I got it all registered and all setup without too much difficulty.

My testing was done by taking this setup with me on my normal walk around a 1.75 mile block. With the W3YNI digipeater not that many miles away from me, I figured it would go well. But, it did not. The APRS saw my position in my back yard whenever I turned everything on, but never again. I blamed it on my configuration which I had setup to trigger my APRS position beacons based on the distance that I had traveled and I had my cell phone's GPS configured in a way that would optimize battery life. I reconfigured APRSdroid to trigger my APRS position beacons on 5 minute periodic time intervals and I reconfigured my phone's GPS to be active all of the time. Then I did the same walk again. This time the APRS once again saw the initial turn-on position beacon, but then it saw only one of the 5 position beacons that I had broadcast on 2 meters during this walk around the same block. Quite disappointing.

I bought a gain antenna for my 2 meter HT and I set my periodic position beaconing time interval down to every three minutes. Tried the same walk again. This time it once again saw my initial turn-on position beacon, but it only saw two of the 10 position beacons that I had sent out on 2 meters during the walk. And, according to the data on the http://aprs.fi web site, only W3YNI was hearing and forwarding my beacons. All of the weather stations that are all around apparently do not hear anything, or do not ever forward anything that they hear. Still a very disappointing performance. I had also been eyeing the simple standalone Sainsonic AP510 APRS Tracker device that supposedly provides a 1 watt output on 2 meters. But that does not look like anything that would be useful for me. If 5 watts cannot get it done, then a 1 watt transmitter sure will not do anything.

Much more reading followed. As I dug more, I found more reports of poor APRS results. I found some stories from people who were trying to do what I wanted to do who had put digipeaters in their cars and left those digipeaters running while they were out on foot in the woods. They had mixed results with that scheme. Sometimes they were not able to relay the data packets from where they had parked their temporary digipeater and other times they were not even hitting their own digipeater reliably while out on foot. So even though that was not a foolproof answer, it got me investigating what it would take to do that. Bottom line on that was that I would have to spend too much money and do too much work for something that might not be successful in many cases.

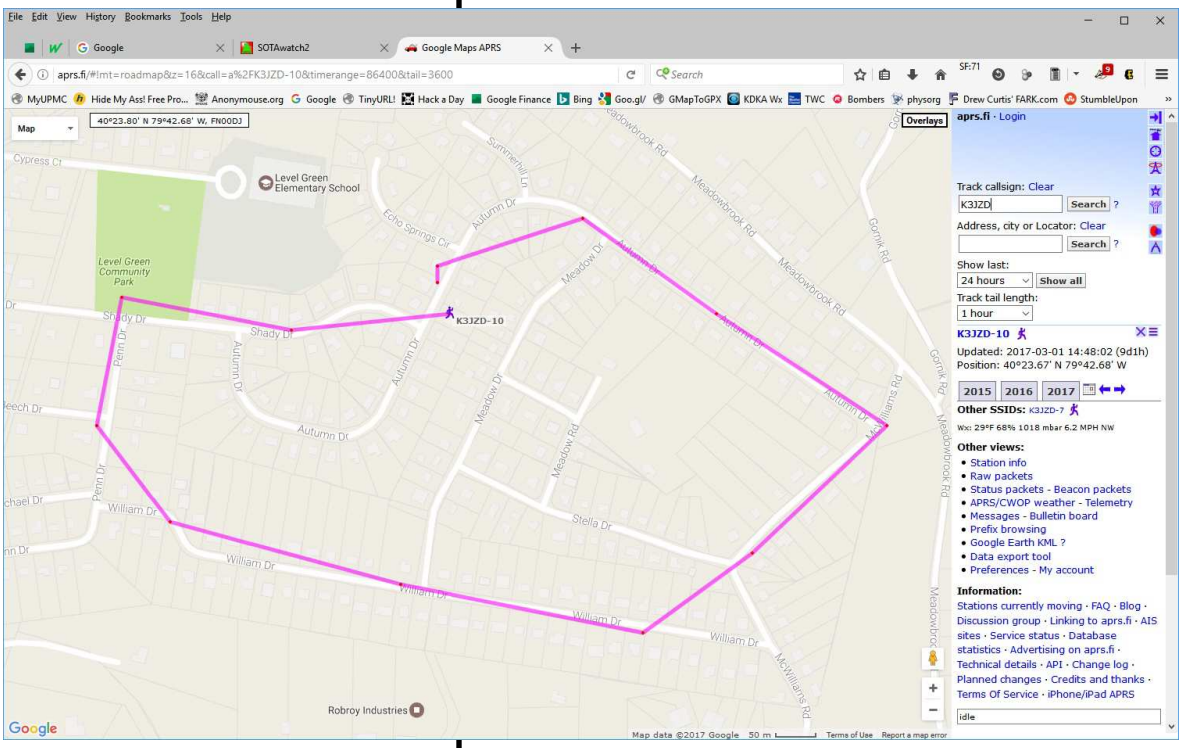
I came to conclusion, which was supported by a lot of the more in depth stuff that I was now reading, that the APRS is something fun to play with, but it is not something that anyone would want to rely on. It was mentioned that even those who run 100 watt APRS beaconing radios with gain antennas in their cars will

have big gaps in their tracking coverage. Five watt 2m HTs : fergetaboutit unless it is line of site.

One major problem is that the slow store and forward broadcast packet protocol that is being used does have utilize an Ack-Nak. Periodic data packets that have been sent out that are not heard and decoded are simply lost. This whole scheme does not seem to have advanced beyond what it was back when I was playing with 2 meter Packet Radio Bulletin Board Systems back in the 1970s. Perhaps it has been the FCC's throttling of newer communications technologies that has kept it from evolving. Perhaps it has just been a singular focus on just polishing what has been in use all along. A lot of the chatter on the aprssig@tapr.org newsletter that I have been following is about scheming and dreaming up new techniques. From just following along on those various threads, I'm seeing that new ideas seem to run into roadblocks most of the time. So, perhaps it is just the nature of the beast.

I think it is going to take a faster much more capable and robust data protocol to make this service truly useful. And that data protocol should build on the work that has been done on weak signal techniques that are being used in communications protocols like JT65. But, that would mean getting off of the FM mode, which means it would take new 2 meter radios, new TNCs, and new digipeaters all the way around. So, I really do not see any feasible way forward for making this a useful service.

Out of this whole thing, my only positive takeaway was that I found out that I can use my cell phone's data service to broadcast APRS position messages to an APRS gateway server that is somewhere out there on the APRS network. That APRS gateway server will then inject my position reports into the normal APRS position tracking network. It is kind of a back door into the APRS network. So, I setup my APRSdriod App on my cell phone to send my position report out as cell phone data messages every three minutes and I went for another of my walks. That worked fine. That cell phone only technique finally produced the expected point by point history of my movements and my last known position during my walk around the neighborhood :



So, what it boils down to, is that the Amateur Packet Report System might work for what I want to achieve while I'm out doing SOTA summits. BUT only if I use my Cell Phone (and not my amateur radio equipment). And, yes, I will also have to have decent cell phone coverage wherever I am out there wandering around in the woods in order for that approach to work. Unfortunately, that is not always the case. But, short of buying an expensive satellite phone and service, that will have to do.

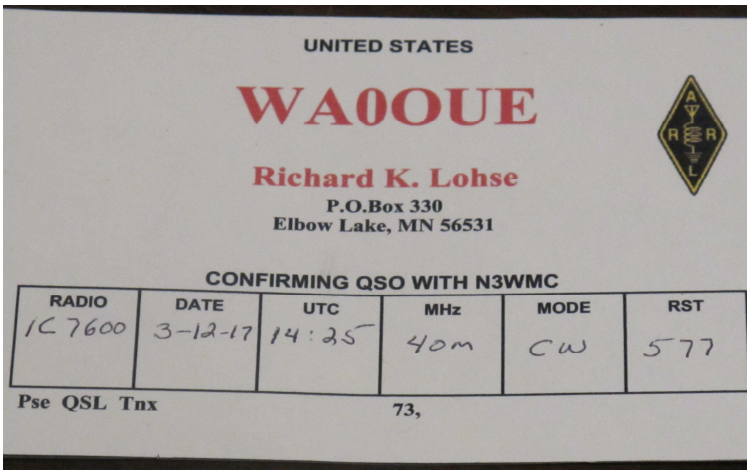
Jody – K3JZD

CW Students Are Starting To Receive Their Diplomas

Cooky – WC3O

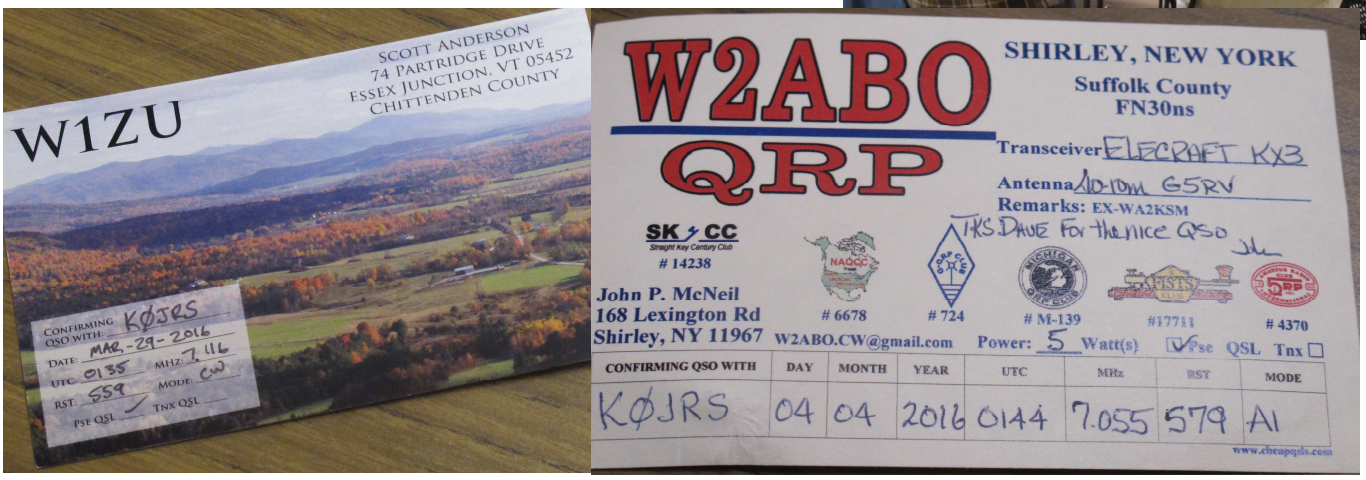
As many of you know, I have been doing on-the-air CW Practice on Monday evenings, Several of my Monday evening students have now received their Diplomas. So, how do they get them you ask. Well, it is easy. All they have to get on the air and make a QSO with someone. Then their Diplomas will arrive in the mail.

Here are some of them:



N3WMC Diploma

N2GBR Diploma



K0JRS Diploma

Baptism of Fire, CW version

Us "no-code" HAMS sometimes have to put up with a bit of ridicule now and then. I think it's somewhat well deserved. The task of learning CW is quite daunting. I've wanted to learn CW since I started in this hobby and it's taken me a couple of false starts to get where I am today.

I won't bore you again with my enthusiasm for the Summits On The Air (SOTA) program, but here's the thing… it can help you learn code too, not so much in learning all the letters / numbers and so on directly… but it can help get you on the air and using CW well before you're really ready. Not for the faint of heart for sure. Let me explain.

Learn to send your Call and recognize your call being sent to you.. Learn "BK" and a simple contest style signal report "5NN" plus "TU" or "73" and you're pretty much ready to chase SOTA activators. The reason for this is that we all know that Training and no-action is boring. This approach will enable you to use CW.. and start becoming used to listening to code and then make a QSO(s) and get some SOTA chaser points. I found that this gave me the added motivation to learn more and I started to hear code (when it wasn't too fast). I have been using multiple programs and AP's to learn code, my personal favorite is the N3FJP code teacher.

Eventually, during March I got the feeling I was pretty close to being ready. I announced that once I reached my 1000Activator points / Mountain Goat, I would switch to CW mode (commitment).

In early April, on one of my regular trips down to Shenandoah, I stopped off to activate Cross Mountain W3/PD-008. I set the normal Alert on the SOTA website and put in the comments that I "possibly" would also do CW. Little did I know how the evening would progress

The walk up took 45-60mins. I set up as usual with my Link-Dipole at about 8ft. 40m was wall to wall S9+10 or so noise and can barely hear a couple of SSB stations. There's no cell-phone coverage on Verizon and I can't even get a self-spot out… even an SMS text message won't send. I call CQ for a while. Nada. I switch to 20m it's the same story. The only option left was CW and the hope RBN would get a spot for me, and the SOTA software 'RBNhole' would then spot me on the SOTA site. I switched my KX3 to CW mode and dialed in the CW portion of 20m. I start sending CQCQCQ SOTA N2GBR N2GBR at 14wpm. Two CQ's calls later I have a customer. I logged about 10 QSO's over a 15min busy period. It wasn't easy at either end of the QSO. The Chasers slowed for me and sent their calls slow and often, so I was able to log them accurately and repeat their calls. I wasn't consistent with my exchanges and had to do extra homework on that when I returned home. But, I completed the activation and everyone went home happy with points gained. As the frequency became quiet I noticed that it had started to rain which gave me the chance to QRT and bow-out. Talk about a baptism of fire!!

This is by no means the end of the story… I think it's the beginning really. I'm at the point where I can read/hear the letters, numbers and useful punctuation at 15-18wpm speed but it takes me time to register what they are. So my overall competency is probably in the 10-12wpm area. This is good enough to get started on SOTA as the majority of the SOTA folks have been working CW longer than I've been alive and they can slow-down or speed up at will. I have a long way to go, but as the old saying goes.. 'every Journey starts with a single step'

Richard // N2GBR

Cross Mountain - Which interestingly enough has a flat, well maintained, field that is long enough to land a very large military plane.

Car Computers – Good or Bad ??

Jody – K3JZD

I'm a computer guy. I have had home computers since 1977. Have programmed them to do whatever task I have needed done over the years. Have written custom software for small businesses to help them do their jobs without changing how they do things. So, I like computers. BUT, I'm finding that I like them a whole lot more whenever I have complete control of them.

Over the years, I have been less and less thrilled with how Microsoft wants to control MY computer. So, I spend a lot of time searching for ways to disable a lot of what they are doing 'for me'.

Whenever computers showed up in cars, I thought that was good thing. They were able to quickly assess a lot of things and make decisions about fuel delivery, which resulted in both more power and better fuel economy. Previously those two were inversely proportional.

But, similar to the way that Microsoft's 'utility' (operating system) has become more complex and expansive, and less and less manageable by the end users, car computers have become a bit too 'controlling'. And have done so without boring us with the details about how they do some things. And, I guess that is OK for the folks who simply buy them and drive them.

However, I maintain my own cars – always have and hope to continue doing so. So, while I'm on the road, I'm always on the alert for any early symptoms of problems. Listening, feeling, etc. I just replaced a battery in my 2013 Honda CR-V. So, while my 2013 Accord has 1/3 of the miles on it, I'm keeping an eye on it's battery. Of course neither of these vehicles display voltage or amperage, so that is harder to do than it used to be.

Frequent readers know that I have installed an 'APO3 Automatic Power Off' Switch to automatically turn on my 2 meter rig whenever I start the engine and automatically turn it off after some preset period after I have stopped my engine. That device works by sensing the input voltage. When the engine is running the alternator provides the vehicle with a voltage that is higher than the battery voltage. When the voltage is higher than battery voltage, this device picks up a relay which then powers the radio.

http://www.aprsworld.com/apo3/

My Accord is mostly just used around town. But, occasionally I will us it to go up to Conneaut Lake, PA or off to some SOTA site out in the mountains. About a month ago, while I was cruising up I-79, I noticed that my 2 meter rig unexpectedly shut down. Then, for no reason that I could discern, it would come back on. That happened repeatedly, on the way up to Conneaut Lake and on the way back. I bought a digital voltmeter that plugged into the Accessory Socket (which used to be called the cigarette lighter socket), and began to keep an eye on the vehicle's voltage. Running around town, I saw some fluctuation, but it appeared to either make sense due the driving pattern or due to the A/D circuit in the inexpensive device. Mostly it was in the 13.0v to 14.0v range while I was moving, and a little lower when stopped in traffic. And, I did not have any instance of the 2 meter radio shutting down unexpectedly.

On my next trip to Conneaut Lake with the Accord, I once again started getting 2 meter radio shutdowns while cruising up I-79. So, was it a bad battery that was getting hot and pulling down the vehicle's voltage? Was it an alternator/regulator problem letting the vehicle's voltage drop? Or was it the 'APO3 Automatic Power Off' Switch that handles the automatic on/off for the 2m radio that was going bad? There was lots of time to consider each possibility while driving along on the Interstate.

When the 2m radio shutdown, I noted that the voltage was hovering around 12.0 to 12.3 volts. Since I have my 'APO3 Automatic Power Off' Switch threshold set to 12.7 volts, that kind of made it look like that switch was just doing its job. That seemed to make it look like a battery or the alternator/regulator. But, why did the radio unexpectedly come back on once in a while? While on I-79, I use my Cruise Control a lot. But, as you know, once in a while you have to touch the brake due to traffic, which Cancels the Cruise Control. I began to see a pattern: touch the brake, and the 2m radio turns on for a while, then goes back off. Naturally when touching the brake in traffic, I cannot immediately be checking my volt meter down low in the center console.

But, once this pattern surfaced, I then began to experiment whenever I was not in heavy traffic and could watch the volt meter. The 2m radio went off. I was still in Cruise Control. The voltage meter showed 12.1v. I touched the brake, and saw that the vehicle voltage jumped up to 14.1v. The 2m radio came back on. I went back into Cruise Control. After a few seconds, the voltage dropped back to 12.1v. This was repeatable. In fact hitting the Cruise Control's "+" or "-" buttons to alter the speed setting achieved the same pattern. One has a lot of time to consider and diagnose while driving along on the Interstate. About this time, I noted that my dash readout showed that I was getting about 35MPG while on out the highway. That was great.

That lit a light bulb in my head. I am now about 99.9% sure that my problem with my 2m radio shutting off is due to the Honda engineers throttling back on the alternator's regulator to improve the fuel mileage while out on the highway. My problem was designed in!!! Think about it. The computer knows you are not running around town in stop and go traffic with multiple engine stops and restarts where it needs to keep the battery replenished. It knows that you are cruising at highway speeds, with the cruise control on, and that all it needs to do is keep the battery at equilibrium; at its base 12.0v level. So, that is all it does. If I dig into it, I will probably find out that there is not any Voltage Regulator in my Alternator - the computer is now the Voltage Regulator. The 14.1v blip in the voltage that I see whenever I drop out of Cruise Control or do anything else related to the vehicle speed is occurring as the computer reassess things. It blips to 14.1v long enough for 'APO3 Automatic Power Off' Switch to pick up and turn the 2m radio on. Then, once it sees that we are still rolling along at highway speed, it goes back to the throttled-back charging scheme. When the 'APO3 Automatic Power Off' Switch times out, the radio goes back off. Having a very light load on the Alternator improves the gas mileage. But turns off the radio.

Having thought about this and come to this conclusion, I then looked over at the "Recirculating" LED that is lit on my Automatic Climate Control System while it is in the "Auto Mode". I began to understand why that is turned on when there is not all that much differential between the outdoor temperature and the inside temperature. I'm betting it is for the same reason – they are keeping me re-breathing the recirculated air instead of switching over to fresh air because then there will be a reduce the load on the Air Conditioning Compressor. For the same reason : to improve the fuel economy.

Bottom line – I have put Honda in the same 'camp devious' that Microsoft is in. Honda is doing things to me to suit their needs (better fuel economy) without telling me that they are doing it. They are turning off my 2m radio. And their Automatic Climate Control system is having me re-breathe the same air rather than give me fresh air. I can often override the stuff that I do not like about what Microsoft is doing, but hacking into the Accord's computers does not seem practical. All I can do is stop, and go back into the trunk and flip the "Override Switch" on my 'APO3 Automatic Power Off' Switch to bypass the voltage sensing circuitry and keep my 2m radio 'On' while I am out on the road (and then remember to manually turn the radio off upon arrival). And I can take the Automatic Climate Control System out of the "Auto Mode" so I can disable the recirculation to get some fresh country air (and I guess some diesel fumes and cow manure once in a while) while out on the highway. But, it annoys me to have to (1) figure that out, (2) have to do that, and (3) not have complete control of the vehicle computers.

By the way, you folks who are running VHF or HF radios in your newer vehicles may also be running them at 12.0v instead of the 13.8v or so that you think you are getting. Wonder if this is why they quit putting voltage gauges on the dash?? Why worry people while they play these games? Also, I really wonder if this running for hours and hours at an equilibrium voltage impacts the overall battery life?

My conclusion:

Cars are Bad - But Car Computers are <u>Really</u> <u>Bad</u>.

Jody – K3JZD

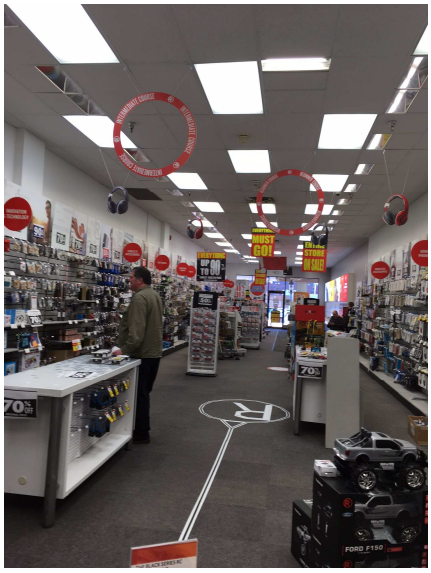
From the Archives : Field Day 2003

. . . . . .This one may not belong here . . . .

Saying goodbye to old friends

You really get used to things you've known all of your life. It is a really bugger when they go away.

Such is the case with Radio Shack and Kings. As a kid I was always excited to see the new Radio Shack catalogue come in the mail. Check out the new CBs, those antennas, those neat items that only Radio Shack had. There was something about the artwork I loved.



I heard some complain about the Shack, but where else could you go to a shopping mall and pick up a .001 capacitor? Sure they were a little expensive, but look at the high rent areas they were located. I was a big fan of the Shack. Now gone. Dag

Then there was Kings Family Restaurant. Kings was once very popular. I just about grew up at Kings in Water Works, belied up to the bar, my Mustang parked outside, enjoying hot apple pie with cinnamon ice cream. Mmmmmm I can taste it now. Then it was Kings in Harmarville. Many times we met there for breakfast before going to AES or DX Engineering, as well as Bob, AG3U and myself going there in the evening to solve the worlds' problems. Now gone. Dag

I swear there is a group of top-notch scientists working night and day to find out the things I like, then closing them down. Sears at Mills Mall? Gone. Office Max at Mills? Gone

Oh well, that's the way it goes I guess. Goodbye old friends.

Cooky -- WC3O

A Practical Application for APRS

Jody – K3JZD

ED: *An earlier article in this issue discussed my disappointment with position tracking capability of the Amateur Packet Reporting System (APRS) Network. Here is what I thought was an interesting thread from the aprssig@tapr.org newsletter. The original idea that was presented prior to the exchanges below involved an idea for adding methane sensors to cars which are already using APRS Position Beacons. It soon migrated to the idea of utilizing the APRS Network to detect impending flood conditions. I found this second idea to be practical. I also found the comments about the perceived value of hams that the Emergency First Responders have to be pretty realistic. Presented here as Some Food For Thought :*

On April 3, 2017, 8:04:38 PM EDT, Scott Miller wrote:
Throwing a bunch of uncalibrated [methane] sensors out there with no standards for their placement is not going to get you much useful data. It might be fun to look at your own track and see where you get hot spots but it's not going to do serious researchers much good.

And didn't we discuss a standardized type-length-value extension scheme a while back? Aside from OpenTRAC, that is. At the very least I think any more extensions to the format need a formal definition, maybe a BNF grammar, to guarantee that everything is unambiguous and parseable.

Scott N1VG <scott@opentrac.org>

On 4/4/2017 8:25 AM, Ev Tupis wrote:
So here is where I chime in (again). Several years ago (at the "Emcomm East" convention), I presented on the topic "Growing APRS Value to the First Responder Community". The points that I made there hold true even more today: Emcomm is not what it was in the 1980's. EFR's don't need us to pass traffic.

Our value comes from "outside of the yellow tape".

Enter: APRS as the IoT/M2M of the Emcomm world. We need to provide situational awareness that is not available in any other way. We need sensors that are both housed at our homes *and* reporting via APRS *and* batter backed up ... and we need sensors that we can deploy around the perimeter of an event to report conditions via APRS ... and we need an APRS infrastructure with a gateway to the EFR's "dot on a map" system.

If you still think otherwise, then please tell me specifically...when was the last time you were activated and did anything OTHER than open an HF net and take check-ins? A rhetorical question as someone in some special case may come up with one or two instances...but let's be honest...that is all that happens a VAST majority of the time.

I have asked the ARRL each time they touted an ARES activation, "This looks like a news story about the disaster, but what did we actually do?" Answer: setup an HF net and took checkins. (yawn).

I asked here, "When were you deployed and used APRS?". The answers I received were not Emcomm related...they were public service related. It is only a matter of time until even public service organizations can do it themselves, too.

It is time to reinvent. How do we build inexpensive, calibrated, deployable sensors and regain our worth to the Emcomm community?

Ev, W2EV

On April 4, 2017, 9:36:46 AM EDT, Scott Miller wrote:
I'm definitely headed down the IoT/M2M path with the stuff I'm working on now. This is what's on my desk now: http://imgur.com/2M8Xs9K

This is the successor to both the Tracker3 line and the ADS-SR1 repeater. It has two radio ports (and will add at least a third RX-only port to meet repeater control requirements), WiFi (not in the small version), including the ability to function as an access point, USB (virtual COM port and mass storage at this point), RS-232, and RS-485.

It'll do a bunch of conventional TNC and repeater controller things, including operating as a dual-port simplex repeater, cross-band repeater, duplex repeater, and some weird hybrid modes. It'll operate as a TNC, digipeater, and standalone Igate.

The RS-485 port is set up for Modbus RTU and will interface with all sorts of off the shelf sensors, relays, I/O modules, motor controllers, actuators, and whatnot. The small board connected to it here is an interface for our wind and rain sensor assembly. I've been testing it with everything from $8 quad relay boards to $400 Acromag industrial I/O modules.

It has a BASIC interpreter with high-level commands for handling voice, APRS, and Modbus. It's particularly useful for data transformation tasks - one demo pulls raw Modbus temperature and humidity readings and converts them to floating point values in the required units, and you can build APRS packets with the string handling functions.

You could have a BASIC script watch a Modbus temperature sensor and door switch and when something of interest happens send an APRS message over one radio port, play a series of WAV files on another radio port, and use HTTPS to send JSON data to a service like Twilio to send a text message to your phone.

I'm looking into the feasibility of making it Echolink-compatible, but usable technical information on Echolink is scarce. If anyone knows of any protocol specification, please let me know. It looks like it's using the GSM full-rate codec over RTP, but I don't know anything about the signaling protocol.

All of this is stuff you could do with a Raspberry Pi and a pile of adapters and some shell scripts, but I'm trying to make it one ready-to-use box with a scripting system geared toward non-programmers. It's got months of work to go still, but a few units are out there for beta testing as repeaters already. I'm hoping to have something ready to release to the APRS community this summer.

Scott N1VG <scott@opentrac.org>

On 4/6/2017 7:24 AM, Ev Tupis wrote:
Very interesting, Scott. This seems like a fairly complex device with lots of capability. I'll be watching from afar to see how it progresses.

Interestingly, the local ARES group has a text-message system that just sent out the following for my area...
"The Storm Trackers Team continues the Potential Alert for General Flooding for all of our area from thru Sat. midday. Periods of rain continues into Friday night. Snow mixes in Friday. Rainfall of 1 to 2.5 inches is likely which can cause flooding. If you live in a flood prone area, remain alert!"

Here is where the IoT of amateur radio (if it existed) could offer huge value...if we only had sensors to deploy *and* a robust APRS network to deliver the data.

I imagine a variation of a common "floor wet monitor" that you find in a hardware store that...
* can be deployed to a "flood prone" area, attached to a stake in the ground
* would send a "flood stage" beacon once water was detected "at that level"
* could be deployed during these events and removed afterward
* run on a 9V battery (or maybe two)
* with an algorithm to minimize battery consumption while still providing useful data
* (maybe) could be cheap enough to be "throw aways" in case they are "swept away" (or stolen?)

I'm thinking small, inexpensive, deployable ... and a "bridge" to send that data to a municipality's "command center".

I'm also thinking about what it would take for the ARRL to ask their Emcomm person to pursue DHS or NOAA grants to fund development if needed.

THIS would be a big step in making amateur radio relevant again, in the eyes of the sworn-officer and professional EFR community.

Ev, W2EV

On April 11, 2017, 8:07:16 PM EDT, Scott Miller wrote:
I remember seeing an APRS flood monitor at Dayton a few years ago. They weren't particularly cheap devices, but I think they used ultrasonic gauges. A simple float switch would do it.

The DRA818V (and probably others) transceiver modules have finally started to make a lot of these applications cheap and practical on 2 meters without resorting to scavenged HTs. They're under $15 and good for at least half a watt of TX power, or a full watt if you believe the data sheet.

Scott N1VG <scott@opentrac.org>

On 4/12/2017 7:24 AM, Ev Tupis wrote:
Hi Scott, I agree that a simple float switch would do. Simple is the key.

I am frankly growing tired of going to ARES meetings and hearing about "passing voice traffic" and counting words to assure proper delivery and then going to Emergency First Responder meetings (in my professional capacity...where nobody knows I'm a ham) and hearing the snickers about ham radio when it is brought up casually. We are frankly a burden as we appear at this time.

My position is different than Bobs on this. The need is less "I want" than it is "we would be more valued if". My approach is one of practical usefulness and "start by pursuing the low hanging fruit that people already want to eat. I see flood gauges as being lower hanging fruit than methane detectors (I see more news stories about floods than methane leaks). I see wind speed/direction gauges that can be deployed into and around fires (and left to burn if the perimeter is consumable...like a prairie or forest) as saving lives in real time.

Too many modules, too early is also bad. Focusing on a

flood detector and making it low-power (battery life), quickly deployable, disposable (if lost/stolen), re-usable (if not lost/stolen) and trainable will uncover other low-hanging fruit.

It will also motivate the re-generation of the needed APRS infrastructure to support delivery. That infrastructure needs rethinking, too...but it will be driven by the learnings from a few deployed sensors.
Assuming that others are interested in this fresh approach to APRS and are still reading this post, I have a question...
"What is the lowesthangingfruit for data sensors in YOUR area?"

Ev, W2EV

A Pittsburgh Marathon Memory

I was first licensed in Nov of 1994 and eager to use my new license. But the day of the 1995 Pittsburgh Marathon, our daughter, Laura, was due to receive a Girl Scout religious award.

Naturally the church chosen for the award was in Shadyside, right inside a loop of the Marathon, and the time for the ceremony was when the Marathon would be taking place. So getting to the church from Plum Boro was "just a little bit of a problem."

I found out from N3INT that the hams on duty at the Marathon would update when the streets were open, and N3INT provided the frequencies being used to me, so I came up with a plan.

On the day of the Marathon (& ceremony), Mary Ann was driving in on the Parkway into town, while I sat in the passenger seat holding my HT with a map of the city on my lap, tracking the street openings.

If I remember correctly, we got off the Parkway in Oakland just as a route opened for us to use, then crossed the now-open Marathon route and drove to the church on time.

Joe - N3TTE

Too Much of a Good Thing Becomes a Bad Thing ????

2017: The Year of the Dishwasher Security Patch

March 28, 2017 by Lewin Day

As if Windows Update wasn't bad enough, one has to deal with a plethora of attention-hungry programs and utilities all begging for a continual stream of patches from the Internet. It's exhausting, but unfortunately also par for the course. Many of these updates are to close security vulnerabilities that could otherwise expose your computer to undesirables. The Internet of Things will only expand the amount of hardware and software you need to keep updated and protected on a daily basis. Now, it's your dishwasher that's under attack.

The Register reports that Jens Regel discovered the bug in a Miele dishwasher with a webserver. It's a basic directory traversal attack that can net the intruder the shadow password file. Armed with this, it's simple to take over the embedded Linux system and wreak havoc on your local network.

It's not particularly surprising – we've talked about IoT security and its pitfalls before. The problem is, a dishwasher is not a computer. Unlike Microsoft, or Google, or even the people behind VLC, Miele don't have infrastructure in place to push out an update to dishwashers worldwide. This means that as it stands, your only real solutions are to either disconnect the dishwasher from your network, or lock it behind a highly restrictive firewall. Both are likely to impede functionality.

Of course, as always, many will ask why a dishwasher needs to be connected to the Internet at all. Why indeed.

de www.hackaday.com

Why Can't Free Towers Be Delivered? Part II

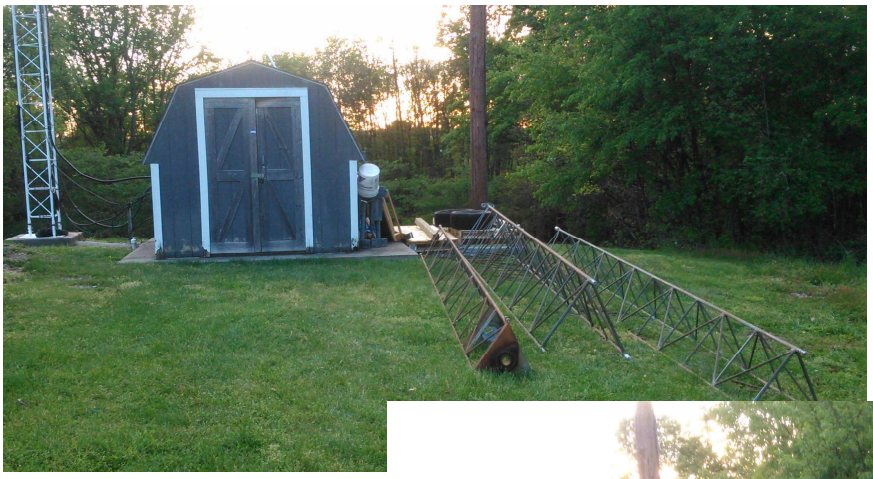
Jody - K3JZD

In the last issue, we got as far as describing how we had managed to convert one vertical tower into three horizontal sections. But, they were left scattered all about up on the hill. We will continue on from there.

Robert L Bastone - WC3O, and his trusty Tacoma steed, made a clandestine visit to the hill in Sewickly. There, by his-self, using ropes, poles, jacks, leverage, and unknown trickery, executed Plan A. He managed to get the three scattered 20 foot long steel tower sections, weighing in at a combined weight approaching 1000 pounds, securely bundled together and lashed onto his fabricated 'pallet on skis'. Whenever he was finished, this makeshift 'trailer' had been towed down to the bottom of the slippery hill, and was parked adjacent to the paved driveway where it could be loaded onto a vehicle for transport to the joint. Wow—what an effort!

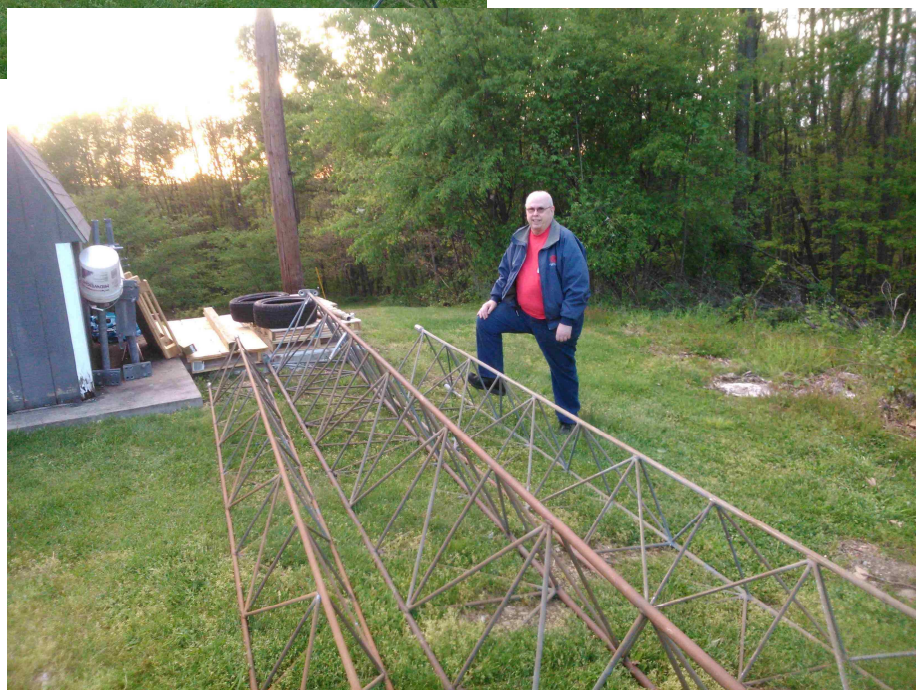
Photos by WC3O

Don - WA3HGW and his friend and fellow MG restorer George are accustomed to hauling MGs on George's car trailer. Don recruited George to help us out by hauling the tower sections out to the joint. As Don tells it: they backed the trailer up to where Cooky had left the tower sections. George said lets start by loading this biggest base section first. George said we'll just lift one end up of this big section up onto the trailer and then we'll push it up on there. After one brief try at that, Don mentioned that this tower was solid steel and it does not lift or push quite that easily. They got it loaded, but only with the help of a jack to do the lifting and the straining winch on the trailer to do the pulling. George, having been a steel hauler, made quick work of lashing it down. And off they went. Unloading was accomplished by tying the tower sections it to the wooden pole beside the repeater shed and then pulling the trailer out from under them. As the pictures show, the tower sections are now residing at the joint.



It is a good thing that we did not trust this moving job to Roadway (you would have to be a reader of the Wireless Association of South Hills *WASH*Rag to fully appreciate that).

Photos by K3JZD



So, the 'easy part' is complete. Protective coating, some engineering, a hole, a hole full of a lot of concrete and properly positioned anchor bolts , and a scheme to make it vertical again are all in the future. Are we worried that someone will pick up these sections and carry them away in the meantime. Naw!

Would I Be Doing SOTA Activations If I Lived In Colorado ??

Jody - K3JZD

While Richard - N2GBR does some pretty challenging Summits on the Air (SOTA) Activations, most of mine have been in the category that Richard defines a 'boring'. Most of the summits in our part of the country are more like plateaus than peaks. We do a bit of 'bushwacking' (walking through the woods where there is not any obvious trail), but our summits are not really that high in elevation. I read the SOTA blogs and articles about the activations that are being done in Colorado. As I read articles like this one that Brad - WA6MM recently posted, I really have to wonder if I would be doing SOTA activations if I lived in Colorado.

I had a fun but tough first activation of Galena Mountain in Colorado last weekend. Galena Mtn is a 2.75 mile (5.5 m RT) climb with 2900 ft of elevation gain up to 12,893 ft. The

road around Turquoise Lake was free of snow but the trail head parking lot was closed. I ended up parking at the entrance to the parking area, keeping my truck just off the main road. The snow was firm when I left the trail head at 7am and I didn't yet need snowshoes. – I put those on after the first hour of climbing. There is still a lot of snow here and I underestimated how long it would take me to summit.

Part of the issue was trying to follow the Colorado Trail for the first 1.5 miles and 1300 ft of climbing through the snow filled forest. I saw no evidence of other hikers so I had to break trail. Following the trail markings on trees started out rather straightforward but got more difficult to follow higher up. I needed to navigate with my iPhone GPS app to help keep me close to the actual trail and most efficient path up the mountain. I only got temporarily *lost* a few times ;-). This slowed down my progress until I got above the tree line and navigation became much easier.

I left the Colorado Trail at 11,300 ft and headed directly north towards Galena over continuous snowfields. I was startled many times hearing the infamous "whumpfs" beneath me. There where no signs of surface cracks but it always gets my adrenaline going when I hear that sound! It appeared the recent snowfall had not bonded well to the deeper layers in this area. So, I decided to stay away from the steeper sections of these slopes and take a safer route. I was able to take my snowshoes off around 12,000 ft as I entered more mixed rock/snow terrain for the final push to the summit.

I finally reached the summit after over 3.75 hours of climbing. I was about an hour behind schedule. The weather was great with little wind and blue sky above me. The forecast called for showers after 12 noon and I could see the clouds in the distance. I set up my antenna and operating position just to the south of the summit proper. I was not able to spot myself via SotaGoat even though I had bars on my phone. In fact, I was able to call my XYL to let her know I summited. Not sure what the problem was. In any event, since I posted an alert on Sotawatch I was confident I would get spotted via RBNhole.

I started on 40M CW but the band seemed really dead. I gave up after several minutes and went to 20M CW. I quickly made 15 contacts.

It was now 11:45am and the clouds were moving in around me – weather changes fast up high! It was time to pack up and descend. I was back to the trail head in under 2 hrs and it didn't start raining until I was driving home.

Many thanks to all the chasers looking out for me! Until the next time…

73, Brad
WA6MM

Now, Brad does have a reputation for doing the tough ones. So, I'm sure that with all of the summits that there are in Colorado, that there are many much easier summits for people like me that can handle doing the 'boring ones'.

So, I guess the answer is: Yes, I would be doing SOTA activations if I lived in Colorado. But, I would be real careful about who I went out with !!

Jody - K3JZD

Raspberry Pi ?? Arduino ?? Something Else ???

Jody – K3JZD

When Dave – AA3EE gave his 'brief introduction to micro-controllers and microprocessors for hams' Elmer Presentation in April, he stated several times that first you need to have a problem to solve. Then you need to choose the right tool for the job. I thought that I would build on that, based on some experiences that I have had with using these small devices as real-world controllers. I will provide some examples of the kinds of choices that I had to make to choose the best tool for the job. I utilize the regular boards that allow me to use plug-in expansion cards rather than the smallest boards that require all soldered connections – they cost a little more but for my one-of-a-kind projects it is not significant.

Regular readers may recall that in the June 2016 issue I published an article describing my K3NG Keyer with additional features that I added to automatically control the PTT on my SDR software and small amplifier, and to do real-time keying of my SDR hardware. I have another article that I wrote a while back but have not published yet which describes an Automatic Battery Cycler that I built to use for managing my SOTA Li-Ion batteries.

I used an Arduino for both of these projects. Why? Well, the K3NG Keyer was a no-brainer – I wanted to build on K3NG's keyer software and his software ran on an Arduino. Period. I considered using a Raspberry Pi for the Automatic Battery Cycler. My original idea was to have it text me whenever it had taken the battery pack down to the desired 10v level. With the Pi's onboard networking capability, it seemed like the ideal choice. But, the Raspberry Pi does not have any onboard Analog Inputs. So I would have to add external A/D Converter hardware to be able to sense the battery voltage. The Arduino has onboard Analog Inputs. But the Arduino does not have a network interface. I would have to add additional hardware to get a network interface. I elected to dismiss the neat idea of getting a text message and use an Arduino with a just simple 'I'm done' indication.

Although all these devices are fairly inexpensive, cost can still play a role. The Arduino boards are cheaper than the Raspberry Pi boards. But if you need Internet connectivity for your Arduino, the plug-in Arduino Ethernet Shield that you would have to add to get networking is quite expensive. So the cost of an Arduino board and an Arduino Ethernet Shield will exceed the cost of a Raspberry Pi 3 board which has onboard Ethernet WiFi hardware and firmware. (Earlier Pi's require an inexpensive USB WiFi Dongle). If you really needed to use a Pi for some application, and you also needed Analog I/O capability, you could purchase a plug-in "A/D Converter Pi HAT" to get the Analog I/O. But, at a price. (A plug-in "Pi HAT" is equivalent to a plug-in "Arduino Shield").

Whenever you are monitoring and/or controlling real-world devices, you will often need to use some external interface board(s) for your sensors or controllers. When you need them, the electrical characteristics those external interface boards comes into play. For example, right now I'm looking at designing a device which will monitor the position of the weights on a cuckoo clock and provide an indication when they are halfway down to the floor. (This is for a neighbor who does not ever remember to pull the chains, so his clock ends up stopping all the time). This looked like a job for Raspberry Pi because I could put a neat user interface on it, and/or use it's WiFi interface to send him a 'wind me now' email or text message. I found an inexpensive sonar device on eBay that I'm thinking that I can utilize to sense the position of the weights. I ordered one of them to experiment with. But, I now see that the interface board for this sonar device uses 5vdc digital signals. Oooops. The Raspberry Pi Digital I/O uses 3.3v, not 5v. While there are schemes that can be used to interface a 5v device to the Pi's 3.3v I/O, I'm not so sure I want to get into doing that. The Arduino uses 5v Digital I/O, so an Arduino now looks like a better fit. Maybe just having an Arduino blink a LED to get his attention whenever it is time for him to pull the chains too wind the clock will be adequate.

I used Raspberry Pi boards to build a system to automatically turn on a driveway floodlight whenever I'm approaching my house in my car at night. It was based on WiFi messages. One Pi board in each of my cars and one Pi board in my attic. The Pi in my attic uses a plug-in 'Relay Board Pi HAT' to control the 120vac LED floodlight. And the Pi board in the attic uses WiFi to talk to my computer in my basement so that I can monitor the activity from there and remotely control it if needed. A perfect Pi application. I had it all working fine while I was powering everything up within range of my WiFi Router. But, I ran into trouble whenever powering up the Pi boards in the car when they were away from my house. They wanted to see my WiFi Router whenever they were powered up, not later on when they approached my house. So they never found my network whenever the car came into WiFi range. And the range was really not the greatest. Long story short, I ended up switching to using a Synapse Mesh Network instead of WiFi. I still have the Pi in the attic, and it still talks to the basement computer. But I put Synapse boards in the cars and interfaced a Synapse board to the Pi in the attic. So, here I had to go to a Raspberry Pi plus 'Something Else' solution.

One more example. I bought a digital frequency readout circuit board for a Kenwood TS-520S from Steven – KV6O. The original Kenwood DG-5 Digital Readout accessories are scarce, expensive, and problematic. Steven, with assistance from Todd Harrison (Toddfun.com), had created an Arduino based emulation of the DG-5. Stephen's board was designed as an Arduino Shield. In addition to displaying the frequency, the Arduino also interfaced to my computer via USB to make the present mode and frequency available to my logging software. I ordered parts, built it, and got it going. Essentially it counted the pulses on each of the three ports on the TS-520S. It did each of them in order, then did some calculations to arrive at the present mode and frequency. It worked wonderfully on 80 meters – nice steady accurate readout. But it had some random fluctuation in the frequency readout on 40 meters. On 20 meters and up, it was jumping all over the place and was unusable. What was happening was the pulses/second increased as you went up the bands. I rewrote Steven/Todd's software to make it as efficient as possible. I clocked the gating hardware on the Arduino Shield with a crystal instead of letting the Arduino's timers clock it. Long story short, none of that worked enough to make this useful. Even though the Arduino is a micro-controller and not a microcomputer, it still does some 'housekeeping stuff' that cannot be turned off. The pulses that are coming in on the Arduino's Digital Inputs were triggering I/O interrupts which were incrementing software counters. The Arduino 'housekeeping stuff' was running at a higher priority than the I/O interrupts, which made the pulse counts inaccurate at the higher pulse per/second rates. This one is now sitting in a shoebox. Whenever I get back to it, I'm thinking that I will have to use an Arduino and 'Something Else' solution here. I think that I will piggyback a simple PIC board onto this Arduino Shield and use it to do the time-critical pulse counting and accumulating, and then periodically pass the totals down to the Arduino. The Arduino can continue to do the math using these totals, run the display and talk to my computer.

So, finding the right tool for the job is not always easy. While you are figuring out what problem you want to solve, think about the big picture. Think about the external interfaces that you will have to deal with and any constraints that they impose. Think about the critical timing issues, if there are any. Look at the features and limitations of these various controller boards and pick what looks like the best one for this task. Think about how you want the software to work. If you can't describe it very clearly in an English language story, you can't program it. Always consider the 'what-ifs' that you will need to deal with. Prototype it as you go. Start with a small part of it and then build on that. Be prepared to change course if you run into a roadblock.

Whatever you use or do, have fun with it!!

Jody - K3JZD

Report of My Two-Day SOTA Expedition to VA, 4/19 & 4/20

Richard - N2GBR

Thursday WX forecast was for 30% chance of Rain and 70% possibility of thunderstorms later in the day.

Located just off the northern section of the Blue Ridge Parkway (BRP) and also on the Appalachian Trail (AT) are the Priest and Maintop Mtn. These two 4000ft peaks are both 10pointers. I had originally planned to do this hike about 3weeks ago, but my plan was busted by fairly extreme weather when I awoke to thunderstorms with Lightening and the threats of high winds and even a Tornado warning (that was a fist for me). Anyhow, I made the sensible choice and only scouted the trailhead on that occasion then took a wandering route home and bagged a couple of other summits.

This visit looked like the weather would hold-up for me, but.. there was the threat of an afternoon thunderstorm and a little rain. I took my normal routine down to VA leaving home (Pittsburgh) at around 8pm.. First stop at Breezewood for dinner and gas, then arrived at 00:30hrs at my chosen rest-stop on I81 for a few hours sleep. I awoke at ~6am, made coffee and had a nice Mountain house Breakfast Hash and then hit the road. I arrived at the trailhead around 0645... Fortunately I met a local who warned me Not to take the road marked 4wheel drive only.... "it's probably passable in that... but I wouldn't do it", well the next option was Crabtree Falls, a little further down the road.

The Crabtree Falls parking area is huge.. room for approx. 50+ cars etc. When I arrived I was the only one there. I grabbed my backpack, gave its contents the once over... drank a liter of water and headed up the trail it was 7:30am. The First part of the trail goes up to the top of Crabtree falls with quite a few viewing spots of the falls and surrounding valley.

At the top of the falls there is an obvious continuation trail that flattens out and eventually hits another parking area (this is near the other end of the 4-wheel drive road) 2.2miles// ~1700ft up. I followed the road for approx. 0.5m and reached the AT. From this point it's Maintop Mtn Right and Priest Left... I went right and followed the AT up to the top of Maintop which is approx. 2.7miles // 800ft up.

The activation on Maintop went well, I put my Link dipole up about 15ft and started on 40m SSB. I switched to 60m CW (the KX3 tuned my dipole for this band) to make a contact with N4EX (my first time on 60m). Then over to 20m CW where I made a bunch of contacts.

Finally I went back to 40m SSB as I had spied that Merle / Herm (KB1RJC & D) were activating Hawksbill (which is approx. 40-50miles north of me). I made a nice SSB Summit to Summit (S2S) with them, and then logged W9MRH. At this point it was time to pack-up and move on to attack the Priest. The 3miles back to the previous Junction with the Crabtree falls path/road was nicely interrupted meeting some through-hikers "Penguin" and "Drag'in".

At the Junction of the Priest, I was down to my last 0.5L of water... ummm OK. The Hike up the Priest is only 1.6miles and not too steep or Rocky.. nothing to see from the top... not too hard of a walk really.

I set-up along the AT and worked CW only across 60m, 40m and 20m not that many QSO's but more than enough to activate. The sound of Thunder rolling around North of me told me it was time to get a move on. As I made my way down I it started to rain a few big drops. I picked up the pace and then ran into another through hiker...with a great big Union Jack flag on his hat.... he just didn't want to be asked if he was Australian! So the "English-Detective" and I exchanged pleasantries for a few mins ... we were brought to our senses by another very loud roll of thunder.

As I reached the upper parking lot it was now raining softly, but I was in the trees and not feeling it too much. I stopped for water at the main stream using my Sawyer gravity system I soon had a liter filled.. I downed that.. made another couple of liters and then set off for the car. The last couple of miles were tough.. steep downhill... down on calories and a little dehydrated.. What a relief to reach the car just after 6pm. That days was approx.. 15miles and +4,000ft of climbing.

The last part of my day was hampered by campsites not being open yet at Otter Creek and Peaks of Otter, so I ended up grabbing a room at the Peaks of Otter resort. This was as far South on the BRP as I had planned to go and right beside Sharp Top Mtn.

Sharp Top Mtn, Apple Orchard, High Knob.

WX forecast was for Showers and possibly thunderstorms later in the day.

When I found my planned campsite closed I carried on down to Peaks of Otter where I found that campsite closed also, so I ended up grabbing a Hotel room at the resort there. It was worth it for the good nights sleep. Refreshed I decided to go for Sharp Top Mtn. just a few hundred yards from my Hotel. The trail is easy to find rising directly from the Parking lot. The Trail is pretty good for the most part. There's a short rocky section around the middle of the hike, but after that it gets better.. At the col you can choose to go to the Sharp Top or the secondary summit (I forget the name).

I carried on to the top where there is an old Stone built house and stone built viewing platforms with 360views. I snapped some pics and then went to look for a good spot for my Antenna set-up.

Fortunately knowing it was a rocky top I brought my Sota-pole. I set-up beside the stone house

The activation went well and I soon had enough contacts using CW to activate the peak.

The walk down was pretty easy and by now other folks were making their way up the path. I was back to the car in approx.. 30mins.

Next on the list was 'Apple Orchard', this one is just off the AT, but there is also a simple walk in off the BRP which most of the SOTA folk take. I choose that simple walk too, as I was judging the weather (storms) and my plan for the last activation of the day.

So the walk to the top took a mere 15mins or so and I passed by the "Bedford Air force station" Federal Communications site carefully but didn't see any cameras? Anyway about 150ft passed the building is the AT and there's a path cut through the grass to the AT from the car park. I set-up on the AT but had forgotten my SOTA pole so I used the couple of small firs in the open field and put up a low Dipole (~10ft). I made CW contacts only on 5Mhz, 7Mhz and 14Mhz,

pretty RF noisy, but I got it done. I was interrupted a couple of times by through hikers… "what the heck are you doing?" and a very nice group of female trail runners stopped for a chat… J I swear I took a couple of photos… but well no, I didn't, just one!.

The next and last summit for the day was High Knob approx.. 1.5hrs drive, but I had plenty of time.. expecting evening showers on the BRP, High-knob is on the other side of the Shenandoah Valley and I expected to clear the showers. I stopped on the BRP at one of the viewing points and made some late lunch + coffee.

The hike in is pretty easy, with a nice path from the car-park area. The Yellow-blaze path is a little steep/rocky in the middle but only about 1.4miles total with a moderate climb so in all it took only 45mins.

The fire-tower has open steps and the view is pretty good (as you'd expect). I used the hand-rail to support one end of my dipole and set-up on the grassy open area below.

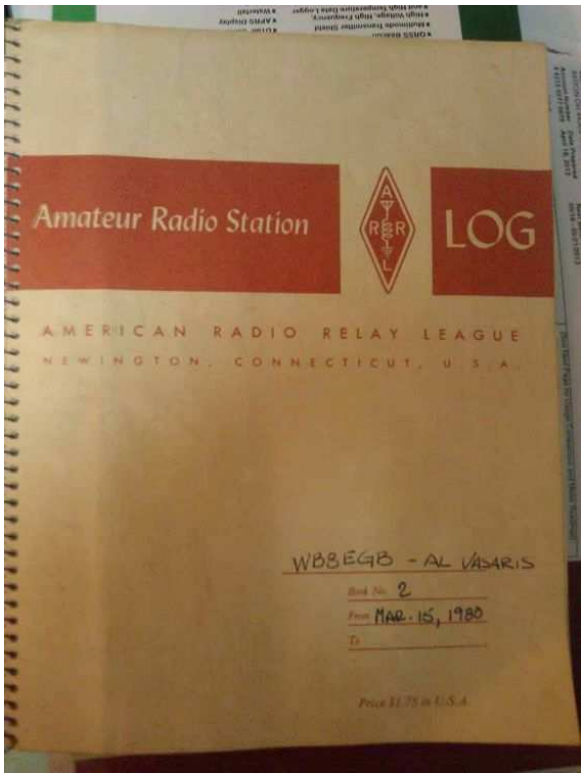
The worst part about this summit was either the biting black-flies or the lack of LTE/cell service.. anyway using CW I was eventually able to make some CW QSO's even with the horrendous local noise and QRN.

I recovered well from the 16miles of hiking on Thursday and the Sharp-top hike was pretty easy considering.. I had expected to be more fatigued.

CW is now a viable operating mode for me when out on SOTA, this is perfect timing considering the current Propagation conditions we're experiencing. It was exciting to get on 60m for the first time, I'm happy that NE4X suggested it. 60m worked out well for Daytime NVIS contacts within about 300miles.

This trip gave me 48 SOTA activation points. So now I'm within 75points of Mountain Goat, which is one of the goals for the year… the other was to activate on CW.. which I've done. I now have to keep persevering on the CW and get my ears tuned in better to read CW at higher speed.

Richard // N2GBR



A Real Log Book From Days of Old

Dayton People

An Outdoor Event Idea de K3JZD

The **Third Annual Scorch Your Butt Off** event will be held from 1600-2200 UTC on July 16, 2017.

Field or Home (yards at home do not count as a field station). Single Op or Multi Single.

This is a QRP CW event - 5 Watts Maximum - Multipliers for field operation, battery or solar power, and the maximum Heat Index. (However, shade is allowed)

http://www.qsl.net/sybo/Scorch_Your_Butt_Off/SYBO.html

Ever notice that Hams have lots of ways of having fun ??

**** Skyview VE Testing ****

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.

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

Testing schedule, what you need to bring, directions, and map are all on http://www.Skyviewradio.net

Welcome New Members !!

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

KC3JBS Bob Buchwald Sarver

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.

>>>>>> WARNING <<<<<<

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

Skyview Digital Challenge Scores

Final Retired Category Scores

K3JZD - 755,073

K3CLT - 572,112

K3RMB - 462,613

N3WMC - 298,711

W3VYK - 201,837

W3CDW - 76,967

Final Working Category Scores

AJ3O - 231,103

AA3EE - 213,091

WD3HAY - 166,442

These Scores were based on QRZ Mileage, the Band used, and Countries. Full details of how the scores were calculated can be found in the Files section of theYahoo K3MJW Reflector. You can also find this same information on http://www.nelis.net Click on my QSL card and the go to the 'Files Page 1' Listing.

Skyview Digital Master Certificates Were Awarded To

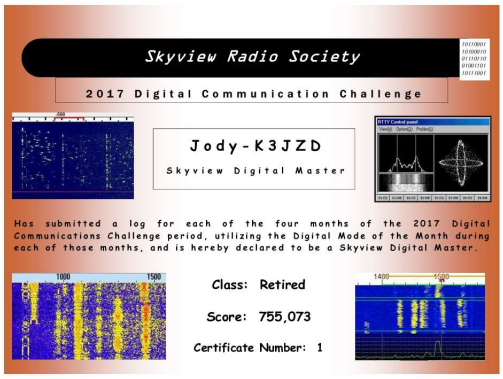
K3JZD - Jody

K3CLT - Chuck

K3RMB - Bob

N3WMC - Bill

WD3HAY - Bill



Skyview Digital Challenge Wrapup

Well, the 2017 Skyview Digital Communication Challenge is History. We did the JT65 Mode in January, the RTTY Mode in February, the PSK31 Mode in March, and the JT9 Mode in April.

Propagation was not the greatest during much of that four month period, but there were some pretty good openings on several days and evenings. We worked a lot of European and South American stations. Occasionally some of us got lucky and worked into Asia, South Africa, or down under into Australia or New Zealand.

Five of us stuck it out through these tough times and earned 2017 Skyview Digital Master Certificates. Others got all setup and configured for doing digital modes, but did not submit logs for all four of the months.

I spent most of my time on 40 meters to take advantage of the scoring multiplier. I tried 80 meters a few times, but did not have a lot of success working DX there due to my using a low shortened antenna.

While there are those who say that the digital mode contacts are not 'real contacts', I have to disagree. A digital mode contact that is made by using wireless RF signals is a valid accomplishment. I spend most of my time on the digital modes calling CQ, and I am always amazed to see some DX station answering me

Hopefully everyone that participated in the 2017 Skyview Digital Challenge learned some things about using digital modes and enjoyed themselves.

It does not take an organized effort like this for you to give these digital modes a try. You can have a go at it anytime that you please. We now have more folks at Skyview who can give you advice on getting setup and operating them.

There is some guidance from the 2016 Digital Challenge on using these various digital modes that can be found in the Messages and in the Files section of the Yahoo K3MJW Reflector. You can also find this same information on http://www.nelis.net Click on my QSL card and the go to the 'Files Page 1' Listing.

Jody—K3JZD

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 . . . . .

See the 'Top 10 Amateur Radio Uses for the Raspberry Pi" at:
http://www.hamblog.co.uk/
Lots of other stuff that may be of interest is there also

Some more Raspberry Pi stuff is at:
http://www.raspberryconnect.com/ and
http://tinyurl.com/lzetkxp
Most 'Raspberry Pi for Hams' stuff seems to be utilizing the Pi as a small inexpensive computer to run the same programs as you would normally run on your regular desktop or laptop computer.

How about a really small QRP Transmitter is built and sold by Jim, KH2SR (just the thing to carry with you in case you end up stranded on a deserted island someday).
https://www/etsy.com/shop/QuirkyQRPHamRadios

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

Stay Off Of The New Grass

Dave - N3TIN has leveled the path of the water line that was put in last Fall, and has planted grass there. Please avoid driving on this new grass.

Next Newsletter will be August 1, 2017
Closing Date For Submissions : July 15, 2017
K3JZD AT ARRL DOT NET

Issue Wrap-up

Once again, the number of pages exceeded my expectations. But looking back, I see that I am partially responsible for that. At least I managed to keep the file size from getting crazy like the last issue was.

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.

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

Jody - K3JZD

Space Weather News For 12MAY17

COSMIC RAYS INTENSIFY: The solar cycle is plunging to its lowest level in years. As sunspots vanish and the sun's magnetic field weakens, cosmic rays are penetrating the inner Solar System in greater numbers than usual.

High-altitude balloon flights over California have detected the change in the form of increased radiation levels in our planet's atmosphere.

Visit today's edition of Spaceweather.com to see the latest data and to learn how intensifying cosmic rays can affect us on Earth.

Q5er Editor & Publisher: Jody Nelis - K3JZD

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, this is the place - have it forward msgs to your email

Is this how your dining room looks ??

Where are the pictures of your shack ??