

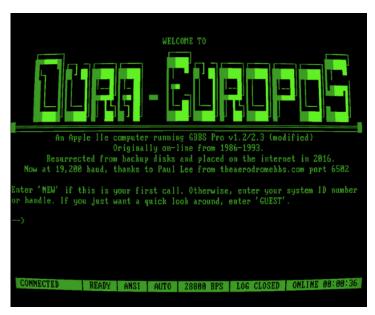
Smoke Signals

Newsletter of Fullerton Radio Club

February 2025

President's Column

A couple of Saturdays ago, I attended the Vintage Computer Festival. It was an enjoyable journey down memory lane. I had the opportunity to walk around the large display of computers from another era. There were a wide variety of brands and models. Among them were Atari 400s and 800s, a TI-99/4, a Commodore PET,and many Commodore 64s. There were a couple of S100 bus systems, every variety of Apple and many more. And then there was this:



Yes, as it turns out, computer bulletin board systems still exist. I no longer own a copy of ProComm, but I do have an app called MuffinTerm running on my phone that allowed me to access this "blast from the past"

Somehow, spending time with old computers got me thinking about packet radio systems. Starting in about 1980, hams began experimenting with sending and receiving ASCII data over the radio. By the time I was licensed in 1990, there was a well-developed network of nodes, digital repeaters, and bulletin board systems. I remember being quite excited when (while on a summer camping trip) sitting in my VW camper, using a Tandy Model 100 portable computer, a Heathkit HK-21 terminal node controller and a Yaesu FT-470 HT, I logged into a packet BBS on 145.09 MHz in Vancouver. British Columbia. I composed and sent an email to the K6UNQ Packet BBS in Walnut, California.

Being able to send electronic messages that would get routed around the country to the desired destination was quite cool. Of course, a couple of years later the internet took off and the novelty of sending messages by radio at 1200 baud quickly faded.

One application of packet radio has survived, and it is found in many of the fancier VHF radios that are on the market today. I am, of course, talking about APRS, or Automatic Packet Reporting System.

Maybe it's time to re-explore APRS.

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

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W6FUB.

Board members absent: None

The January Board Meeting minutes were reviewed and approved without amendment.

The monthly FRC Board Meeting was called to order by President Bob

present included Robert Gimbel KG6WTQ, Gene Thorpe KB6CMO, Walter

FRC January 5,2025 Board Meeting Minutes

Houghton AD6QF at 5:35 PM on Wednesday, February 5, 2025. Board members

Treasurer's Report

- Bank balance: \$6241.59 as of February 5.
- New deposits: \$45 renewals (Robert, Joe, April); \$0.02 interest
- New expenditures: None

Upcoming expenses: Bob noted upcoming ARRL Insurance due March 1, premium was \$200 over the last several years.

New members: None

Bob's records show 22 memberships paid so far for 2025 and 1 life member as of 1/4/25.

Old Business: none

New Business

- Walter suggested the theme of "Al" for the upcoming TAG meeting
- · Second Saturday training will be discussed at this week's meeting.
- · Larry McDavid asked about Bob's email from Chris Meyer W3KYL. Chris is looking to place several pieces of equipment in a good home.

Meeting was adjourned at 5:45 PM

Submitted by Ray Rounds, Secretary

New Hamsat on the Air

AMSAT has designated the recently launched HADES-R as Spain-OSCAR 124 (SO-124). The satellite features an FM repeater and is now open for amateur radio use. The upload frequency is 145.925 MHz and the downlink frequency is 436.885 MHz. SO-124 also supports APRS and FSK telemetry.

At the request of AMSAT-EA, AMSAT has officially designated HADES-R as Spain-

OSCAR 124 (SO-124) in recognition of its contributions to amateur satellite communications. This designation underscores the satellite's role in expanding access to space-based communications for the amateur radio community. AMSAT congratulates AMSAT-EA on this achievement and looks forward to the continued success of this and future projects.

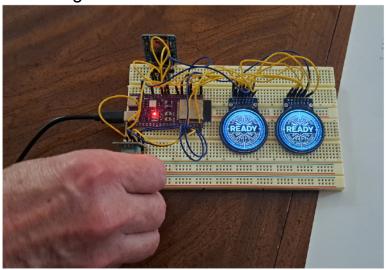
TAG Activity Report for February 2025

The Theme was A-I and Electronics.

The pre-meeting discussion while waiting for others to gather involved subjects like:

- Red lights and left turning; the controversy.
- McFadden-Dale Hardware and other sacred places.
- Larry's paper shredder Story.

Bill Webb brought his latest projects and gets the prize for the most theme like discussion. These two round displays are driven by the microcontroller development board. The device connects to the internet through Bill's phone and using DALL-E, creates original art based on prompts like "create a drawing of a rocker switch". You can find the project files here1.



Text is easier to work with than graphics. The project below uses ChatGPT to evaluate the weather.

The project below uses OpenWeatherMap.com to get the current conditions and the forecast conditions. There is a considerable gap between the current conditions data and the forecast conditions data. ChatGPT fills in the gap. This is all done on an internet connected thumbnail size microcontroller. You can read more about this project here2.

Walter couldn't get over how the round displays could possibly work. He was wedded to the idea that an array of tiny LEDs had to be addressed like cartesian coordinates.

Larry McDavid shared with us something he found in a closet or the attic somewhere. An 8" floppy disk. 80 kilobytes! Wow, how far we've come. That's what, about 40 pages of plain text?



There were some ChatGPT and Copilot challenges by way of cellphones that night. Here's an example of one dialog...

Here's Walter's example. He is using ChatGPT constantly to help him write a science fiction novel. This 747 has been outfitted with an array of nuclear fusion rockets to transport cargo and people to Mars.

What electric car can fit into the cargo bay of the 747?

It then listed for me the size of the cargo bay, its hatch, and the sizes of about 6 different brands of electric cars.

It then asked me...

"Would you like a specific recommendation based on additional criteria (weight, range, purpose, etc.)?"

I typed "yes"

and it responded with . . .

"To give you the best recommendation, let me know what matters most for your use case. Are you . . ."

it then listed four "use cases" such as . . .

- 1. Maximizing the number of EVs
- 2. Maximum number most easily rolled on board etc.

It recommended the Fiat 500e

And then asked: "Would you like a loading

diagram or further optimization ideas for efficient packing?"

You can't help but to thank it. And it seems to like that and compliments you too if it finds your questions interesting.

References:

- 1 https://github.com/bill-orange/chatGPT DALLE
- 2 https://github.com/bill-orange/weathercall-forecast-Al-test