President’s Column - July 2018

Since I last wrote to you, I have had the chance to be involved in several radio-related activities.

For a week in the middle of June, FRC member Tom Gaccione and I spent a few days near Truckee, California volunteering at the 2018 ARDF National Championships. My wife Maijian - KJ6QLY and I camped at Donner Lake State Park while Tom stayed in the Royal Suite a room at the headquarters hotel. After the ARDF event, Tom joined my wife and I for two more nights of camping at Sugar Pine Point State Park on Lake Tahoe. I suspect Joe Moell will write something more about the event, if not here then in CQ Magazine.

I got home from Lake Tahoe on Friday, June 23, which was the day before Field Day. I spent much of Saturday and Sunday at the HDSCS Field Day location at Huntington Beach Hospital. The hospital was kind enough to set up their surge tents in the parking lot, so we had shade in the daytime and shelter from the coastal dampness in the evening and nighttime. Among the numerous HDSCS members working the event, we had a good representation of FRC members: Joe Moell - K0OV, Tom Gaccione - WB2LRH, Paul Broden - K6MHD, and Dave Reinhard - WW6I. I was not there for the entire time, so I am almost certain to have left someone out.

On Saturday, July 7, I spent a few very hot hours at the Anaheim Senior cooling center Ham Radio Outlet hanging out at the HDSCS table at Ham Jam 2018. All the usual suspects were present, including Gordon West with his 1970s Chevy Ghostbusters Emergency Communications station wagon. There was a huge crowd there, despite the heat.

After we took a month off in June, I hope to see you Wednesday at our regular FRC meeting. Tom G and I will be talking about our recent experience at Maker Faire.

Meet for dinner at 5 at the Black Bear Diner if you are so inclined.

73,

Bob

<table>
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<tr>
<th>JULY MEETING</th>
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<tr>
<td><strong>Wednesday, July 18, 2018</strong></td>
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<tr>
<td>Chapman Activity Center</td>
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<tr>
<td>2515 San Carlos Drive, Fullerton (Second street east of State College Boulevard off Commonwealth)</td>
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<td><strong>Meeting time – 7:00 PM</strong></td>
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<td><strong>Visitors are always welcome</strong></td>
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<td><strong>Dinner before the Meeting:</strong></td>
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<td>Black Bear Diner</td>
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<td>5:00 PM</td>
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<td>1011 N. Harbor Blvd., Fullerton (at Berkeley)</td>
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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

July Board Meeting Minutes

The July 2018 FRC board meeting was called to order at 7:30pm by President Bob Houghton, Others present: Treasurer Gene Thorpe; KB6CMO; Secretary Linda Endsley KJ6IHB. Directors: Larry McDavid W6FUB; Paul Broden K6MHD; Richard Belansky KG6UDD; Member: Cheryl Thorpe KE6TZU; Visitor Irene Broden.

June minutes were approved.

Treasurer’s report: June’s bank statements have not been received.

Old Business:

The Christmas dinner will be on December 14 at Marie Callender’s.

New Business:

Received 1 membership renewal for 2018 and 2019.

Will check to see if there are any club brochures.

Speaker for the July general will be Bob Houghton.

Bob Houghton will pick up a speaker for use at the general meetings.

Next meeting bi-laws/responsibilities for Secretary/Treasurer/Vice President will be discussed.

Next board meeting: 1 AUG 2018

Adjourned at 8:26 pm

Submitted by Linda Endsley KJ6IHB
Our Antennas In The Park event last May served as a training session for this year's USA championships of Amateur Radio Direction Finding (ARDF). The championships took place June 13 - 17 near the ski resort town of Truckee, California, which is along Interstate 80 between Sacramento and Reno. It's just east of the famous Donner Pass.

FRC President Bob Houghton AD6QF and Tom Gaccione WB2LRH were among the volunteers who handled the start and finish line operations at the competition sites, all of which were near Little Truckee Summit at 6200 feet elevation. Tom also made arrangements for the awards banquet, which took place Saturday evening at the Hampton Inn of Truckee.

Two of the winning competitors got some ARDF practice at Antennas In The Park 2018. Bill Wright WB6CMD took home a silver medal from the foxoring competition. Scot Barth KA6UDZ won bronze in the sprint, two-meter classic and 80-meter classic events. Another attendee at past Hillcrest foxhunts was Eduard Nasybulin, who received a gold medal for the two-meter classic as well as silver in sprint, foxoring and two meter classic.

USA championship ARDF courses are open to anyone of any age who can navigate safely through the wilderness with map and compass for a few kilometers. An Amateur Radio license is not a requirement. All events utilized the excellent maps of the Bay Area Orienteering Club. These sites had not been used for any ARDF competitions in the past. There are eleven age/gender categories with medals for the best three in each category.

Some of the winners of these USA Championships will travel to Sokcho, Korea for the World ARDF Championships, September 2 - 8, 2018.

In the photo are the organizing volunteers for the Truckee events: Woody Jackson, Bob Cooley KF6VSE (Course Designer), Tom Gaccione WB2LRH (Banquet Coordinator), Jay Hennigan WB6RDV (Meet Director) and Bob Houghton AD6QF.

Next year's USA ARDF Championships will be in North Carolina during July or August.

Joe Moell K0OV
ARRL ARDF Coordinator
**HDSCS Activities**

Summer has certainly gotten underway for HDSCS. For the 17th year the "Hospital Group" was hosted by Huntington Beach Hospital for Field Day. Once again we had the opportunity to create antenna set-ups using the roofs and existing structures around the facility. The hospital brought our surge capacity tents and portable generators for our use. FRC members, Joe, KØOV and Tom, WB2LRH once again erected their special satellite antenna structure in hopes of improving on their 4th in the nation performance in 2017. Come 11AM on Saturday morning every station was on the air. The weather in Huntington Beach was ideal for Field Day. A nice breeze kept things comfortable through the day and those surge capacity tents kept those overnight operators comfortable. Other HDSCS/FRC members, Bob, AD6QF and Paul, K6MHD also participated in Field Day festivities.

The other summer activity was Ham Jam hosted by Ham Radio Outlet on July 7. Fortunately, it was cooler than Friday……but once it's over 100 degrees who can really tell?? Despite the heat and sweat, the HDSCS members staffing our display managed to stay hydrated, answer questions and encourage some folks interested in joining HDSCS.

To learn more checkout the HDSCS website April, WA6OPS
www.hdscs.org

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**Activity Reports of the Fullerton Radio Club (Technical Advisory Group) for July 2018**

**John Stevenson** brought one of many rockets he and Bill Webb made in the 1980s. It has very much to do with ham radio in that Bill assembled for the rocket, TV equipment from the amateur TV community. Back then cameras were $500 and the transmitters were the size of a shoebox. The rocket he brought survived many flights and was named *Hypertension*. The rocket engine was a hybrid, liquid/solid, of 65 pounds thrust for 3 seconds.

**Bill Webb** brought five short flight videos and passed around a cute little video display which was once a give-away flyer like thing from some car company. Bill replaced the ads and testimony with his own videos. The video transmitter on the rocket was on the 433 MHz ham band. The electronic circuits were from a company known among the TAG folks; PC Electronics, Arcadia. Bill also brought along the electronics stage. Two of them; one smaller than the other representing a generation of electronics improvements. They took up the black space in the rocket John is holding.

**Bob Houghton** started the meeting off by talking about the pool of speakers that were in this room tonight. He and Tom Gaccione will have a slide show on the Maker Faire this month. Larry will talk about Fish, steam and hydroelectric power in August. Walter will do September and Rich November. Only October is open.

**Thomas Gaccione** described the tools used to map in 3D the locations of objects in a lab where he works. This laser tool was used as the calibration for a microwave antenna pattern measurement. The 3D mapper was made by the Leica Camera Company.

Tom also reported on a satellite, actually two satellites used to measure quite precisely the gravity field around the earth. The two satellites are 220 km apart and a microwave interferometer was used to monitor the separation to a precision of .001°. (That’s 137 miles plus or minus .001”) It has been used to monitor the amount of ice in the poles and how that amount changes through the years.
He also reported on the heroic piloting of a recent accident involving a ruptured window in an airliner and sudden loss of air pressure. Walter was not impressed.

**Tom Fiske** brought an Xonar U5 audio card for a PC. It is made by Asus, the computer company. The audio card is actually a box and is a replacement for the internal audio card. It connects through the USB. It has a higher digitizing rate and able to go to sub audio, even DC. This was purchased by Tom for working the digital modes on 20 meters using his Software Defined Radio (SDR). The box is $60 and Tom feels it was well worth it.

**Dick Bremer** is quite the advocate for SSD (solid state disk) to improve one’s laptop. Bob Houghton agreed saying that turning on a PC is the most noticeable improvement. No waiting. Dick is in the process of learning how to use the SDR in the form of a dongle to trans-vert the output of a satellite dish LNB for use in the 10 GHz amateur band.

**Walter Clark** brought out his 24 GHz motion sensor that was modified to fit in an ultrasonic telescope dish that was once used to monitor leaks in high pressure systems. This project is about 8 years old and only used briefly because it needed a computer with waterfall display of audio frequencies. His present project is to make it stand alone where a small speaker in the back will reveal motion by the sound of the Doppler. It becomes more of a toy than a demonstration of something scientific.

**Bob Houghton** brought a fun gadget demonstrated it for us. He held his and did a CQ and found someone in Florida. It was K4VQO; Gordon Perry. way of a repeater in Florida which to the internet and from there to there is an amateur run network connected Gordon Perry to Bob this end the connection consisted of: to the device picture on the right assembled. (It was across the room Tom Gaccione.) From there it went to phone on the chair next him in the From there it completed the connection to the internet.

**Larry McDavid** is reading a book about the Eisenhower administration. He told us about the early use of satellites and actual film cameras which parachuted to earth. This even though the world only knew of our U2 use for surveillance.

Larry also told us of his experience with leaking batteries and how to handle the problem. His son’s business in Ontario was having an overload condition with the air conditioners and Larry told us of the diagnosis made by Edison on the fuses used by the system. Larry and all of us, were astounded at the use of fuses when there were circuit breakers in use right next to them.

**Dick Palmer** brought a bridge circuit which was an antenna analyzer. It was a kit MFJ 259b. It has a source of RF which is used to measure the return loss and other antenna characteristics. Bill Webb reminded us that a tuned and correctly built antenna is far cheaper than the same gain achieved by better transmitters and receivers. Dick would like to have used it on field day, but it arrived too late.

Dick’s field day was a success (of course) because he was using QRP which is a points-multiplier. This is his 36th year using QRP on field day. He went to Table Mountain Camp Grounds and strung antennas between the trees with his air-gun line shooter. His view of the world was north. Two antennas; one for 40 meters and one for 20. They were both 80 feet in the air. That's an inverted delta configuration with the horizontal element at the top. There were 3 rigs and four operators all using the callsign N6GA. Some PSK 31 but mostly code and voice.
You have to be old enough to remember Abbott and Costello, and too old to REALLY understand computers, to fully appreciate this. For those of us who sometimes get flustered by our computers, please read on...

If Bud Abbott and Lou Costello were alive today, their infamous sketch, 'Who's on First?' might have turned something like this:

COSTELLO CALLS TO BUY A COMPUTER FROM ABBOTT
ABBOTT: Super Duper computer store. Can I help you?
COSTELLO: Thanks I'm setting up an office in my den and I'm thinking about buying a computer.
ABBOTT: Mac?
COSTELLO: No, the name's Lou.
ABBOTT: Your computer?
COSTELLO: I don't own a computer. I want to buy one.
ABBOTT: Mac?
COSTELLO: I told you, my name's Lou.
ABBOTT: What about Windows?
COSTELLO: Why? Will it get stuffy in here?
ABBOTT: Do you want a computer with Windows?
COSTELLO: I don't know. What will I see when I look at the windows?
ABBOTT: Wallpaper.
COSTELLO: Never mind the windows. I need a computer and software.
ABBOTT: Software for Windows?
COSTELLO: No. On the computer! I need something I can use to write proposals, track expenses and run my business. What do you have?
ABBOTT: Office.
COSTELLO: Yeah, for my office. Can you recommend anything?
ABBOTT: I just did.
COSTELLO: You just did what?
ABBOTT: Recommend something.
COSTELLO: You recommended something?
ABBOTT: Yes.
COSTELLO: For my office?
ABBOTT: Yes.
COSTELLO: OK, what did you recommend for my office?
ABBOTT: Office.
COSTELLO: Yes, for my office! ABBOTT: I recommend Office with Windows.
COSTELLO: I already have an office with windows! OK, let's just say I'm sitting at my computer and I want to type a proposal. What do I need?
ABBOTT: Word.
COSTELLO: What word?
ABBOTT: Word in Office.
COSTELLO: The only word in office is office.
ABBOTT: The Word in Office for Windows.
COSTELLO: Which word in office for windows?
ABBOTT: The Word you get when you click the blue 'W'.
COSTELLO: I'm going to click your blue 'w' if you don't start with some straight answers. What about financial bookkeeping? You have anything I can track my money with?
ABBOTT: Money.
COSTELLO: That's right. What do you have?
ABBOTT: Money.
COSTELLO: I need money to track my money?
ABBOTT: It comes bundled with your computer.
COSTELLO: What's bundled with my computer?
ABBOTT: Money.
COSTELLO: Money comes with my computer?
ABBOTT: Yes. No extra charge.
COSTELLO: I get a bundle of money with my computer? How much?
ABBOTT: One copy.
COSTELLO: Isn't it illegal to copy money?
ABBOTT: Microsoft gave us a license to copy Money.
COSTELLO: They can give you a license to copy money?
ABBOTT: Why not? THEY OWN IT!

(A few days later)

ABBOTT: Super Duper computer store. Can I help you?
COSTELLO: How do I turn my computer off?
ABBOTT: Click on 'START'.

August BOARD MEETING

Open to all Club members
Marie Callender's Restaurant
126 Yorba Linda Blvd., Placentia
First Wednesday of each month.

Next Board Meeting
August 1, 2018

QSO and dinner; 6:30 PM
Meeting: 7:30 PM