The Dummy Load
The Official Newsletter of the Tehachapi Amateur Radio Association
AC6EE TARA Tehachapi Amateur Radio Association

In This Issue

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A Word

Dan Mason, AB6DM, President

Greetings, TARA friends.

Our Summer has been super busy. From Field Day through Mountain festival, with two VE sessions, multiple PR events, fellowship breakfasts, growing the weekly 10M Tech Net, enjoying the weekly Just Because Net, and an exploding Whopper Wednesday gathering, all resulting in new hams being born as well as increased TARA membership! We are riding high, and there are lots more coming.

We will be helping the Tehachapi Chamber of Commerce at the Apple Festival on both Saturday and Sunday, October 12th and 13th. It will work like the Mountain Festival where we provide communications and help the organizers maintain situational awareness. We need hams to volunteer to be on our team.

I still want us to visit, and POTA activate the Manzanar Internment Camp sometime in October. It is located 140 miles North of us along US-395. No hard date set, but it can't be October 12th or 13th Apple Fest. I need to get their permission for the POTA activation based on the success of our last one a few years ago.

Our USS Midway visit has slipped to Saturday, November 9th. I have been in contact with the special event organizers, and they have let me know that the ARRL calendar has the date wrong (4th). Again, the deal is that you can get into just the radio room for free, being escorted by one of the Midway ham guys. It is quite a long trip to see just that, so some of us are purchasing tickets to tour the

entire ship. There is so much to see there, you can't see it in a day. Some people are overnighting nearby.

Volunteer Registration is now officially OPEN for the 2024 Ridge Rally car race! The Rally takes place on December 7th 2024, out in Jawbone Canyon and Kelso Valley. It's a fun event for hams where we set up a radio net along all the stages. It's an all-day event where they provide lunch. We will have some training, and new hams can get stationed with a veteran rally ham. Go to https://www.rallydata2.com/ to sign up, or email RodnocRacing@gmail.com with questions. Also, Paula at mpgibeault@gmail.com is very helpful.

And lastly, we are looking to have our Christmas party at P-Dubs in town on Thursday, December 12th at 6 PM. We loved Don Pericos but overflowed the end room. There will probably be the fun gift drawing/stealing game, raffle prizes, and our TARA Officer Election. Please look for the email we sent out calling for nominations.

This is a long one, and I'm sure I forgot a couple things. As always, we will continue to keep you informed via our many gatherings and emails.

EDITORS' Note:

The Dummy Load theme for October is a "Memorable QSO". Some of you have thousands of QSOs and some of us not so many, however when someone (usually a new ham or non-ham) asks you "what do you talk about" there is almost always one contact that comes to mind … please share that one, or dozen, that standout of all your QSOs.

Send them to w6qpa@ac6ee.org by 6 October 2024.

73 …Ray, W6QPA & Stephen, KN6ZGI

What I did on my HamCation

Mike Hardee, AC6PC

So, what did I do over the Summer? I think it was more like what happened over the Summer. In mid-June, after I finished all the required vegetation reduction for the fire season, I went out to our pasture to check on my G5RV. It had been giving me problems with wandering SWR and my Elecraft amp kept kicking off to protect its circuitry, so I had shut down the rig for over a week. When I got out there (it takes a bit of a hike to get to the feed point) I found that the entire antenna was in bad shape from all the winters it had endured (6 of them). The feed point connector literally came apart in my hands. The only thing holding it together was all the waterproofing I had applied to it. The radiating elements were frayed, worn and corroded badly. It was clearly time for a replacement, even the balun was in bad shape.

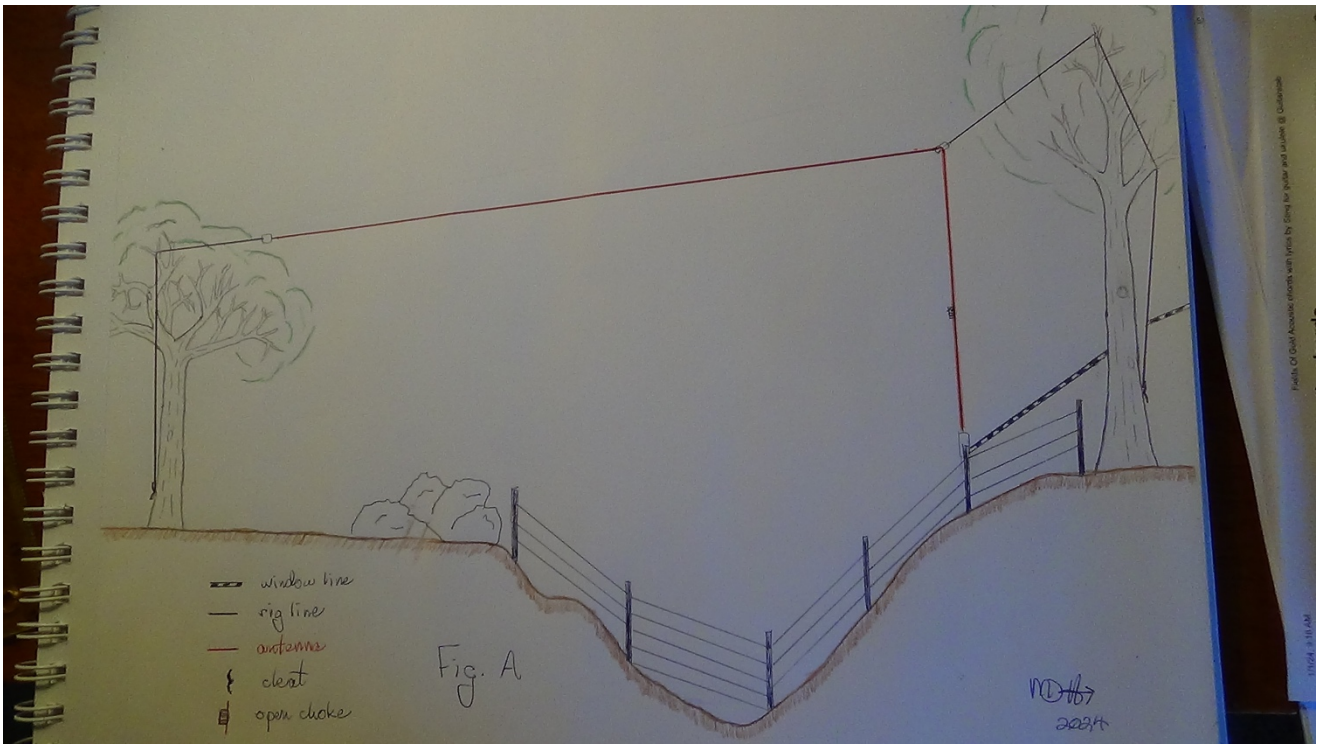
Now the old G5RV was oriented North-South; it had 246 feet (it had to cross a ravine between the pasture and the shack) of window line from the field to outside the shack where it was converted by a 9:1 balun to the last 50 feet of LMR 400 to the rig. While I had done some great DX with this arrangement, that 246 feet of window line and 50 feet of LMR 400

still represented some significant signal loss. So, I opted to find a solution that would reduce the overall feed line length and still use the same footprint of space as the G5RV, as well as the same balun to balun arrangement from the feed point to the shack.

The G5RV was 124 feet long and hung between two oak trees that were over 35 feet high. I had rigged a pulley system on the top of each tree so that the antenna would hang in free space, away from each tree attached by a rig line and insulators. The center point feed line ladder hung in between the two radiating elements and caused quite a bit of sag in the middle. This also provided a “flying flag” effect on the whole antenna in strong winds and when collecting ice, which probably contributed to its eventual demise.

I figured that an End Fed Half Wave (EFHW) antenna would fit in the same footprint, use the same pulley systems on the oak trees and I would be able to reduce the feed line run by at least 100 feet of window line. The question was, which EFHW to get?

After much searching and reading endless customer reviews, I opted for a MyAntennas multi band 7510 EFHW. It operates between 75 and 10 meters and has a very robust matching



system. The antenna wire is also insulated and the whole system seemed well designed. The challenge was that the match was hefty and needed to be connected to the first balun (50 Ohms to 450 Ohms conversion) in order to use the window line to the shack. That would make for a fairly heavy assembly that I didn’t want to see hanging for fear of excessive strain forces on the antenna. I also decided to configure the antenna in an inverted “L”, so that the match/balun assembly on the end of vertical short segment could be put on a post, away from trees and easily accessible. (See figure A, below)

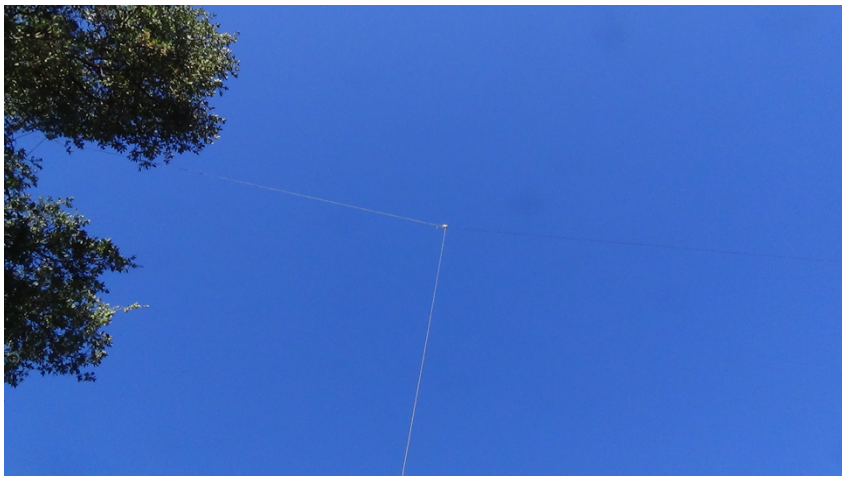
The top “corner” of the inverted “L” would be threaded through the southern oak tree’s pulley system, so I could maintain just enough strain required for keeping the “L” shape. The other end of the antenna would terminate with an insulator that was connected to the northern oak’s pulley system. This made the EFHW’s installation fairly straightforward; just hook it up

to the pulley system and hoist one end up and the “L’s” corner up and connect the match/balun assembly to the feed line. Easy, huh? Well, we still had to mount the match/balun assembly. The whole assembly weighed about 3.5 lbs., needed to be connected to the antenna and needed to be off the ground in such a manner that it could be grounded, didn’t touch any vegetation, tree branches and the like. The answer came in a convenient fence post in the right location, away from trees and easily accessible.

I repurposed an old small plastic cutting board, painted it in local landscape colors and mounted both the match and the balun with wood screws, connected with a male/male UHF connector. (photo on right)

Then I attached a U-bolt to the board and affixed it to the top of the fence post. (photo on left)

I threaded the antenna wire through an insulator and connected the insulator to the southern oak's pulley system and hoisted up the "corner" into the air and adjusted the tension to a cleat attached on the trunk of an oak. (Photo on right)



Then it was time to attach the window line leading back to the other balun outside of the shack.

The window line was easily attached to the first balun with wingnuts. I threaded the remaining 100 feet through tree trunks, using PVC stand offs to keep the feed line away from branches and trunks to the second balun (converting 450 Ohms to 50 Ohms) that connected to the LMR 400 going into the shack and the rig. (Photo on right)

Once everything was hoisted up in the air and connected, I checked SWR on all applicable bands. The antenna was easily showing a 1.1:1 to 1.2:1 SWR at low and high-power settings. I'm getting great signal reports from all my colleagues in the Mission Trail Net for locations from Idaho to San Diego. I haven't had a shot at doing any DX yet, but that's another article for later…

Ray Gretlein, W6QPA

My summer hamcation began in May with a trip to the ARRL HamVention near Dayton Ohio. I wrote of that trip in the June 2024 Edition of the Dummy Load.

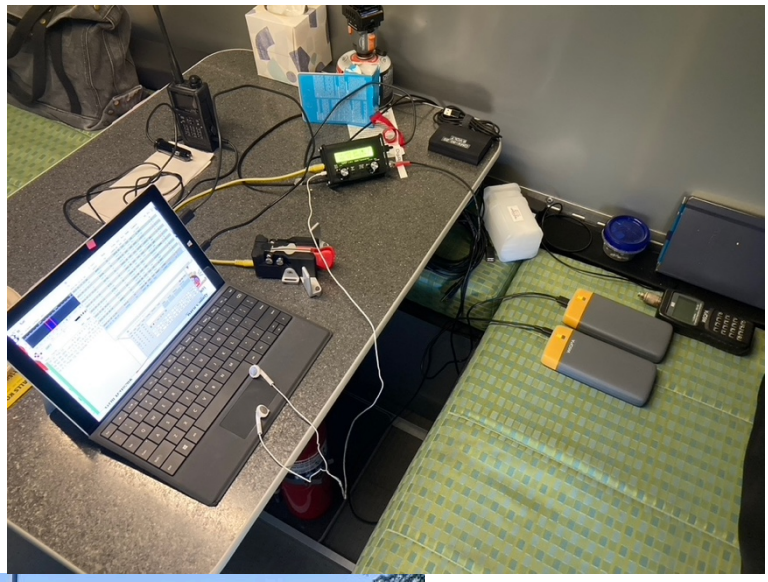
We finished out our summer travel, with ham gear, on a camping trip that included a stop at a nice Kampgrounds of America site in Klamath Falls, Oregon. I had some time to operate at this site.

The traveling kit for this trip included my:

- QRPGuys 40-30-20 meter vertical antenna.
- QRPLabs QMX 80-20 meter multi-mode transceiver
- Begali Traveler paddles

- Apple EarPods
- Microsoft Surface for logging
- BioLite 74 whr LI battery bank -- PD compatible

Operating position this time was the table of our travel trailer.



The Klamath Falls KOA has the most generously sized camp sites we have seen. The site was actually two sites wide, providing more than enough space for the vertical antenna.

I operated with 5 watts of power and had seven QSOs on 20 and 30 Meters, including Dave, WA5GUL! A nice way to wrap-up my summer HamCation season.

Valerie Mason, KK6WLQ

We participated in Summer Field Day, National Night Out, Mountain Festival, Sunday Night Net. Not much to say that we didn't talk about at last month's club meeting.

On the Bench

This is a semi-regular column for members to share the off-the-air aspects of their ham radio activities. Using a sports metaphor, on-the-bench refers to a player not currently active in the game. So, applying that in a ham radio context, what is "On-the-(work)bench" in your shack?

Assembling an APRS iGate & Digipeater using Direwolf

Ray Gretlein, W6QPA

APRS (Automated Packet Reporting System APRS.ORG) has been around for at least 25 years. It provides a useful method for sending short messages (somewhat like SMS texting) as well as position and status information using Amateur Packet Radio. At one time, packet radio and APRS were sufficiently popular that I could beacon position packets throughout most of California and have them "heard" by the APRS network. I guess interests change, APRS seems to have lost many of the digipeater sites I previously relied upon. I now find that from Keene north to around Visalia and west to around Cholame I can't hit any digipeaters while driving in the Central Valley portion of Kern County. And of course, since my home is in a "VHF sinkhole", I'm out of luck trying to use APRS messaging.

I got to thinking about maybe trying to set up my own internet gateway (iGate) to at least provide a "hot spot" like function. I recalled reading about a software TNC called DireWolf. DireWolf is the acronym for "Decoded Information from Radio Emissions for Windows Or Linux Fans" … I suspect the definition may have been contrived to fit the acronym. DireWolf functions as a digipeater that would boost my power enough to get into the digipeaters north of me and as an internet gateway allowing APRS packets to be posted to APRS-IS services like APRS.FI.

A DireWolf implementation requires a computer to run the software, a soundcard interface to join computer to the radio and of course a transceiver. To implement the internet gateway, you'll also need an internet connection as well. I got lucky and found almost everything needed while rummaging through the collection of parts from previous projects and came up with:

- Computer – Raspberry Pi Model 3B+
- Soundcard Interface – SignaLink USB
- Radio – Kenwood TM-241A 2 meter 50watt transceiver.

I did need to order a cable to connect the SignaLink (RJ-45 connector) to the Kenwood (round 8-pin connector) for audio and PTT. The finished cable from TigerTronics

(SignaLink's maker) was just about the price of the parts if I were to build my own … so I took the premade route this time.

The DireWolf software install is a bit time consuming. I downloaded the source as opposed to installing a pre-built package for the PiOS. I choose to build it from source to get the most current stable release as I've found the PiOS packages often lag the current project releases. Following the instructions, I was able to compile and install it on the RaspberryPi. It came up without error.

The next step to getting this up and running was a configuration file in which we tell DireWolf what internet gateway servers to use as well as the ports to use for input / output from/to the radio and how PTT is controlled. Most of the defaults in the configuration file are what is needed so this wasn't too much of a problem. I did find that I needed to understand APRS routing a little better, so I spent a fair amount of time with the documentation learning the meaning of some the parameters.

My assembled components are located on the top of a cabinet in my "shack".

The Bose speaker in the photo is not part of the "normal" configuration … I used it during troubleshooting.

The radio is connected to an "Efficient 2-meter Disguise Antenna Made From a TV Satellite Dish" based upon a QST article by John Portune, W6NBC. The design and build instructions can be found here. It is only at roof edge height of about 10 ft … but it is better than nothing.

I did have a few RF-in-the-shack issues that caused some erratic behavior of the Raspberry Pi; that was corrected by placing ferrite clamp-on cores on the data cable from SignaLink to the Raspberry Pi and on the cable to the radio.

All was great, the radio was hearing my APRS beacon and occasionally someone beaconing as they passed by and even more rarely a digipeater up near Shaver Lake; however, it was not digipeating anything. The PTT indicator LED came on as expected when sending a packet, but the transmitter was not keying. Nuts! I took the SignaLink out of its case and started tracing the PTT signal from the relay through jumpers and connectors all the way to the end of the cable where it plugs in to the radio … it was all working … still no transmitter keying. I then plugged in the Mic and pressed the PTT and the transmitter keyed right up as it should. I finally sprayed the socket on the radio and the connector with De-Ox-Id, then

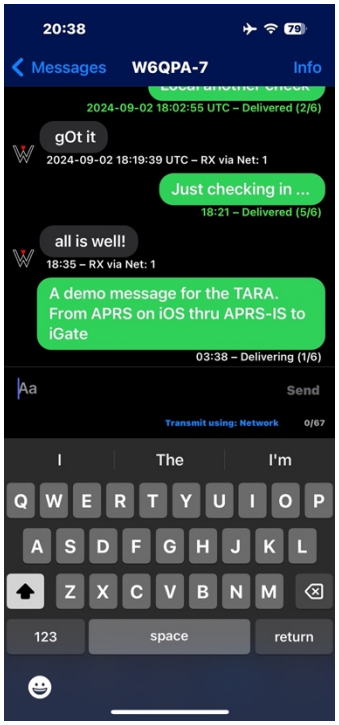
plugged and unplugged the connector several times. Reconnected everything and reran the test mode of DireWolf … Lo-and-behold it keyed right up! Sigh … once again … I took the hard path before finding it was simply dirty contacts! I have a bad habit of looking for the obscure causes of a fault rather than the easiest to check.

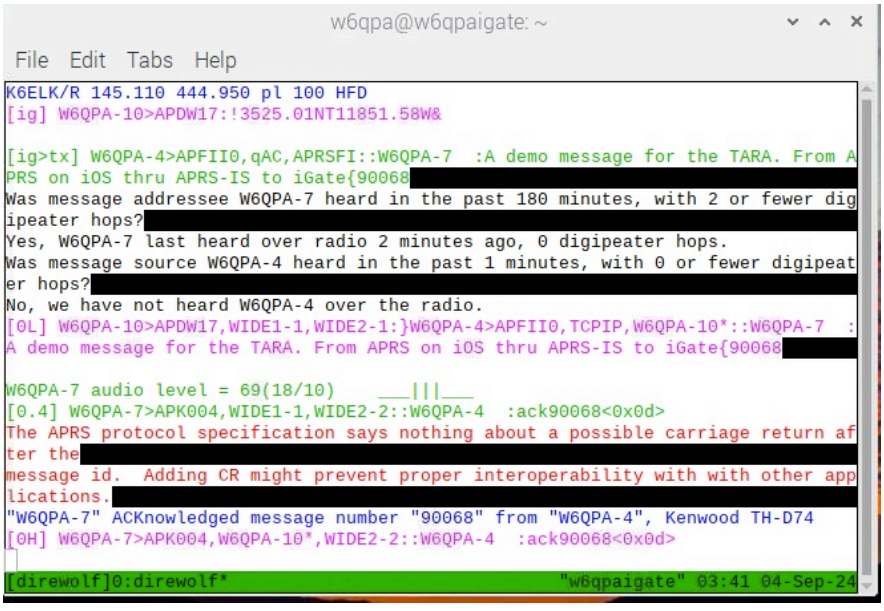
To test the RF-internet-RF end-to-end connectivity I sent a message from my iPhone aprs.fi app to the APRS software on my Kenwood TH-D74 HT. This message is sent to the APRS.FI servers via the internet. Then from APRS.FI the message is sent to the iGateway servers.

Each iGateway receives the message (yep as near as I can find it goes to ALL of them world-wide --- although that seems inefficient. I haven't read of any other routing algorithms) then checks to see if the recipient has been heard by that specific gateway and if so, the message is sent to the radio for RF delivery to the recipient. The processing logic is shown in the following screen shots. The system specific identifiers (SSID) in the following images are:

- My iPhone is identified as W6QPA-4.
- The TH-D74 is W6QPA-7.
- The Direwolf digipeater is W6QPA-10.

The screen shot to the right shows the demo message from the iPhone W6QPA-4 addressed to W6QPA-7 my HT.





This is A DireWolf status display showing traffic as it is processed, and the decisions made whether the traffic is ignored or retransmitted through the digipeater. The image shows, in the green text beginning with [ig>tx], that this is a packet intended to go from the iGate to the RF if it meets the criteria. The black text shows the processing logic and confirms that W6QPA-7 (the recipient) was heard by the

digipeater and thus the message should be sent on via RF. The purple line beginning with [0L] means that this packet (the message) was sent out Channel 0 (the radio) at 'L' low priority.

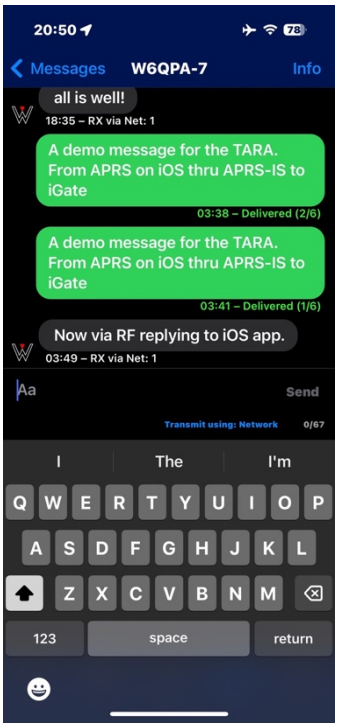
The HT automatically generated an acknowledgement as shown in the screen shot above in the bottom group of green, red (think of this as a warning message), the black text with the human explanation of the packet and finally the purple text shows the raw packet that was received.

A split second later the D74 display lit up and the audio announced a message from W6QPA-4 had arrived. (Image to the right.)

I selected the reply feature and sent the message (shown at the left.)

The screen capture at the right shows DireWolf's processing of the reply message.

```
W6QPA-7 audio level = 69(18/10)    __||||___
[0.3] W6QPA-7>APK004,WIDE1-1,WIDE2-2::W6QPA-4  :Now via RF replying to iOS app.{
16<0x0d>[redacted]
The APRS protocol specification says nothing about a possible carriage return af
ter the[redacted]
message id.  Adding CR might prevent proper interoperability with with other app
lications.[redacted]
APRS Message, number "16", from "W6QPA-7" to "W6QPA-4", Kenwood TH-D74
Now via RF replying to iOS app.
[0H] W6QPA-7>APK004,W6QPA-10*,WIDE2-2::W6QPA-4  :Now via RF replying to iOS app.
{16<0x0d>[redacted]
[direwolf]0:direwolf*                                    "w6qpaigate" 03:49 04-Sep-24
```



And moments later, the screen shot to the left shows the message received in APRS.FI app on the iPhone.

This project hasn't really met my desire to improve digipeater coverage in the southern Central Valley, for that I need to place a digipeater at a higher elevation (or install a ~275' tower … not likely to happen).

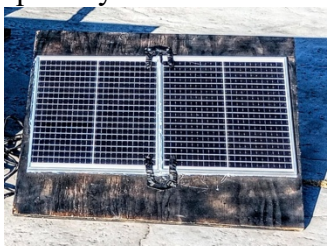
I'm planning to "harden" the set-up so that it will reliably restart after a power failure and then configure a remote administration method. I'll likely install OpenVPN and then use SSH or VNC so that I can manage the digipeater/iGate wherever it is installed. After that is all reliable, I'll look for a site with good coverage of the southern Central Valley and fill-in this APRS coverage hole. For now, however, it has been a fun learning experience!

Solar Panel Charger for Yeti Power Station

Micah Martin, KN6VUT

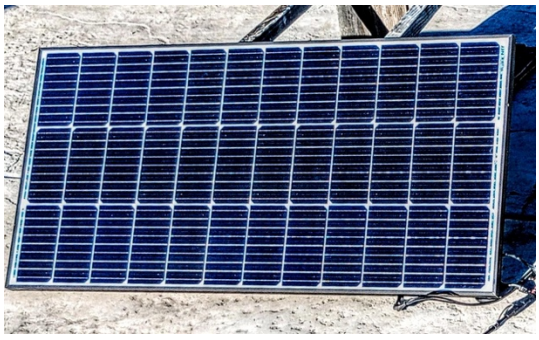
I made a solar charger for my Yeti power station.


I purchased two 12v 25w solar panels and one 12v 100w solar panel.
The two 25w have been mounted on a piece of plywood and wired in parallel to increase the charging capability






The two 12v 25w solar panels produce approximately 4.17 amps.



The 12v 100w solar panel produces approximately 8.33 amps.
Combined, the three solar panels produce about 12v 150w for about 12.5 amps.

During testing, the solar charger was able to charge the Yeti Power station even in shade.

The Power Station provides up to12v 10 amps. I used my BTech 25x2 mobile radio at Tehachapi Mountain Festival for net control. I left the Mobile at 25w and ran the radio all of Saturday and Sunday, it only brought the power station down to about 80%. I then used the power station to power about two weeks of the "Just Because Net" and got the power down to about 75%.

I set up the solar panels outside and plugged them into the Yeti to see how long a recharge would take. I happened to go back outside after about 20 min and looked at the charge. It was already at 100%.

If possible and space and time permit, I'll set up the solar panels at our next few TARA events to see how well they keep the power station charged.

Here are links to the products mentioned in my article:

- Yeti Portable Power Station - Yeti 200X
  187 Watt Hours
  https://a.co/d/aGx4Zml
- 1- 12v 100w solar panel
  https://a.co/d/fhN7qWL
- 2- 12v 25w solar panels
  https://a.co/d/6UK3av5
- 1- SAE to 8mm Y Branch Parallel Connector
  Cable Solar Panel Adapter 2Ft
  https://a.co/d/brJKSDC
- Spare outdoor electric cord
  Similar to this from Home Depot
  https://www.homedepot.com/p/2GoGreen-Power-15-ft-16-3-SJTW-Outdoor-Extension-Cord-Black-GG-13715BK/309452123

The Operating Room

This is a semi-regular column for club members to share the on-the-air aspects of their ham radio activities.

No submissions this month.

Hospitality

Valerie Mason – KK6WLQ

Oh, please come to club meetings earlier, like 6:45, to get raffle tickets purchased before the meeting at 7:00. Bring cash! Thank you!

TidBits

A collection of miscellaneous mostly amateur radio related items.

History of the Radio Receiver: Part 1

David Walter - WA5GUL

(Originally in Electroonics-notes.com)

Radio technology is an integral part of everyday life. Everything from broadcast radio and television through to mobile phones, wireless connectivity, Internet of Things and much more are based around radio technology.

The history of the radio receiver is an integral part of the development of today's radio technology, and it is a fascinating story to see how we arrived at where we are today.

In 1895 Marconi demonstrated his first viable radio system, now more than a 100 years later the radios that are in use today bear no resemblance to the early equipment that was used.

The equipment that was used in the 19th Century was crude and very insensitive, nowadays receivers are very sensitive and they offer many facilities.

Radio technology developed through the age of the crystal radio set, early vintage and antique radios using valves / vacuum tubes to more advanced ones, and then the era of the transistor dawned.

Modern radios are also used in a wide variety of applications from broadcast reception, through cellular telecommunications to satellite links and much more. To be able to operate in all these diverse areas, receiver technology has changed beyond all recognition.

These developments represent the work of many people from the earliest days of antique radios and vintage radios right up to the modern day. Some of these people have their names entered in the technology history books, but the majority were just ordinary engineers or radio enthusiasts who remain unknown.

History of the radio - beginnings

The story behind the history of the radio begins with the discovery of radio waves themselves. A brilliant Scot named Maxwell was the first person to prove electromagnetic waves existed. However, he only showed this mathematically and he was never able to demonstrate them in a practical form.

Although many people stumbled across them and demonstrated effects that now we know were radio waves, it was a German named Heinrich Hertz who knowingly demonstrated these new waves which Maxwell had proved existed. He used some spark gap equipment to transmit and receive radio or Hertzian waves as they were first called.

Hertz used a number of variations of the basic equipment. Essentially the transmitter consisted of a circuit in which a spark was made to jump across a gap.

A second circuit with similar dimensions but with a smaller gap was placed within a metre or so of the first circuit. When a spark was made to jump across the gap in the transmitter circuit, a smaller but simultaneous spark would be seen to jump across the gap in the second.

A broadcast crystal radio receiver dating from the early 1920s (at left)

Naturally the range of this arrangement was very limited, mainly because the receiving circuit had to pick up a large amount of energy for the spark to jump across the gap.

Coherers

It was soon realized that more sophisticated and sensitive methods of detecting radio waves were needed. A device called a coherer became the basis for reception and remained in widespread use for about ten years.

The coherer was based around the effect that had been known since the 1850s that small particles of dust or even metal filings stick together or cohere when an electric field is present.

The first person to use the phenomenon to detect radio waves was a Frenchman named Edouard Branly. He discovered that the resistance of a glass tube filled with metal filings fell

from a few megohms to a few hundred ohms when placed close to a discharge. A short mechanical shock then restored the coherer to its high resistance state.

Once Branly had developed the basic idea, Oliver Lodge popularized it when he gave a lecture in 1898 in honour of Hertz who had recently died. Lodge also made improvements to the device.

Usually, the coherer was made to operate a bell so that when a spark or discharge took place the bell rang. A self-restoring feature was also introduced. The current flowing through the coherer was made to operate a small tapper that restored the coherer as well as ringing the bell. This meant that it was ready for the next discharge almost immediately.

Guglielmo Marconi

It was possibly Marconi who did more for the new technology of radio than any other person, especially in its early days. He believed that these new waves could be used to communicate over great distances. He also undertook many experiments and steadily improved the distances over which signals could be detected. He looked at the coherer and had his assistant spend many hours experimenting with different materials to find the best combinations, and in this way he made some significant improvements.

As an indication of the way in which his developments were progressing, he managed to span the Bristol Channel, and later he managed to send a message across the English Channel. During this experiment the signals were picked up at his factory in Chelmsford. This was considerably further than anyone had expected the signals could travel, and it made Marconi think that it would be possible to span the Atlantic.

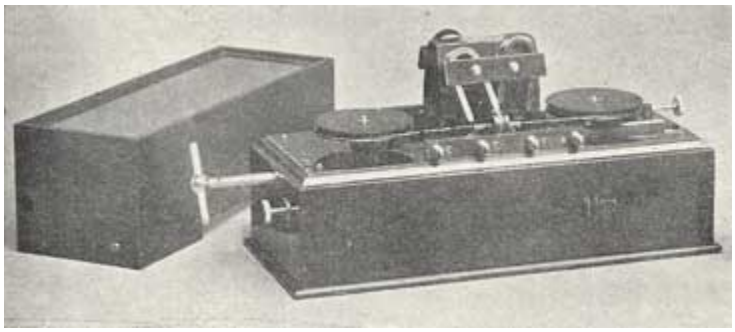
Although Marconi's company did not have the funds to support a venture of this size, undeterred he set about the task of building stations in Britain and America and after many difficulties he managed to make contact in December 1901. This was an enormous achievement and it made headlines in the newspapers, but the sensitivity of the receiver proved to be the limiting factor. This set Ambrose Fleming, professor at University College London and consultant Marconi thinking about the ways in which improvements could be made.

Magnetic detector

While the coherer was one of the first radio wave detectors, it had many limitations. Another form of detector that came into use was the magnetic detector, often known as the Maggie for obvious reasons.

The magnetic detector took over from the coherer, especially on maritime installations. It was also used by Marconi for his famous transatlantic transmission in 1901.

It had the advantage that it was possible to directly hear the detected incoming signals. With the coherer any signals were only indirectly heard.


Marconi magnetic detector

Fleming's Valve

The idea for this next development in receiver technology found its origins with Edison in America. He had been investigating the reasons for the short life of light bulbs. After a short while the inside of the bulbs became blackened and he could not find a way to prevent this.

It was thought that carbon from the filament was coating the inside of the glass. In one experiment to overcome the problem he placed a second wire or electrode into the bulb and noticed that current would flow between the electrodes if the negative end of a battery was connected to the heater filament and the positive end to the additional electrode.


Fleming's Oscillation Valve (Marconi plc - with permission)

He also noticed if the battery was reversed, then no current flowed.

Surprisingly, Edison could not find a use for this interesting phenomenon. Fleming who had seen the effect demonstrated by Edison wondered if it could be used to detect radio waves. He set his assistant to set up an experiment to discover if it could be used, and to their delight it did. He called it his oscillation valve because it acted in the same way as a water valve in only allowing flow in one direction.

Humorous

David Walter - WA5GUL

For those who did not attend the 2024 summer field day, I have attached an (until now) unreleased photo of the High-Country Park location.

(Photo credit Willem De Haan)

ARRL Contest Calendar

This page provides a summary of events sponsored by the ARRL, the national association for amateur radio. The most current information is on the website at: http://www.arrl.org/contest-calendar.

Another source for contest and on-the-air activity is WA7BNM Contest Calendar at https://www.contestcalendar.com/weeklycont.php

September 2024

- 14-16 September VHF
- 21-22 EME - 2.3 GHz & Up
- 21-22 10 GHz & Up - Round 2

October 2024

- TBD Collegiate QSO Party
- 19-20 EME - 50 to 1296 MHz
- 21-25 School Club Roundup

November 2024

- 2-4 Nov Sweepstakes–CW
- 16-17 EME - 50 to 1296 MHz
- 16-18 Nov Sweepstakes–Phone

December 2024

- 2-4 160 Meter
- 14-15 10 Meter
- 22 Rookie Roundup–CW

TARA Calendar

This page is a summary of events sponsored by or involving our club.
All dates are subject to change. Please check the club Facebook and website for updates.

September 2024

- 7, 14, 21, 28 — 1800 hrs, 10 Meter Technician Net every Saturday on 28.350 MHz
- 1, 8, 15, 22, 29 — 1900 hrs, TARA Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 1, 8, 15, 22, 29 — 1930 hrs, BVS ERT Net (ARES) (W6SLZ VHF rpt, 146.70 - / 123.0)
- 4, 11, 18, 25 – 1900 hrs “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 4, 11, 18, 25 – 1300 hrs “Whopper Wednesday” at Burger King
- 5 – 1900 hrs, TARA Board Meeting, Via Zoom (invite via email)
- 12 – 1800 hrs, TARA Club Meeting Tehachapi Police Department, 220 W C St, Tehachapi
- 14 — 0830 hrs, TARA Club Breakfast at Kelcy’s Restaurant, 110 W Tehachapi Blvd, Tehachapi, CA. Reserve a spot with Valerie Mason by 1 September.
- 28 —0800 hrs, BVS Emergency Radio Team Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 15 September.

October 2024

- 3 – 1900 hrs, TARA Board Meeting, Via Zoom (invite via email)
- 5, 12, 19, 26 — 1800 hrs, 10 Meter Technician Net every Saturday on 28.350 MHz
- 2, 9, 16, 23, 30 – 1900 hrs “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 2, 9, 16, 23, 30 – 1300 hrs “Whopper Wednesday” at Burger King
- 6, 13, 20, 27 — 1900 hrs, TARA Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 6, 13, 20, 27 — 1930 hrs, BVS ERT Net (ARES) (W6SLZ VHF rpt, 146.70 - / 123.0)

- 10 – 1800 hrs, TARA Club Meeting Tehachapi Police Department, 220 W C St, Tehachapi
- 12 — 0830 hrs, TARA Club Breakfast at P-Dubs, 20800 Santa Lucia St, Tehachapi, CA 93561 Reserve a spot with Valerie Mason by 1 October.
- 12 — 11:00 hrs, VE Amateur Radio License Exam, 538 East Tehachapi Boulevard
- 26 —0800 hrs, BVS Emergency Radio Team Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 15 October.

November 2024

- 2, 9, 16, 23, 30 — 1800 hrs, 10 Meter Technician Net every Saturday on 28.350 MHz
- 3, 10, 17, 24 — 1900 hrs, TARA Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 3, 10, 17, 24 — 1930 hrs, BVS ERT Net (ARES) (W6SLZ VHF rpt, 146.70 - / 123.0)
- 6, 13, 20, 27 – 1900 hrs "Just Because" Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 6, 13, 20, 27 – 1300 hrs "Whopper Wednesday" at Burger King
- 7 – 1900 hrs, TARA Board Meeting, Via Zoom (invite via email)
- 9 — 0830 hrs, TARA Club Breakfast at P-Dubs, 20800 Santa Lucia St, Tehachapi, CA 93561 Reserve a spot with Valerie Mason by 1 November.
- 14 – 1800 hrs, TARA Club Meeting Tehachapi Police Department, 220 W C St, Tehachapi
- 30 —0800 hrs, BVS Emergency Radio Team Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 15 November.

Reference Information

Local Repeater Information				
BVS APRS Digipeater	144.390	No tone	AC6EE-3	APRS
BVS Repeater Backup Freq.	146.700 145.580	123.0 Hz Tone Simplex	W6SLZ	Open Machine
BVS Repeater	440.625	100.0 Hz Tone	W6SLZ	Open Machine (WIN System node)

Local Repeater Information				
Tehachapi Repeater (Cummings Mtn.)	442.925(+)	141.3 Hz tone	KI6HHU	On the KERN System
Tehachapi Repeater (Double Mtn.)	446.320(-)	151.4 Hz tone	KI6HHU	On the KERN System
Tehachapi Repeater	444.225	100.0 Hz TONE	KG6KKV	Overlooks Bakersfield
Tehachapi Repeater	447.120	67.0 Hz Tone	KR6DK	Linked to KR6DK Bilingual Repeater Network
DMR Repeater	442.675	Offset: +5.000 ColorCode: 1	K6RET	Brandmeister, Bakersfield, CA The location is in the Tehachapi Mountains near Cummings Mountain
DMR Repeater	442.225	Offset: +5.000 ColorCode: 1	K6GTA	Brandmeister, Located about halfway up Bear Mountain at about 3,200' coverage to west side of the mountain in Bear Valley Springs
Tehachapi Simplex	145.58	No Tone		Local Simplex
Tehachapi Simplex	146.54	No Tone		Local Simplex

In addition to the repeaters listed above the following repeaters, part of the Kern System, can be reached from locations throughout the Tehachapi area and much of the San Joaquin Valley. They are linked together and more information may be found at http://www.KernSystem.org

KERN System Linked Repeaters				
Frazier Mountain (8,000')	447.860	141.3 Hz Tone	KK6AC	Jerry Garis
Cummings Mountain (7,800')	442.95	141.3 Hz Tone	KI6HHU	Lee Bouchard
Double Mountain (8,000')	446.320	151.4 Hz Tone	KI6HHU	Lee Bouchard

ARRG Linked Repeaters				
Cummings Mountain (7,800')	444.425	100 Hz Tone		

ATTENTION:

For those interested in monitoring dispatch for the Bear Valley Springs Police Department

- KCSO Eastern Dispatch — 460.225
- KCSO East TAC —- 460.125

All dispatch for BVSPD will be handled by the Kern County Sheriff's Department

Club & Other Websites	
TARA website	http://www.ac6ee.org
TARA Facebook	https://www.facebook.com/TARAtehachapiamateurradio/
Tehachapi-hams (email list)	https://groups.io/g/tehachapi-hams/
Antelope Valley Amateur Radio Club (AVARC)	http://www.k6ox.club/index.html
Kern County-Central Valley Amateur Radio Club (KCCVARC)	http://www.w6lie.org
ARRL	http://www.arrl.org

Club & Other Websites	
West Kern County Amateur Radio Emergency Services (WKCARES)	http://westernkerncountyares.org/index.html

Officers & Committee Chairs			
Officer/Committee Chair	Name	Call	Email
President	Dan Mason	AB6DM	ab6dm@arrl.net
1st Vice President	Dan Mason (Interim)	AB6DM	ab6dm@arrl.net
2nd Vice President	Ray Gretlein	W6QPA	w6qpa@ac6ee.org
Secretary/Treasurer	John Dyer	KM6DXY	km6dxy@ac6ee.org
Technical Director	Dick Brown	W6SLZ	db24130@sbcglobal.net
Web Page & FaceBook Committee Chair	John Dyer	KM6DXY	km6dxy@ac6ee.org
Hospitality Committee Chair	Valerie Mason	KK6WLQ	val3mason@yahoo.com
Public Affairs Committee Chair	Micah Martin	KN6VUT	kn6vut@ac6ee.org
Newsletter Co-editor	Stephen Lee	KN6ZGI	Kn6zgi@ac6ee.org

Meeting and Club Membership Information

The Tehachapi Amateur Radio Association meets every second Thursday of the month at 7:00 PM (except for July - no meeting). Our meeting site is the Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.

Member Annual Dues: $25.00/year

Additional Family Member: $12.50/per person

Membership Application

Download a copy of our Membership Application here. Please share this with any friends, family or neighbors that are either hams or may be interested in amateur radio. Applications are accepted at all club meetings or you may mail your application along with the applicable dues to the club Post Office Box:

Tehachapi Amateur Radio Association (TARA)
P.O. Box 134
Keene, CA 93531