



Smoke Signals

Newsletter of Fullerton Radio Club

March 2026

President's Report

Time flies! We're three months into 2026, we've reset our clocks for daylight savings, and spring is here!

I've been diving into some new studies lately: learning about APRS methods, reading up on antenna usage, exploring my HF and HT radios a little deeper, and getting a better grasp of high-frequency propagation.

I'm delighted to see how much the membership is getting involved in our events. Hillcrest Park on the second Saturday of each month has been busy with activity with our exercises and discussions. Ham Basics keeps us talking about lots of interesting topics, helping us learn and use practical strategies to get on the air.

Our weekly check-ins and Zoom meetings (except for TAG night) are still going strong, with lots of lively and interesting conversations. We took a little break for the March TAG meeting and will get back to them next month. We could really use some extra volunteers to help present or lend a hand with different parts of these meetings. Know a good guest speaker for our Wednesday night meetings? Let me know if you'd like to hear more about that.

We're also starting to plan for Antennas in the Park, which is coming up in May. We are presently working with the City of Fullerton to use our regular location at Hillcrest Park at the Izaak Walton League Cabin.

Lastly, Fullerton Radio Club will miss one of our club's long-time members, Paul Broden K6MHD. Paul passed away on March 3rd. He was a big part of the club editing Smoke Signals for over 20 years and serving on the Board of Directors. He served until 2024 and was also on the Board in 1964 as Secretary. We're so grateful for his time with FRC and remember his wife, Irene, and family during this time.

Until next month, 73!

Ray Rounds, K6RAX
k6rax@arri.net

The following article is by popular ham YouTuber Jason Oleham, KM4ACK
<https://km4ack.square.site/>

The Hidden Reason You're Not Getting on the Air More

The other day my wife called out from the garden. She needed a piece of wood cut to a specific length.

We walked over to the shed, grabbed a full length board, unwound the extension cord from its spool, and fired up the saw. A few quick cuts later, the piece was ready. The whole thing took less than ten minutes.

The reason it was such a quick and easy project is simple: we try to remove friction wherever we can. We didn't have to run to the store for lumber. We didn't have to search for an extension cord. Everything we needed was already where it should be.

At this point, you're probably wondering what in the world this has to do with radio.

The same principle applies to getting on the air.

If there's friction between you and operating—especially portable operating—you'll do it less often. Organization is one way to reduce that friction. Keeping your batteries charged is another. If you have to hunt down your rig, coax, or that one USB cable before you can leave the house, suddenly something that should be fun starts to feel like work.

And it's usually not one big obstacle that keeps us from getting on the air—it's a handful of small ones stacked together. The battery needs charging. The coax is in a different bag. The logging tablet isn't where you thought it was. The antenna wire is tangled from the last outing. None of these things are difficult to solve, but when they appear all at once, the effort starts to feel bigger than the reward.

That's when the thought creeps in: "Maybe I'll do it

Continued on next page

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

Board of Directors

President

Ray Rounds K6RAX

Vice President

Bob Houghton AD6QF

Secretary

Ted Schulman KO6FKX

Treasurer

Gene Thorpe, KB6CMO

Members At Large

Walter Clark

Robert Gimbel KG6WTQ

Larry McDavid W6FUB

Bart Pulverman WB6WUW

Volunteers

Membership

Bob Houghton AD6QF

T-Hunt

Joe Moell, K0OV

<http://www.homingin.com>

Email: homingin@aol.com

W6ULI License Trustee

Albert Solomon, AG6OF

Newsletter Editor

Bob Houghton, AD6QF

Groups.io List Manager

Larry McDavid, W6FUB

Club Contact email: AD6QF@ARRL.ORG

FRC March 4, 2026 Board Meeting Minutes

The monthly FRC Board Meeting was called to order by President Ray Rounds K6RAX at 5:33pm on Wednesday, March 4 2026 via Zoom.

Board Members Present: Ray Rounds K6RAX, Bob Houghton AD6QF, Ted Schulman KO6FKX, Walter Clark, Larry McDavid W6FUB, and Robert Gimbal KG6WTQ

Board Members Absent: Bart Pulverman WB6WUW and Gene Thorpe KB6CMO

The February Board Meeting Minutes were approved by consensus.

Treasurer's Report:

- New deposits: \$65.00 plus \$0.02 interest.
- New expenditures: \$359.90 (see February minutes).
- Bank balance: \$5,593.17 as of February 28 bank statement.

Membership:

- New members: 3 (Art Mendelsohn, Lucinda Gray, Greg Hastings - KO6DOM)
- Renewals: None
- Bob's records show 34 paid members plus 1 life member = 35 members as of 3/1/26.

Old Business:

- Training Recaps - Ham Basics Learning, Hillcrest Park

New Business:

- Antennas in the Park - tentatively May 9 - upcoming planning, assignments, budget, exhibits/demos. Need to see if Marvin is going to be available to come down from Santa Barbara. Participation in the fox hunt was light last year. Need to talk with Joe his ideas about what to do differently, and providing him support in setting out the transmitters. The heat was particularly hard on Albert who was doing the grilling in the sun for hours. Do we want/need the cabin? Might just use our usual setup for Saturday in the Park instead?
- Saturday in the Park 3/14/26 plans - Ideas? (Ray Rounds will be out of town). Bob: APRS was well attended last year, thinking to do that again soon.

There were no further items brought forward and the meeting was adjourned at 5:47 PM.

Submitted by Ted Schulman KO6FKX, Secretary

How about a K6QEH group challenge?

For the month of April, FRC members will keep track of the call signs they've QSO'd with on the Fullerton K6QEH repeater. At the end of the month send Ray Rounds your results (we'll remind everyone often to play). Winner will be announced and rewarded. Fine print: 1) regularly scheduled net check-ins do not count. 2) QSO's accepted for any licensed amateur radio operator, 3) reward and any special mentions are TBD, and 4) K6QEH can be reached on either of two linked repeaters, one on the 2 meter band and one on the 70 centimeter band. Program K6QEH VHF 146.970- PL 136.5 and K6QEH UHF 446.440- PL 114.8 into your radios for quick (and frequent) access.

another day."

Reducing friction means making the path to operating as short and simple as possible. Keep your gear in the same place. Store the small items—adapters, cables, and connectors—where you can grab them quickly. Recharge batteries when you get home instead of the night before the next trip. Coil your coax and antenna before putting them away so they're ready for the next outing.

The goal is simple: when the urge to get on the air strikes, you want to be able to grab your gear and head out the door without a second thought. The fewer steps between the idea and the action, the more often you'll find yourself operating.

FULLERTON RADIO CLUB, INC.
P.O. Box 545
Fullerton, California

December 12, 1964

Dear OM;

The regular December meeting of the Fullerton Radio Club will be held on Tuesday the 15th, at 8:00 P.M., in the Hillcrest Recreation Building.

Your new officers will be attempting to begin their term of office by following the fine example of the outgoing officers. Presentation of the plans for the coming year will be the highlight of the evening, including some ideas for our equipment, field day, public service and other events to come. Be sure to attend and lend your ideas and opinions so our's will continue to be a smooth functioning organization.

Saturday, November 14 saw a fine gathering of club members, XYLs, and friends at the Annual Installation Banquet at the Royal Coach Inn. After the "warm-up" time we had a steak dinner which was followed by the usual speech making and installation of officers. Special awards were made, with some XYLs taking home most of the awards. Those who desired stayed to enjoy the dancing after dinner.

Sorry to be so short in this first issue of the bulletin since taking office, but this OP is a bit slow on the key.

Best of the season to you,
73 for now,

Paul Broden, WB6CDY, Secretary

P.S. Has anyone picked up that WMS award yet?

Rest in Peace, Paul. 73

TAG Activity Report for February 2026

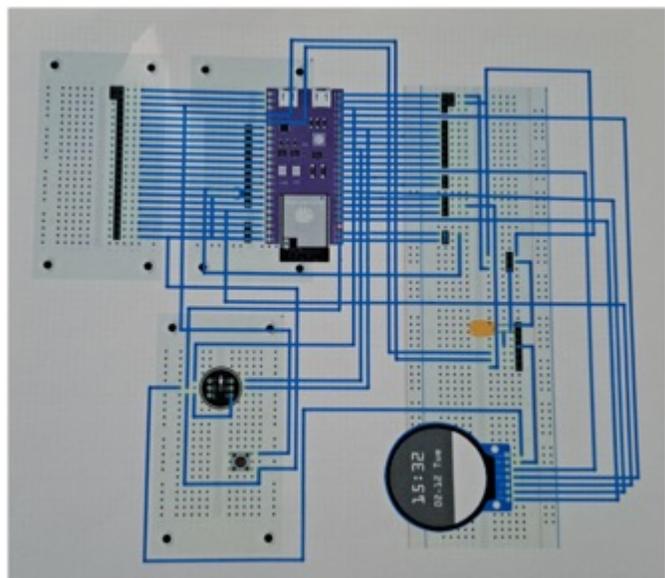
Our first meeting indoors. And hurray, **Harish** Kumar is back and he brought our favorite treat, mini apple strudels. Hurray Harish. . . Harish likes doing things by hand, rather than using artificial intelligence (AI).



Bill Webb showed progress on his AI-advised sprinkler control system. It is now so advanced we worry that the sprinklers will hold him hostage the way Colossus

held the world. (I forgot how that movie ended.) He used a better weather website [Open-Meteo.com](https://open-meteo.com), but the main improvement was using a better AI; Gemini.

He shared with us, his experience with AI and fabricating circuit boards. For example, none of the AI engines he tried can optimize a circuit board layout starting from an image. To the right is the listening, analyzing, talking and displaying ESP32 PCB. AI can suggest a tighter more efficient layout if you give it a Netlist (a text file that defines the electrical connections between components on a printed circuit board) and a Bill of Materials. It wants text. This project uses the PCB design program [Fritzing](https://www.fritzing.com). Someday soon Bill will have it documented on his GitHub page. It is also the first time he contributed a project to the Arduino library of code. Once again, he impressed us with how cheap and easy it is to turn a circuit board layout into hardware. A package of five boards came in no-time-flat and cost under \$4 each. Below is the finished (finally) project.



Brooks Kachner, we haven't seen in over a year. He is famous (to us) for his research on the energy content of batteries and what kind are the most for the money. In the discussion, he and at least one other reported that Duracell, the most expensive cells out there, has the reputation for leaking way before the shelf-life.

Someone recalled that he experienced a garage fire and he told us about all the electronics he lost in the at fire.

Although primary lithium batteries were not evaluated by Brooks, Larry pointed out that lithium-ion "primary" batteries not only have more energy than standard alkaline cells. They are slightly lighter and significantly longer shelf life. They charge faster (often reaching 50% in under 30 minutes), require minimal maintenance, and provide consistent, efficient power, making them ideal for any application. This is made clear in the table below. (from ChatGPT)

Battery Type	Avg. AA Capacity	Approx. Price (Bulk)	mAh per Dollar (Est.)
Leclanché	~1,000 mAh	\$0.20 – \$0.35	3,000
Alkaline	~2,500 mAh	\$0.25 – \$0.50	5,000 - 10,000
Primary Lithium	~3,400 mAh	\$2.00 – \$3.00	1,100 – 1,700

Walter observed that there is one advantage for the Leclanche and probably why they are still sold. If the toy will become disused before the shelf life of the battery or there's a chance the toy will be left on long enough to render any battery dead.

Larry McDavid brought a very simple wooden cell phone stand he bought for \$5 from Ali Express, including shipping. It allows the bottom speaker in the cellphone to have a horn which effectively amplifies the sound. The enhancement was very evident when playing one of the alarm sounds of a cell-phone. Not shown here is that



machined into the wood is a sound channel that lines up with the cellphone's tiny little bottom speaker where the sound comes out.

Larry also talked about a Chinese competitor to Amazon, Ali Express. He has found that their prices can be astonishingly low but the real price only shows up when you go through the process of buying it.

He also talked about making an object, (such as something made with a 3D printer or the cell phone stand) skid proof. It's a sheet of 40 Shore A hardness silicone rubber bonded to the bottom, soft enough to make it not slide on a table. The rounded corners of the rubber sheet are cut with a really interesting hand tool, a quarter circle outside-radius punch.



Bob Houghton set up a cellphone on a tripod so Bart Pulverman could watch the TAG meeting. Bob did not get a report from Bart as to whether this was enjoyable to him or frustrating. First timer **Jesse James** introduced himself as a pilot, lawyer, and earlier in his life a policeman. He led a discussion on how the FCC and hams

themselves handle minor abuses like cussing over the air. He mentioned Winn Systems and that led a discussion on how to turn off police HT radios that have been stolen.

Greg Hastings, also new to TAG, talked about his experience with PCBs with components. He used Fusion 360 to design a product enclosure for a prototype breakout board. The breakout board provides a potentiometer, push button switch, and several LED's. These come in handy when experimenting with microcontrollers. To print the project box, a K2 Creaty 4 color 3D printer was used. The extra colors were used to indicate the schematic wiring to the header pins. That way this product is self documenting.

