



FARS

FOOTHILLS AMATEUR RADIO SOCIETY

The FARS Relay

October 2014

See you down the log!

Volume 44, Number 9

www.fars.k6ya.org

OCTOBER CLUB MEETING

When & Where

Date: Friday, October 24th, 2014

Time: Socializing at 7PM
Meeting starts at 7:30PM
Guests are welcome to join us

Place: Covington School, 205 Covington Rd, Los Altos
(near Foothill Expressway and El Monte Rd)

Snacks: Cookies and coffee will be served. *(new coffee pot!)*

Questions: Bring your hardest radio questions.
The mysterious Dr. Know-It-All reveals all answers.

Post-Meeting Snacks: Denny's on Mathilda in Sunnyvale.



Raffle Prizes

We will have a great selection of Raffle Prizes as well as the CA\$H Wish-You-Were-Here Prize.

1st Prize: Kenwood TM-281A 2 meter 65 watt
Base/Mobile Transceiver

2nd Prize: DBJ-1 2m/440 Dual Band J Pole Antenna
by Ed Fong WB6IQN

3rd Prize: La Crosse Wireless Weather Station
Model WS-9630TWC-IT-TB

4th Prize: Cold Heat Soldier Tool with Wire Stripper

Wish-You-Were-Here Prize: A CA\$H prize awarded to a member who is present and has paid their 2014 dues. (now \$50!)

Who & What

Presentation:
**Nuclear Reactors
for the
Complete Ham Shack,
Emergency Power,
and Clean Green Power**

Speaker:
Dr. Alexander Cannara

See page 4 for details



CALENDAR OF UPCOMING EVENTS

www.fars.k6ya.org/events/calendar

* Visitors are welcome at all FARS events! *

FARS is an amateur radio organization in the southern San Francisco Peninsula area serving residents of Los Altos, Palo Alto, Mountain View, and several other communities.

OCTOBER

- 24** **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM
Presentation: **Nuclear Reactors for the Complete Ham Shack,
Emergency Power, and Clean Green Power**
Speaker: **Dr. Alexander Cannara**
The Wish You Were Here Prize is up to \$50 !!!

NOVEMBER

- 9 **BARC Meeting**, Panera Bread, Cupertino, 3PM
*Bay Area Radio Builders Club. **Sponsored by FARS.***
See the website / Yahoo Group for details.
- 12 Board Meeting, Los Altos, CA, 7:30PM
- 21** **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM
One week earlier than usual due to the holiday

DECEMBER

- 10 Board Meeting, Los Altos, CA, 7:30PM
- 14 **BARC Meeting**, Panera Bread, Cupertino, 3PM
*Bay Area Radio Builders Club. **Sponsored by FARS.***
See the website / Yahoo Group for details.
- 19** **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM
One week earlier than usual due to the holiday

UPCOMING

- Jan. **FARS/PAARA Winter Banquet 2015**
The Foothills Amateur Radio Society (FARS)
and the Palo Alto Amateur Radio Association (PAARA)
present this ham radio event. It will be open to anyone who
wants to attend, but reservations will be required.
Details to be posted soon. Lots of raffle prizes!
- 2/28 **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM
- Mar. **Electronics Flea Market** starts up again!
- May **Radio in the Park** starts up again!
Stay tuned for details.

FARS Membership

Joining FARS
and
renewing your
membership to FARS
provides:

*
Much needed
support for your club
activities,

*
Qualifies you for the
CASH
Wish-You-Were-Here **Prize**
awarded at each
membership meeting,

*
Plus you'll receive
a **FARS Relay**
to your email each month!

Join us!

***Have a photo, article, or
operating news to share?***

Email your FARS newsletter
editor at K6YL@ARRL.net

P R E S I D E N T ' S C O R N E R

Mikel KN6QI

Membership Meeting. Our next membership meeting is scheduled for October 24th and our talk is about “Nuclear Reactors for the Complete Ham Shack” - Dr. Alexander Cannara of Cannara Consulting. He talks a different type of nuclear reactor that is inherently safer than the heavy water moderated nuclear reactors. Nuclear reactors have a much smaller carbon footprint, so they may help reduce the impact of climate change.. See page 4 for details.



See the

Jamboree on the Air (JOTA) was a blast. We had close to two dozen young scouts (and their parents) show up for this event to learn about amateur radio. Each child was given a brief presentation about amateur radio, followed by some hands on practice with a code oscillator, and then several got to talk on the air on our special event station (K6J). A special thanks to Joanna K6YL for doing a super job putting this together, and thank you to all our volunteers including: Rick N6DQ, Dave W6DLF, Paul KK6HWN, Jose KJ6WCX, Dona KI6DAR, Richard N6ATD, Steve Stearns K6OIK, Bob KG6AF, Dave AA6XV, and others I’m surely forgetting. Thank you all.

I also want to thank our partner Mark Chappell and pack 76 for organizing the scouts and providing beverages and snacks for our hard working volunteers.

FARS operated four stations for this event: one on VHF, two on HF phone, and also a PSK31 station on HF. We have some great QSL cards to send to each of our contacts to memorialize this event (see photo below).

Electronics Flea Market is on Hiatus until March 2015. Full details at www.electronicfleamarket.com.

Support FARS with membership. Membership dues are our main source of support, helping FARS put on programs and other activities. Membership is only \$20 (\$10 youth rate for applicants under 18) for the year. Look for a membership form on the back of this newsletter, or check on-line on our web site at <http://k6ya.org/membership>.

FARS is a California 501(c)(3) non-profit corporation, so donations and membership dues are tax deductible with the California Franchise Tax Board and the Internal Revenue Service. Note that donations to our raffles are also considered gifts, so they are generally deductible as well. Consult your tax advisor for details.

Email notices. Subscribe to the FARS Announcement List (<http://www.fars.k6ya.org/mail/>) to receive reminders of FARS activities and other news.

de Mikel KN6QI

J O T A Q S L C A R D

See page 5 for additional photos from this event



57th Annual
World Scout
Jamboree
On The Air



Station	Frequency	Signal Report
Date	Time	Mode

73,

FARS PRESENTATION FOR OCTOBER

Details

When: Friday, October 24, 2014

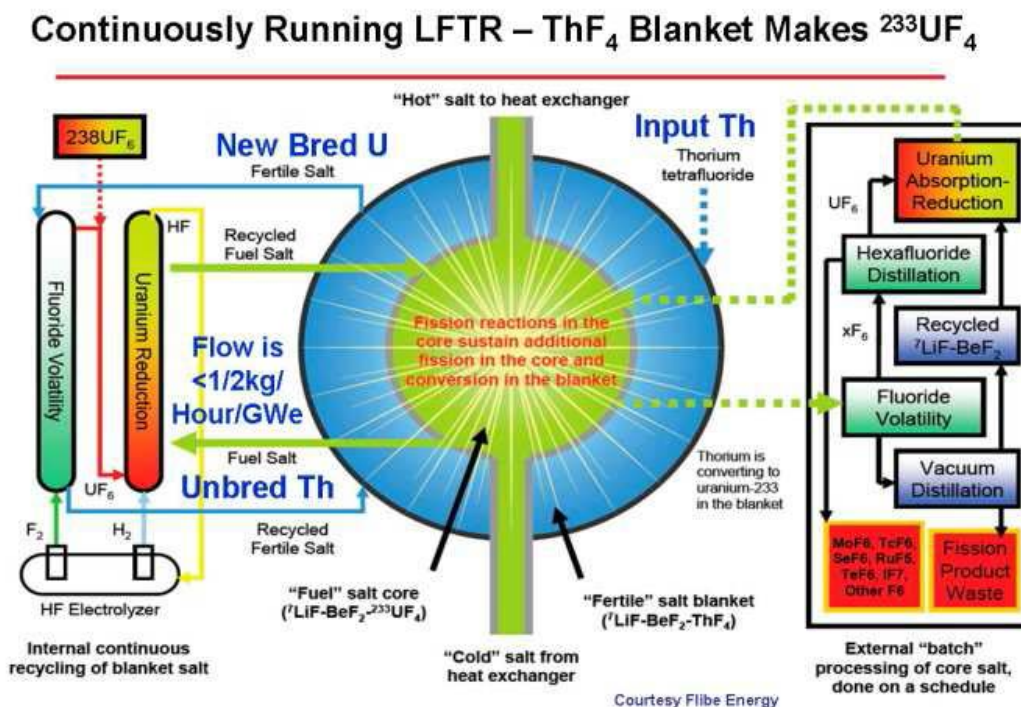
Presentation: Nuclear Reactors for the Complete Ham Shack, Emergency Power, and Clean Green Power

Speaker: Dr. Alexander Cannara of Cannara Consulting

Suppose someone told you there is a way of generating heat and electrical power on an industrial scale without the fuel emissions, nuclear materials, and waste we now produce, and do it for the whole world for thousands of years, using a cheap, plentiful source. What would you say? Suppose these power sources:

1. Can't explode because they're unpressurized and produce no flammable materials.
2. Shut down naturally, without power or people, if something goes wrong.
3. Are independent of water cooling, so can be built anywhere, using little land.
4. Get their energy from cheap material abundant on Earth, Moon, and Mars.
5. Can be made to consume nuclear wastes.
6. Produce valuable industrial/medical/scientific isotopes now becoming scarce.
7. Have already been tested and shown to work.
8. Can be built and operated more cheaply than coal, oil, or gas power.

The technology is the Molten-Salt Reactor (MSR), and the specific variant is Liquid Fluoride-Thorium Reactor (LFTR), developed, designed and operated in the 1960s at the Oak Ridge National Laboratory www.thoriumremix.com/2011. Come and learn what might be the best kept secret for powering your emergency station while combatting global warming in the not so distant future.



2014 JAMBOREE ON THE AIR (JOTA)

Hosted by FARS!

On October 18th FARS hosted local scouts for the 2014 Jamboree on the Air (JOTA) and thanks to a dedicated group of volunteers this event was a huge success. We were very pleased to introduce Pack 76 to Amateur Radio!



The final group during the 4 hour event, standing in front of the hex beam at 42 ft.



With the scouts you will recognize Dave W6DLF, Dave AA6XV, Mikel KN6QI, Joanna K6YL, Rick N6DQ, and Paul KK6HWN. There were about 25 scouts total.



Activity tables included Your Name in Phonetics, Your Name in Morse Code, Sending SOS, QSL Cards, & Translating Morse Code. The two types of code practice oscillators and keys were a hit!



Contacts included AZ, TX, NY, RI, Canada, Mexico, Puerto Rico, Dominican Republic, Cuba, and more! The two HF phone stations consisted of IC-756ProII's with Tokyo HyPower linear amplifiers, and the HF PSK31 station was a IC-7200. Headset splitters also came in handy, to allow for both speakers and headsets.



PACIFICON 2014

Report & Photos



During the weekend of October 10th-12th thousands of hams gathered at the Marriot Hotel in Santa Clara for the 2014 Pacificon. We are incredibly lucky to have such an amazing amateur radio convention so close to home! I hope everyone was able to enjoy it, whether it was the swap meet, seminars, vendor tables, banquet, or just catching up with friends. The hotel was bursting with amateur radio, intermingled with only the occasional business meeting, tourists, and what looked like a bachelorette party (it was quite the combination of people in the bar Friday night!). The big update for next year's 2015 convention is that the location will return to San Ramon. The 2015 dates are October 16th-18th.



Kay Craigie N3KN (ARRL President), Hiram Percy Maxim W1AW (SK), and Dave W6DLF in a great photo op



Charlie KI6FXY working qso's as W100AW/6



Elise KI6PUO enjoying her turn operating the W100AW/6 station



Dozens of vendors filled the Exhibit Hall to show off their latest amateur radio technologies and goodies. It wasn't difficult to locate transceivers, antennas, QSL cards, t-shirts, and much more! This is the largest west coast vendor show for ham radio gear.



Dave K6WA takes a turn working Special Event Station W100AW/6 celebrating ARRL's 100th anniversary.

Over 50 hours the station made over 6600 contacts!

Antennas: K4KIO 6-band hex beam on a 42ft Force 12 tower trailer, with double bazookas for 40m and 80m.

Filters: High power triplexer and bandpass filters by 4O3A.

Radios: Icom IC-756ProII for each of the 4 stations.

Amplifiers: Tokyo Hy-Power for each of the 4 stations.

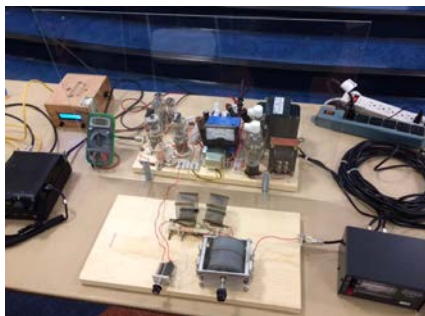
Misc: Old Del XP laptops, WriteLog, MFJ voice keyers, DigiKeyer II, Bencher paddles, Heil headsets, and a ton of coax.

SEPTEMBER'S HOMEBREW CONTEST

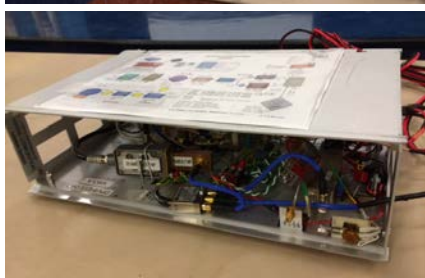
Results and Photos

Thank you to all of the entries in last month's annual FARS Homebrew Contest. We had an impressive range of projects.

Congratulations to the 4 WINNERS who took home cash prizes!



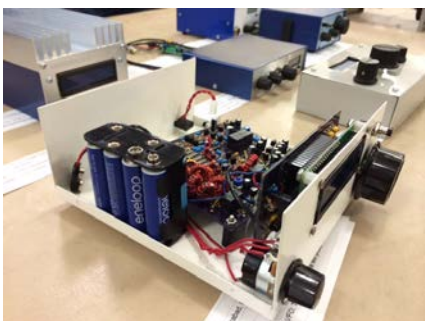
FIRST PLACE **Richard WR6J**
with his 100 watt retro tube amplifier and
Whisper transmitter
(photos at left and right)



SECOND PLACE **David KI6CLA**
with a 10GHz transverter for microwave
(photos at left and right)



THIRD PLACE **Chuck N6AF**
with a 40 meter AM/CW QRP transceiver
(43 years in the making!)
(photo at left)



FOURTH PLACE **Bob KF6ABC** with a
Minima 20 meter direct conversion receiver
(and more)
(photos at left and right)



Rick N6DQ with a modified Hex Beam feed
point for 17/12/6 meters

**ADDITIONAL
ENTRIES**
(in no particular
order)

Thank you!



David W6DLF with
a QRP power monitor



Paul AA6PZ with Whisper

FARS Member Badges

Place your order online or at the meeting.
Available for pick up at the next club mtg

BAEARS Ham Cram

Next Quarterly Session: Saturday, January 24th
8 AM
San Francisco, CA
www.baears.com

FARS Email Notices

Easy to subscribe!
www.k6ya.org/mail
Receive reminders of activities and other news.

Weekly FARS Net

Thursdays @ 8 PM
N6NFI Repeater 145.230(-), 100 Hz PL

Bay Area Radio Builders Club "BARC"

A FARS Special Interest Group

*We are a group of mostly
Amateur Radio operators who want to gain
a better understanding of the topics covered
in the General and Extra class tests.
We want to learn electronics, antenna theory,
kit building, and kit design.*

Next Meeting: 3PM on Nov 9th
Location: Panera Bread in Cupertino
(20807 Stevens Creek Blvd)

Join the Yahoo Group:
http://groups.yahoo.com/group/ba_radio_builders/

More Info:
www.barbc.org

FARS PRIZE WINNERS FOR THE SEPTEMBER RAFFLE

Congratulations!



- 1st Prize:** **Andy KR6DD** (#3 in photo)
C Crane WiFi Internet Radio
with clock, alarm & 99 memory
presets
- 2nd Prize:** **Paul KK6HWN** (#1 in photo)
Diamond NR-770HB 2m/440 Mobile
Antenna
with MFJ-335BS 5 HiFlux Magnet
Mount
- 3rd Prize:** **Ed Fong WB6IQN** (#4 in photo)
Evil Mad Scientist XL741 Discrete
Op-Amp Kit, build a working
transistor-scale replica of the classic
and ubiquitous analog workhorse
- 4th Prize:** **Rick N6DQ** (#2 in photo)
NARCC 2014 NorCal Repeater
Directory

WYWH: This Wish-You-Were-Here prize is a
CA\$H prize awarded to a member
who is present and has paid their 2014
dues.

Doh! **Jim Koski KT6W** was not
present to collect the \$45 cash!

Thus next month this prize will
increase to **\$50**.

HAM RADIO NETS – Getting On The Air

FARS Weekly Net **Thursdays @ 8 PM**

N6NFI repeater, 145.23-/100Hz
This net is open to all interested hams.

The purpose of the net is to keep club members informed about club activities; to exchange other club-related info; and to socialize.

9AM Talk Net **Weekdays @ 9 AM**

N6NFI repeater, 145.23-/100Hz
This net is open to all interested hams.

This is an informal net that is very popular.
Check out www.9amtalk.net for more information.

READY TO UPGRADE YOUR LICENSE?

What is a Passing Score you might ask?
Technician & General exams – 26 out of 35 (74.2%)
Amateur Extra exam – 37/50 (74%)

BAEARS (Bay Area Educational Radio Society) Crams & Exams, www.baears.com –

This group holds “Ham Crams” 4 times a year for Tech and General licenses (Amateur Extra test available but no cram). A guided study consisting of six 45-minute reading periods, with breaks and lunch. They have a high success rate!

Pre-registration required, sign up on the website. \$30

- Saturday 1/24/15, 8 AM @ San Francisco (exam starts at 4 PM)

Sunnyvale VEC Exams, www.amateur-radio.org –

Holds test sessions on Saturdays often alternating between Sunnyvale and Redwood City.

Walk-ins only, no pre-registrations. \$15

- Saturday 11/8, 10:30 AM @ Sunnyvale
- Saturday 11/15, 10:30 AM @ Redwood City
- Saturday 12/13, 10:30 AM @ Sunnyvale



Silicon Valley ARRL VE Exams, www.svve.org –

Holds test sessions on the 1st and 3rd Saturdays of each month. Arrive between 8 AM and 10:00 AM to the Saratoga Fire Station at 14380 Saratoga Avenue (in downtown Saratoga).

Walk-ins only, no pre-registrations. \$15

- Saturday 11/1
- Saturday 11/15
- Saturday 12/6

Tri-City VE Group Exams, http://www.sbara.org/tricity_ve.html –

Holds test sessions at Hurricane Electric in Fremont each month, alternating between Saturday morning and Tuesday evening. The address is 48233 Warm Springs Blvd.

Walk-ins welcome. \$15

- Saturday 11/8, 9 AM
- Tuesday 12/9, 6:30 PM

CURRENT US AMATEUR RADIO BAND PLAN: www.arrl.org/band-plan ([click here for printable PDF](#))
Effective March 5, 2012

CLUB INFORMATION

www.fars.k6ya.org

President:	Mikel Lechner KN6QI
Vice President:	Steve Stearns K6OIK
Treasurer:	Dick Baldwinson N6ATD
Secretary:	(open)
FARS Board:	Charlie Morrin KI6FX Y Phil Hawkins KA6MZE Bob Bynum WB2URF Doña Kerns KI6DAR
Radio Officer:	Phil Hawkins KA6MZE
Training Officer:	(open)
K6YA Trustee:	Phil Hawkins KA6MZE
Relay Newsletter Editor:	Joanna Dilley K6YL

Contact the FARS Board of Directors at fars-board@svpal.org.

Membership: An annual FARS membership is \$20 and provides much needed support for your club activities, qualifies you for the CA\$H Wish-You-Were-Here prize drawn at each membership meeting, plus you'll receive a FARS Relay to your email each month! An optional club badge is \$9.

FARS is a California 501(c)(3) non-profit corporation, so donations and membership dues are tax deductible with the CA Franchise Tax Board and the Internal Revenue Service.

Meetings: FARS 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 November & December (for holidays). **Visitors are always welcome!** Directions on the website as well as in this newsletter.

Email Announcements: Members and non-members are encouraged to subscribe to the FARS Announcement list to receive reminders of FARS activities and other news. Browse www.fars.k6ya.org/mail, click on Subscribe/Unsubscribe and follow the instructions under "Subscribing to fars-announce". You may submit announcements to the FARS Announcement at fars-announce@svpal.org. The list is moderated and messages will require approval by the moderator.

Newsletter: The 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! Photos, operating news, articles, etc. can be submitted to the editor at any time. Contributions are subject to editing and/or compression.

Newsletter Editor:

Joanna Dilley K6YL

K6YL at arrl.net

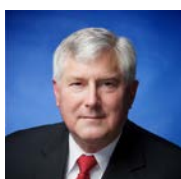
PO Box 399, San Carlos, CA 94070

Also available at FARS meetings.

Photos © K6YL unless noted otherwise.



Mikel KN6QI



Steve K6OIK



Dick N6ATD



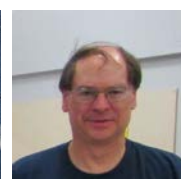
Phil KA6MZE



Joanna K6YL



Charlie KI6FX Y



Bob WB2URF



Doña KI6DAR

FARS New Membership / Renewal Form

The annual dues for 2014 is \$20. You may renew with this form or online by logging onto the FARS website and then using PayPal. <https://www.fars.k6ya.org/membership> Membership runs from January 1 to December 31. New membership applications accepted later in the year may have their dues prorated (see dues schedule).

Date: _____

Name: _____

Callsign: _____ Phone: _____

Class (eg Technician, General): _____ ARRL Member? _____

Email: _____

Mailing Address: _____

Special topics of interest / suggestions for club meeting speakers: _____

Optional FARS Badge -- Please include \$9 if desired.

First Name for Badge: _____ Select: Clip / Magnet / Pin

Send your check payable to FARS, to:

FARS, PO Box 112551, Campbell, CA 95011



DIRECTIONS TO FARS MEETINGS:

Visitors are always welcome.

Meetings are held at the Covington Elementary School 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.

From Interstate 280 – Take the El Monte exit Northeast. Cross Foothill Expressway. * At the first traffic light turn right on Covington. 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 – Turn Northeast onto El Monte, then follow directions as above at the *.

From US101 or El Camino – Take San Antonio Road west (to Foothill Expressway), then follow directions as above at the *.

TALK-IN via the [N6NFI](#) repeater (145.230-; 100Hz PL) or the [W6ASH](#) repeater (145.27-; 100Hz PL).