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Contact Us

- Via [Facebook](#)
- Via WWW.AC6EE.ORG
- U.S. Mail:
TARA
P.O. Box 134
Keene, CA 93531

A Word

Dan Mason, AB6DM, President

Hello, TARA friends,

Our first major event of 2023, Winter Field Day (WFD), was a great success. We had 9 members show up to help setup and to operate. We had three stations that were very different from one another. Kern River Campground was a nice place to dip our toes into WFD as the weather was jackets off while in the sun, plus the scenery was nice. We got at least one curious visitor who had a ham relative. As always, we all learned a thing or two. Thank you to all who showed up, helped out, took pictures, and some who donated food. If you can, look us up on Facebook for lots of pictures. More details to come at a general meeting.

Next, we are planning an event where we do a combination of driving (probably North East), operating VHF/UHF, then setting up various HF toys (bring stuff you want to try) so people can see different ways to do things. We could brown bag lunch, or potluck together. The events we develop are to help people get radio experience and to have fun.

I'd now like to throw out a plug for a very valuable resource that hams have at their disposal, the American Radio Relay League (ARRL). Besides being our greatest advocate for hams in our federal and state governments, they provide a huge resource of helps to us in so many ways. Each time I browse the ARRL website, I'm impressed at the sheer volume of useful information at our disposal. Plus, they publish lots of books to help us become more capable and effective radio communicators. This enables us to be more useful in emergencies and to have more fun. I recommend new hams

(and not so new) check out the On The Air Magazine section of the ARRL web site (<http://www.arrl.org/On-the-Air-Magazine>) to get lots of help on what you can do and where to go next. This page will also point you their Podcast, Emails, Blog and Facebook. In addition, I strongly recommend each of us support ARRL by becoming members. Membership helps them help us.

73,

Dan Mason - [AB6DM](#)

TARA President 2023-2024

[661-203-8398](#)

EDITORS' Note:

For the March newsletter the focus is Off-Grid Power Solutions — describe how you power your station when the commercial power is not available.

I received one idea for a theme or perhaps a new regular section in the newsletter. I'd certainly like to have additional ideas. Please send your ideas for themes to

w6qpa@ac6ee.org

73 ...Ray [W6QPA](#)

Contests

I hope this "Contest" topic will introduce some of us to new contest opportunities or perhaps introduce you to the contesting aspects of our hobby. ...Ray, W6QPA

Ray — W6QPA

I'm very new to contesting. From my earliest ham operations, contests intimidated me. To win it seemed it was an activity for the rich (top of the line radios, linear amps, monster antenna farms) and super-experienced operators. Now, I'm not as concerned with winning, more with just the experience and opportunities to make contacts. Contests provide LOTS of hams looking for a contact so it is a target rich environment! I operate mostly CW and find that contests are easier QSO's than the unstructured "Rag Chew" conversation when using morse code. That is because a contest is a very limited exchange of information and becomes very predictable. Each contest has a defined minimum exchange of information which must be completed in order for the QSO to count for scoring.

As an example, when I participate in the QRPFox hunt the exchange is a signal report, state, operators name and power. Let's say the Fox is K9CW located Illinois and his name is Drew running 5 watts. I tune around listening for CQ FOX K9CW. I then send W6QPA and hope to hear his exchange which is "W6QPA 559 IL DREW 5W W6QPA<ar>" I then send "559 CA RAY 5W <ar>" to which he'll usually acknowledge with TU K9CW QRZ? Presto, I have logged a QSO and scored some points. The QRPFox hunt also operates in split mode where the fox

sends on a fixed frequency but instructs the hounds that he'll be listening "UP" 1 to 2 KHz above his transmit freq. Good skill to learn.

The structured nature makes it much easier for me since I really only have to listen for a limited set of characters and don't have any anxiety about "what to say" in a rag chew. That said, I still look for ragchews wherever possible as that is where I really improve my morse code skills.

My current contest experience involves:

- [K1USN Slow Speed Contest](#) — max CW speed is 20WPM ... which initially DID NOT seem SLOW at all. Nice group of operators mostly interested in helping others develop CW/morse code skills and will adjust to whatever speed you send to them.
- [CWops conTest \(CWT\)](#) — Sponsored by the CWops organization. These are the same folks that run the CW Academy morse code training program. It is targeted at the CW Academy students and intended to push their speed up. Definitely not limited to 20 WPM, in fact I think 25 is more like a minimum speed!
- [QRP Fox hunt](#) — As described in the text, this is a weekly activity for about 30 or so weeks a year. For me it's a level-ish playing field in that everyone is operating at 5 watts (or less ... I've seen milliwatt levels reported!)
- [State QSO Parties](#) — Less of a contest and more of an operating opportunity.
- [ARRL RTTY Round-up](#) — My first contest, obviously not CW. I used this as a chance to learn how to use RTTY and find stations to contact.

Dick — W6SLZ

Dick thought he'd do one better than telling us of a favorite contest, he is inviting us to join him for the ARRL International DXCC Phone contest! ...Ray, W6QPA

CJ and I invite you all to our home QTH to participate in the 2023 International DX Phone Contest Friday, March 3rd from 4 pm to Sunday, March 5 4 pm. All 48 hours are open to operate.

This is an opportunity for you to use my station to make contacts with stations literally all over the world.

We'll run food more or less potluck; we ask each of you bring pizza to feed yourselves plus extra to share. Please include some dessert items, again for yourself and some to share. Also bring our own drinks. The club is going to supply paper plates, napkins, cups, and a cooler of ice.

Here is more information about what the contest is all about: <https://www.arrl.org/arrl-dx>

Our address is 24130 Sorrel Ct in Bear Valley Springs. Let me know if you need a BVS guest pass.

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?

Mini QRP Transceiver Assembly

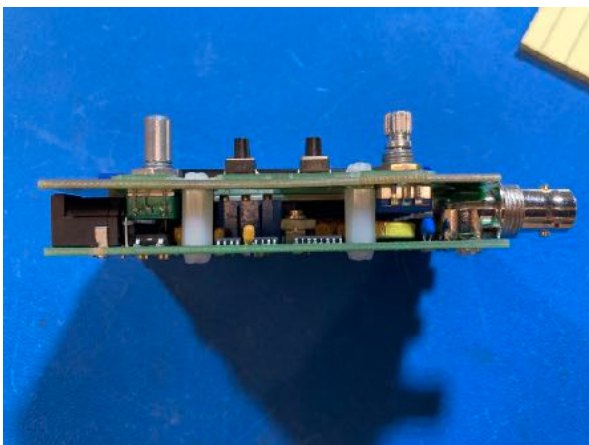
Ray — W6QPA

I wanted to use a [QRPLabs QCX-mini](#) 40 meter kit I bought a while back for Winter Field Day. I sometimes need a deadline or “need date” to spur me on to completing a kit assembly. WFD provided the motivation.

This kit comes with many surface mount devices. Thankfully they are factory installed, requiring the builder only to wind five toroid coils and populate thru-hole resistors, capacitors, transistors, and connectors.



Of these tasks, the toroid winding steps are the most tedious for me.



There are three boards stacked to complete the radio. It is a tight fit and required some work with a jewelers file.

Once coils are wound and the boards populated, the three boards are attached to one another. Built-in test and

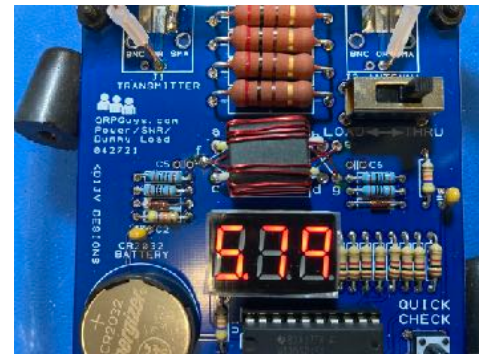
alignment tools are used to optimize the low-pass filter in the RF section and to balance I-Q channels in the audio section.



Counting the turns is sometimes a challenge for me, a photo helps a lot with the turn count!



The final result provided 5.8 watts with 13.3 volts, while consuming 9.1W for about 64% efficiency.



All assembled and aligned I took it out for our Winter Field Day adventure only to find that propagation on 40 meters was relatively poor and not where I needed to operate...oh well, at least the schedule pushed me to complete this project. Next, the 50 watt amplifier to go with it.

MOBILE RADIO POWER

Micah — KN6VUT

I needed to create a way to easily use my new mobile radio as a base in the house, mobile in the car, and portable out in the field. Moving up from handhelds to a mobile, I wanted the portability of the handhelds I had gotten used to. I used what was around the house from past non-radio projects, but I listed the equivalent of what I used along with prices from Amazon. When installed in the car, the radio uses the direct to battery cable, not the car power adapter.

THE BUILD-

I cut the radio's car adapter plug off and soldered on a longer cord with a male 12v automotive plug along with an in-line fuse.





I used a 12v 7a lead acid battery for working the radio on its own. I soldered and glued a car 12v female adapter with USB ports to the battery terminals and protected the battery leads with hot glue.



I already had a 12v power adapter so I can run the radio on household current.



I had some battery clamps I soldered on to another male plug end, this way I could charge the battery with my automotive battery charger.

I used what was laying around the house. My mobile is now portable, runs on electric, car battery, or its own battery.



My radio is now ready for use in car, home, or in the field.



Amazon equivalents-

12V Battery Clip-on Car and Socket Female Adapter \$4.91 <https://a.co/d/bOSfboL>

12V Auxiliary Power Outlet AC to DC Converter \$19.99- <https://a.co/d/4TiEsWu>

Battery 12V 7Ah \$22.99- <https://a.co/d/4a68wZF>

12V Sealed Lead Acid Battery Charger \$10.99- <https://a.co/d/cyw88Rm>

The Operating Room

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

Winter Field Day Thoughts.

Check out our Photo Album for the WFD at: [2023 Winter Field Day.](#)

John — KM6DXY

The Tehachapi Amateur Radio Association successfully completed its 1st Winter Field Day last weekend. Setup began Friday afternoon, January 27th and the event began on Saturday, January 28th at 11:00 am local time. Attending and operating during the event were Ray (W6QPA), Micah (KN6VUT), Dan (AB6DM), Valerie (KK6WLQ), and Dave (WA5GUL). Providing support were John (KM6DXY), Joshua (KN6HWS), Dick (W6SLZ), and CJ (W6SLZ/s XYL). Micah's wife provided a great BBQ pulled pork lunch and Ray and his wife, Jan, provided pizza!

Our event was held at the Kern River Campground. Ray was able to secure two camping sites; the location could not have been better. The facility was great and the weather was excellent –

especially for Winter! Skies were clear and if there was a breeze it was slight. It was a little chilly, but not bad.

Ray and Micah arrived on Friday and got their comms gear set up. John, Joshua, Dick and CJ arrived on Saturday morning. Dick was able to supply the crew with filters to keep the RF noise down. Dan and Valerie arrived, got their antenna deployed and their equipment setup.

After a great lunch provided by Ray, Micah and their wives it was time to get busy. Ray worked QRP CW and digital (JS8) from his trailer. Dan, Dave, Micah and Valerie worked HF from the second campsite.

Micah — KN6VUT

I had a great time at Winter Field Day. I learned more in the short time of Winter Field Day than all the test prep, YouTube videos, and Google searches I've done.

I tried my mobile dual band 25w with a J-Pole in a tree. I wasn't able to get anything, for winter field day, but the location wasn't line of sight friendly. Did pick up some nets on repeaters,

First basic lesson I learned, I over packed, and not conveniently. I need to break down my go-bags into different categories, field work, extended time, emergency, long term etc. I brought every radio related piece of equipment I owned, three handhelds, back up batteries, car chargers, small power-pack solar charger, two base antennas, collapsible J-Pole, Ground Plane, Extra long 'Tactical antenna' whip antennas for the Handhelds, laptop with power inverter for the car etc. luckily my car was right there, and I quickly noticed despite my efforts organizing what I needed, I was digging through all the bags, which took up a good portion of my trunk.

When I got on the HF radio, I got stage fright all over again, but it passed quickly. Watching the long distance contacts live, rather than watching a YouTube video was a completely different experience. Even though I know enough to have passed the Tech test, and have continued to learn, it seemed like a vague concept, or idea, not real, even though I believe it and have a basic understanding. I think I needed to actually experience what can be done to make it real, and wow, what a rush.

It's true, Ham radio takes you down a rabbit hole. Talking to people so far away on such a small device blew my mind, even though I know the basics. Actually having the chance to use the equipment has me thinking about HF and CW. I've been trying to ease into CW, have apps on my phone to learn, but, my brain just isn't picking it up. I'll keep using the apps, hopefully I'll eventually start to pick it up. I think HF will be my next radio goal, but not in a hurry, still have a lot to explore with what my dual band can do.

I can't wait for the next event!

Ray — W6QPA

Well, I'm unpacked, mostly put away. Logs submitted.

I operated for about 11.5 hours out of the 24 available. My station was operated as a separate entry from the club station since I was at QRP power of 5 watts. The rig was an [Elecraft KX3](#) feeding a [Band Hopper III](#) 40-30-20 meter linked-dipole antenna from SOTABeams hung about 15 feet off the ground between trees, feed point was supported by a SOTABeams "[Tactical' mini-mast](#)". I was able to run 15 meters too, the 40 meter elements loaded up almost perfectly on 15! For logging I used a Microsoft Surface 3 and [NiMM+](#) logging software. For JS8 digital, I used

[JS8Call](#) software. My power was supplied by a Bioenno [LiFePO₄](#) battery with a capacity for 144 Watt-hours. During daylight hours there was enough sunshine for the 60 watts of [Bioenno solar panels](#) to run the station and keep the battery topped off. After sunset, it was all battery.

I had 48 (38 CW, 10 JS8) contacts across 40, 20, 15 meter bands. These stations were in 29 ARRL sections and 23 states plus a Canadian Province. The CW/Dg operation came in with a whopping ~4 Qs per hour ... not exactly record-level performance ... it gives room to improve.

Thanks to Dick, W6SLZ, for loaning his [Low Band Systems band pass filters](#). Those filters kept Dan, leading the phone team, and I from interfering with each other.

Thanks to Micah we enjoyed BBQ pulled pork for lunch on Saturday. We also had breakfast doughnuts courtesy of John.

We're still tabulating the phone-teams scores, looking forward to Dan, Valerie, Dave, Dick, John and Micah's phone-team totals. No matter the scores ... it was fun and, as always for me, a learning experience.

SOTA Activation

Micah — KN6VUT.



Tuesday, Jan 31, I attempted my first SOTA activation, it was a learning experience.



I chose one of the closer peaks to Bakersfield near the KGET TV tower on Breckenridge Rd. I used 2 meter for my SOTA.



After no responses, I used both 2 meter and 70cm to check repeaters and heard a lot from up there.

Shortly into my hike, I realized I need to rearrange my 'Go-Bags' into easier carrying and need a solution to carrying my collapsible J-Pole.

In preparing for the SOTA, I used Google maps, and the estimated walking time from the road was only about 10 min. This did not take into account the dirt road off Breckenridge Rd was inaccessible to my

Dodge Dart, and I failed to take into account a “Summit” implies a certain degree of incline, a lot more than an out of shape guy is used to.

HamAlert

Latest spots

14:35 **SOTA** **KN6VUT** on W6/SS-647 (146.580 FM)
3580, 1091m, 2pt New Ham, First Activation, outside Bakersfield CA

Callsign	KN6VUT
Summit	W6/SS-647 (3580, 1091m, 2pt)
Band	2m
Frequency	146.58
Mode	FM
DXCC	291 (United States of America)
CQ zone	3
Spotter	KN6VUT
Trigger(s)	
State	CA

I logged myself into the SOTA site, and even got an alert to my activation on Ham Alert!

Summit details

W6/SS-647 2 pts
3580

NEW SPOT NEW ALERT

Association	USA
Region	Southern Sierra
Activation count	0
Last activation	N/A
Altitude	3580 feet
Coordinates	35.4409° N 118.7574° W
Grid square	DMJ5pc15
Distance	
Bearing	

GET TV transmits

Unfortunately, I didn't receive any replies for SOTA. I did receive a lot of signals and I also believe I was able to hit all the repeaters I had programed on my mobile with J-Pole, and my handheld with whip antenna.

I think I learned I won't be hiking up any more hills, but, more importantly, I need to re-arrange my go bags, and take walking further from the car into consideration when I need to go into the field.

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>

February 2023

- 13-17 [School Club Roundup](#)
- 18-19 [International DX – CW](#)

March 2023

- 3-5 [International DX– Phone](#)

April 2023

- 16 [Rookie Roundup – 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.

February 2023

- 1, 8, 15, 22 – 1900 hrs PST “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 2 – 1900 hrs PST, TARA Board Meeting, Via Zoom (invite via email)
- 9 – 1900 hrs PST, TARA Club Meeting, Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.
- 11 — 0830 hrs PST, TARA Club Breakfast at [P-Dubs](#), 20800 Santa Lucia St, Tehachapi.
- 11 — 1100 hrs PST — VE License Exam Session Salvation Army Community Room 538 E Tehachapi Blvd, Tehachapi, CA
- 25 — 0800 hrs PST, TARA Club Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 14 February.

March 2023

- 1, 8, 15, 22, 29 – 1900 hrs PST “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 2 – 1900 hrs PST, TARA Board Meeting, Via Zoom (invite via email)
- 3-5 — International DXCC Phone Contest at Dick & CJ Browns QTH (see Contests in the February edition)
- 9 – 1900 hrs PST, Club Meeting, Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.
- 11 — 0830 hrs PST, TARA Club Breakfast at [Gracian Grill](#)
- 25 — 0800 hrs PST, TARA Club Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 14 March.

April 2023

- 5, 12, 19, 26 – 1900 hrs PST “Just Because” Net (W6SLZ VHF rpt, 146.70 - / 123.0)
- 6 – 1900 hrs PST, TARA Board Meeting, Via Zoom (invite via email)
- 13 – 1900 hrs PST, TARA Club Meeting, Tehachapi Police Department Conference Room, 220 W C St, Tehachapi.
- 8 — 0830 hrs PST, TARA Club Breakfast at [Gracian Grill](#)
- 22 — 0800 hrs PST, TARA Club Breakfast at BVS Mulligan Room. Reserve a spot with Valerie Mason by 14 January.

Reference Information

Local Repeater Information				
TARA APRS Digipeater	144.390	No tone	AC6EE-3	APRS

Local Repeater Information				
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 (WIN System node)
Tehachapi Repeater	444.225	100.0 Hz TONE	KG6KKV	Overlooks Bakersfield
DMR Digital	442.675	Offset: +5.000 ColorCode: 1	K7RET	Brandmeister, Bakersfield, CA The location is in the Tehachapi Mountains near Cummings Mountain
DMR Repeater	447.120	Offset: -5.00 ColorCode: 1	KR6DK	Brandmeister, McKittrick, CA The location is in the Tehachapi Mountains near Double Mountain This repeater is permanently linked to the KR6DK analog repeater system.
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 Repeater				
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

KERN System Linked Repeaters				
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/
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
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

Officers & Committee Chairs			
Officer/Committee Chair	Name	Call	Email
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

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, our meeting site is now 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