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Contact Us

- Via [Facebook](#)
- Via WWW.AC6EE.ORG
- U.S. Mail:
TARA
P.O. Box 1681
Tehachapi, CA 93581

A Word

Dan Mason, AB6DM, President

Greetings, TARA friends,

Much has changed for TARA in the last couple of years. COVID cramped our style, impacting both our meetings and Field Days, we got incorporated, became both a 501.c.3 and charitable organization, and started independently conducting VE sessions with an ever increasing number of testing candidates.

But we have also been working to recapture the best parts of our former "normal", resisting the "new normal". We're still having nets on the W6SLZ repeater. We're still having fellowship at breakfasts. We're still supporting rally car races and bike rides. We are having in person meetings again. We had a really nice TARA Christmas party. So now I'm pushing for a normal TARA ARRL Field Day, even if I'm there with just KK6WLQ (but I know some of you will come).

We have some other new things in the works that I urge you to get involved with. So read on for those, and please attend the club meeting at TPD this Thursday.

73,
Dan

EDITORS' Note:

February's theme is *Contesting* — *describe your favorite contest experience and station you use*. Please share your contest experience with us, send a few paragraphs (or pages if you'd like) describing your contest related experience.

Please email your contributions to AC6EE@arrl.net by 31 January 2022

73 ...Ray W6QPA

RadioActive!

Phil Dolber, W6WBT, 1st Vice President

- Happy New Year -

As we start this New Year I am hopeful that it won't be a repeat (COVID wise) of 2021. However, as they say "hope for the best and plan for the worst". With that said, a while back we had a conversation about some activities/games, with a Ham Radio twist, that would get us out of the house safely allowing club members to participate at their particular comfort level.

I did a little research about automobile Gimmick Rallies and Poker Runs. I wrote some notes about these attempting to include some ham radio components. I also made notes about some variations. I think these notes will make a good starting point for a Committee to brainstorm more ideas and come up with a fun activity and a set of rules of play

I brought this to the board, via email, and received approval, via email, from all but one member who was out of town. I told the board that I was willing to chair a committee for games/activities with on the air ham radio components, only if I can get at least 2 other committed volunteers to help brainstorm, write the rules of play, setup and execute an actual activity. The goal is to be ready to set a date for the first game/activity at the February membership meeting, and cover the rules of the game.

Keep in mind that we do not want to be too grandiose for our first attempt. If the activity shows promise after the first execution we can start growing the activity with some of the other ideas the committee may have held back, or we maybe even end up with another separate activity.

I would like to see TARA invite other clubs and area hams to come join in with intent to grow our membership. If we are creative we may be able to put some donations in our coffers.

If you would like to volunteer and make a commitment to this committee please contact Phil W6WBT through the club email ac6ee@arrl.net

I would like to take a moment to appeal to all of our readers. If you are a member of TARA ***please renew your TARA membership for 2022*** and to all who have participated in our meetings and activities as guests and/or check into the nets, please consider joining the Tehachapi Amateur Radio Association. Membership is not require to participate in the Nets,

and guests are always welcome at our activities, however through your membership you can help us shape a better club for our ham community. We can't improve without your help and feedback and we can't provide more Ham Radio activities and services in the community without more members.

Thank you,

73 – Let's Make 2022 a RadioActive Year!

Projects — Tales from the Shack

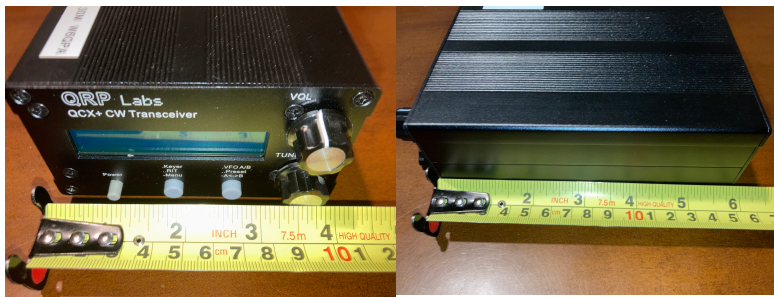
We asked for stories of your recent Ham Projects and those planned. Here are the submissions, I hope you find them interesting.

W6QPA — Ray Gretlein

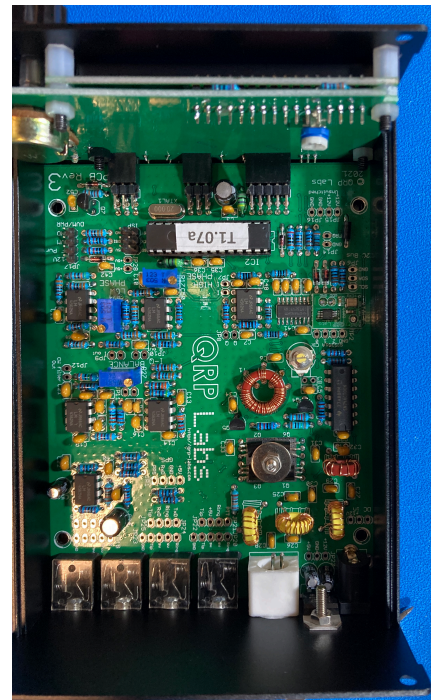
I've enjoyed building, assembling and in general tinkering with radio since my early teens. There have been spurts of activity and looong lulls. After a 20+ year lull, 2021 has been a lot of fun. I've been motivated by thoughts of participating on Summits-on-the-air (SOTA) and Parks-on-the-air (POTA) activity. These are best served by light weight, low power consumption rigs and supporting computers. In a previous edition of the "Dummy Load" I showed my portable operations "Bag" (really a backpack) weighing in at over 25 pounds...that was more than I wanted to carry. So in pursuit of lighter gear for portable operation, I've assembled and am enjoying using the following:

QRPLabs QCX+ CW Transceiver (<https://www.qrplabs.com/qcxp.html>)

Since I hadn't really assembled any kits in a number of years I started with this one. It offers a bit more real-estate on the PCB not requiring quite as fine a touch when soldering.



This also reacquainted me with winding toroid inductors, not particularly difficult, just tedious. In assembling this transceiver I also gained a lot of respect for Hans Summers the owner of QRPLabs. He designs and kits these with very good quality at reasonable prices, this one was \$55. He also provides really informative



documentation, not just assembly instructions but detailed description of the design choices made as well as the why/how it works. As an added bonus these include build-in-test features that let you align and calibrate it without additional test equipment. It performed well on its first outing.

REVERSE BEACON NETWORK
SSN:23 SFI:75 A:10 K:2 callsign lookup:

[welcome](#) [main](#) [dx spots](#) [nodes](#) [FT8](#) [downloads](#) [about](#) [contact us](#)

show/hide my last filters

showing spots for DX call: **W6QPA** rows to show: 15 ▼

search spot by callsign

de	dx	freq	cq/dx	snr	speed	time
VE7CC	W6QPA	10120.7	CW CQ	15 dB	14 wpm	0400z 16 Aug
W2NAF	W6QPA	10120.7	CW CQ	16 dB	14 wpm	0356z 16 Aug
WZ7I	W6QPA	10120.7	CW CQ	17 dB	14 wpm	0356z 16 Aug
W4KAZ	W6QPA	10120.7	CW CQ	15 dB	16 wpm	0355z 16 Aug
K4PP	W6QPA	10120.7	CW CQ	7 dB	16 wpm	0355z 16 Aug
VE6WZ	W6QPA	10120.7	CW CQ	18 dB	16 wpm	0355z 16 Aug
K5TR	W6QPA	10120.7	CW CQ	2 dB	16 wpm	0355z 16 Aug
KU7T	W6QPA	10120.7	CW CQ	24 dB	16 wpm	0355z 16 Aug
K1TTT	W6QPA	10120.7	CW CQ	5 dB	16 wpm	0355z 16 Aug
W2NAF	W6QPA	10120.8	CW CQ	6 dB	16 wpm	0342z 16 Aug
K1TTT	W6QPA	10120.8	CW CQ	6 dB	16 wpm	0342z 16 Aug
K3PA-1	W6QPA	10120.8	CW CQ	7 dB	16 wpm	0342z 16 Aug
VE6WZ	W6QPA	10120.8	CW CQ	14 dB	16 wpm	0342z 16 Aug
VE7CC	W6QPA	10120.8	CW CQ	7 dB	16 wpm	0342z 16 Aug
W4KAZ	W6QPA	10120.8	CW CQ	9 dB	16 wpm	0340z 16 Aug

options:
[show/hide](#)

Do you enjoy the RBN?
Please consider supporting us!

Donate

W6QPA frequencies on last 15 minutes:
no spot...

we have 164 skimmers online

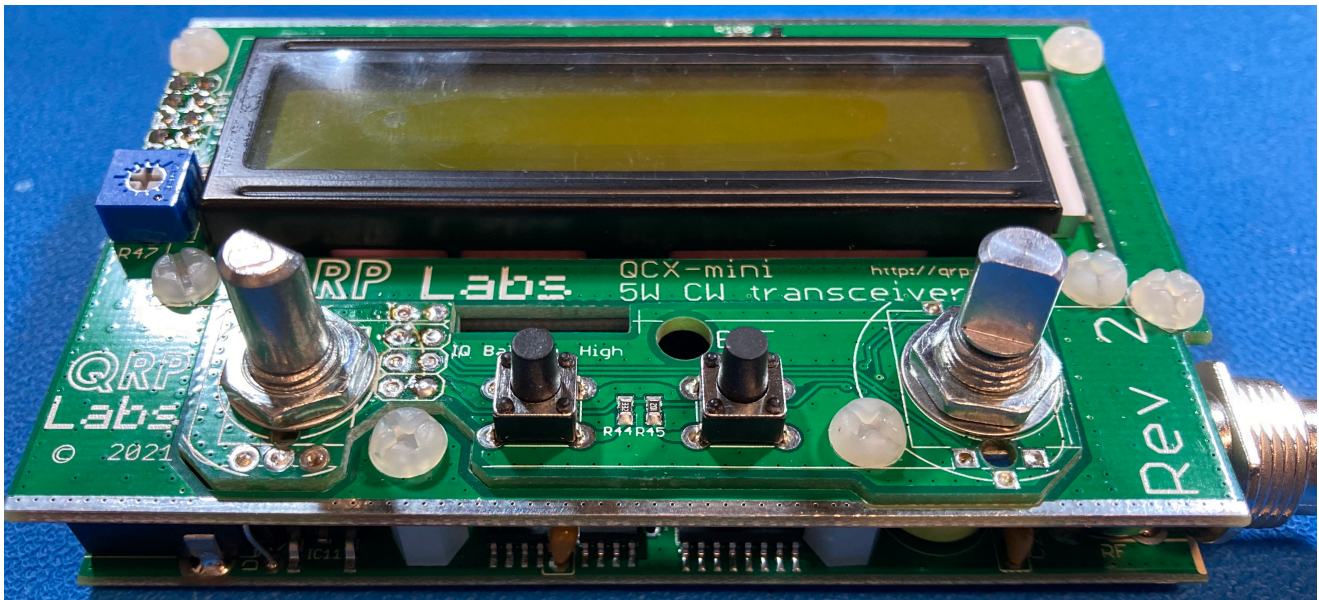
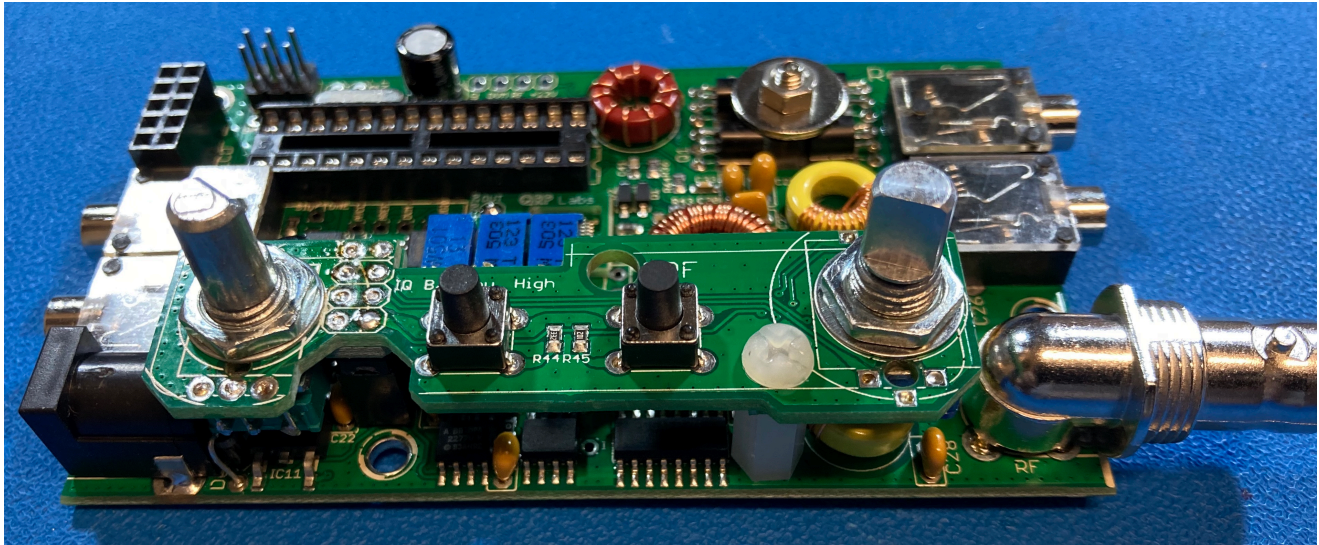
skimmers online:
 3B8CW - no spot last 15min
 3V8SS - 80m, 40m, 30m, 20m, 17m
 5W1SA - no spot last 15min
 9A1CIG - 80m, 40m, 30m, 17m
 AC0C-1 - 30m, 20m
 BA7KW - 40m, 20m
 BD7IS - 40m, 20m
 BD8CS - 40m, 20m
 BG4WOM - 40m
 BG6SNJ - 40m
 BG8DIV - 40m, 20m
 BG8PA - 40m, 20m

QRPLabs QCX-Mini CW Transceiver (<https://www.qrp-labs.com/qcxmini.html>)

This is the project I really wanted for the SOTA, POTA outings I have in mind. It is the same circuit as the QCX+ with a reduced form factor achieved by the selection of surface mount components (SMD) which reduced the board real-estate as well as power consumption. The SMD components are all factory installed, which reduces the number of parts the builder must assemble.



However, the thru-hole components fit in much tighter quarters, requiring (at least for my eyes) a good magnifier and lots of light.



The small size is also achieved by redesigning what was once on a single PC board to three boards that are very tightly fit together. In this tiny package we still have a rig with with 200 Hz wide CW audio filter, receiver sensitivity of -117 dBm; thanks to Will, WA6LDQ for providing the test equipment and know how to run that test. It also has CAT control (emulates Kenwood TS-440 commands) built-in keyer, message memories and RIT/split support.

16:07 Tue Oct 5

Not Secure — reversebeacon.net

SOTAwatch3 DX = W6QPA spots - Reverse Beacon Network

REVERSE BEACON NETWORK

SSN:29 SFI:82 A:6 K:0 callsign lookup:

welcome main dx spots nodes FT8 downloads about contact us

show/hide my last filters

showing spots for DX call: W6QPA rows to show: 15

search spot by callsign

de	dx	freq	cq/dx	snr	speed	time
K5TR	W6QPA	14058.0	CW CQ	4 dB	16 wpm	2304z 05 Oct
K9LC	W6QPA	14058.0	CW CQ	5 dB	16 wpm	2304z 05 Oct
VE6WZ	W6QPA	14058.1	CW CQ	3 dB	17 wpm	2304z 05 Oct
K7EG	W6QPA	14058.0	CW CQ	5 dB	16 wpm	2303z 05 Oct
W1NT-2	W6QPA	14058.0	CW CQ	7 dB	16 wpm	2303z 05 Oct
W4KAZ	W6QPA	14058.0	CW CQ	3 dB	16 wpm	2302z 05 Oct
W1NT-6	W6QPA	14058.0	CW CQ	5 dB	16 wpm	2302z 05 Oct
K9IMM	W6QPA	14058.0	CW CQ	14 dB	16 wpm	2302z 05 Oct
WE9V	W6QPA	14058.0	CW CQ	14 dB	16 wpm	2302z 05 Oct
K1TTT	W6QPA	14058.0	CW CQ	10 dB	16 wpm	2302z 05 Oct
KP2RUM	W6QPA	14058.0	CW CQ	7 dB	16 wpm	2302z 05 Oct
VE6JY	W6QPA	14058.0	CW CQ	11 dB	16 wpm	2302z 05 Oct
W8WWW	W6QPA	14058.0	CW CQ	5 dB	16 wpm	2302z 05 Oct
NC7J	W6QPA	10116.0	CW CQ	6 dB	18 wpm	1729z 27 Sep
VE6WZ	W6QPA	10116.0	CW CQ	6 dB	18 wpm	1728z 27 Sep

options:
show/hide

Do you enjoy the RBN?
Please consider supporting us!

Donate

W6QPA frequencies on last 15 minutes:
20m: 14058 - 13 spots

we have 167 skimmers online

skimmers online:

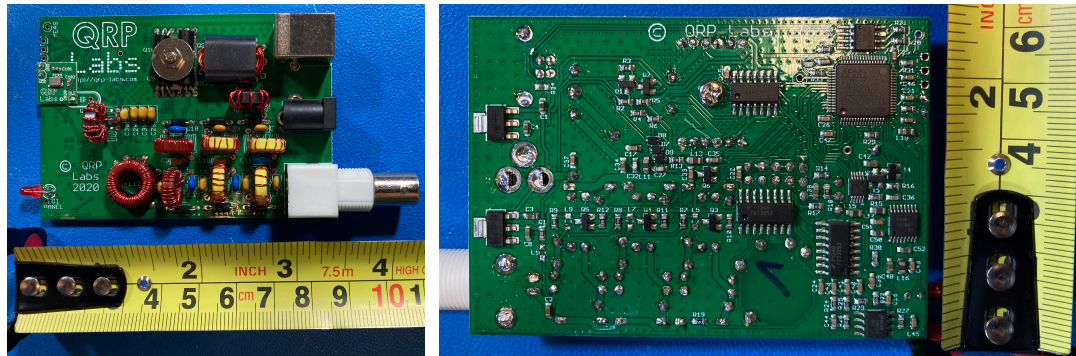
- 3B8CW - no spot last 15min
- 3V8SS - no spot last 15min
- 5W1SA - no spot last 15min
- 9A1CIG - 80m, 40m, 30m
- 9M2CNC - 40m, 20m
- 9V1RM - 20m
- AA4VV - no spot last 15min
- AC0C-1 - no spot last 15min
- BA7JA - no spot last 15min
- BA7PC - 40m, 30m, 17m, 15m
- BD7LMD - 40m, 30m, 17m, 15m
- BD7MLA - 40m, 30m, 20m, 17m, 15m
- BG4WOM - 40m, 20m, 15m
- BG6SNJ - 40m, 30m
- BG7IBS - no spot last 15min
- BG8DIV - 40m

This one too performed well!

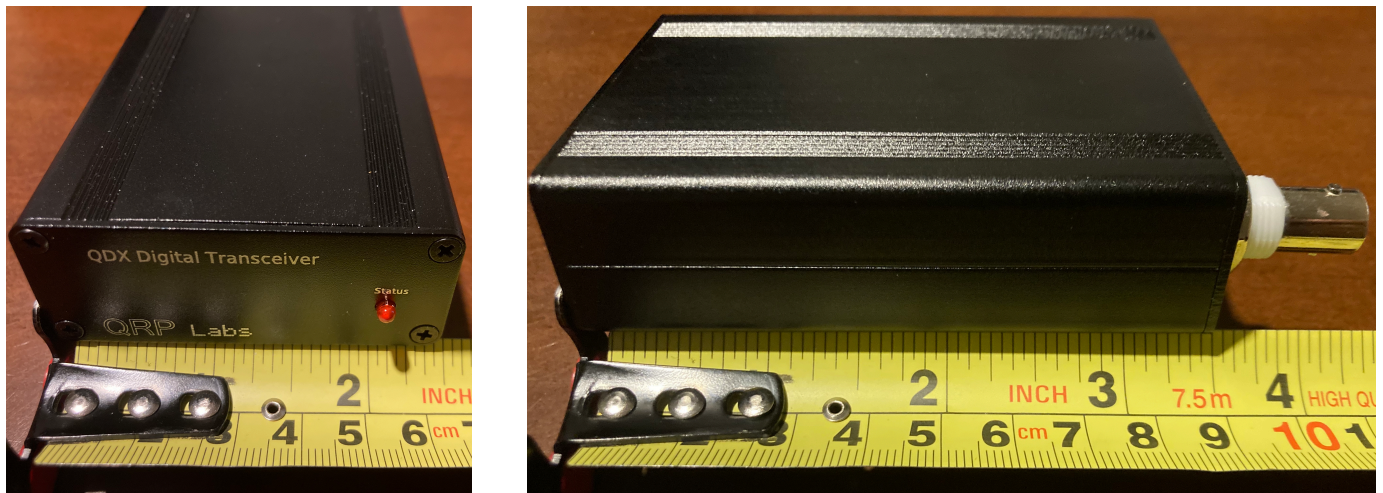
QRPLabs QDX 4 band digital transceiver (<https://www.qrp-labs.com/qdx.html>)

This was an unplanned project ... until I saw an announcement on one of the Groups.IO boards I follow. In early October a contributor said that Han's, at QRPLabs, was about to release a new digital-mode specific 4 band transceiver. On a lark, expecting zero success, I waited on the QRPLabs shop site for the exact time these would be released, there were just under 500 available. They went on sale 11 October 2021 at 1800Z and were sold out in 14 minutes! I was surprised that my order made it in. The features are just shy of amazing, rather than list them here, I suggest having a look at the link above.

It is the same basic size as the QCX-mini.



As in the QCX-mini, a lot of the circuitry is SMD components, factory installed. The bulk of the assembly on this one is winding ten toroids for the low-pass filters sections and a couple of transformers.



The performance on a 9V supply capable of ~1.25 amp into a dummy load is:

20 meters	4.47 watts
30 meters	5.04 watts
40 Meters	4.02 watts
80 meters	4.78 watts

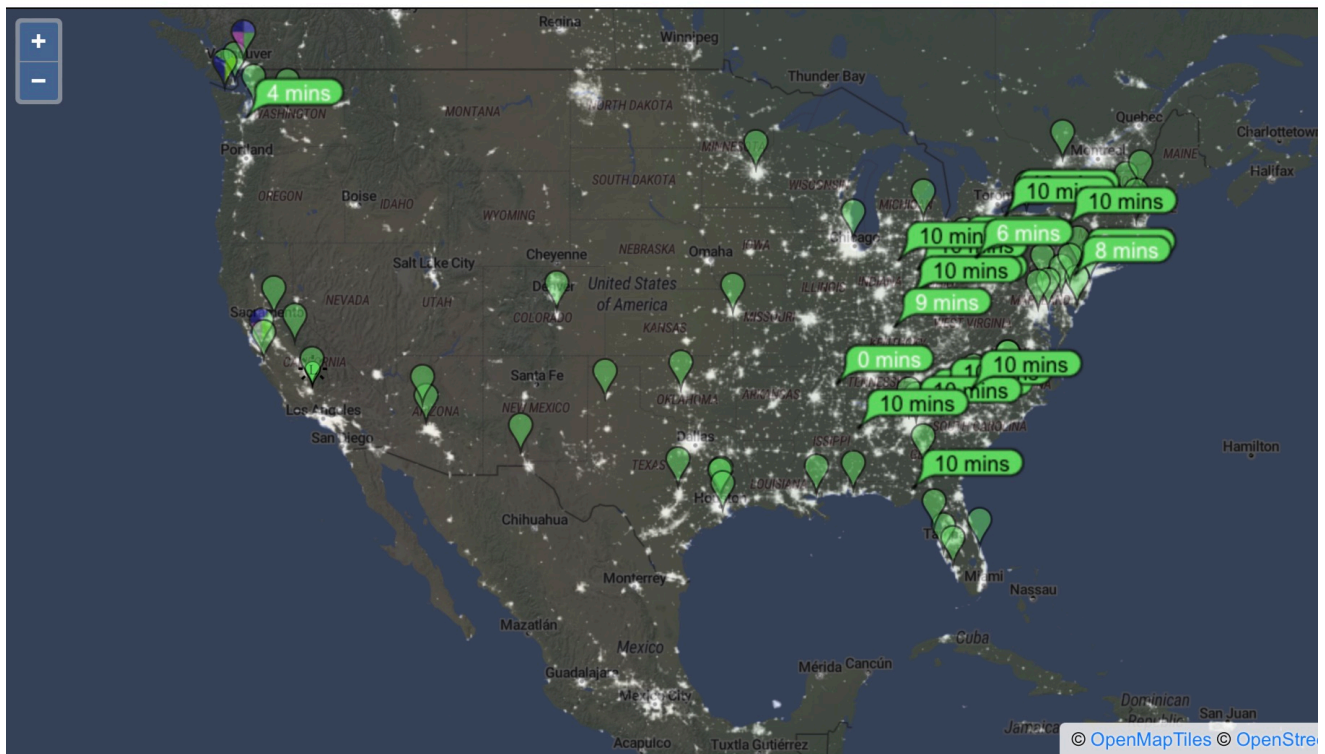
On the air I was very pleased. First an FT-8 QSO was with NP3DM in Puerto Rico on 30 meters, next day it broke the 1,000 mile/watt milestone on 20 meters with an FT8 JA9FFS QSO — 1,228 miles/watt.

On **30m** , show **signals** sent by **the callsign** **W6QPA** using **FT8** over the last **30 minutes**

Display options [Permalink](#)

Monitoring W6QPA (last heard 0 mins ago). Automatic refresh in 5 minutes. 20 reception reports for W6QPA are shown as times ([show logbook](#)).

There are **378 active FT8 monitors** on 30m. [Show all FT8 on all bands](#). [Show all on all bands](#). [Legend](#)



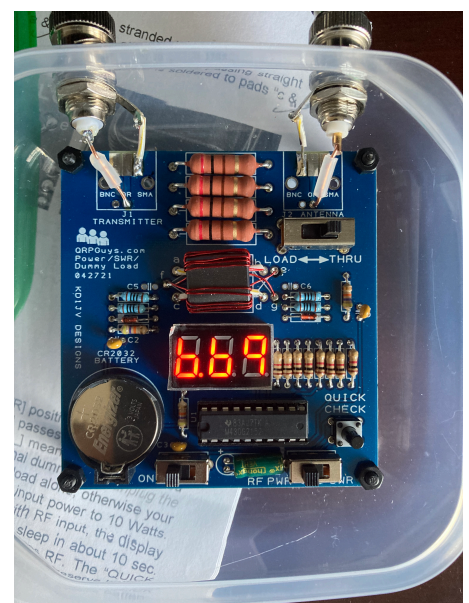
[Statistics](#) — [Comments to Philip Gladstone](#) — [Online discussions](#) — Reception records: 24,791,782,825 — Hosting by [Fast Soft Networks Ltd](#)

PSKREPORTER

PSKReporter shows it was getting out fairly well on 30 meters.

[QRPGuys.com Power/SWR/Dummy load \(https://qrpguys.com/power-sw-dummy-load\)](https://qrpguys.com/power/swr/dummy-load)

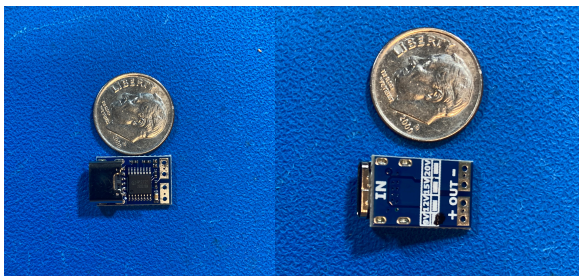
I came across an article in QST, I think, that reviewed this kit. I've been looking for a power meter that was field-able and this fit the bill ... plus it was cheap at \$25! It is a one-evening assembly and while not as accurate as something like a Bird meter, it is close enough. As far as SWR goes it is again, fairly accurate compared to other VNA meters. So I built this one evening. The "cabinet" was another issue. I wanted to package it so I could toss it in the field bag, however, it did not come with, nor even have an optional, enclosure. Kitchen plastics to the rescue. I found a plastic kitchen container of the right size and mounted it in side. I snap the lid on and have a dust/moisture resistant enclosure!



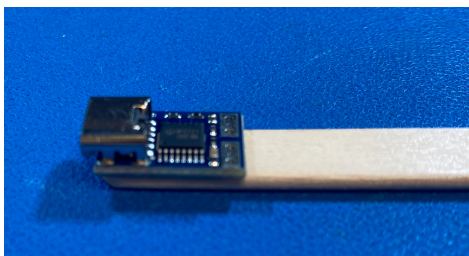
USB-C PD power bank for portable operations.

I'm always looking for power solutions. On the [groups.io](https://groups.io/g/QRPLabs/topics) mail list for QRPLabs (<https://groups.io/g/QRPLabs/topics>) I came across an article (<https://www.ng3p.com/2021/06/two-great-little-power-banks.html>) and presentation (http://phil-mont.org/presos/ng3pQRP_FieldUseWithPD.pdf) by Gwen Patton NG3P. From these I learned that the USB-C has a Power Distribution (PD) protocol allowing the device needing power to tell the power bank (a smart battery pack) what voltage to supply. The PD 3.0 supports devices needing 5, 9, 12, 15, 20 volts, although not all batteries support all voltages. This made it ideal for my needs as I have both 9 and 12 volt devices. There are many “decoy” or “trigger” or “sink” modules that contain the electronics that tell the PD power bank what to supply ([Amazon link](#)).

I built one as a 9 volt trigger module and mounted it to the end of a power cable for the QDX.

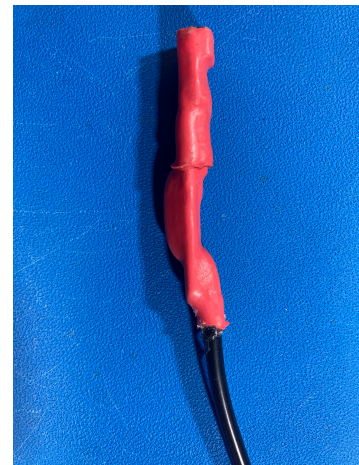


The module is tiny. The requested voltage on this model is set by a ‘solder blob’ jumper on a corner of the board.



There is no way to provide strain relief on the module, so I mounted it on a popsicle stick and then glued the power cable to the stick before wrapping the assembly with heat shrink.

This cable plugs into a 37Wh battery ([Amazon link](#)), and provides power for the QDX to operate FT8 50% of the time for over 12 hours.



On the planned list:

- QRPGuys Wire Antenna Trap Kit (<https://qrpguys.com/qrpguys-antenna-trap-kit>) — I live in an HOA area that restricts antennas. So I've been experimenting with inverted-vee trap dipoles and verticals. I have acquired some "stealth" antenna wire and these traps kits. I plan to put up a sloping inverted-vee in the back yard with their kit.
- Flagpole Antenna (<https://zerofive-antennas.com/product/24-foot-6-40-meter-high-performance-commercial-duty-flagpole-antenna/>) — And I'm still planning on putting up a Zero Five flagpole antenna...maybe this is the year!

AB6DM — Dan Mason

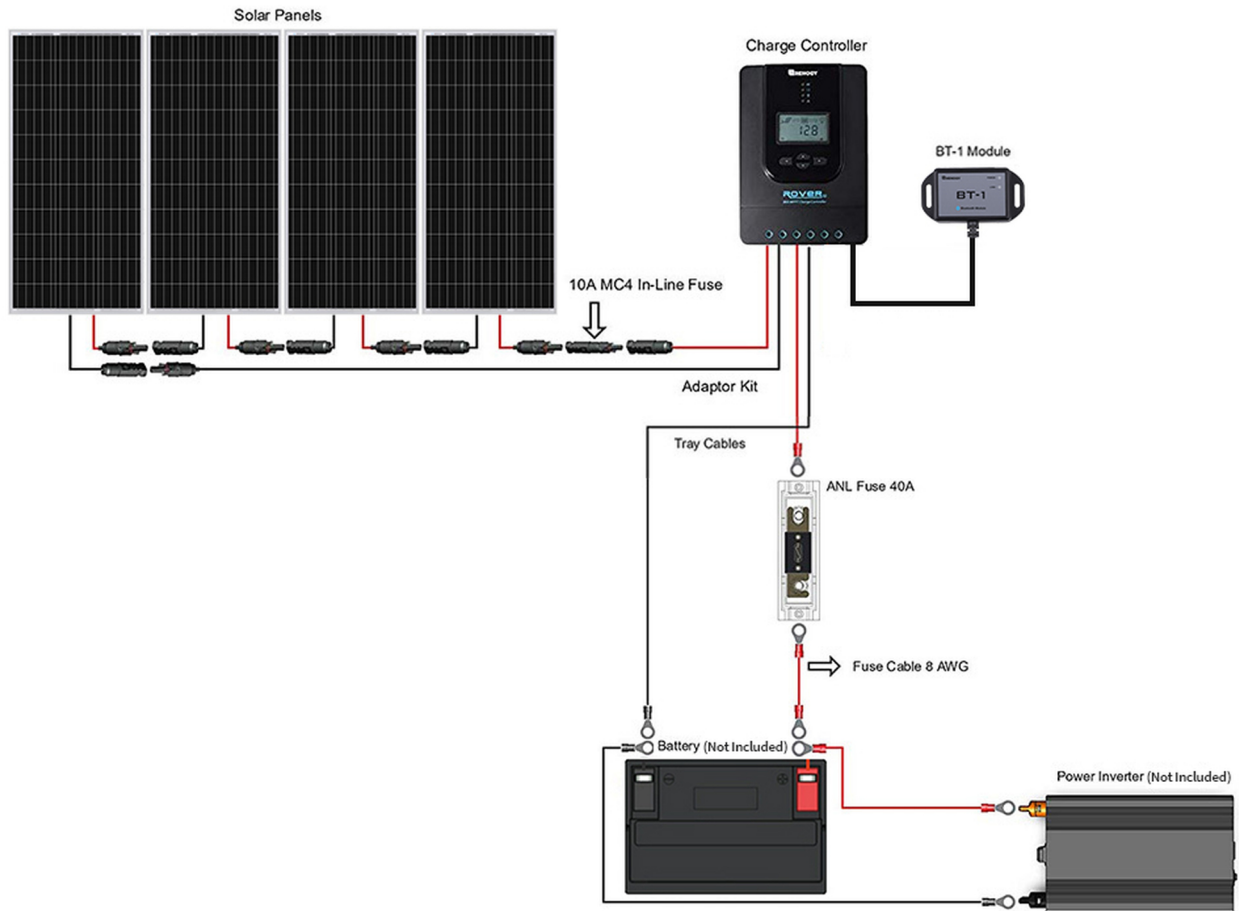
A mobile 400 watt, 12 volt DC solar power system

My project right now is a mobile 400 watt, 12 volt DC solar power system with a 3000 watt AC inverter, and 400 Ah of 12 volt Lithium Iron Phosphate batteries. It will also have fused 12 VDC bus box, a 110 VAC circuit-breaker box, a shunt for monitoring, and fuses, circuit breakers/switches for protecting or isolating various parts of the system. I plan to have all the components mounted on plywood that I can move with a hand truck and use in various parts of my house, RV, truck camping, and even radio field operations.

Most of the components are from www.renogy.com (watch for sale prices), where you can easily buy kits of various sizes. The 400 watts of solar (<100 VDC) is perfectly matched to the 40 amp charge controller which can take 100 VDC, so I can run these totally in series with no combiners and normal 10 gauge wire. By now you may be wondering if the 400 Ah of battery and 3000 watt inverter is too big for 40 amps of charging, and you're right. But some of the time, my truck will be charging the batteries (DC to DC charger) as we travel, and we'll have that capacity available for the 3000 watt inverter. I will be able to grow the solar array later to match the batteries along with a bigger charger. I'll repurpose this charger if I do. Some of the components are from the marine electrical shops and PowerWerx.

You can piece together a system like this cheaper using a solar controller from Rich Solar and some Chinese batteries. You can get more deluxe parts from Victron.

Here is a basic schematic of how this would be wired, minus my extra protections and appliance outputs:



W6WBT — Phil Dolber

Planned Projects — for retirement

As many of you know Sylvia and I are planning to retire at the end of 2022. This means a move and a new ham shack. It will by no means be a “dream” shack, but it will include many things I don’t currently have in my 5’ x 5’ hallway alcove shack. I also plan to include some of the modes I have done in the past, like satellites, that I haven’t done for quite some time. Maybe I’ll even try some moon bounce.

I have many receiver, transmitter, transceiver, antenna and tower restoration projects on the shelf for retirement as well. If I pace myself these projects could keep me busy for the first few years of my retirement.

I also have some plans for some non-standard digital shack controls using packet, and the better supported Internet rig remote controls. Internet remote may be challenging because there haven't been too many broadband IP options in the area.

Heck our Verizon cell phones have only worked up there for about 6 years now. If we are lucky we get 2 bars. Nextel was there at one time with very spotty coverage.

We did use Hughes Net for internet up there years ago, but because of the way they issued IP addresses via DHCP (Dynamic Host Configuration Protocol) in their Tx/Rx box I was unable to use EchoLink back then. We'll see what solutions present themselves. This month I will be putting some of my Tehachapi shack back together, for the interim, after an extended hiatus that started with some home remodeling followed by procrastination and life. Working from home has long lost its luster for me with little separation of home life and work. Work wins out every time.

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>

January 2022

- 1 Straight Key Night
- 1 Kids Day
- 8-9 RTTY Roundup
- 15 -17 January VHF

February 2021

- 8-12 School Club Roundup
- 20-21 International DX – CW

March 2022

- 5 International DX- Phone

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.

January 2022

- 5, 12, 19, 26 – 19:00 PST “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 6 – 19:00 PST, TARA Board Meeting, Via Zoom (invite via email)
- 8 — 08:30 PST, TARA Club Breakfast at Gracian Grill
- 13 – 19:00 PST, TARA Club Meeting, Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.
- 29 — 08:00 PST, TARA Club Breakfast at BVS Mulligan Room. Reserve a spot with Dick Brown by January 14th

February 2022

- 2, 9, 16, 23 – 19:00 PST “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 3 – 19:00 PST, TARA Board Meeting, Via Zoom (invite via email)
- 5 — 08:30 PST, TARA Club Breakfast at Gracian Grill
- 10 – 19:00 PST, TARA Club Meeting, Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.
- 26 — 08:00 PST, TARA Club Breakfast at BVS Mulligan Room. Reserve a spot with Dick Brown by February 14th

March 2022

- 2, 9, 16, 23, 30 – 19:00 PST “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 3 – 19:00 PST, TARA Board Meeting, Via Zoom (invite via email)
- 10 – 19:00 PST, Club Meeting, Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.
- 12 — 08:30 PST, TARA Club Breakfast at Gracian Grill
- 26 — 08:00 PST, TARA Club Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 14 March 2022.

Reference Information

Local Repeater Information				
TARA APRS Digipeater	144.390	No tone	AC6EE-3	APRS
BVS APRS Digipeater	144.390	No tone	WA6LDQ-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
Tehachapi Repeater	444.225	100.0 Hz TONE	KG6KKV	Overlooks Bakersfield
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. 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

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/TARAtchapiamateurradio/
Antelope Valley Amateur Radio Club (AVARC)	http://www.k6ox.club/index.html
Bear Valley Springs Emergency Response Team (BVSERT)	The website is being refurbished.
Kern County-Central Valley Amateur Radio Club (KCCVARC)	http://www.w6lie.org
ARRL	http://www.arrl.org
West Kern County Amateur Radio Emergency Services (WKCARES)	http://westernkerncountyares.org/index.html

Officers & Committee Chairs			
Office/Committee	Name	Call	Email
President	Dan Mason	AB6DM	ab6dm@arrl.net
1st Vice President	Phil Dolber	W6WBT	w6wbt@arrl.net
2nd Vice President	Ray Gretlein	W6QPA	w6qpa@arrl.net
Secretary	Valerie Mason	KK6WLQ	val3mason@yahoo.com
Treasurer	Dick Brown	W6SLZ	db24130@sbcglobal.net
Web Page & FaceBook maintenance	John Dyer	KM6DXY	km6dxy@gmail.com

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 meetings are on Zoom and in-person meeting site is now 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 if we are meeting in-person. 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 1681

Tehachapi, CA 93581-1681