



# Smoke Signals

## Newsletter of Fullerton Radio Club

### July 2020

#### President's Message

Happy July Everyone! The FRC Board hopes everyone is staying safe!

Welcome to our New Member Kevin Moore KM6ZQC! We hope to see you soon!

While the virus has hampered club get togethers, remember, we still have a two meter net on Wednesday nights as well as a Zoom meeting. We'd love to see and hear from you! If you are interested, VP Bob Houghton AD6QF can get you the details.

On Field Day Saturday, Tom Hall, Gene and Cheryl Thorpe, Paul Broden and Tom Gaccione worked from the porch of the cabin in Hillcrest Park. We operated only on Saturday, and maintained safe distancing and wore masks throughout the day. We were on twenty and forty meters, along with Tom Hall setting up a satellite station. The noise level was very high on both HF bands; and due to us being there only Saturday, we couldn't setup an elaborate antenna system to make things a bit better. I uploaded our score to the ARRL website; we had 2 satellite contacts, 6 twenty meter contacts, and 16 forty meter contacts for a total of 494 points.

We're always looking for speakers to talk about things they are interested in, and it doesn't have to be amateur radio. Please let us know if there's anything you'd like to talk about. We'd like to see you at the Zoom meeting or on the two meter net!

PLEASE remember to renew your membership for 2020. Your \$20 goes towards the costs the club incurs each year: Postal Service charges, Club Insurance, gifts for the holiday dinner, and government fees that are required to keep the club incorporated. Send your check made out to Fullerton Radio Club, to the club PO Box [see top of page 2] or follow this link <https://fullertonradioclub.org/application-renewal-form/>.

Thank you!

73,

Tom, WB2LRH

#### July Program Topic

Have you noticed the newer, taller power towers that go through the Puente Hills, then east across the 57 freeway and into Chino Hills? Why were they put in? Where does the power come from and where does it go? Why would Edison put parts of a 500-kilovolt power line underground, and how did they do that safely? I decided to try to find out, so I did some "digging" of my own. I didn't become a power distribution expert, but during the July FRC online meeting, I'll show you some things I discovered. If there's time, I'll tell you how to find out how reliable your home electrical service is, and how it is distributed from the six substations in Fullerton. If you don't live in Fullerton, I'll show how to find out about your city's electrical distribution and reliability.

73,

Joe Moell K0OV

#### July FRC Meeting

The June Club meeting will again be presented by video teleconference using Zoom. Members will receive Zoom connection information by our Groups.io.

**Meeting date: July 15 2020;**

**On ZOOM!**

**8:00 PM**

**[NOTE: Time change]**

**Fullerton Radio Club**  
**P.O. Box 545, Fullerton, CA 92836-0545**

**Board of Directors**

**President**

Tom Gaccione WB2LRH  
Email: [tsgaccione@yahoo.com](mailto:tsgaccione@yahoo.com)

**Vice President**

Bob Houghton AD6QF  
Email: [bobhoughton@mac.com](mailto:bobhoughton@mac.com)

**Secretary**

Linda Endsley, KJ6IHB

**Treasurer, Public Service, Membership**

Gene Thorpe, KB6CMO  
E-mail: [kb6cmo@juno.com](mailto:kb6cmo@juno.com)

**Members At Large**

Richard Belansky, KG6UDD

Walter Clark

Robert Gimbel, KG6WTQ

Larry McDavid W6FUB

Paul Broden, K6MHD

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**Volunteers**

**T-Hunt**

Joe Moell, K0OV  
<http://www.homingin.com>  
E-mail: [homingin@aol.com](mailto:homingin@aol.com)

**W6ULI License Trustee**

Albert Solomon, AG6OF  
E-mail: [albertsolomon18@gmail.com](mailto:albertsolomon18@gmail.com)

**Newsletter Editor**

Paul Broden, K6MHD  
E-mail: [pbroden@sbcglobal.net](mailto:pbroden@sbcglobal.net)

**BOARD MEETING**

***The next Club Board meeting will be on  
August 12 and will be conducted using  
Zoom video conferencing platform.***

***5:40 PM***

***Members are welcome.***

**Show –and–Tell**

Bring something of interest to the meeting to show and share your story.  
Something old, new, or just of interest to hams.

**Web site: [www.FullertonRadioClub.org](http://www.FullertonRadioClub.org)**

**July Board Meeting Minutes**

The July 2020 FRC Board meeting was called to order at 5:40 pm by President Tom Gaccione WB2LRH via Zoom (Coronavirus). Others present: Vice President Bob Houghton AD6QF; Treasurer Gene Thorpe; KB6CMO; Secretary Linda Endsley KJ6IHB, Paul Broden K6MHD; Larry McDavid W6FUB and Walter Clark. Member Joe Moell K0OV.

Minutes were approved.

Treasurer's report:

Checking - \$3,920.42; \$Savings - \$2,608.54

Old Business:

ANTS in the Park BBQ? - Rescheduled

One member was added. Total 31 members, 3 life members.

As of 7/2020 FRC is still not a tax exempt. May take up to 4 months to process.

New Business:

Field Day – Tom Hall, Gene and Cheryl Thorpe, Paul Broden and Tom Gaccione worked from the porch of the cabin in Hilcrest Park. We were on twenty and forty meters, along with Tom Hall setting up a satellite station. The noise level was very high on both HF bands; and due to us being there only Saturday, we couldn't setup an elaborate antenna system. Tom Hall had two "Ham Stick" antennas we were able to use. Tom Gaccione uploaded our score to the ARRL website; we had 2 satellite contacts, 6 twenty-meter contacts, and 16 forty-meter contacts for a total of 494 points. Our operating time was from 11AM to 6PM.

Next board meeting: 12 Aug 2020

Adjourned at 6:10 pm

Submitted by Linda Endsley KJ6IHB

# FIELD DAY

(What there was of it...)



Operating area with antennas



Cheryl Thorpe KE6TZU – 40 Meters



20 Meter setup



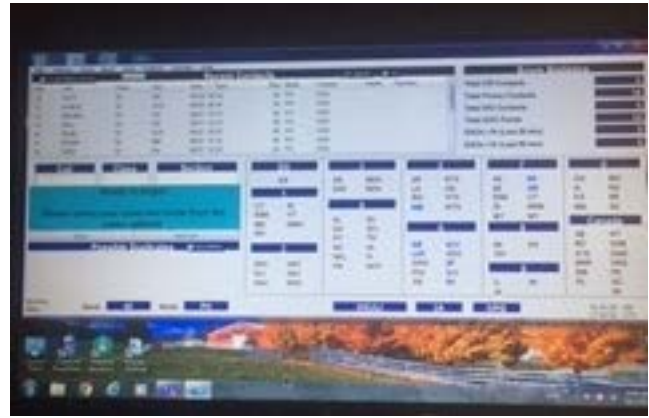
Warning!



Tom Gaccione WB2LRH – Satellite Hunting



Tom Hall N6DGK – 20 Meters



40 Meter Contact Log

### Did you know FRC now has a Weekly Wednesday Net?

We have revived a very old FRC tradition. Come join us for our Wednesday Night 2 meter roundtable net. If you haven't been on 2 meter FM for a while, this is a good excuse to be sure your batteries are charged and your radio still works!

Since we are not currently meeting in person monthly, we have rearranged our schedule to meet weekly, but virtually. You are welcome to join us on 2 meters for a casual roundtable net every Wednesday at 7:30, followed by a session on Zoom at 8:00. Since the propagation is always excellent on Zoom, we have been seeing some familiar faces who live too far away to attend in-person meetings.

First Wednesday of the month

7:30 pm - 2 m Roundtable Net

8:00 pm - Chat, listen, or show and tell if you like on Zoom

Second Wednesday of the month

5:40 - Board Meeting on Zoom (all members are always welcome)

7:30 pm - 2 m Roundtable Net

8:00 pm - TAG on Zoom

Third Wednesday of the month

7:30 pm - 2 m Roundtable Net

8:00 pm - FRC month meeting on Zoom. Usually a presentation.

Fourth Wednesday of the month

7:30 pm - 2 m Roundtable Net

8:00 pm - Chat, listen, or show and tell if you like on Zoom

Fifth Wednesday of the month (If there is one)

7:30 pm - 2 m Roundtable Net

8:00 pm - Chat, listen, or show and tell if you like on Zoom

Our net is held on the K6QEH (Raytheon) repeater. 146.97 Hz – offset, PL is 136.5 Hz

**This space is unintentionally left blank. Just nothing more to print!**  
**You could have an article published here.**

**Maybe next month?**



## Activity Reports of the Fullerton Radio Club (Technical Advisory Group) for May 2020

The FRC TAG meeting was done on Zoom once again and we are getting better at it. Everyone was right on time. Bob was the electronic host again but yours truly (Walter) kept the interchange rolling.



I called on **Bill Webb** to go first as seems to be my habit for some reason. His discussion was quite short; on the subject of dollar-each digital volt meters which can take its power off the very signal its measuring. They can also run off a 3 volt source you provide if you want near infinite load on what you wish to measure.



He put the four images on Power Point on a server which you can access by merely clicking on this:

<https://1drv.ms/p/s!AmXKqAwyCrbxiOMQBmwzol8otOUosw?e=Y7i7iY>

Bill talked about a machinist friend of his who wants to build a rather large metal cutting router. Bill is doing the electronics for it. We should expect a presentation on it in the near future.

Next to speak is our old TAG friend **Bill Preston**. He moved to Texas a few years ago so his two boys could go to Texas A&M. The oldest Mike, has graduated (chemical engineering) and got a job that involves pharmaceutical industry. It's Fuji, the film company except they have diversified and Mike's job has to do with laboratories that are secured electronically (Tempest Rooms) so independent companies can do vaccine research there. Bill has some medical problems that he is addressing with hyperbaric oxygen. He wanted to make it clear that he loves it there in College Station Texas.



**Tom Fiske** started his discussion by thanking Dennis Kidder for getting him back into FT-8 digital mode hamming. He verbally listed the countries he's communicated with. Wow. He's doing all this on just 30 watts. He's also spending some time building up his CW receive speed.





**Don Lawver**, WB6OZZ sent to Tom a link to a 1950s video that explains wave motion. Tom then sent it to me because I have talked on this subject and used demos like the one in the video. Here's that video: <https://www.youtube.com/watch?v=DovunOxIY1k>. I agree, it is far and away better than any other wave machine on youTube. Don didn't have much to share other than the fact we were all impressed by the quality of his Walmart

headphone-microphone setup.

**Larry McDavid** talked on one of his favorite subjects; time displays. He showed a slow motion video of three clocks coming from two different sources. The tenth-second digits rolled over concurrently in the 8X video. The bottom two are Heathkit's **Most Accurate Clocks**. They decode the two "seconds-tick tones" from WWV in Colorado. Heathkit was ahead of its time with this clock design, steering the crystal oscillator with corrections derived from WWV time and even allowing correction for ionospheric pathlength delay.

The top clock is a GPS Clock available on-line at Tindie. He encouraged us to check out Tindie. These are kits that amateurs invent and publish in magazines like QST. The kits are available at: <https://www.tindie.com/>



**Dennis Kidder** (with wife Lisa) had the most to say (and all of it most interesting) but I'll reduce it to just a few sentences here. He talked about his 122 GHz (that's mm wave) radio experiments. Many of the microwave ham folks in the SBMS club got a hold of some automobile radar units.

He also talked about his love/hate relationship with "Winlink". This uses the ham bands to allow even commercial users to benefit from email service out in the ocean.

<https://en.wikipedia.org/wiki/Winlink>

I think what bothered Dennis was that it uses "amateur" bands that allows commerce communications to happen. What turned him around is how effective it is used in emergencies. (Yes hospitals are commercial enterprises.)

Dennis showed us his latest toy a WSPR transmitter for the low end of the ham bands. It is one of the many ways computers kept on 24 hours a day coupled to the internet and a radio can map out highly efficient propagation paths; ducting even.







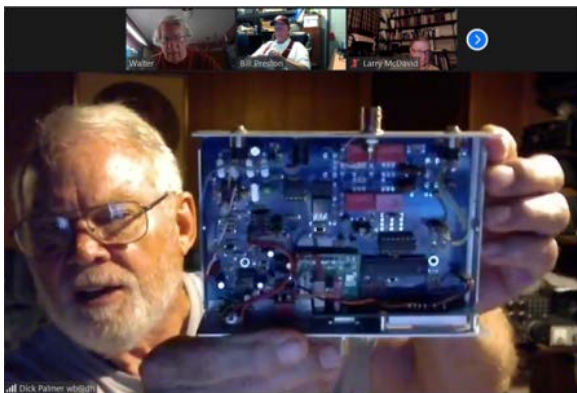
**Joe Moell** has devoted his electronic attention lately to a video capability for his church. This is more than just to bring services to the congregants during the pandemic. They will be used for performances where multiple cameras are involved. These

cameras will be remotely operated to allow only one operator to not only direct but be the three camera-men. We learned a new acronym; PTZ; pan tilt zoom

[https://en.wikipedia.org/wiki/Pan%E2%80%93tilt%E2%80%93zoom\\_camera](https://en.wikipedia.org/wiki/Pan%E2%80%93tilt%E2%80%93zoom_camera)



**Dick Bremer** was involved with some fairly technical work for the RACIES group. He made an impedance transformer to allow a long wire to load for 118 to 136 MHz.



**Dick Palmer** shared with us his latest QRP. He claimed it is his 102nd one. Of course we didn't believe him. Surely no more than 50. But then he told us there's a club of QRP fanatics where membership is limited to those that can demonstrate in a photograph a table of ten by ten units.

Sheesh.

**Walter Clark** and President **Tom Gaccione** didn't share anything but were good listeners.

**Dennis Kidder** as a post script told us the subject of his HamFest talk. It will be using the 40 meter diameter dish antenna at Goldstone.

## MEMBERSHIP RENEWAL / APPLICATION

Fullerton Radio Club  
PO Box 545, Fullerton, CA 92836

(Please Print)

Name #1 \_\_\_\_\_

Call: \_\_\_\_\_

Class: \_\_\_\_\_

Name #2 \_\_\_\_\_

Call: \_\_\_\_\_

Class: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State/Zip: \_\_\_\_\_

Phone #1: \_\_\_\_\_

Email #1: \_\_\_\_\_

Phone #2: \_\_\_\_\_

Email #2: \_\_\_\_\_

ARRL Member ☐ Yes ☐ No

Special Amateur Radio Interests: \_\_\_\_\_

Dues are \$20 per member, or \$25 per family. Students (full time) \$10

**Bring your application and dues payment to the next meeting or mail to the above address.**