Smoke Signals

Newsletter of Fullerton Radio Club

August 2021

Not much news for this month's Smoke Signals. But here's what I've received. I'd really appreciate some input from someone besides the Board members. Something simple; perhaps a DX report, or what's going on with 6 meters. Photos add to the interest, so please add them when you can! My thanks to Walter Clark for his faithful production of the TAG activities report. Without him we would have very little to publish each month.

Free to a Good Home

April and I are moving and we need to clear out the parts for some never-finished antenna projects. There is a bunch of 1/2 and 7/8-inch low-loss Heliax cable, including some connectors, as well as aluminum masts and other tubing. Lots of flexible coax also. Call (657) 286-5125 (new number) or send e-mail to homingin@aol.com. See attached photo.

73, Joe Moell K0OV

English and it's double meanings:
Did you know that the companies that make yardsticks won't make them any longer!

August Club Meeting date: Wednesday, August 18 2021; On ZOOM! - 8:00 PM

We'll be conducting our usual informal discussion, targeting, among other subjects, anything you've been doing for summer Ham activities. Same Zoom ID and password as in the past.

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

September FRC BOARD MEETING

The next Club Board meeting will be on <u>September 1, 2021</u> and again will be a face-to-face meeting. We will be meeting at Sizzler restaurant; Harbor Boulevard north of Brea Boulevard.

5:30 PM

All Members are welcome.

Note: This is a change in date. The FRC Board will now be meeting on the <u>FIRST</u> Wednesday, of each month.

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

August Board Meeting Minutes

The August 2021 FRC Board meeting was called to order at 6:15 pm by Vice President Paul Broaden K6MHD. Others present: Treasurer Gene Thorpe KB6CMO; Secretary Linda Endsley KJ6IHB, Larry McDavid W6FUB, Robert Gimbel KG6WTQ and Walter Clark. Visitor: Irene Broaden.

Minutes were approved.

Treasurer's report: Checking - $4,155.72 ; Savings - $2,608.80.

1 new member.
Received 2 QSL cards from field day

Old Business:

None

New Business:

Discussed changing the date of the Board meeting from the 2nd Wednesday of the month back to the 1st Wednesday of the month. It was decided to change it back to the 1st Wednesday of the month.

Next board meeting: 1 September 2021

Adjourned at 6:36 pm

Submitted by Linda Endsley KJ6IHB

TAG Activity Report for August 2021

We went back to Zoom, not so much for obedience to Newsome but because it is real handy for far away amateur scientists. Except; Far away amateur scientists are so out of the habit, only the local ones were on Zoom. Next month we will try a hybrid where we will have a screen and projector for the zoom folks and a rotating camera looking at those who are of the 3-D-with-mass entity.

Tom Fiske began the discussion with something in the news about GE. This is of interest to Tom because in his career he was factory head of a GE appliance division. Someday we will have to interview him about that. My experience is aerospace engineering where (in my case anyway) most research ends in a dead end. ("Well, that didn't work very well.") Making stuff that thousands of people pay for and makes their life easier . . . that has to be the most rewarding form of engineering.

What Tom heard in the news about GE is that they have a new head whose philosophy is get in new young blood instead of so much promotion from within. That began a discussion with others about experience of upper-management decisions like that.

Tom also talked about the famous people he's interviewed for his books. One of them, Don Marshal, is very local and there was some discussion on getting him to be our first speaker when we meet at the club house in Chapman Park. His experience is flying the SR-71.

Larry McDavid is working with Joe Moell, Bill Webb and a friend from his machine shop club designing and 3D printing the ideal handle for a two-meter band T-Hunt direction finder antenna. The discussion went into details on the attenuators that become part of that handle and how they are connected to coax cables.

John Mock K6AHY (lower right in the picture above) was the first time with us. He was anxious to say his main interest is teletype. Yes, there are people who collect them but in his case that interest was many years ago and he got rid of every single one he had. (They are famous for their taking up a lot of room.) He doesn't really want to get back into that antique kind of hamming, but apparently, he is proud to once have had that hobby. He was a MARS hub at one time too. We will have to interview him to hear about that experience. His present interest is a paying job; Bits and Bytes is a computer trade name he has been using for a long time. He's an early bird in home computers (1976) and under the Bits and Bytes name does consulting for two clients and even has a product he makes; a battery control system for trailers.

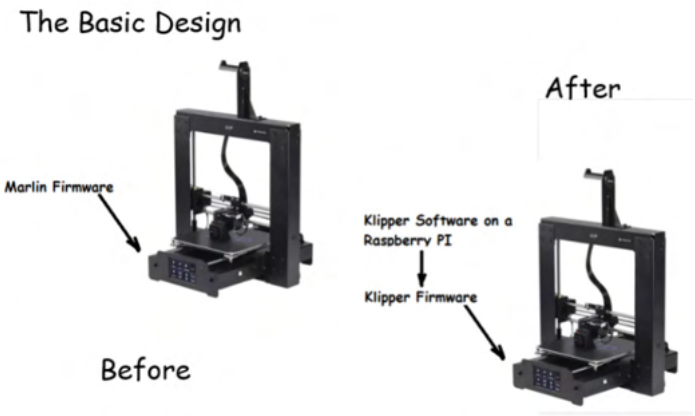
Joe Moell talked about ham radio at his new home in Morningside. Antennas are allowed but they must be confined to his first floor patio. Right now, for transmitting on 40 meters he is loading up a 45-foot aluminum downspout going up the side of the building. The building is full of electrically noisy LED lights, so for receiving, he's experimenting with a homebrew loop (see photo) that helps to reduce the LED interference. The flagpole is actually a copper-pipe J antenna for VHF/UHF.

Larry McDavid brought up a discussion about coax cables used on the T-Hunt Yagi antenna. Many builders use common RG-58 coax (large at 0.196 inch diameter) but good alternatives are: RG-174 (smaller at 0.101 inch diameter) but which is PVC insulated and can melt when soldered; RG-178 (quite small at 0.071 inch diameter) which is Teflon FEP insulated so won't melt when soldered; and RG-316 (like RG-174 is 0.101 inch diameter) and also is Teflon FEP insulated. Larry's favorite is RG-316 because it is a convenient size and won't melt when soldered.

This picture isn't important to the report but I show it to remind those who use Zoom, that you can hold things up to the camera in your lap top. You can also walk around with the laptop camera to show something of interest in another room. Walter (yours truly) has done that to show off his new kitchen.

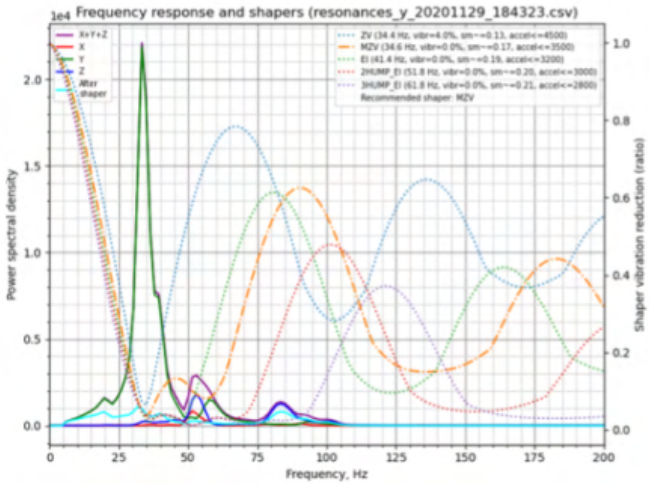
Bill Webb talked about his experience with the handle he is making for Larry but he also had a slide show for us on new firmware called Klipper to go into a 3D printer. The most important feature of Klipper is to make printed objects smoother by making the printer run without vibration.

Here's a link to the slide show he presented to us. . . https://1drv.ms/p/s!AmXKqAwyCrbxiYM-LVdlxyPDYCzCLQ?e=E5KDMU



This diagram looks simple, doesn't it. Just load existing microcontroller with a new program. But that new program (the firmware) has to learn the details of the way the 3D printer shakes. He had to install an accelerometer to record that motion. Klipper is open-source software so it's free. A component of Klipper runs in the printer's microcontroller and the main software component runs on a raspberry Pi which he already had. The slide show gets very technical. Check out this slide; holy crap…

My Favorite Feature and Why I Am Testing Klipper
INPUT SHAPING



- Input Shaping in Klipper allows you to measure the resonate frequency of your printer frame.
- Once measured, these frequencies are entered into to printer's Klipper configuration file and avoided during printing

Here's the rest of us looking at that slide . . .

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: _____

ARRL Member ☐ Yes ☐ No

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.