

NET CONTROL STATIONS

1st Tuesday; Jeff KG7HZT

2nd Tuesday; Mihai W4MHI

3rd Tuesday; Duff WA7BFN

4th Tuesday Craig W7CDP



RV-Travelers Net

Tuesdays 7PM PNW/Digital WA-2

JULY/AUGUST 2020



Valley Camp - Re-Visited Mike NO7RF

I wandered toward Valley Camp, a quick 4 hour roll along various high-ways and freeways to hook up with the PNWDigital folks. A few of us were collecting there to do some PNWD picking through a large batch estate and other goodies donated to Valley Camp that were earmarked to benefit hams. So it was an excellent excuse to make a run over to see Valley Camp again for a different set of circumstances.

If you are a ham and haven't been to Valley Camp, most especially as an RVer, tenter camper or simply as a one who wishes to get away for a few days, you are in for a special treat. You will find repeaters, HF antennas, pulleys in trees 100 foot tall trees ready for your wire, all there for visitor use. WiFi, APRS digi and iGate, DMR, D-STAR and FM repeaters for use by any hams. Hiking trails, wildlife, pavilion, cabin, bunkhouse, all available to some degree during C-19 times. Valley Camp is a non-Profit, income is solely by donation, operated by hams Thom **K7FZO** and Teena **K9HAV**, nice folks and awesome camp hosts. Check out at VC: valleycamp.org

The picking was superb for anyone who does repeater installs at commercial sites. Heliac, connectors and HD galvanized tower mounting hardware galore. Much was salvaged and swapped hands this day. Rob AF7PR will be going back with a pickup to get the rest of the 1/2" and 7/8" Heliac. VC's donation to PNWD will save us several thousand dollars in our future repeater deployments.

It was fun to look through the small and oddball parts. Part of picking (especially if you are an American Picker show fan) is the history associated with the stuff you find. I am like Mike (from the show), the history of stuff is cool. For instance, some of the rack faceplates I pawed through were packed in old newspaper from 1974. Teena pulled out some stuff that was educational training material from Devry Institute, in a box from 1962...and it had Thom's name on it...but it was Thom's dad who was in training back then.



Warm day but fun to pick. It was the first time I've been to Valley Camp outside of one of their big events and it really was nice to be able to visit, relax and just veg with beverages and great company. I went with simple plans to eat out of the cooler and toss out a tent or just a tarp, or more likely just sleep in the car. As it turned out, dinner was with Brad and Donna with Salmon burgers in Brioche buns, beans, home brew condiments and Heineken. Delicious and very kind!

Valley Camp - Re-Visited

Housing was the bunkhouse as it turned out no one was in residence (C-19 restrictions keep it very limited and hardly worth keeping the heat on). Luxury over a Civic seat for sure. Next morning, I got an invite over the Valley Camp DMR repeater on Local 2 for coffee at TNT's place. Teena also provided blueberry morning cake slices and I think we killed off 2 hours sitting out in the yard jawing while watching the deer, birds and bugs and simply enjoyed the cool heavy air of morning.

It really is amazing how many hams that that crew knows. But after 20 years of putting on big ham events like the Digital Summer Gathering, you meet folks you can understand why. Add in a couple of nice people and you, well, get the drift and maybe some of the magic from a VC stay. I had to leave by noon to get home in time for an event in Winthrop or I likely would have spent a bit more time there.

So it was a big weekend score for PNWD and fun time jawing over ham radio and all the ham that Thom and Teena seem to know. Makes it a small world and really is part of that ham radio of old, the commandery and friendships that have moved well beyond that voice in the speaker. We are already talking about getting back there again, sooner than later to do more of this ham thing.

NOTE: I adapted this article from an Email recap that I sent out to the principals at VC this particular weekend. Part of my desire was to provide it to the RV Net rag was to highlight Valley Camp. It is a great resource for hams and RV'ers. They are in tough times now being essentially closed due to C-19 and not likely to get better this year, maybe next as well. So consider wandering out to Valley Camp to enjoy it and support it. If you can't, then maybe a donation dropped in the mail. Check out their [website](#). We really do want to keep Valley Camp around in the years ahead.



SOMETHING SUPER!

This Way Comes.... Jim WA7VFQ

Camping with your Amateur Radio is a lovely thing to do. You've already have your radios – why not take them along and have a mini-field day wherever you park it. I became a trailerite, before I became a Ham, and once I became a Ham – I wanted to bring along my radios. First it was just an HT, and then it switched to bringing a MMDVM Hotspot and finally I decided to camp with HF. But what to do about an antenna??? Thus, my search for the BFM antenna, it took me awhile, but I have arrived at a point where I'm satisfied and I'm parking my search for multiple reasons.

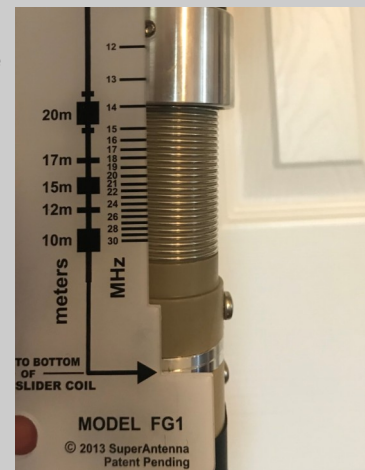
My first portable antenna system was a Buddipole Deluxe antenna that was gifted to me. It was the cup of tea



my Elmer was looking for, and he gave it to me. Great gift, it's an amazing antenna and as the years progressed it went along on every trip and still does, however, now I configure it as a 2m meter dipole for mobile communications. I occasionally assemble it in a j-pole configuration for 70cm. It's a great system, however I find tuning it for HF a bit too tedious and frustrating – so I keep it around to do my 2m and 70cm work.

A couple of years ago I was camping with a group of friends and one of them pulled out his brand new Icom IC7300 to show to me. He had this really cool small vertical clamped to his picnic table. However, I wanted to see the radio being used, so I ignored the antenna and focused on the radio. He was showing me FT8 and phone usage on his new radio. I loved the waterfall display and was very intrigued as he lit up 20 meters on 100 watts and made contact with a station in Alabama, and then one in Alaska – both on phone. Then he showed me FT8 on 35 watts – his first station contact was in Japan then Hawaii and followed up with Ukraine. I had to have that radio! But I continued to use my Buddipole and continued being frustrated with both setup and performance. It wasn't till this winter that I decided that I needed to try something better. So, I spent time with a ham-stick dipole setup and I wasn't so totally enamored with it either. Nothing is perfect, but I had watched my buddy do so well with radio and I was languishing – and then I remembered that small vertical antenna and he had clipped to his picnic table. That prompted a phone call and an order on Amazon and my new antenna that I have grown to love these past few months. Both phone and digital, it gets me there. I purchased it in mid-April. I have made over 350 contacts in a mix of phone and digital contacts in under 3 months since I first put it up. I've worked 46 states and made contacts in Japan, Australia, New Zealand, Norfolk Island, New Caledonia, Ukraine, Russia, Bulgaria, Italy, Chile and Brazil. All with my little vertical antenna.

Little, well when mounted on its mini-tripod base, it's 7 feet tall. It's the Super Antenna MP1DXMAX. It will do 80 to 6 meters and 2 meters at the same time. The makers sell it only thru Amazon. Their website: <http://newsuperantenna.com> has lots of details and setup configuration information. The MP1DXMAX comes in a rather small bag that holds all the parts and wires. Everything is very well made and well thought out. It's a Swiss Army knife approach and it does it well. There is another version that comes with a taller tripod, however if you already have a solid camera tripod, you won't. The tuning is an interesting aspect on its use and it's easy to get a reasonable SWR well below 3 that is easily tuned with my Icom 7300. has Bluetooth connectivity, the Rigexpert 230 Stick. I attach it to the coax at then feed it. I have yet to set it up on a taller tripod and not sure I will even give it a try.



SOMETHING SUPER!

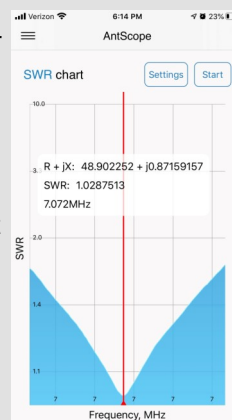
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Whenever I do digital modes, I like to tweak it as close as I can to my set frequency and go from there. I use a relatively new on the market antenna analyzer that connects to the

back of my radio and turn it on. I can take a quick look at how the current antenna tune is sitting at that moment and then go to the antenna. I grab my iPhone and open the app AntScope (available on Android also) and connect via Bluetooth, and head to my antenna. Using the app, I can tune the antenna, step back about 10 feet and check the SWR on my phone. I can readjust and check it again if necessary. The app lets you zero in on the frequency you are going to use by inputting the frequency range and number of check points. If I'm using FT8 and FT4 – I'll be using the frequencies 14.074 and 14.080 on 20 meters, so I set a scan for 14.000 to 14.160. Then the middle of the curve you will see



you get a really nice readout of your SWR. Attached you will see a recent tuning for 40 meters, The SWR was 1.0287513 at 7.072MHz with FT8 needing 7.074MHz. Pretty nicely tuned for the frequency I was going to use. It took two quick minor adjustments of the slider on the SuperAntenna to dial this in this close. Easy and quick for sure. To be honest, the slider frequency guide that comes with the SuperAntenna tuned it to 1.4 SWR, close enough, but I wanted to tweak it to see how close I could come.



I recently had a contact with a station in Kentucky, we exchanged pleasantries and dual 59 reports, we were both 10 over. He then did the standard "what's your rig" after he told me about his Icom 7610 amped to 1100 watts and his 120 ft high beam pointed at me. I was proud to report my Icom 7300 at 100 watts with my 7 ft SuperAntenna. He said he'd have to look that one up. . . and then proceeded to say the bands are really open. This has happened more than once on SSB. Whether you're operating SSB phone or playing with weak signal digital modes – this is not necessarily a "compromised" antenna.

All in all, the SuperAntenna MP1DXMAX is a great companion for camping/RVing or operating QRP on a hilltop. The carry case is small and compact about the size of a lunch box. The performance is big, and the setup and tuning is on the quick and easy side. One hint – don't open the packaging and discard and toss everything in the bag. Cut off the tops of the plastic bags that things reside in and keep the labeling with them. I tossed in some extra ziplock bags quart and half gallon size to help keep things organized and recognized. Keep the excellent directions with you, I punched mine and put them in a 1/2" ring binder.

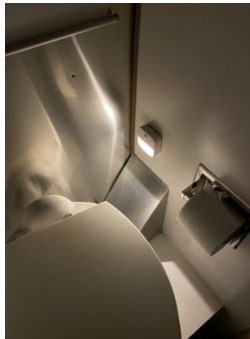
Happy Ham Camping – 73!



Another Inexpensive RV Mod

Dale W7HLO

In a previous newsletter I wrote about an inexpensive way to change the color temperature of the harsh LED lighting found in many new RVs. At the risk of unmasking my Scottish heritage, here is yet another cheap modification that we made to our travel trailer. My wife and I are at the age where we tend to frequent the bathroom during the night. The bathroom in our RV isn't very large and can be difficult to navigate in the dark. Turning on one of the overhead lights tends to wake up the spouse and both of our dogs. So, seeking an inexpensive and easy solution to the problem I turned to my old friend Amazon. https://www.amazon.com/eufy-Generation-Bedroom-BathroomEfficient/dp/B07PB9Z1ZZ/ref=dp_ob_title_hi



I found this 3-pack of motion sensitive battery powered lights. They also have a photocell so only come on in the dark. They come with an adhesive backing which allowed me to stick it onto the bathroom wall near the head. Now when we walk into the bathroom in the dark the light comes on automatically. The light came with AAA batteries and we are now in our third season and yet to replace the original set. The price has gone up since we purchased ours but this is still a very convenient and inexpensive enhancement. And because it's a 3 pack and I only used the one in the RV I still have 2 left over.

RV Battery Management



Dale W7HLO

As ham radio operators we generally have a much better knowledge of all things electrical than the general public. However, some of us may be new to the world of RV's and the idiosyncrasies found within them. Even if you don't do much boondocking, it is a good idea to learn all the little details of your RV's electrical system and how to manage your battery capacity.

The majority of the camping that Jane and I enjoy is in areas that do not offer electrical hookups. When we first got our trailer we were very conservative with our electrical usage yet surprised at how quickly our battery voltage levels dropped. As a result I installed a Battery Monitor system (more on this later) and began to discover what was going on within the hidden recesses of our Airstream. Here are some of our discoveries:

Battery Disconnect: Unlike many trailers, the Airstream doesn't have a pure disconnect switch. There is a switch labeled "Store / Use" which implies it is disconnecting the batteries from the trailer loads. When toggled one can even hear the solenoid latching on and off. After installing my battery monitor system I discovered that there were still devices drawing power even when this switch was in the "Store" mode. If we put our trailer in storage with a fully charged battery and place the switch in the Store mode, within 2-3 weeks the battery voltage will be down in the 12.1V range.

CO2 Detector: For some reason, some RV manufactures feel compelled to keep the CO2 detectors powered up even when the disconnect switch would lead one to believe otherwise. Supposedly this is a safety feature and admittedly the detectors do not draw much current. However, if left unattended for a few months they will drain a battery down to unacceptable limits.

Inverter: Our trailer came with a 1,000W inverter which, as it turns out, was wired directly to the battery bank bypassing the Store/Use switch. Now one might think that if you don't turn the inverter on it isn't drawing current. As it turns out, the rascal is sitting there partially powered up, just waiting for you to push the "On" button on the wall panel or for you to plug the RV into shore power. I was very surprised to learn how much power this thing was drawing. We typically don't use any AC power except when we are on shore power or generator (and thus weren't using inverter) so I simply disconnected the inverter from the battery bank altogether.

When the disconnect switch is in the “Use” position and you think you have most everything turned off, it’s interesting to measure how much power you are still consuming. The culprits in our trailer were as follows:

- Stereo
- Subwoofer
- Refrigerator Control Panel
- Hot Water Control Panel
- Ceiling Fan Rain Sensors

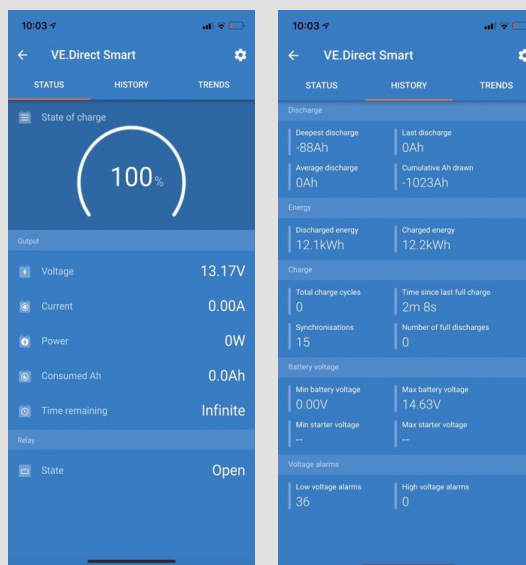


Victron meter

Battery Monitor System – It is my understanding that if one depletes a typical lead acid battery below about 12.1V it will severely shorten the lifespan of the battery. Wanting to preserve my batteries for as long as possible and also wanting to learn more about my RV’s electrical usage patterns, I installed a Victron BM-712 Battery Monitor System.

This system measures all current going in and out of the battery bank. Upon initial setup one specifies the expected amp-hour capacity of the batteries and based upon that and the electrical usage the system will report:

- Battery Voltage
- Real time current draw
- Amp-hours consumed
- Percentage capacity remaining



Screen shots of the smart phone app that receives data from the system via Bluetooth.

The system also provides a means by which one can set an alarm if the voltage drops below a certain level. With the knowledge gained by watching this system Jane and I are now able to stay in our trailer (in the summer) for 4-5 days without the voltage dropping below 12.1V. If we plug in our little 150W portable solar panel we typically can go for an indefinite time period. Of course during the shoulder season when one has to run the furnace we generally have to resort to firing up the generator to top the batteries off.



We visited our favorite(?) campground/RV park last week. Jump off Joe. We really enjoy the site and have had some great times with grandkids and friendly neighbors.

Being firmly attached to the ability to check e-mail and yes get into ReXx for communication, the need for a reliable WiFi or Cell signal is a must and now has become a must in the consideration process for selection :)

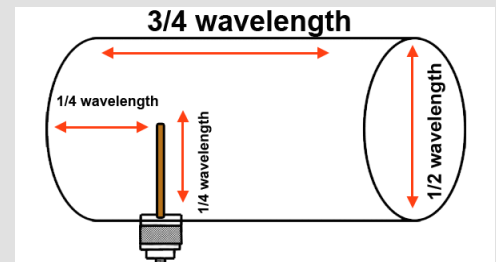
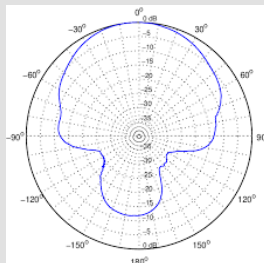
JOJ has a very weak and VERY SLOW wifi signal that comes and goes. And Cell reports 1X! My son in law supplied a remote WiFi repeater that for no amount of swearing would connect and provide a reliable signal. Come to find out that a lot folks invest a fortune in long-range Wi-Fi hardware, only to report back disappointedly that it hardly made any difference. In a lot of these cases there just wasn't any worthwhile service to work with in the first place. If the campground or marina has slow and unreliable Wi-Fi in the front office near the hotspot, no amount of technology will be able to make things any better further away.

Before you invest time and money in installing extra gear, find out if the hotspot you're trying to connect is actually worth the effort. i.e. good internet/ connection close in. In the JOJ case, I walked close in to the camp's WiFi antenna with Cellphone in hand and WALA... Good connection...decent speed and maybe worth some investigation. Remember WiFi is only the conduit. A Wireless ethernet cable if you may. If the internet connection is not good...even a amplifier/antenna array will give poor results... By the way the same thing applies to Cell amplifiers... if the Cell Signal is weak same results will probably apply...

Testing Testing. Try this. Take your laptop, phone, or tablet up as close to the hotspot as you can manage. Run some speed tests. Fast or the other speed apps are great. Try some web surfing...does it work good. In our case my laptop streamed a SpaceX launch with great results.

If the experience is a good one, then using long range Wi-Fi extending gear may help. But if not, save yourself some frustration and find another way online. OH if the performance is bad up close, there is nothing further you can do to improve it, except perhaps complain to management.

If you want to take on a fun project, check out the "Cantenna". A great little project that reports great results in the Pickup of the elusive, wily, WiFi signal. I've got one started on the bench and will report back results . In the meantime... Happy Rving Catch you on DMR (hope)!..



Spare parts I'm sure you have and a "can opener" So far maybe \$2.00 in parts...73s

NET DOINGS

Well the third month almost complete for the Rv/Travelers net. So far it's been a good run. We'd like your input.

1. Is WA-2 a good TG for the net?
2. Are Tuesdays good or would another day be better?
3. Format? Is there something missing? What would you like to see?

Please respond to PNW or WA7BFN@msn.com.

Thanks all for joining in. Remember you don't have to be an RVer to join in.

Safe Travels, Stay Safe.

Side Notes

I'm interested in the Dispersed, BLM, and off the grid camping. I'm looking for a trailer however my radio fund takes precedent. I use Gaila GPS. I'm hoping one of these years before I croak. I'll be able to get off the grid and play HF etc.

73

VA7DGP/VA7QU 3027135

Don Poaps

New Westminster, BC

