

May Club Meeting

Date: Friday, May 28, 2010

Time: Socializing at 7 pm, Meeting at 7:30

Place: Covington School, 205 Covington Road, Los Altos

Speaker: Charlie Morrin, KI6FXY

Topic: Fighting Robots

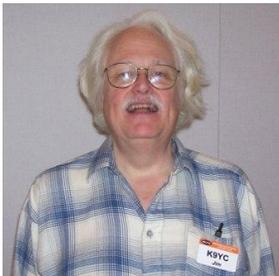
Summary: Watch out! Charlie Morrin, KI6FXY, is bringing his "friends" tonight, and the robots will be taking over. Whether small or large, the jobs of the future will increasingly be done by robots. Charlie's friends are eager to demonstrate what they can do – from vacuuming to clobbering each other. This will be a fun demo, but be prepared to jump out of the way. The only question is do they need licenses to drive or operate a rig!

The club offers refreshments (great coffee, great cookies). Bring your questions for Dr. Know-It-All and get great answers.

Pre-Meeting Dinner, 6pm at the Beausejour Restaurant, 170 State St., Los Altos. There are Great Early Bird specials.

April Meeting Report

Jim Brown, K9YC, talked about coaxial transmitting chokes. Jim covered how ham antennas are inherently unbalanced, common-mode and differential-mode current on transmission lines, how to wind chokes, how to measure chokes, what kind of ferrite cores are best, and lots of other fun stuff. You may remember Jim's popular talk "RFI and Ham Radio" from FARS December 2007 meeting. Jim's presentation slides can be found at his web site <http://www.audiosystemsgroup.com/publish.htm>.



Jim Brown, K9YC
April Speaker (file photo)



Larry, Doña, Byron, Steve
April Raffle Winners

The first prize, a new Icom IC-V80-25 2 meter handheld 5.5 Watts with loud RX, was taken home by Byron Beck, KG6UOB. Larry Hedberg, KD6EUG, won the 2nd prize, two Maker Faire Tickets (donated, won and redonated by Michael Pechner, NE6RD). 3rd prize, an MFJ-281 Cleartone Speaker, was won by Steve Stearns, K6OIK. 4th prize, an ARRL Repeater Directory was won by Doña Kearns, KI6DAR (after being won and redonated by Herb Vanderbeek WY6G). A 2010 Northern California Repeater Directory, 5th prize, was won by Steve Stearns, K6OIK. The Wish You Were Here number for Bill Rainey, K6WAR, was chosen. Unfortunately, Bill was not present to claim the prize.

President's Corner



Membership Meeting. The next regular membership meeting is Friday, May 28th at 7pm. Our program is "Fighting Robots" with Charlie Morrin, KI6FXY. Along with the talk will be demonstrations of some things these robots can do. See

k6ya.org/meeting meetings for more details.

Am-Tech Day. The next Am-Tech Day is scheduled for June 12th. Don't miss out! There will be food, radios, and hams. Check the web site (k6ya.org/amtechday/) or the email list ([k6ya.org/mail/](mailto:k6ya.org@mail/)) for the date and program information.

Electronics Flea Market. FARS is running the electronics flea market on June 12th. The proceeds from the June electronics flea market benefit FARS and its activities, so please volunteer to make it a success. Contact Peter Chow, AF6DS to volunteer. Check out www.electronicfleamarket.com for all the details.

Field Day. It's time to prepare for Field day 2010. This year's Field Day is scheduled for June 26th and 27th. This is a great opportunity to get on air in a contest without the pressure. Bring your friends and introduce them to Amateur Radio Field Day and a chance to experience Ham radio first hand.

Email Notices. Subscribe to the FARS Announcement list (k6ya.org/mail/) to receive reminders of FARS activities and other news.
de Mikel, KN6QI

May Raffle Prizes

The prizes for the May 28th meeting are: First Prize LDG Z-100Plus 0.1 -125 watt Memory Antenna Tuner. The Z-100Plus sports 2000 memories that store tuning parameters and frequency (using an internal counter). It will run on any voltage source from 7 to 18 volts; six AA batteries will run it for a year of normal use.



2nd Prize: Pkg. 10 Anderson 30 amp Powerpoles, which are recommended for use with 12-14 gauge wire. 3rd prize: 2- Silver Teflon PI-259s. 4th Prize: 2- Van Gordon Dogbone End Insulators. Photos and text courtesy the manufacturers' websites, www.ldgelectronics.com, www.powerwerx.com.

Upcoming Events

May 29 7:00 pm, [Club meeting](#), Covington School
 June 3 7:30 PM, Board Mtg at the Los Altos Town Crier
 June 12 [Electronics Flea Market](#), hosted by [FARS](#)
 June 12 8 am to 9 pm, [Am-Tech Day](#), SLAC NAL
 June 18 7:00 pm, [Club meeting](#), Covington School
 June 26-7 ARRL 2010 Field Day
 Thursdays 8:00 pm, FARS net, 145.230(-), 100 Hz PL

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

CLUB INFORMATION

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| President: | Mikel Lechner, KN6QI |
| Vice President: | Steve Stearns, K6OIK |
| Treasurer: | David Cooper K6WA |
| Secretary: | |
| Radio Officer: | Phil Hawkins, KA6MZE |
| Training Officer: | Kevin Weiler, K6XXX |
| Relay Editor: | Mark Hardy, K6MDH |
| FARS Board: Dick Baldwinson N6ATD, Peter Chow AF6DS, Robert Flemate KE6TFU, Nimit Hongyim K6XOX, Gerry Horn K6TXD, Charlie Morrin KI6FXI, Barbara Neuhauser AE6RM. | |
| K6YA Trustee: | Phil Hawkins, KA6MZE |
| 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 , clicking on Subscribe/Unsubscribe and following the instructions under "Subscribing to fars-announce." | |
| You may submit announcements to the FARS Announcement at fars-announce@sypal.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@sypal.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 <i>Relay</i> 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: | |
| Mark Hardy, K6MDH | |
| Mail: P.O. Box 2248 | |
| Santa Clara, CA 95055 | |
| Voice: 408-243-0701 (Before 9 PM, preferred) | |
| Email: mark.k6mdh@gmail.com , At FARS meetings. | |

Flea Market signups

FARS is the sponsor for the Flea Market on June 12. We Need people for a variety of jobs/positions to help make this a success:

- 1) Food booth: 5 - 8 am – setup, 7 - 11 am, 10 am - to 1pm – takedown
- 2) Red Cross truck loading/unloading in Palo Alto, Fri dinnertime, and Saturday after the Flea Market
- 3) Donut pickup from Donut Wheel at 5am Saturday
- 4) Drinks - from store and previous Flea Market
- 5) Gate/vendor tickets/payment

Please let me know if you are able to help out at the Flea Market so that it will be a great success for FARS.

- Peter, AF6DS

Microwave Antenna Online Handbook

Get information you need about Microwave antennas with this online handbook from Paul Wade, W1GHZ, at <http://www.qsl.net/n1bwt/contents.htm>.

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Dr. Know-It-All, May 2010

Dear Doctor,

We're continuing to use our analog TV sets as long as they still work, before we take the deep plunge into the HDTV arena. At current prices, a big screen digital TV would cost \$1,800 to \$2,500 for a 58-inch display, but prices keep coming down. The best technology choice seems to be edge-lit LED LCD. Each time we go to COSTCO, I look behind the sets to see the power consumption. It's amazing what power hogs plasma sets are! They draw 500 to 750W! I've also heard they radiate RFI all over the spectrum. The lowest power consumption I've seen for a big screen is about 190 W for a SAMSUNG UN55C6400, 55-inch LED LCD TV, which costs \$2,500. What do you suggest?

Andy Korsak, KR6DD

Answer: The way to save money on a big screen TV is to buy a projector for under \$900. A good projector (e.g. Optoma) can project a reasonably bright HD resolution picture up to 110 inches diagonal. You still have to provide a DTV tuner and audio system. However, each of these might cost as little as \$200. So the total cost might be end up around \$1300 or so for a component TV system. Complete bundled TV systems cost more than unbundled separate components – the opposite of high-end audio systems. If you only watch downloaded MPEG files, then you don't even need a tuner – just a computer that's connected to the Internet. Good viewing software is available free, e.g. "Media Player Classic – Home Cinema" is a popular free viewer. If you do use a tuner, then a converter box connected to an analog TV or VCR may allow you to project a big image, albeit at NTSC definition, assuming the TV or VCR has video outputs. It's funny that most high-end Blu-ray players that play DVDs with the greatest resolution available today also have the ability to download and play low resolution MPEG-compressed videos. Why pay good money for that?

That's it for this month. You can send your comments or questions about any aspect of Amateur Radio to Dr. Know-It-All. Written comments and questions are accepted at the monthly meetings of the Foothills Amateur Radio Society, by email to FARS officers and board members, or through the FARS web site at <http://www.fars.k6ya.org>.

Free Online Electronics Courses

The Massachusetts Institute of Technology (MIT) provides a free video library of engineering lectures and tutorials. From the basics to more advanced courses, these video lectures cover a wide variety of topics, including artificial intelligence, C++ programming, analog electronics, receivers, antennas & signals, and more! See the following link for a selection of courses. http://www.101science.com/Radio_mit_Courses.htm.

Inductor Design

Designing inductors? Download this free tutorial which covers Inductor design constraints, design procedures, illustrated examples and more.

http://ecee.colorado.edu/~ecen5797/course_material/Ch14slides.pdf.

2010 Maker Faire

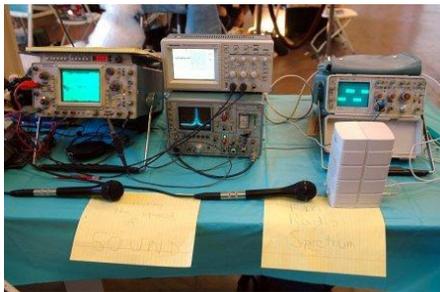
For two years in a row, FARS has sponsored an amateur radio presence at this year's Maker Faire in San Mateo - thanks to the initiative of Michael Pechner (NE6RD).

The exhibit demonstrated SSTV with APRS (known as APRN) by Bernard Van Haecke (KI6TSF), oscilloscope measurements and pattern generation (Kristen McIntyre, K6WX, and Leigh Klotz, WA5ZNU).

Many other volunteers supported the exhibit and demonstrations. Below are some pictures from the Maker Faire 2010, thanks to Joanna Dilley, KI6YRU, and Peter Chow, AF6DS.



Bernard Van Haecke, KI6TSF, giving demonstrations.



Oscilloscope demonstrations



Peter Chow, AF6DS, setting up.



Umesh Ghodke, K6VUG, and Joanna Dilley, KI6YRU.



The FARS Spring 2010 General Class License Course

The FARS Spring 2010 General Class License course started on April 15th and ran five 2-hour classes, concluding with a test session on May 20th. The course was taught by Mikel Lechner K6NQL, Kristen McIntyre K6WX, Peter Chow AF6DS, Phil Hawkins KA6MZE, and Kevin Weiler K6XXX, and was organized by Kevin. The class size was 29 students plus an observer, and at any given session there were 25 or so students present.

Several students took the test at a local VE and obtained their General class license before the course finished.

At the course test session, 21 students took the test, 17 passed the first time, and one retook the exam and passed -- so 18 out of 21 walked away with new licenses! Three of the students at the exam session had passed their General exam before or during the class, so they took the Extra exam -- and all 3 passed.

Of those who didn't pass, they were all within a few questions from passing and were eager to take the test again at a VE site within a couple of weeks.

All in all it was a successful class, with great students, great instructors, and fun was had by all!

- Kevin K6XXX

FARS 2010 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.