



RF



ORANGE COUNTY AMATEUR RADIO CLUB, INC.

VOL. LXI NO. 05

P.O. BOX 3454, TUSTIN, CA 92781

May 2020

The Prez Sez.....

Bv Dan KI6X



It has been a month since my last Prez Says and it is still unknown regarding status of future Covid-19 restrictions. The Board has been floating various Field Day ideas and it will become more defined as it gets closer to June. Here are various thoughts for operating: Full FD effort as normal, Winter FD level effort with individual tents, "mobile" effort where all operators show up at a common site self-contained (station in their car, personal pop-up tent). This last idea could include sharing a site generator or personal power needed and using mobile mounted or self-deployed antennas. We would set our defined station count and as operators (cars) come and go we switch off who is operating as W6ZE. Could be a fun change? We may just end up encouraging everyone to operate on their own and no club entry will happen.

Our May General Membership meeting will be on Zoom again. We had 40 attend the April Zoom meeting and I think it went very well. We had very few hiccups, had a great presentation and a business meeting, in about an hour. I am planning the same level of announcing the Zoom details. Emails were sent to the members with the Zoom information a couple times. The info can be passed on to non-members that would like to visit. The link may show up on the website but the day of the meeting only. We don't like to blanket the internet with the information since there are "losers" out there that like to find Zoom meeting notices and harass the group.

In membership information, we have had one of our best years in membership renewal rates. We had about 80% renew by the expiration the end of March and normally only about 60% renew by then. Accepting PayPal has helped too. I do appreciate those that renewed to continue their membership and getting those in on time. We are currently not removing former members from the roles until we meet in person again to allow us to not lose contact to all during this time.

Dan, KI6X, President

NEXT MEETING

May 15, 2020
7PM

ONLINE ZOOM

**OCARC Virtual Meeting on
"ARRL ARES Organization"**
– by Bob Turner, W6RHK
Orange Section Emergency
Coordinator

**All current members will
receive an email invite**

**DURING THE
CORONAVIRUS
(COVID-19)**

**All OCARC Nets
Remain Active!**

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Monthly Events:**General Meeting time & location:**

Normally Held third Friday of the month at 7PM, located at
The American Red Cross
600 Parkcenter Drive
Santa Ana, CA
(Near Tustin Ave. & 4th St.)

Canceled during Covid 19
See Pg 1 for ZOOM meeting information.

Breakfast (Board Mtg) info:

Held the First Saturday* of the month at 8am
Marie Callender's Restaurant
307 E. Katella Ave
Orange, CA 92867
***Temporarily cancelled**

Club Nets (Listen for W6ZE):

10M: 28.375 ± MHz SSB
Wed- 7:30 PM - 8:30 PM
Net Control: Corey, KE6YHX

2M: 146.55 MHz Simplex FM
Mon, Wed, Fri 8:30 PM - 9:00 PM Local time
Net Control: Corey, KE6YHX

75M 3.883 MHz LSB

Wed ~9:15 PM
Follows right after end of 2M Net
Net Control: Corey, KE6YHX,

OCARC 2020 DUES**Membership period is:**

1 January to 31 December

Individual New or Renewal:	\$30.
Family New or Renewal:	\$45.
Teen New or Renewal:	\$15.

New Member Dues are prorated quarterly and includes a badge:
Additional Badges: • \$ 3.
Use one of our interactive online forms to calculate current prices, join the club and/or order badges:

Online Forms / Dues & Badges

• \$3. plus mailing costs if applicable
Dues are subject to change without notice

Orange County Blood Bank

During the Coronavirus crisis, many Blood Drives were cancelled. In the wake, the American Red Cross has been working hard to replenish the Blood Bank inventory.

Please consider helping by donating to:

Appts required - 1-800-RED CROSS or www.redcross.org

Blood Donation Centers

			Santa Ana Blood Center 600 Parkcenter 92705	Fountain Valley Blood Center 17800 Newhope St Fountain Valley, CA 92708	Fullerton Blood Center 1144 Rosecrans Ave Fullerton, CA 92833
MON	MAY	11	12:15 PM - 07:30 PM	11:30 AM - 07:30 PM	11:30 AM - 07:30 PM
TUE	MAY	12	12:15 PM - 07:30 PM	11:30 AM - 07:30 PM	11:30 AM - 07:30 PM
WED	MAY	13	12:15 PM - 07:30 PM	11:30 AM - 07:30 PM	11:30 AM - 07:30 PM
THUR	MAY	14	10:45 AM - 06:00 PM	10:00 AM - 06:00 PM	10:00 AM - 06:00 PM
FRI	MAY	15	08:15 AM - 03:30 PM	07:30 AM - 03:30 PM	07:30 AM - 03:30 PM
SAT	MAY	16	07:45 AM - 03:00 PM	07:00 AM - 03:00 PM	07:00 AM - 03:00 PM
SUN	MAY	17		07:00 AM - 03:00 PM	07:00 AM - 03:00 PM
MON	MAY	18	12:15 PM - 07:30 PM	11:30 AM - 07:30 PM	11:30 AM - 07:30 PM
TUE	MAY	19	12:15 PM - 07:30 PM	11:30 AM - 07:30 PM	11:30 AM - 07:30 PM
WED	MAY	20	12:15 PM - 07:30 PM	11:30 AM - 07:30 PM	11:30 AM - 07:30 PM
THUR	MAY	21	10:45 AM - 06:00 PM		10:00 AM - 06:00 PM
FRI	MAY	22	08:15 AM - 03:30 PM		

Blood Drive Sites

American Legion Post 132	143 S. Lemon St	Orange, CA 92866	10:00:AM - 04:00 PM	MAY	17
Antis Roofing	2649 Campus Dr.	Irvine, CA 92612	09:00:AM - 03:00 PM	MAY	19
Buena Park Masonic	6841 Western Ave	Buena Park, CA 90621	10:00 AM - 04:00 PM	MAY	14
Free Chapel	2777 McGaw Ave	Irvine, CA 92614	10:00 AM - 04:00 PM	MAY	12
Mariners Church	3095 Red Hill Ave	Costa Mesa, CA 92626	11:00:AM - 05:00 PM	MAY	14
Mesa Verde United Methodist	5001 Newport Coast Dr	Irvine, CA 92612	10:00 AM - 04:00 PM	MAY	18
Rockharbor Offices	5001 Newport Coast Dr	Costa Mesa, CA 92626	10:00 AM - 04:00 PM	MAY	12
Segerstrom Center for Arts	615 Town Center Dr	Costa Mesa, CA 92626	10:00 AM - 04:00 PM	MAY	13
Sisters of St Joseph	480 S Batavia St	Orange, CA 92868	09:00 AM - 03:00 PM	MAY	11
Sisters of St Joseph	480 S Batavia St	Orange, CA 92868	09:00 AM - 03:00 PM	MAY	21
Teamsters Local 952	140 S. Marks Way	Orange, CA 92868	10:00:AM - 04:00 PM	MAY	19

For schedule updates see: www.redcross.org.

How Has Coronavirus (COVID-19) Affected Amateur Radio?

By Tim N6GP

The Coronavirus has left its mark on the world, and ham radio is no exception. Some areas of our hobby have been shut down, while others have flourished. Let me get the bad affects out of the way, and end on a positive note.

Conventions, Hamfests and Club Meetings The year started off like any other year with the Quartzfest in Arizona, the Yuma Hamfest and the Orlando Hamcation. Clubs across the country held meetings as normal in January and February. Then suddenly the Southern Calif DX Club cancelled their meeting in early March. We and all the other clubs followed suit. Like dominoes, conventions were cancelled, like the Visalia DX convention, Dayton and now even Friedrichshafen in June. The face to face 'eyeball QSOs' are missed! The Baker to Vegas law enforcement run, that many in our club support every April was postponed, and now is cancelled.

DXpeditions

The brave ops who went to the South Orkney Is. VP8PJ Feb 26-March 6 logged almost 70,000 contacts. For sure the DXpedition of the year, because the rest are all cancelled or postponed. The first major one postponed was the W8S expedition to Swains Is. was to be in mid-March. An additional 2 week quarantine was required at the beginning of the trip, making it unfeasible. It has been delayed until late Sept thru early Oct 2020. Since then, more than 95% of the DXpeditions have been cancelled. The NG3K DXpedition calendar normally has about a dozen DXpeditions active at one time. Right now it is down to 2. <https://ng3k.com/Misc/adxo.html> The DX Contesters who normally fly down to the Caribbean for the ARRL DX Contests in late Feb and the first weekend in March were able to make their trips. But none of them travelled for the CQ WPX the last weekend in March. No Aruba, Virgin Islands nor Cayman Islands in that one!

Contests

A few rule changes have been made to contests here and there. Multi-operator stations have been banned in a lot of contests, with the exception of

remote stations. Some of the state QSO parties have banned rovers or expedition stations. The RSGB CW Field Day has been cancelled, while the ARRL has left its Field Day rules unchanged, while asking us to adapt.

Two special contests have been added due to COVID-19. The Hamvention QSO Party is filling the hole in the calendar left by cancellation of the Dayton Hamvention.

<https://wwrof.org/hamvention-qso-party/>

Secondly, the RSGB is adding two 90 minute contests a week to help keep their members busy at their home. "Hope QSO Party"

<https://rsgb.org/main/blog/news/rsgb-notices/2020/04/01/rsgb-contest-committees-launch-hope-qso-party/>

Contest activity is WAY up! As an example, the CQ WPX SSB Contest in late March had a record 7,450 logs submitted vs 5,516 last year. Let's see what the CW version of WPX does later this month! Op's in state QSO parties are reporting lots of activity, and personal best record scores. (Some of this might be due to the State QSP Party Challenge <http://stateqsoparty.com/>)

Special Events on the Air

Hams in New York are honoring the men and women fighting the COVID-19 crisis on the frontlines with the K2H special event call. A 3 letter suffix is appended to the call for each county. This is a very nice thing to do.

Other hams are encouraging social distancing with special callsigns like OH2STAYHOME. It is believed these callsigns are the longest ever in amateur radio, like OR20STAYHOME. If you want a STAYHOME callsign in the U.S., the answer is "no".

Nets

All over the country, nets are springing up to keep hams in touch while the face-to-face meetings are impossible. We have started the OCARC Coronavirus Nets on Mondays and Friday nights at 8:30PM on 146.55 MHz. The net control is Corey KE6YHX, and he keeps the conversation lively on a varied set of topics. Tom W6ETC has started the "Net at Nine" nets on the Catalina Island Repeater (147.09 +) at 9AM and 9PM weekdays as a way for hams to support one another during this crisis, and to have a bit of fun.

EmComm is Ready, if Needed

The brand new Orange County ARES hospital support group (OCHEART) is gearing up for a possible activation. They have been running simplex tests during several of the last weekends

to test their capabilities. <https://ocheart.net/> This will be the topic for the May OCARC meeting. The County and City RACES group are testing their preparedness as well.

Ham Radio Retail is Up

During an online interview last week, Janet Margelli commented that “business has never been better”, while reminding everyone that all HRO stores are closed to walk in traffic. They are literally on the phone all day long taking phone orders for shipment, or for curbside delivery.

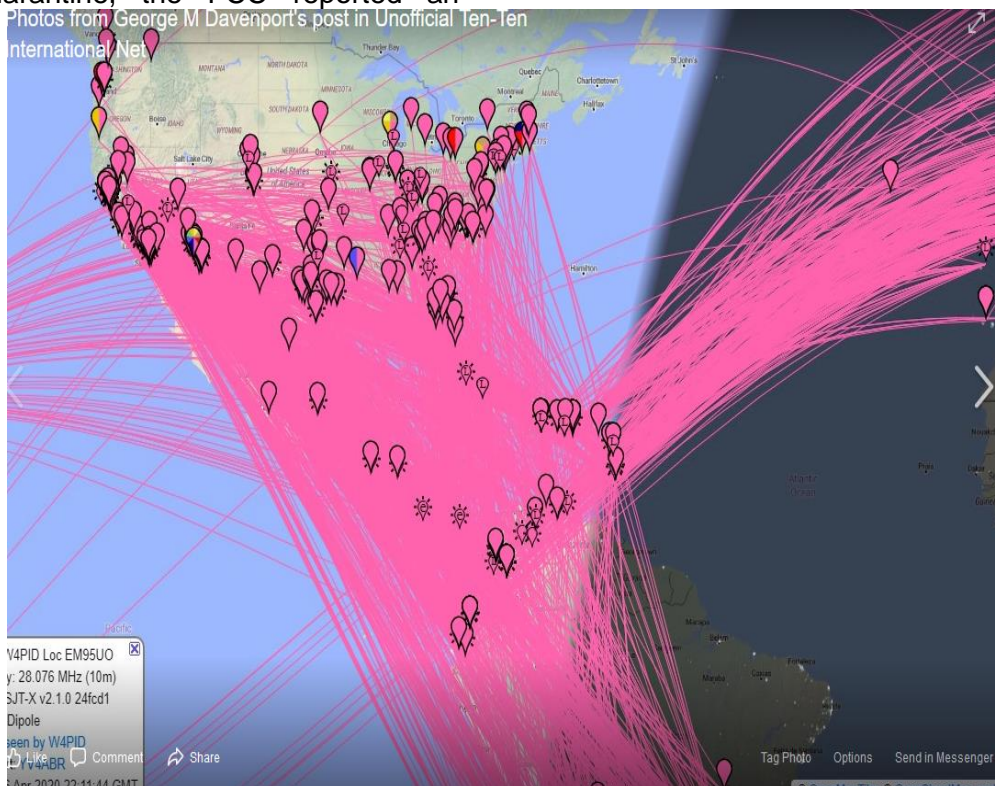
VE and Ham Radio Courses

With some of the good press that amateur radio has gotten during this crisis, people are clamoring to become hams. The www.hamradioprep.com site is saying that their enrollment in their classes has increased 706% since the virus outbreak. Before the quarantine, the FCC reported an

increase in amateur radio exams of 7% year over year. Sadly, Volunteer Examiner (VE) sessions were shut down mid-March. But, that led to a revolutionary new concept – remote VE exams (see article by Adam KN6FUO in this issue).

Better Propagation?

Not really, but it seems like it. We are still scraping the bottom of the trough in the 11 year sunspot cycle, but Trans Equatorial Propagation on 15 thru 6 meters has been hot recently. I don't think the propagation has changed much, but the operating habits sure have changed. Hams aren't at work, and they are home on the air, making magic happen! Sporadic E season on 6 meters has opened a full 3 weeks ahead of schedule. Look at this QSO map from 10 meters a week ago. It was hot! South America working U.S.A. and Europe!



LOTW

Some users of the ARRL's Logbook Of The World (LOTW) are seeing newly matched confirmations from QSO's as far back as the 1990's and early 2000's. Evidently, people staying at home are finding time to enter old QSOs into the system. The writer of this article had a confirmation come through recently for a 12 meter QSO with Uzbekistan back in 2014.

The Best Hobby to Have at this Time?

On the whole, amateur radio is not only surviving this Coronavirus Crisis, but we are thriving. Some hams are saying that getting on the radio is the only thing keeping them sane during this prolonged period of lockdown. We should be thankful that we have this hobby that allows us to connect with our friends locally, and to compete with 1000's of hams around the world in a weekend contest. I would say that we are truly blessed to have it.

RadioActivity

May 2020

Upcoming Activities:

May

- **May 7TH Call Area QSO Party:** 1300 UTC Saturday May 2 through 0700 UTC Sunday May 3
- **Baltic Contest:** 2100 UTC Saturday May 24 through 0200 UTC Sunday May 25
- ***CQ World Wide WPX Contest/CW:** 0000 UTC Saturday May 30 through 2359 UTC Sunday May 23

June

- ***ARRL June VHF QSO Party:** 1800 UTC Saturday June 13 through 0259 UTC Monday June 15.
- **Kids Day:** 1800 UTC through 2359 UTC Saturday June 20
- **Field Day:** 1800 UTC Saturday 27 through 2100 UTC Sunday 28.

* Indicates club entries are accepted

** Indicates team entries are accepted

Note: When submitting logs for ARRL Contests indicate your club affiliation as "Orange County ARC"

State QSO Parties:

- **Indiana QSO Party:** 1500 UTC Saturday May 2 to 0300 UTC Sunday May 3
- **Delaware QSO Party:** 1700 UTC Saturday May 2 to 2359 UTC Sunday May 3
- **New England QSO Party:** 2000 UTC Saturday May 2 to 0500 UTC Sunday May 3 and 1300 UTC to 2400 UTC Sunday May 3
- **Arkansas QSO Party:** 1600 UTC to 1959 UTC Saturday May 9
- **Kentucky QSO Party:** 1400 UTC Saturday June 6 to 0200 UTC Sunday June 7

Ongoing Activities:

Super QP Challenge: Year Long Event

Repeating Activities:

- **Phone Fry** Every Tuesday night at 0230Z to 0300Z
- **SKCC** Weekend Sprintathon (Straight Key CW) on the first weekend of the month after the 6TH of the month. 1200 Sat. to 2359Z Sunday.
- **SKCC** Sprint (Straight Key CW) 0000Z to 0200Z on the 4th Tuesday night (USA) of the month.
- **CWops** Every Wednesday 1300 UTC to 1400 UTC 1900 UTC to 2000 UTC and Thursday 0300 UTC to 0400 UTC

Send an email to Ron W6WG, w6wg@w6ze.org to have your favorite activity or your recent RadioActivity listed in next month's column.

49:1 Transformer End Fed Half Wave (EFHW) Antenna for W6ZE

by
Terry AI6ZV



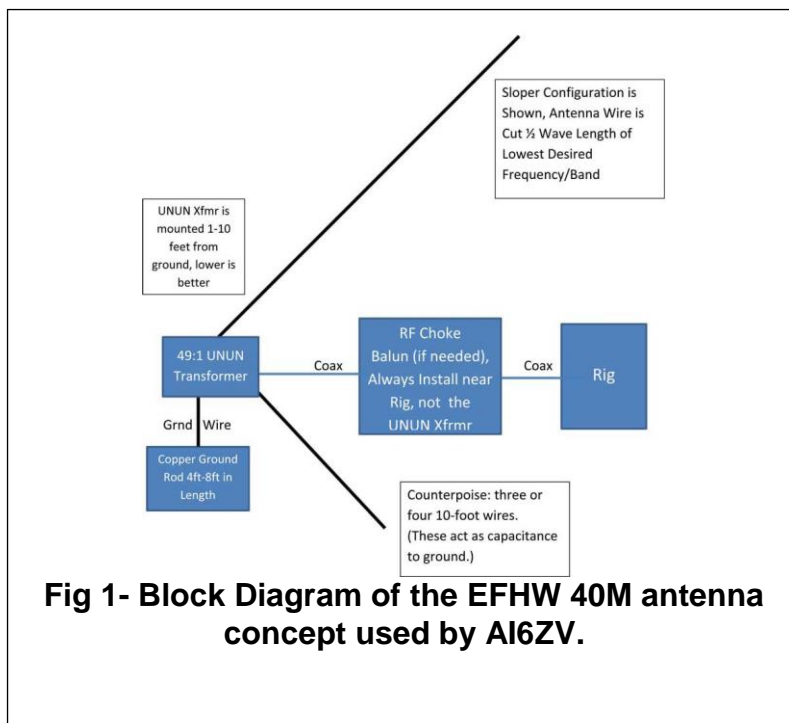
Terry presenting at OCARC's first virtual General Meeting

This article describes an antenna designed for 10M-80M if using a halfwave wire on 80M (approx. 130-134 feet of wire). The wire is typically run in Sloper or Inverted-L configuration. In addition to the half-wave of wire for the actual antenna, the main components are:

- a 49:1 transformer to match the antenna impedance to coax,
- an RF choke to block RF from entering his shack,
- three 10-ft sections of wire to act as counterpoise (capacitors to ground),
- a ground rod.

See **Figure 1** for a block diagram of a typical EFHW antenna.

If 134 feet of Wire is too much for your location, you can use 67 feet of Wire and get 10M-40M. With 67 feet of wire, the SWR is very low on 40M and 15M. This is what I am using at my location with a limited-size backyard. You would need a Tuner for the other bands with 67 feet of Wire.



I have also used the full 134 feet of Wire in a portable application, and it worked exceptionally well on all the bands with a very low SWR, almost 1:1 for 80M, 40M, 20M, 15M. An antenna tuner is only needed for 30M, which was just under 3:1 SWR.

The Illustration, **Figure 2**, shows the winding details and provides a materials listing for the UNUN transformer. You need to use two ferrite toroids made of 2 type 43 material for 100W or less – in order to lower the amount of heat generated in the toroids. Remember that toroid heat is lost power that never reaches the antenna. More toroids should be used for 500W - 1KW power levels, or better yet, use the more efficient 3 type 52 material toroids.

Figure 3 is a photo of the assembly I constructed. This was the first winding I ever did, and was very easy since the wire used is so large. There are many videos online that can assist with the winding. I would recommend doing a search for Steve Ellington on YouTube, as he has many videos for 49:1 EFHW.

EFHW UNUN Construction

I recommend at least 2 toroids for better efficiency, higher primary inductance, and splitting power between toroids

Number of turns = number inside the toroid stack. Crossover counts as one turn

49:1 Transformer

Primary 2 Turns.
Secondary 14 turns (Total turns)

To End Fed Half Wave Antenna.

"Crossover"

To TX Gnd.

100 pF

Revised: 07/14/2017 - K1TA

Parts List

Toroid Core:
Mouser Part #623-5943003801
240-43 Toroid 12.7mm x 61mm

**Use 1, 2 or 3 cores depending on transmitter output to be used.*

Capacitor:
Mouser Part #81-DHR4E4C221K2BB
100 - 110 pF. You can use TWO 220 pF @ 15 kV in series.

Antenna:
80m - 10m use a 134' wire.
40m - 10m use a 67' wire, etc.

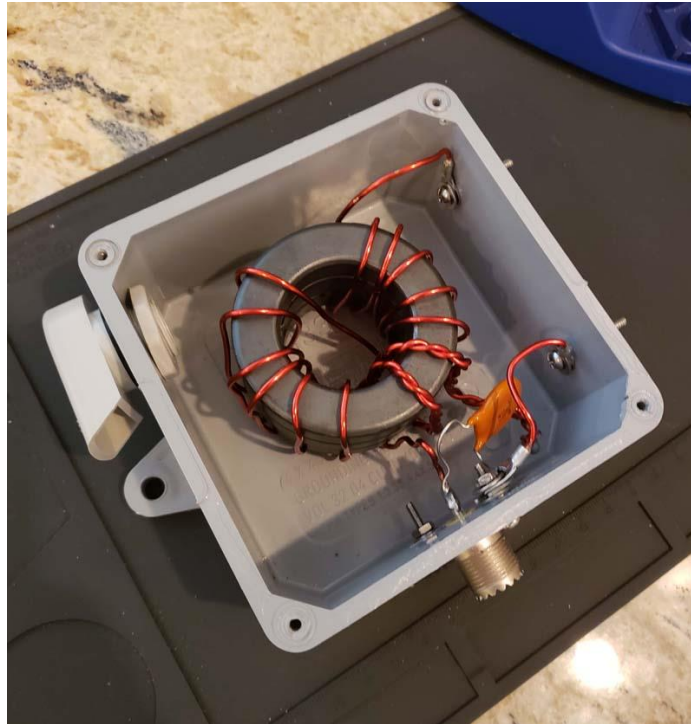
Wire:
14 gauge enameled wire. **

**** When using 3 toroid cores start with a Primary wire of ~13" and Secondary of ~80" long. 1 & 2 cores will use less wire.**

I recommend 2 type 43 material for less than ~250 watts for lower cost, Fair Rite P/N 5943003801

3 type 52 material for ~500-1000W higher efficiency and higher temperature capable. Fair Rite P/N 5952003801

Fig 2 – Details on winding the 49:1 Impedance Transformer
It matches the ~3000 ohm end-fed impedance to the coax.
(courtesy of K1TA)



AI6ZV uses two toroid cores in his impedance xfmr for better efficiency and to lower heat for 100W rig. Heat is created by lost power that never reaches the antenna. It matches the the ~3000 ohm end-fed impedance to the coax.

In reference to the Block Diagram, the 49:1 Transformer connects to a ground rod, optional counterpoise wires, and your Rig via Coax. You may or may not need an RF Choke/Balun installed inline right before your Rig. This will prevent RF from radiating off of the Coax shield. This was an issue I had, and the RF Choke solved the problem.

Mounting the 49:1 Transformer should be on a non-metallic wood or fiberglass post/fence. It is not recommended to mount it near any metal, as the cores may not function properly. The Transformer seems to work best approx. 1-4 feet from the ground, but can be mounted as high as 10 feet if needed.

This is a relatively simple and efficient antenna, which only requires one high point to mount your antenna wire. It is my **GO TO ANTENNA** for 15M and 40M. Google "K1TA end fed" or "K1RF end fed" for more details.

73!
Terry

MY EXPERIENCE UPGRADING TO GENERAL USING REMOTE TESTING SERVICES by ADAM ROBLES, KN6FUO

I have been a Ham for only 5 months and I was ready to upgrade to General. I have been in the IT industry for 20+ years and have worked remotely for the last 10 years so remote testing seemed right up my alley. Thanks to Covid-19 (sarcasm or maybe not?), it was impossible to get a testing date at a location near me due to the restrictions. Classes were being canceled all over the nation, with good reason of course. This spurred a lot of discussion about remote testing as under certain circumstances it has been allowed in the past. Even with this older style of remote testing there had to be a VE with you at the location you were testing. The other two required VE's could be remote. Again, with the Covid-19 pandemic, it wasn't safe to do this.

I have been following HRCC (Ham Radio Crash Course <https://m.youtube.com/user/hoshnasi>) with Josh Nass KI6NAZ on youtube since I started studying for my tech exam. Thanks to his channel and GLAARG (Greater Los Angeles Amateur Radio Group <https://glaarg.org/>) they created a way to remotely take the exam I needed to upgrade. I found out they were testing through one of Josh's live streams and quickly headed over to <http://www.hamstudy.org/sessions> and found the class available and registered. It was Saturday and the remote session was Wednesday that next week! Amazing! I started studying right away.

Before the test day I was sent a PayPal request to pay the \$5 fee for the exam and a DocuSign for the required FCC documentation. Right away I paid and signed to not cause any problems or delays. The test was scheduled between 11am-3pm PST and it was first come first serve. Instructions were emailed before hand. There was a Discord server (chat application) that you can sign into to ask any questions before the test. It acted as sort of a waiting room where people can come and go. They used a web conferencing application called Zoom to watch you during the test. If there was any sign of cheating or interruption they would cut the test short and fail you.

I Made sure to find a quiet place where I couldn't be interrupted. Once you join Zoom you sit and wait until they are ready to bring you into the initial room. There were ~60 people signed up and they had enough VE's to do four tests at a time. I thought I would join early so I joined 30 minutes before 11am but I seemed to not have been the only one to have done this as it took nearly 2 hours just to get into the initial verification room. I didn't mind the wait, I was just happy to be able to test. Once they get to your name and while others are testing they bring you into the first virtual room. In this room they make sure you have everything you need to test including your ID, calculator and piece of paper. They confirm you know how to use zoom and know how to share your screen. After a short wait they bring you into the next virtual room where 3 VE's introduce themselves and go through a checklist of things to make sure everything is per their requirements. GLAARG only requires one form of picture ID so a driver's

license is perfect. They have you pick up your camera or computer and show the room you are in to make sure there is not a way for you to cheat. You show them your desk, walls, ceiling, desk, and they make sure your cell phone is put away. They then ask you to share your screen and ask for access to your computer. They make sure you have no other apps open and turn off all notifications to not disturb the test process. They log you into the website <http://www.examttools.org> which seems to be a modified version of <http://www.hamstudy.org>. The VE signs you into the site with a pin provided in the registration email and the VE's callsign. You then start the web based test while they watch your screen. They turn off their video to not distract you during testing but they can still see you and your desktop. Once you tell them you are done they hit the grade exam button and put in their call sign again for verification. You receive your grade right then and there. The VE's then close everything and file the paperwork over the internet to the FCC.

My license on the FCC site was upgraded from tech to general 24 hours later. It was seamless and easy, this should have been implemented years ago! Thanks to HRCC, GLAARG, the VE's that volunteer to do this, Discord, and Zoom for making this happen. We live in some extraordinary times and I was glad to be part of the first group of people to remote test.

73

KN6FUO

NEW NET ANNOUNCEMENTS

The Coronavirus pandemic has captured the bulk of our attention recently. Locally it has given birth, among other things, to several new ham networks. We are all encouraged to participate in them. Among the new nets are:

Corey KE6YHX, the primary net control station for OCARC nets, has added two new weekly 2M nets to focus primarily on service and support during the Coronavirus health-threats and restrictions. The two nets are called the **"OCARC Coronavirus Support Net"** to meet each Monday and Friday on 146.550 MHz simplex) at 8:30 PM.



Tom W6ETC reported that the CARA (Catalina) repeater (147.090+) is being used to operate a new support net for hams called **"Net at Nine"**. The nets are meeting Monday and Friday at 9 AM with Tom serving as Net Control. Again, the focus will be centered on service and support during the Coronavirus health threat and restrictions.

OCARC continues to host the general discussion nets. Corey KE6YHX as Net Control

10M: 28.375 ± MHz SSB - Wed - 7:30 PM - 8:30 PM

2M: 146.55 MHz Simplex FM - Mon, Wed, Fri 8:30 PM - 9:00 PM.

75M: 3.883 MHz LSB Wed ~9:15 PM Follows immediately after Wednesday 2M

RADIO NOSTALGIA

For the nostalgia deprived among us.

Sources of nostalgia for those of us living in the past, or dreaming of the past, or just simply nostalgia deprived. Below is a listing of some websites offering vintage radio/electronics catalogs and manuals. They may come in handy for restoration projects or they may just be fun to review.

Surely more of these sites exist, but here are some that have been offered by members beginning with Tim, N6GP's initial reference and Bob, AF6C's response.

Offered by Tim, N6GP

<http://www.radioshackcatalogs.com>

Includes History back to 1919.

Offered by Bob, AF6C

<http://heathkitcatalogs.com/index.php>

Includes catalogs back to 1961

<http://www.alliedcatalogs.com/index.html>

Includes history back to 1928

Offered by Jim, AF6N

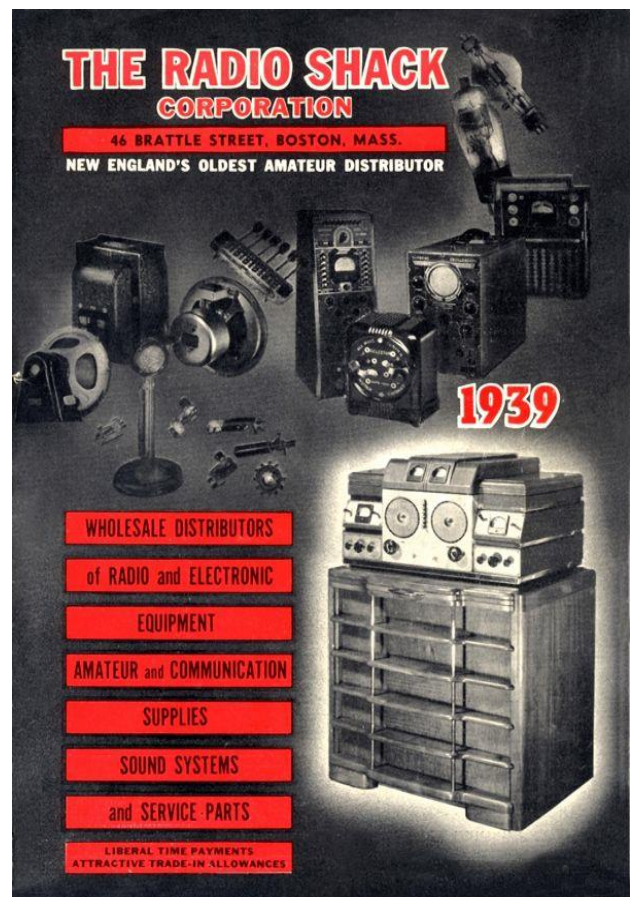
www.pastcatalogs.com

includes: Catalogs back to 1927

- Allied Radio, Federated Purchaser, Harry Alter Co, Heathkit, Lafayette Radio, Pettingell-Andrews Co., Radio Shack

<https://www.americanradiohistory.com>

An extensive listing of electronics catalogs and manuals including early amateur equipment such as Hammerlund and Hallicrafters

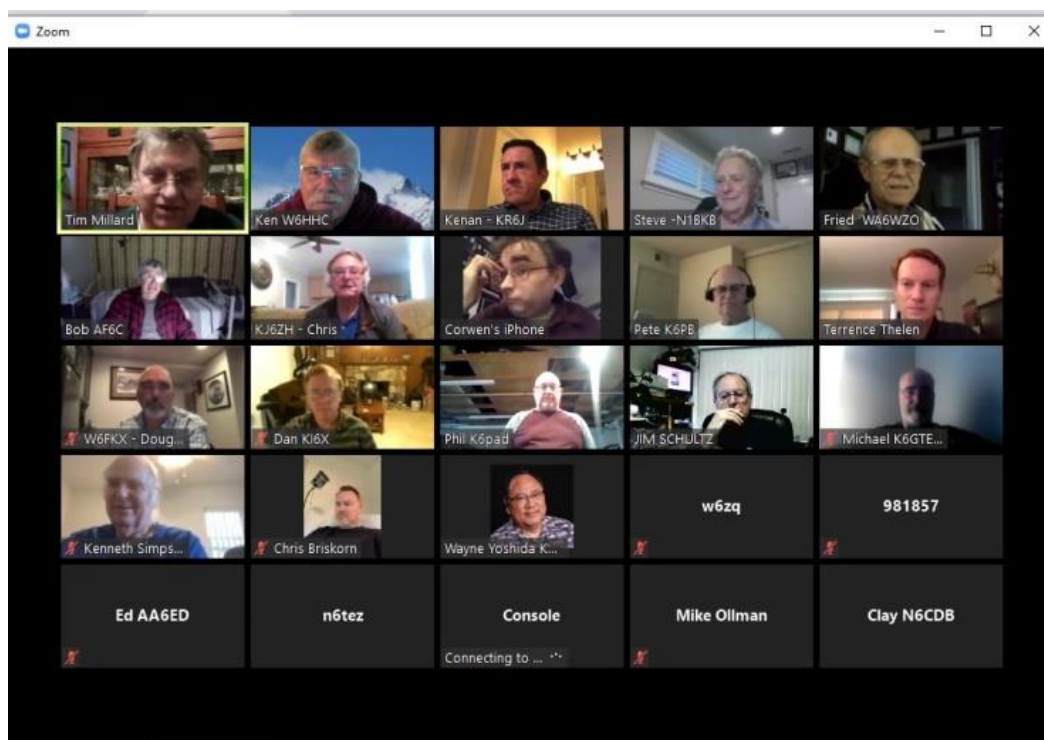


OCARC General Meeting via ZOOM 2020-04-17

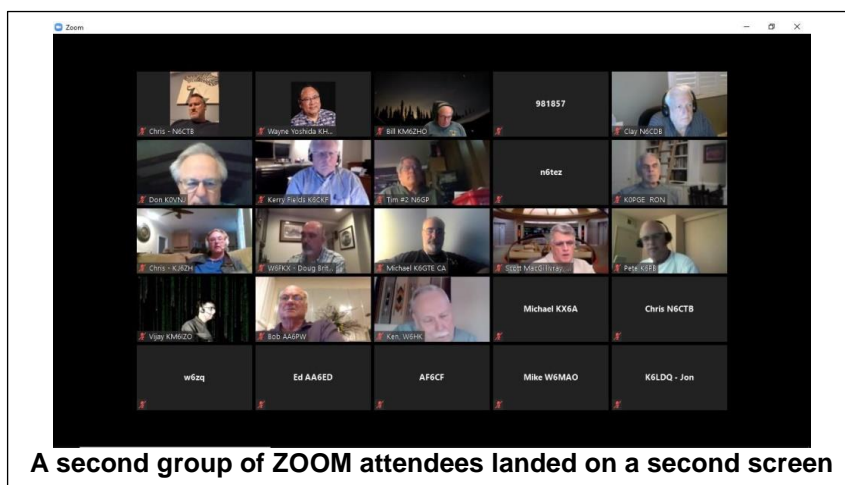
The April OCARC General Meeting was ZOOM via the internet on April 17, 2020.

The meeting was called to order at 7:00pm by Dan KI6X.

There were a total of 40 members and visitors in attendance. There was a quorum of officers, with all directors present. This was the first ever OCARC General Meeting that was conducted using ZOOM (due to restrictions imposed by the Coronavirus).



**One typical Screen-Capture of members in meeting attendance.
The majority of attendees could provide video from the home QTH,
but while some sent no video, everyone could watch video on ZOOM
and could hear the audio during the meeting.**



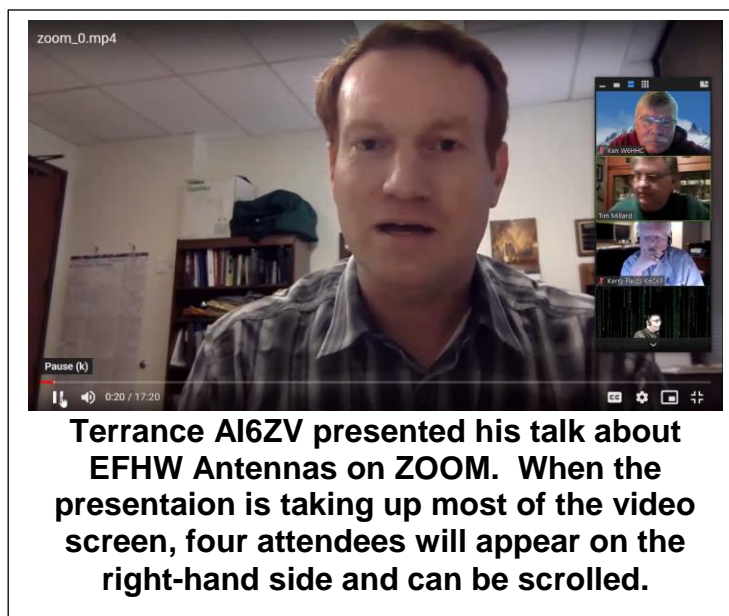
A second group of ZOOM attendees landed on a second screen

April Program:

Tim N6TMT introduced Terrance Thelen AI6ZV on ZOOM as the club program speaker for the evening who talked on:

“End-Fed Half-Wave HF Antennas...”

Terry explained his success on building a one-half-wave 40M antenna in his limited-size backyard. In addition to the half-wave of wire for the actual antenna, the main components are 49:1 transformer to match the antenna impedance, an RF choke to block RF from entering his shack, three 10-ft sections of wire to act as counterpoise (capacitors to ground), and a ground rod. See Terry's article in this RF Newsletter and also Google “K1TA end fed” or “K1RF end fed” for even more details.

**Old Business:**

- **General Meetings** - Tim N6TMT, vice president, explained that the next Gen Meeting will most likely be also held on ZOOM.
May – Bob Turner W6RHK to present on the ARRL ARES Program via ZOOM.
- **Winter Field Day** – Tim N6GP reported that the OCARC score for WFD was first in the nation.
- **Membership** – Corey KE6YHX reported that the club membership stood at 112 members, despite the impact of Coronavirus.
- **Summer FD** – Ron W6WG explained that the rules for FD in June are still unstable. Perhaps members may work from their back yards....although the school district field is mostly still available. Ron further explained that “if in the event that FD turns out to be a small event”...then a lot of emphasis will be put on club members operating CA QSO Party from their homes in October.
- **Red Cross Blood Drive** - Dan KI6X, president, announced that the Red Cross was in urgent need of blood volunteers.

Good of the Club:

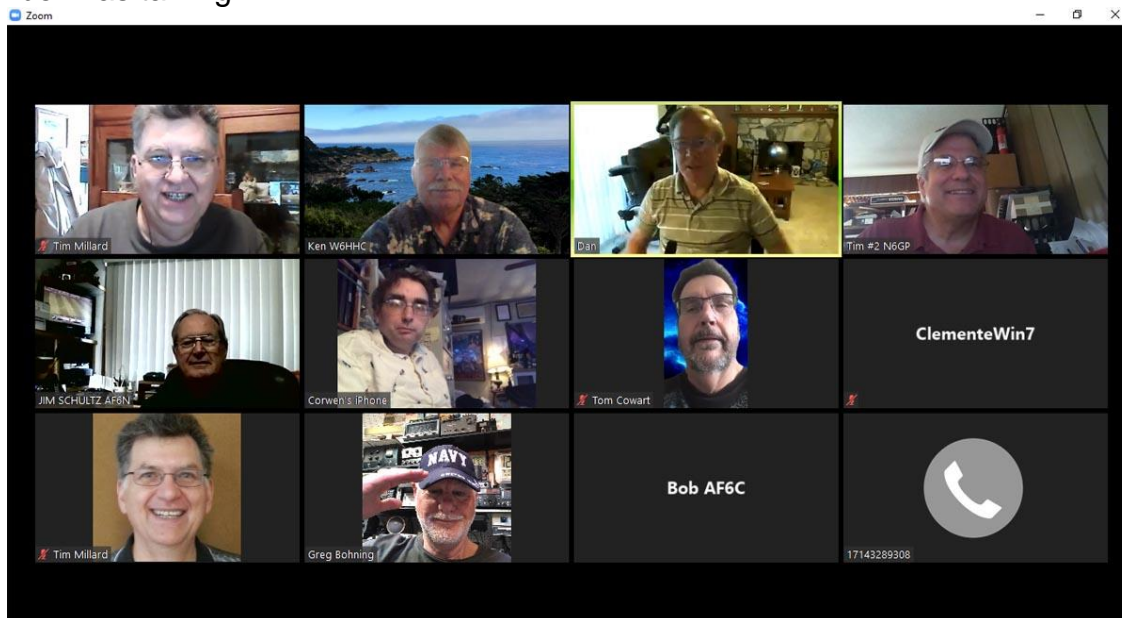
- Corey KE6YHX announced that in addition to the normal OCARC nets on Wednesday...there are two additional OCARC Coronavirus Support nets being held on 2M at 7:30 PM on Monday nights and Friday nights.
- Ex-President of OCARC, Chris Breller KJ6ZH, who checked into ZOOM from Granite Bay, CA announced that the North Hill ARC (up in central Calif) conducts a weekly 75M net. All OCARC members are welcome to check in, The net meets on 3918.5 MHz LSB, on Saturday evenings at 8:00 AM.

The ZOOM Meeting Adjourned at 8:00 pm.

Submitted by: Ken W6HHC, Secretary

OCARC BOARD MEETING MINUTES 2020-05-02

Due the COVID-19 restrictions, the latest OCARC Board meeting was held **ON-LINE via ZOOM** on Saturday May 02, 2020 at 8:30 AM. In attendance were 9 Directors and four visitors. All directors were present, except KM6IZO, for a Board quorum. The ZOOM technology (organized by Tim N6TMT) worked very well and allowed the board to see agendas and reports as well as to see which board member was talking.



Screen-shot of May Board Meeting held on Zoom
due to Coronavirus health restrictions
(W6WG and AF6CF participated by phone from Boron, CA.)

Director Reports:

- **Membership** – Corey KE6YHX reported that the club has a total of 85 members who have paid their 2020 membership. 21 members from 2019 have not renewed yet for 2020.
- **Treasury** - Greg W6ATB reported that the club had revenues of \$3,660 and a net profit of \$958, so far Year-to-Date. See Newsletter Page 19 for a cash flow report of the club's finances.

Old Business:

- Newsletter Editors
May – Jim AF6N
June – Greg W6ATB
July – Ron W6WG
- **General Meeting Programs**
Because of COVID-19 restrictions, the Board has agreed to conduct a ZOOM General Meeting in May that is open to all OCARC members.
May – **ONLINE ZOOM** on **ARRL ARES Organization** – Bob Turner W6RHK
June – May be ZOOM??? **HF Portable Operation** – by Nicholas AF6CF
July - ??
Aug - ??
Sept – **Ham Test Equipment** by Doug Millar K6JEY.
Oct – Radio Auction.

• Summer Field Day

Tim N6GP reported that the ARRL has not made a decision on IF/how to hold FD this year because of the Coronavirus restrictions. [**LATE NEWS** – ARRL has decided there will be no changes in rules.]

- One ARRL suggested guideline is that club members should practice FD from their back yards.
- The board members kicked around the idea of several 2-person tents set up in a large field.
- An idea of setting up several mobile vehicles in a parking lot (maybe located on a hilltop?)
- The board concluded that there are no plans to include Boy Scout Troop 440 cooking for meals.
- The using Knott school grounds this year is **conditional on "stay at home" orders being released**...may not be available for FD this year?

Tim N6GP has volunteered to be “chairman” for FD this summer.

• Storage Locker move

The club is still planning to move the club’s equipment to a “one-car space” garage in Yorba Linda owned by the mother of Tim N6TMT. Complications of summer FD planning from COVID-19 is still impacting the exact date of equipment moving.

• Bylaws Update Committee

Corey is now working to clean-up the official revisions.

• ARRL Special Services Club status

Ken W6HHC is trying to wind up the submission by early June..

• California QSO Party planning

Ron W6WG will organize a full blown club participation for the fall CA QSO PARTY with each member operating from his home station.

New Business:**• Recognition for N2CNC**

In recognition of the several “no charge” construction projects completed by Atlee to help OCARC field day equipment over the years, the board unanimously awarded Atlee Hitchcock N2CNC a membership in OCARC until the end of 2021.

Good of the Club:

• Low-Voltage-Backyard-Lighting RFI – Ken W6HHC explained that he has run into S9 noise across the entire 2M band whenever his backyard low-voltage (12V) lighting system is turned on. The 440 MHz band is clean from this noise. He tried a few snap-on toroids from the “junk box” of Nicholas AF6CF, but they had no effect. Some high quality snap-on toroids are being ordered to try. Is the switching power supply noise “common mode” along the wiring of the light? Ken would enjoy hearing from any hams who have solved this type of RFI problem with Low-Voltage lighting systems!!

Submitted by Ken W6HHC, OCARC Secretary

Corey's Succulent Emergency Supply French Toast (makes 2 pieces)

Ingredients:

2 slices of day-old bread from a breadmaker,
5 tbsp whole egg powder
1 tsp cinnamon 1/4 tsp salt,
5 tbsp water,
1 eight-oz container of shelf-stable whole milk,
2 tbsp sugar,
1 tsp vanilla powder,
butter or peanut oil for frying.



Directions

Add the egg powder, sugar, vanilla, cinnamon, and salt to a container. Combine with the water and mix until the lumps are nearly gone. Add the milk, and stir. Cover and chill overnight. When you are ready for french toast, take the mixture out of the chill-chest and stir. Set a baking dish or small pan next to the stove and pour the mix in.

Cut one or two pieces of bread 1/2-inch to 3/4-inch thick, depending on the size of the baking dish, and the amount of mixture; it must come up at least half-way on the bread. Let the bread soak for two minutes on each side, and melt some butter in a nonstick pan on medium heat. When the butter just begins to brown, lay the soaked bread in the pan, last-soaked-side-up and cover. Cook covered for two minutes on each side.

Place on the serving dish and allow carry-over heat to set the interior to custard. Slather with butter and syrup, or try it without; it tastes great either way! For a hint of strawberry, substitute the milk and sugar with:

1 eight-ounce container of shelf-stable 2% strawberry milk,
2 tbsp shelf-stable heavy cream,
1 tbsp fructose.

--73, Corey Miller KE6YHX

Astronomy Picture of the Day

[Discover the cosmos!](#) Each day a different image or photograph of our fascinating universe is featured, along with a brief explanation written by a professional astronomer.

2020 May 2



Radio, The Big Ear, and the Wow! Signal
Image Credit & Copyright: Rick Scott

Explanation: Since the early days of radio and television we have been freely broadcasting signals into space. For some time now, we have been listening too. A large radio telescope at Ohio State University known as affectionately The Big Ear was one of the first listeners. The Big Ear was about the size of three football fields and consisted of an immense metal ground plane with two fence-like reflectors, one fixed and one tiltable. It relied on the Earth's rotation to help scan the sky. This photo, taken by former Big Ear student volunteer Rick Scott, looks out across the ground plane toward the fixed reflector with the radio frequency receiver horns in the foreground. Starting in 1965, the Big Ear was used in an ambitious survey of the radio sky. In the 1970s, it became the first telescope to continuously listen for signals from extraterrestrial civilizations. For an exciting moment during August 1977 a very strong, unexpected signal, dubbed the Wow! Signal, was detected by the Big Ear. But alas, heard only once, the source of the signal could not be determined. In May 1998 the final pieces of the Big Ear were torn down.

Reprinted courtesy of Astronomy Picture of the Day and Rick Scott.

OCARC Cash Flow - Year To Date

1/1/2020 through 5/2/2020

Category	1/1/2020- 5/2/2020
INFLOWS	
Auction In, Jan 2020	1,696.25
Cash Box Deposit	140.00
Donation - Michael K6GTE	30.00
Donation - N6GP	20.00
Dues, Family (PayPal) 2020	131.78
Dues, Membership (PayPal) 2020	1,088.26
Dues, Membership 2020	538.83
Refunds Received	15.53
TOTAL INFLOWS	3,660.65
OUTFLOWS	
Auction Payout, Jan 2020	1,359.23
Donations - Red Cross	250.00
Field Day Winter - Tent Rental	130.00
OCARC Historian	29.29
Opportunity Drwg - Monthly Exp	438.71
Refreshments Expense	32.65
Storage Locker	285.00
Supplies	15.85
Trifold Auction Printing	21.55
Web Site Hosting	101.94
Web Site Hosting - PayPal	38.00
TOTAL OUTFLOWS	2,702.22
OVERALL TOTAL	958.43



MiniTiouner-Express

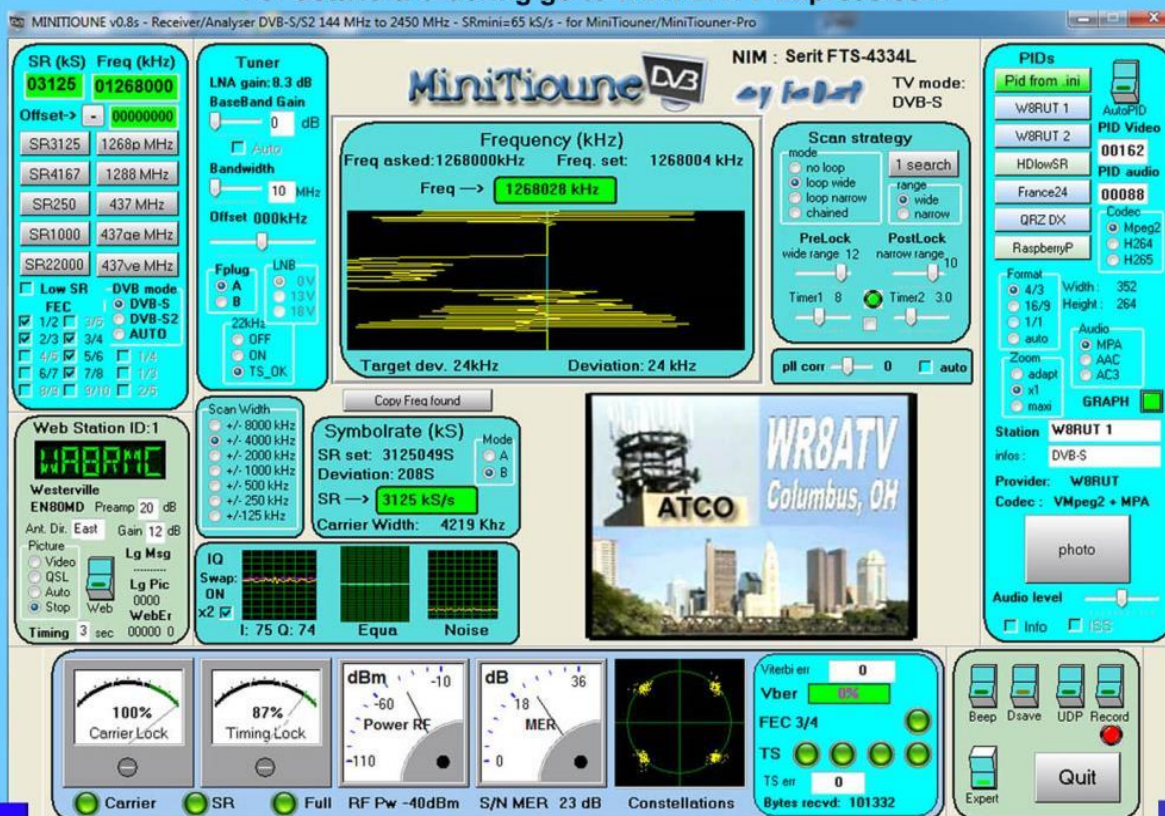
Digital Amateur Television DVB-S/S2 Receiver / Analyzer



Available at DATV-Express.com

- Operates with Windows PC using free MiniTioune software from Jean-Pierre F6DZP
- Smaller than a stack of 2 decks of cards (picture above is full size)
- Two independent simultaneous RF inputs with internal preamps
- High sensitivity -100dBm @1288MHz – at 1/2 FEC
- Fully assembled/tested in aluminum enclosure
- Covers 144-2420MHz (ideal for Space Station DATV reception)
- Symbol rates from 75 KSymb/s to >20 MSymbols/sec
- Uses external 8-24VDC supply or +5V from USB-3 port (with small modification)
- Real time signal modulation constellation & dBm signal strength display
- Price: US \$75 + shipping – order with PayPal

For details & ordering go to www.DATV-Express.com



(MiniTioune display above is the ATCO 1268MHz DVB-S repeater signal at WA8RMC QTH 15 miles away).