



March 2008 Volume 38, Number 3

### March Club Meeting

**Date:** Friday, March 28, 2008  
**Time:** Socializing at 7 pm, Meeting at 7:30  
**Place:** Covington School, 205 Covington Road, Los Altos  
**Speaker:** Steve Stearns, K6OIK, Vice Pres. FARS  
**Topic:** Circuit Theory for Radio Amateurs

**Summary:** What is voltage? What is current? What is power? And while we're asking, what are resistance, conductance, capacitance, inductance, reactance, susceptance, impedance, and admittance? Perhaps more mysterious are mutual inductance, transformers, impedance inverters, negative impedance converters, gyrators, nullators, and nullors. The story gets really interesting when we consider hooking devices together to make circuits. Circuit theory as it evolved from Heaviside through Steinmetz, Foster, Guillemin, Kemmerly and Hayt, marks the branch point between electrical engineering and physics. Steve, K6OIK, will explain these concepts plus complex numbers.

**There will be three prizes for the meeting.** First Prize is a Yaesu Ft 1802M, 2 meter, 50watt Mobile Tcvr. Second Prize will be a 100 ft. spool of 3/16 Dacron line. Third is a 2008 Northern California Repeater Directory.

The club offers refreshments at the meeting. Be sure to attend for an enjoyable evening. Get your name in the Relay: bring your toughest questions for Dr. Know-It-All.

### Upcoming Events

- Mar 28 7:00 PM, [Club meeting](#), Covington School
- Mar 29 8 AM to 9 PM, [Am-Tech Day](#), SLAC, 8AM-9PM
- Apr 3 7:30 PM, Board Mtg at the Los Altos Town Crier
- Apr 5 8 AM to 9 PM, [Am-Tech Day](#), SLAC, 8AM-9PM
- Apr 12 7:30 PM, Board Mtg at the Los Altos Town Crier
- Apr 25 7:00 PM, [Club meeting](#), Covington School
- May 3 8 am to 1 pm, [VOMARC Hamfest](#)
- Thursdays 8:00 PM, FARS net, 145.230(-), 100 Hz PL

See more events, [FARS Calendar](#) <<http://www.fars.k6ya.org/events/calendar>>

### Article by Local HAM

Jim Oberhofer, KN6PE, from Cupertino ARES and Santa Clara County RACES, has written an article on his Outpost packet messaging software that appears in the April 2008 QST on page 35. Titled "Outpost: Packet Radio for Emergency Messaging," it describes the features of the software, how it works, and how to get your own free copy. It's worth reading to learn about the software and how it is used to support local emergency communications.

If you like this article and you are an ARRL member you can cast your vote for it to receive the QST Cover Plaque Award at <http://www.arrl.org/members-only/qstvote.html>.

### President's Corner

**Membership Meeting.** Our next meeting is Friday, March 28<sup>th</sup> at 7pm (<http://www.fars.k6ya.org/meeting>).

**Am-Tech Day.** The March Amateur Radio Technology Day is scheduled for Saturday, March 29<sup>th</sup> at the Stanford Linear Accelerator Center. Check the FARS web site ([www.fars.k6ya.org/amtechday/](http://www.fars.k6ya.org/amtechday/)) for the program schedule, directions, and the latest news.

**Email Notices.** Subscribe to the FARS Announcement list ([www.fars.k6ya.org/mail/](http://www.fars.k6ya.org/mail/)) to receive reminders of FARS activities and other news.

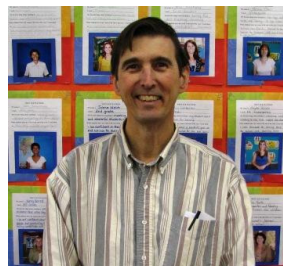
**Membership Renewal Time.** It's time to renew your FARS membership. Remember that memberships are valid through the end of December with a 30-day grace period for the month of January. If you have not already renewed, please do so at the next club meeting, or send in a membership renewal form with your check. Even easier, just go online, update your member profile, and pay via PayPal. Your support helps us fund all our activities: member meetings, Am-Tech Day, Field Day and more ([www.fars.k6ya.org/cgi-bin/r-edit](http://www.fars.k6ya.org/cgi-bin/r-edit)).

**Flea Market & Volunteers.** The next Electronics Flea Market is scheduled for April 12<sup>th</sup> – and this time FARS is hosting it! This means we need volunteers to help run the flea market and that means you. So check your schedule for April 12<sup>th</sup> and see if you can spend a few hours working at the flea market. There will be sign up sheets at the March 28<sup>th</sup> club meeting for you to sign up.

- de Mikel, KN6QI

### February Meeting Report

The February meeting speaker was John Treichler. He spoke about the history of mobile telephone service. It was interesting that many decisions made long in the past are still in place today, according to John. He described how the challenge to improve poor services that were present even into the '80s resulted in a multi-tower system. He also covered frequency reuse and the setup of cells with vectorized antennas. We hope to have the continuation of the very interesting talk in a future meeting.



**John Treichler  
February Speaker**



**1<sup>st</sup> through 4<sup>th</sup> Raffle Winners  
and WYWH**

Larry Hedberg, KD6EUG, won the first place raffle prize - "The Traveler" Boomset from HEIL Sound. Second prize, the Grundig FR-250-ARC, was taken by Richard Tsukushi, KA6IXN. The 2007 ARRL Handbook, third place prize was won by Pat Buder, AE6ZY. Fourth place prize, the 2008 Northern California Repeater Directory, was won by Ray Egan, W6FQY. The Wish You Were Here (WYWH) number for Dave Platt, AE6EO, was chosen. Dave was present to claim the prize.

## February Meeting Raffle Prizes

The FT-1802M is a ruggedly-built, high-performance 50-Watt 2-meter mobile FM transceiver with outstanding receiver performance and crisp, clean audio. It has an illuminated microphone with keyboard frequency entry and 221 memory channels with alpha-numeric labeling. There is automatic repeater shift, automatic power-off, a CW Trainer, and a security password to prevent unauthorized use. Optimized for ease of operation day or night, the FT-1802M is one tough radio for operating in a tough world!



Second Prize will be a 100 ft. spool of 3/16 Dacron line. Third is a 2008 Northern California Repeater Directory.

## VOMARC Hamfest

We would like to invite you and the members of FOOTHILLS AMATEUR RADIO SOCIETY (FARS) to the Valley of the Moon Amateur Radio Club (VOMARC) Hamfest on May 3rd (8am to 1pm) in beautiful Sonoma. Activities include a swap meet, VE session, breakfast, fox hunt and a lot friendly folks. Go to the website, [www.VOMARC.org](http://www.VOMARC.org) for more info, flyer and a map or e-mail us. Hope to see you there.

- 73, Dave Dammuller, Pres., and Eileen Adams, Vice Pres.

## Amateur Radio (HAM) License Plates

The State of California, Department of Motor Vehicles, has the following information on their website: [http://www.dmv.ca.gov/ham/ham\\_plate.htm](http://www.dmv.ca.gov/ham/ham_plate.htm)

These plates are issued, upon request, to holders of Federal Communication Commission (FCC) amateur radio station licenses. The alpha-numeric series reflects the call letters assigned by the FCC (Vehicle Code &sect;5005 and Revenue and Taxation Code &sect;10751, 10752).

If you have Amateur Radio (HAM) License Plates that have spaces between the numbers or letters and you would like plates without the spaces follow this link to the application. Complete the application and a Statement of Facts indicating that you wish to retain the old plates until the new plates arrive, at which time you will properly destroy the old plates. Mail both documents to the address on the bottom of the application form. No fees are required.

If you have questions or concerns regarding your Amateur Radio (HAM) license plates, please call Customer Communications at (916) 657-6560

When you go to the DMV website, you will be able to click on the links to receive a PDF of the indicated application form, and the Statement of Facts form, which you can print and mail to DMV for obtaining replacements for your current plates that contain spaces. Future applications for Amateur Radio call sign plates will result in the receipt of plates with no spaces.

## Photo-voltaic systems

Some years ago, it was calculated that it took more electricity to make a solar electric cell than the cell would produce. I ran across an article which says this is no longer true. That article didn't give any specifics, but referred to: <http://www.taunton.com/finehomebuilding/PDF/Free/021192056.pdf>

One example shows a California system which costs \$36000 to install. State and Federal tax incentives reduce that to \$24000. It generates electricity worth \$750 each year, giving 32 years to pay for itself, which is a long payback period.

I will say that Taunton Press is a reputable outfit with many great publications like Fine Woodworking magazine.

- de Paul, AA6PZ

## From ARRL (<http://www.arrl.org/arrlletter/08/0320/>)

Emmett Freitas, AE6Z (ex-W6OIA), known as "Shorty" to his friends, passed away February 23. An ARRL Life Member, Freitas was on the Volunteer Examiner team that administered the first Amateur Radio license test session on August 31, 1984. He went on to participate in a total of 548 test sessions. Freitas, a US Navy veteran in WWII, served as a Chief Petty Officer (Radioman) on the USS Parakeet, as well as other duties in and around the Panama Canal Zone, the Galapagos Islands, Ecuador and Lakehurst, New Jersey. A memorial service was held in his home city of San Jose, CA on March 7.

## CLUB INFORMATION

President:	Mikel Lechner, KN6QI
Vice President:	Steve Stearns, K6OIK
Treasurer:	David Cooper KE6PFF
Secretary:	Rob Riley, KI6INR
Radio Officer:	Phil Hawkins, KA6MZE
Training Officer:	Kevin Weiler, K6XXX
Relay Editor:	Mark Hardy, AF6DO

FARS Board: Dick Baldwinson N6ATD, Robert Flemate KE6TFU, Pink Foster KG6ILA, Kristen McIntyre K6WX, Barbara Neuhauser AE6RM.

Station Trustee: Stan Kuhl, K6MA  
FARS Web Page: <http://www.fars.k6ya.org>  
Download Relay: <http://www.fars.k6ya.org/relay>

Club members and non-members are encouraged to subscribe to the FARS Announcement list by browsing [www.fars.k6ya.org/mail](http://www.fars.k6ya.org/mail), clicking on Subscribe/Unsubscribe and following the instructions under "Subscribing to fars-announce."

You may submit announcements to the FARS Announcement at [fars-announce@svpal.org](mailto:fars-announce@svpal.org). The list is moderated and messages will be posted as approved by the list moderator.

Contact the FARS board of directors at [fars-board@svpal.org](mailto:fars-board@svpal.org)

Club meetings are held at 7 PM on the fourth Friday of each month except January (Winter Banquet); and sometimes there are changes for June (for field day) and Nov. & Dec (for holidays).

Annual club membership is \$20. Club badges are \$9. Visitors are always welcome! Directions in this newsletter. Talk-in: N6NFI (145.23-, 100 Hz) or W6ASH repeater (145.27-, 100 Hz).

FARS *Relay* is the official monthly newsletter of the Foothills Amateur Radio Society. Contributions to the newsletter from members, family, and guests are earnestly solicited! Contributions are subject to editing and/or compression. All readable forms welcome.

Here is how to reach the editor:

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Mail: P.O. Box 2248  
Santa Clara, CA 95055  
Voice: 408-243-0701 (Before 9 PM, preferred)  
Email: [mark.af6do@gmail.com](mailto:mark.af6do@gmail.com), At FARS meetings.

**FARS 2008 MEMBERSHIP RENEWAL FORM**

Date: \_\_\_\_\_

PLEASE fill out the form for all new/renewal memberships.

Name(s) & Callsign(s) & Class (E-A-G-T-N-None): \_\_\_\_\_

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

Home phone: \_\_\_\_\_ Work phone: \_\_\_\_\_

Fax (H or W?) \_\_\_\_\_ Packet BBS Address: \_\_\_\_\_

E-mail: \_\_\_\_\_ ARRL Exp Date(s): \_\_\_\_\_

Preferred modes: (e.g. HF-SSB/VHF/QRP/Other): \_\_\_\_\_

I'm willing to Elmer new hams with: \_\_\_\_\_

Special topics of interest / suggestions for club meeting speakers:

Dues: \$20 per year, new members add \$9 for badge fee. **Please note:** Membership runs from January 1 to December 31.

Send your check payable to FARS, to:

David A. Cooper  
PMB 41  
270 Redwood Shores Parkway  
Redwood City, CA 94065-1173



**How to get to FARS Club meetings (Visitors always welcome)**

Meetings are held at the Covington Elementary School (directions below) on the fourth Friday. Socializing at 7 PM with the regular meeting at 7:30 PM. There may be changes in the meeting dates for January, June, November, and December.

**DIRECTIONS:**

**From Interstate 280.** take the El Monte exit Northeast. Cross Foothill Expressway. (A) At the first traffic light turn right on Covington. (B) Immediately at the fork take the left street (Covington). Go about 1/10th of a mile. Turn left into the parking lot. The gym is the tall building to your right with red and white stripes.

**From Foothill Expwy.,** take the El Monte exit and go Northeast; then follow directions as above at point (A).

**From US101 or El Camino:** take San Antonio Road west (to Foothill Expressway). Then follow directions above at point (A).

**TALK-IN** via the [N6NEI](#) (145.230-; 100Hz PL) repeater or the [W6ASH](#) 145.27- (100Hz PL) repeater.