



FARS

FOOTHILLS AMATEUR RADIO SOCIETY

May 2011

Volume 41, Number 5

ONE month until Field Day!

www.fars.k6ya.org

May Club Meeting

Date: Friday, May 27th, 2011

Time: Socializing at 7PM, Meeting starts at 7:30PM

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

Speaker: Rick Huisman, N6DQ
Topic: "Premature Antenna
Destruction, Its Causes and Cures"



Why would any ham in their right mind take down a magnificent HF yagi antenna on a 65 foot mast, sell the antenna, and have the tower taken away? For the lure of life on the beaches of Southern California? Uh, well yes, that's exactly what happened. Come and learn how Rick, N6DQ, quickly saw the error of his ways...but not before the great antenna and mast went bye-bye. But more importantly, learn how Rick turned this ham tragedy into a ham triumph! This is the sequel to his presentation to FARS in February 2002.

Snacks: Cookies and coffee will be served.

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

Pre-Meeting Dinner: 6 PM at the Beausejour Restaurant.
170 State St., Los Altos. Great fixed price dinner menu.

May Raffle Prizes

The prizes for the raffle will be:

First Prize: Daiwa CN-101

1.8-150 mhz PEP SWR/Power Meter



Second Prize: Diamond SRH77CA SMA 2m/440 HT
Antenna



Third Prize: MA-HRO-8X-3P 3 ft RG 8X Patch Cable

Fourth Prize: Powerwerx PP30-10

Anderson Powerpole 30A 10 pack



Fifth Prize: NARCC 2011

Northern California Repeater Directory

The **Wish-You-Were-Here prize** is a **CASH** prize awarded each meeting to a member who is present and has paid their 2011 dues. Are you on the list for the drawing?

The FARS RELAY President's Corner

Membership Meeting. Our next membership meeting is scheduled for Friday, May 27th at 7PM. Rick Huisman, N6DQ, will talk about "Premature Antenna Destruction, Its Causes and Cures."



Am-Tech Day. The next Am-Tech Day is scheduled for June 11th. Check the website (k6ya.org/amtechday/) or the email list (k6ya.org/mail/) for the latest news and information. At the May 14th Am-Tech Day, Rod Stafford, W6ROD discussed the importance of the International Amateur Radio Union (IARU) and the International Telecommunications Union (ITU) and the support they provide to Amateur Radio.

Letter to NAARC. At the April meeting Dan Curtis, N6WM, presented a petition objecting to the NARCC plan to convert some of the current 2-meter simplex frequencies for use by repeaters. The membership present at the meeting was asked if they would like FARS to support the petition, and we received an overwhelming response to do so. At the May 5th board meeting FARS decided to write a letter in support of the petition and objecting to the NAARC decision. This letter was sent to Dan to present at the next NAARC meeting.

Dan did not have an opportunity to present the petition and letters of support because NAARC has already decided to rescind its earlier decision. Apparently they were already aware of the opposition to their earlier decision and decided to avoid further controversy and confrontation.

Electronics Flea Market. The next electronics flea market is scheduled for June 11th, which is back on the second Saturday of the month schedule. Contrary to some reports, the flea market is healthy, although smaller than it was a number of years ago. The host and beneficiary of this flea market is the Southern Peninsula Emergency Communication System (SPECS). Check out www.electronicfleamarket.com for all the details.

Ham Radio at MakerFaire. This was a success again this year. I was able to attend "Young Maker's Day" on Friday and share some of the fun and interesting things about amateur radio with the schools kids, parents and teachers. I want to thank all of the FARS members who participated to make the event a success. It's important to expose the public to amateur radio, so that they are aware of the value of this radio service. It also helps bring new people into the activity to expand their skills and to keep the hobby healthy, growing and vibrant.

Field Day. Field Day is only a month away on June 25 & 26. We are already preparing for this event. FARS has acquired a new radio that is already being used at Am-Tech Day and will be put to use during this year's Field Day. Contact Phil Hawkins, KA6MZE, if you have interest in participating, or you can sign up on the FARS website. Click on Field Day then sign-up online. As usual we need your help to put on this event, so please sign up and participate. We need YOU.

de Mikel, KN6QI

CLUB INFORMATION

www.fars.k6ya.org

President: Mikel Lechner KN6QI
Vice President: Steve Stearns K6OIK
Treasurer: Dick Baldwinson N6ATD
Secretary: (open)
Radio Officer: Phil Hawkins KA6MZE
Training Officer: Kevin Weiler K6XXX
Relay Editor: Joanna Dilley K6YL
FARS Board: Robert Flemate KE6TFU
Mark Hardy K6MDH
Barbara Neuhauser AE6RM
Peter Chow AF6DS
Charlie Morrin KI6FX
K6YA Trustee: Phil Hawkins KA6MZE

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

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.

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. Talk-in: N6NFI (145.23-/100Hz) or W6ASH repeater (145.27-/100Hz).

Membership: Annual FARS membership is \$15. A club badge is \$9. With membership you'll receive the monthly FARS Relay, and you'll also qualify for the monthly CASH Wish-You-Were-Here drawing at each membership meeting.

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 Joanna.K6YL@gmail.com
PO Box 51985 Also available at FARS meetings.
Palo Alto, CA 94303 Photos © K6YL unless noted otherwise.

CALENDAR OF UPCOMING EVENTS

www.fars.k6ya.org/events/calendar

Visitors are welcome at all events!

MAY

27 [Club Meeting](#), Covington School, Los Altos, 7PM

JUNE

1 Board Mtg, Los Altos Town Crier, 7:30PM
4 [BAEARS Ham Cram](#), Fremont, 8AM
11 [Electronics Flea Market](#), DeAnza College, 5AM
11 [Am-Tech Day](#), SLAC Natl Accelerator, 9AM-6PM
17 [Club Meeting](#), Covington School, Los Altos, 7PM
25-26 [ARRL FIELD DAY 2011](#), FARS in Los Altos
BIGGEST EVENT OF THE YEAR

JULY

7 Board Mtg, Los Altos Town Crier, 7:30PM
9 [Electronics Flea Market](#), DeAnza College, 5AM
HOSTED BY FARS THIS MONTH
16 [Am-Tech Day](#), SLAC Natl Accelerator, 9AM-6PM
22 [Club Meeting](#), Covington School, Los Altos, 7PM

AUGUST

4 Board Mtg, Los Altos Town Crier, 7:30PM
13 [Electronics Flea Market](#), DeAnza College, 5AM
26 [Club Meeting](#), Covington School, Los Altos, 7PM
27 [Am-Tech Day](#), SLAC Natl Accelerator, 9AM-6PM

[Amateur Radio Technology Day \(#78\)](#)

Saturday, June 11, 2011

SLAC National Accelerator Laboratory
Menlo Park, CA

Radio* *Food* *Friends* *Fun

*Am-Tech
Day !!*

Volunteers are appreciated:
Setup – 7:15AM
Breakdown – 6:00PM

*9:00 AM
6:00 PM*

The **K6YA** Get-On-The-Air (GOTA) Station will be set up and ready for some QSO's during Am-Tech Day.

FARS Membership Dues Reduced for 2011

Payment of dues for 2011 supports the club and provides you with current membership status – you'll qualify for the CASH Wish-You-Were-Here prize awarded at each membership meeting, and you'll also receive the FARS Relay in your email each month.

The FARS board has reduced the membership dues for 2011 to \$15. Use your \$5 savings to purchase raffle tickets, or put it in your pocket and be \$5 richer. If you've already renewed for 2011 at \$20, you may request a refund. Or simply leave it as a donation.

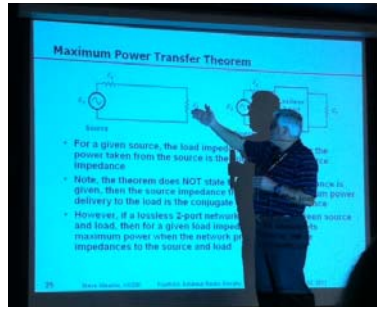
FARS is a California 501(c)(3) non-profit corporation, so donations and membership dues are tax deductible with the California Franchise Tax Board and the Internal Revenue Service.

APRIL MEETING REPORT

April's FARS meeting on the 22nd included 2 speakers.



Dan Curtis, N6WM



Steve Stearns, K6OIK

Speaker #1: Dan Curtis, N6WM

Topic: "2-meter Simplex Frequencies in Danger"

The Northern Amateur Relay Council of California (NARCC) is planning to take half of the available 2-meter simplex frequencies and reassign them to repeater use. A petition is being circulated among local Radio Amateurs that objects to NARCC's proposed plan. Dan Curtis, N6WM, explained NARCC's rationale and how 2-meter band operations would be affected. He also explained the grass-roots petition to counter NARCC's proposed action.

Both sides of this petition were discussed in detail at the April meeting, and a poll of the membership present at the meeting showed overwhelming support of the petition. In response FARS forwarded the following text, taken primarily from the petition, in a letter to the President of the NARCC.

Dear Ms. Allred

According to the January 29, 2011 Board minutes published at the NARCC web site, the NARCC Board voted to accept the "2 Meter Band Plan Modification Proposal 15 KHz Simplex Digital Port System Segment Addition".

At our regular membership meeting held on April 22, 2011 we discussed this matter with the membership. After the discussion we polled the membership present about this matter and the result was overwhelming support for the petition that opposes the refarming of current simplex frequencies for use by repeaters.

I am an officer and representative of the Foothills Amateur Radio Society. This letter is to inform you that the FARS Board of Directors has determined that NARCC is not representing our membership nor is NARCC meeting our membership's needs when making repeater frequency recommendations in the 2 meter band that are currently assigned for simplex use. FARS does not recognize NARCC as an overall band planner in the northern California area. FARS does not accept frequency recommendations from NARCC outside the repeater segments specified as of December 2010. Further, the FARS Board of Directors recommends that our members not follow any frequency recommendations from NARCC outside the repeater segments specified as of December 2010.

With respect,
Mikel Lechner

President, Foothills Amateur Radio Society

[See the Presiden'ts Corner on page 1 for the UPDATE!](#)

With Field Day only a month away (June 25th-26th) we are recruiting operators for all stations. See p. 10 for details!



Mikel
KN6QI
(President)
and
Phil
KA6MZE
(Radio
Officer and
Board
Member)

Speaker #2: Steve Stearns, K6OIK

Topic: "Conjugate Matching Disproved"

A popular book by Walt Maxwell, W2DU, called Reflections presents an incorrect theory of impedance matching. Steve Stearns, K6OIK, showed what's wrong with Walt Maxwell's concept of transmission lines and why Maxwell's idea of conjugate matching fails to do the very thing Maxwell claims it does - provide maximum power transfer from a source to a load through a line. In working out the correct solution to the maximum power transfer problem, Steve succeeded where Maxwell failed, and found the correct match solution for maximum power transfer. Steve guided us through controversial territory fraught with misconceptions, error and mistakes.

Congrats to the May raffle prize winners!



Left to Right:
Cliff K6CLS,
Steve K6OIK,
Byron KG6UOB,
Ray W6FQY,
Kevin K6XXX,
and
Don KG6GLU

Ray W6FQY won First Prize: Wouxun KG-UV3D-2/UHF 2M/440 Dual Band HT (by Powerwerx)



Don KG6GLU won Second Prize: Lido LM-801EXP Adjustable Cup Holder Mount

Cliff K6CLS won Third Prize: RF Parts CW10B Coax Silicone Tape

Steve K6OIK won Fourth Prize: Bongo Ties

Kevin K6XXX won Fifth Prize: Two PL-259 with UG-176 Reducers

Byron KG6UOB won the Special Prize: Two MakerFaire tickets

Tom Smith KD6SOJ was the FARS member chosen for the Wish-You-Were-Here drawing... but unfortunately wasn't present to collect the **CASH prize!**

REPORT: Dayton Hamvention 2011 Dayton, OH

The 3rd weekend in May was the 60th Hamvention in Dayton, Ohio.

The theme "Global Friendship" emphasized "how the technology continues to bond Amateur Radio Operators from all over the world." Those who made the trek to Dayton experienced an impressive number exhibitors and demonstrations. And if you couldn't make it you could still enjoy live video footage from multiple feeds, including W5KUB's helmet cam! Visit www.hamvention.org for videos and more.

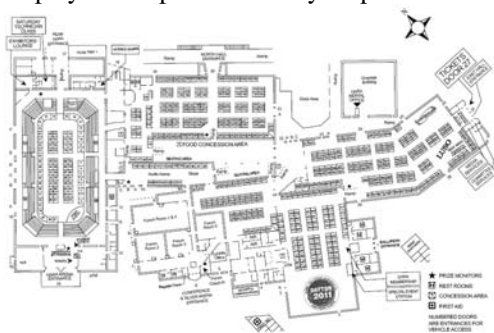


www.hamvention.org
Since 1952

"For many years it has been the world's largest amateur radio gathering, attracting hams from throughout the globe."

550 Exhibitors

Too many exhibitors to list! If they're involved in amateur radio, electronics or related businesses then they were likely on display. A map was certainly helpful in finding your way.



Seminars

Anything you wanted to learn about was presented in a seminar between Thursday and Sunday. The topics covered all the bases.

Raffle Prizes topped \$55,000 !!

Hourly prizes were raffled off each day as well as numerous grand prizes Sunday afternoon, incl. radios, antennas, subscriptions, gift certificates & more.

Flea Market

What a selection! This flea market must've been at least 15 times larger than the monthly electronics flea market in Cupertino! And almost all of it was related to amateur radio. From boat anchors to modern radios, this one parking lot had it all.

Attendees from all over!

Hams from across the United States made the trek to Dayton, but many also traveled from much further. Home QTH's included Canada, Japan, Germany, Spain, Italy, Finland, England, Qatar, Israel, Australia, Mexico, Sweden & more. Many aren't as lucky as we are in the SF Bay Area to have a store like HRO close by, let alone two of them!

Interested in guessing the total number of attendees?

- a.) 13,000
- b.) 16,000
- c.) 19,000
- d.) 21,000

See page 15 for answer



A great display; a clear case on an amp; a tall tower for the GOTA station; and flag poles as stealth antennas



K6YL on the GOTA station; an out of this world outfit; and cw keys as far as the eyes could see



Oh my, that tower won't fit in my back yard, but it certainly was cool to see in person!



Flex Radio had a large area filled with multiple tables, consistently filled with visitors. Being able to touch and operate is helpful.

REPORT continued: Dayton Hamvention 2011

Flea Market – Notice the beautiful weather. It did not rain the entire weekend.



Flea Market – Surrounded by radios, new & old



Testing cw keys – these ones by Begali traveled all the way from Italy. www.i2rtf.com



“The Candy Store” ala Dayton style (HRO) was one of the vendors that offered discounts to attendees, and was often crowded with people.



The number of antennas present at Dayton was beyond amazing. Nearly every manufacturer you could think of. Notice below at right the Alex Loop antenna, discussed at a FARS meeting earlier this year.



The Slinky Antenna



Multiple connected buildings were used for the Hamvention. The Arena housed a couple of the large manufacturers like Icom and Kenwood, and is also held most of the tall antenna displays incl SteppIR and many others (you can see several verticals below).



**REPORT continued:
Dayton Hamvention 2011
Dayton, OH**



Bob Heil of Heil Sound

Friendly and incredibly helpful, Bob Heil is always ready to assist Amateurs with their sound.

Perhaps you might want to check out the tips on his website where he makes suggestions for DSP and Carrier Point settings – by radio model – in order to improve quality.

<http://heilsound.com/amateur/tips/index.htm>

A new release at Dayton! The Elecraft KX3 Transceiver
Ultra-Compact Home/Portable/Mobile Station
(not yet for sale, stay tuned)



Preliminary Specs: For more info see www.elecraft.com:

- 160-6 meters, SSB/CW/DATA/AM/FM modes
- 10 W PEP (100 W with KXPA100 amp)
- Only 1.5 pounds (0.7 kg)
- Current drain as low as 150 mA
- Internal wide-range antenna tuner (ATU) and battery options; built-in speaker
- Advanced DSP provides dual watch, noise reduction, noise blanking, autotune, stereo audio effects
- Software-defined radio (SDR) architecture plus roofing filters (KXFL3) for excellent dynamic range
- Operates in data modes (PSK31/RTTY) with or without a PC; includes RX I/Q soundcard outputs
- And yes that's a cw keyer at the bottom (adjustable KXPD3)



Left:
A portable solar power mfgr

Right:
Ham City's fun booth – catch the cash!

**REPORT:
May's Electronics Flea Market**

May's Electronics Flea Market at DeAnza College was another great opportunity to meet up with friends and find items you may or may not have needed or wanted.

The WX was beautiful and the turnout great for this event, hosted by SCCARA (Santa Clara County Amateur Radio Association).

The Flea Market is operated by ASVARO, and each month is hosted by a different group.

NEXT FLEA MARKET: June 11, 2011

Hosted by: SPECS

(The Southern Peninsula Emergency Communication System)

FARS will host the Electronics Flea Market on July 9th, so SAVE THE DATE!

This is a great opportunity for the club to make money. Volunteers and equipment donations (to sell) are appreciated.



Electronics and misc for sale!
Photos © Nimit K6XOX



Coffee, donuts & more!

REPORT:
MakerFaire 2011
World's Largest DIY Festival

Maker Faire

In MAKE magazine's 10th Maker Faire and 6th anniversary in the Bay Area, this incredible event took over the San Mateo Event Center May 21st and 22nd showcasing creative and resourceful people in the areas of science and technology, engineering, food, and arts and crafts. www.makerfaire.com

The demonstration this year was
See and Hear Radio Frequency Modulation.

This is always an incredible opportunity to showcase amateur radio. FARS again sponsored a booth at the Maker Faire, each year creating a different demonstration to explore some of the many opportunities available through ham radio. Mikey NE6RD and his team of dedicated volunteers excelled in drawing the crowds to this year's display.

SETUP ON THURSDAY: The physical setup was completed, with a heavy duty truss system, large monitors, and bright banners. This was an impressive display.

YOUNG MAKER'S DAY ON FRIDAY: Kristen K6WX and Mikel KN6QI set up in the hall with the Tesla Coils and talked to the kids that came through. Approximately 1200 or so K-12 children experienced MakerFaire on this day, when Makers such as the FARS-sponsored booth volunteer to give 5 minute demonstrations to a fairly continuous stream of children, parents and teachers. Meanwhile some of the remaining FARS booth volunteers spent the entire day getting the gear working smoothly in prep for Saturday and Sunday.

MAKERFAIRE ON SATURDAY & SUNDAY: The event went very well. We had one table with books and handouts, and two additional tables with demonstrations.

One of the tables had a PC running FLDIGI and HDR giving demonstrations of PSK-31 and thumper to show people that digital modes are audio signals encoded over radio.

The second table had two FT-817's running into dummy loads using FLDIGI to send PSK-31. We then had a RF Space SDR showing the signal in a monitor. We tried to use a software receiver, but it was misbehaving... part of the fun of homebrew as well as of Windows software.

Many amateur radio operators came by to say hello and show their support. Many had just earned their license, or had just re-entered the hobby and wanted information. We also had a good amount of interest from people wanting to get their license – some because of CERT training, some because a parent or sibling was into it, some because it sounded fun.



Sunday's
tear down
team



THANK YOU VOLUNTEERS !!

FARS thanks you for volunteering your time and hard work to make this booth a success!

Antonio Forenza, Art Fluter, Chris Hoffman, Christie Dudley, Dan Curtis, Dan Yee, Gina Pond, Jake Whiting, Jim McCarthy, Josh Villyard, Kristen McIntyre, Leigh Klotz, Mark Cohen, Michael Pechner, Mikel Lechner, Norman Bradley, Paul Zander, Rita Derbas, Rob Fenn, Robin Yee, Sarah Thompson, Umesh Ghodke, and Yuki Klotz-Burwell. Incl. participation from the ARRL, PAARA, SBARA..



[Click Here for Link](#) to Mikey NE6RD's full set of photos

Blackberry REACT also showcased amateur radio again with their mobile/portable HF amateur radio station, operating as **Special Event Station K6M**

REPORT: May's Amateur Radio Technology Day

May 14th, 2011

Amateur Radio – Technology Day #77

SLAC National Accelerator Laboratory, Menlo Park, CA

Presentation By: Rod Stafford, W6ROD

“The IARU and the ITU: Two important organizations for Amateur Radio”

Rod is the Secretary of the International Amateur Radio Union (IARU), as well as a past President of the American Radio Relay League (ARRL).



Rod reviewed information about the International Amateur Radio Union (IARU) and the International Telecommunications Union (ITU).

- Valuable information and reasons why each organization exists, what advantages each Amateur Radio Operator gains by the support these organizations provide, & why all Amateurs should be aware of the IARU and the ITU.
- The ITU manages the radio spectrum, including the spectrum available to Radio Amateurs around the world, as a specialized agency of the United Nations (UN).
- Work of the ITU and the Regional Telecom Organizations is very important to the amateur radio service and to each individual amateur radio operator around the world.
- As an international organization that works within the ITU, the IARU works to preserve and protect the Amateur Radio spectrum.

Telecom Authorities & Amateur Radio's Voice

- | | |
|---|--|
| ■ ITU (WRC, WTDC) | ■ IARU Administrative Council |
| ■ Regional Telecom Organizations (CEPT, CITEL, APT) | ■ IARU Regional Organizations (R1, R2, R3) |
| ■ National Telecom Authorities (FCC) | ■ National Societies (ARRL, RSGB, JARC) |

What can YOU do to help protect and preserve spectrum and privileges for all amateur radio operators?

SUPPORT YOUR NATIONAL SOCIETY →

The Amateur Radio Relay League (ARRL) www.arrl.org

What's new? FARS is now the proud owner of a Yaesu FT-950 HF/6m rig which was snagged from the consignment



shelves at HRO for a great deal after careful comparison to other available radios. This will fulfill a need for

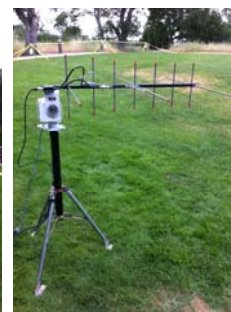
Field Day as well as provide a higher quality radio for Am-Tech Day, the 160m Contest, and other events that FARS participates in. This radio was taken for a spin at May's Amateur Radio Technology Day!



The K6YA GOTA (Get On The Air) Station, as set up at Am-Tech Day in May.

Notice the addition of the Yaesu FT-950 HF/6m transceiver

FARS board member and K6YA Trustee Phil Hawkins, KA6MZE, carefully testing the FT-950.



Satellite tracking and QSO's in progress at Am-Tech Day

Far left is the latest version from Nimit, K6XOX



Happy 90th Birthday Arv!!



At May's Am-Tech Day we celebrated Arv's 90th birthday!

Arv, WA6UUT, is an honorary lifetime FARS member, a dependable morning volunteer at Am-Tech Day, and an amazing person. Happy Birthday Arv!

Arv Hamer, WA6UUT

The next Am-Tech Day is on Saturday, June 11th

CQ CQ CQ!

Volunteers are needed during setup and tear down to help make this event happen.

Please contact Dave Cooper K6WA, or just show up at 7:15 AM (*setup*) or 6 PM (*tear down*). Thank you.

REPORT: Dream Machines 2011

While not specifically related to amateur radio, the annual Dream Machines event in Half Moon Bay, CA has become popular amongst ham radio operators.

Surrounded by exotic and unbelievable automobiles, airplanes, motorcycles and more, numerous licensed hams volunteered their time to make this event a success. The reward was not only a day at an amazing event but knowing that the event brings vital fundraising to the Coastside Adult Day Health Center.



Amateur radio operators, ready to volunteer their time to provide comm support



Keith K6ZJI and Jake N6EWS



Byron KG6UOB



Joanna K6YL

Dave Cooper K6WA and numerous others also volunteered their time at this event.



LEFT: the command post for the ham radio volunteers.

RIGHT: the San Mateo County Sheriff's Office



- Tasty food
- Perfect weather, sunny with a breeze
- Various rides available on the ground and in the air
- Planes, trains and automobiles as far as the eyes could see!

“The Coolest Show on Earth”

Took place May 1st at the Half Moon Bay Airport
www.miramarevents.com/dreammachines/

“Whimsical, fascinating, amusing, educational, curious, and unique are a few words that describe the Pacific Coast Dream Machines Show, Half Moon Bay’s massive annual celebration of mechanical ingenuity, power and style. It’s a remarkable show-and-tell spectacle, an outdoor museum-for-a-day, featuring 2,000 magnificent driving, flying and working machines from the 20th and 21st centuries.”



PHOTOS TOO SMALL?

See the full set of photos at:

<https://picasaweb.google.com/112703361447220235022/2011DreamMachinesByK6YL?feat=directlink>
or search “K6YL” on Picasa.

*Thank you to the volunteers
who made this event a success!*

Attention! FIELD DAY 2011 is less than a month away!

Field Day is almost upon us. Take this opportunity to get on the air in a huge event without the pressure of a contest. Bring your friends and introduce them to Amateur Radio and a chance to experience it first hand.

The ARRL Field Day 2010 is the biggest annual event for FARS as well as many other amateur radio clubs.

FARS will be participating in the 3-A category again this year, with stations setup as follows for 24 hours of operating:

- **HF station** operating Single Sideband (SSB) voice on 10/15/20/40m
- **HF station** operating CW (Morse code) and other digital modes like PSK31 and RTTY (keyboard) on 10/15/20/40/80m.
- **HF station** operating SSB voice on 80/160m
- **VHF/Satellite station** (not counted in the category #)
- **GOTA (Get On The Air) station** (not counted in cat #)

SETUP:

Friday, June 24th at 11am

OFFICIAL START TIME:

Saturday, June 25th at 11am

POTLUCK DINNER & BBQ:

Saturday, June 25th around 5:30pm

Always has lots of good food and good people
Bring a side dish to share with others

TAKEDOWN:

Sunday, June 26th at 11am

SIGN-UPS:

Sign-ups for all aspects of the FARS Field Day are available by 3 methods:

- 1.) At the upcoming FARS meetings (May or June)
- 2.) By emailing Phil KA6MZE at sputnik at pacbell dot net
- 3.) On the FARS website (requires login) →

• **Sign up for Friday Setup here:**

<https://www.fars.k6ya.org/cgi-bin/fdcrow>

• **Sign up for Sunday Takedown here:**

<https://www.fars.k6ya.org/cgi-bin/fdcrow>

• **Sign up for the Saturday Potluck & BBQ here:**

<https://www.fars.k6ya.org/cgi-bin/fdbbq>

• **Sign up to Operate here: We need operators!**

<https://www.fars.k6ya.org/cgi-bin/fdop>

OBJECTIVE:-

To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions. Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. DX stations residing in other regions may be contacted for credit, but are not eligible to submit entries.

DATES:

Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday. Field Day 2011 will be held June 25-26, 2011.

LOCATION:

The Maryknoll Residence in Los Altos
23000 Cristo Rey Drive, Los Altos, CA
(near Rancho San Antonio Park).

This is the same Field Day site that FARS has used in years past.
GPS coordinates 37°19.962' N by 122°04.919' W



DIRECTIONS:

- Take Interstate 280 towards the Los Altos / Mountain View border.
- Exit onto Foothill Expressway and head south (~1/4 mile) following signs to Rancho San Antonio.
- Turn RIGHT onto Cristo Rey Drive (first light).
- Follow Cristo Rey Drive until you reach a traffic circle (~3/4 mile).
- Take the SECOND EXIT from the circle marked with a small brown sign that says Park. This is the continuation of Cristo Rey Drive.
- Go shortly past Rancho San Antonio Park entrance (on the left) and then turn RIGHT into the Maryknoll (private) driveway.
- Pass through the gate, take an immediate RIGHT into the paved area, and park next to the Eucalyptus trees.



GOTA Station
(Get On The Air)
for non-hams,
newly licensed
hams, and even
hams with no HF
experience (ask
Mikey NE6RD if
you qualify).
*Photo © Peter
AF6DS (2010)*



What is Field Day?

From the ARRL

www.arrl.org/field-day



Field Day is a picnic, a campout, practice for emergencies, an informal contest and, most of all, FUN!

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, other groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar.

The contest part is simply to contact as many other stations as possible and to learn to operate our radio gear in abnormal situations and less than optimal conditions.

We use these same skills when we help with events such as marathons and bike-a-thons; fund-raisers such as walk-a-thons; celebrations such as parades; and exhibits at fairs, malls and museums — these are all large, preplanned, non-emergency activities.

But despite the development of very complex, modern communications systems — or maybe because they ARE so complex — ham radio has been called into action again and again to provide communications in crises when it really matters. Amateur Radio people (also called “hams”) are well known for our communications support in real disaster and post-disaster situations.

What is the ARRL?

The American Radio Relay League is the 150,000+ member national association for Amateur Radio in the USA. ARRL is the primary source of information about what is going on in ham radio. It provides books, news, support and information for individuals and clubs, special events, continuing education classes and other benefits for its members.

What is Amateur Radio?

Often called “ham radio,” the Amateur Radio Service has been around for a century. In that time, it’s grown into a worldwide community of licensed operators using the airwaves with every conceivable means of communications technology. Its people range in age from youngsters to grandparents. Even rocket scientists and a rock star or two are in the ham ranks. Most, however, are just normal folks like you and me who enjoy learning and being able to transmit voice, data and pictures through the air to unusual places, both near and far, without depending on commercial systems.

The Amateur Radio frequencies are the last remaining place in the usable radio spectrum where you as an individual can develop and experiment with wireless communications. Hams not only can make and modify their equipment, but can create whole new ways to do things.

http://www.arrl.org/files/file/Field-Day/2011/2011_FD_Flier.pdf

OPERATING REPORT: Field Day 2010

FARS Field Day 2010 Experiences
Phil Hawkins, KA6MZE

Low Band (80/160m) Station

Field Day 2010 saw another successful deployment of a 165 foot vertical antenna which was lifted by a 6 foot helium filled balloon. This vertical antenna was designed as a 5/8 wave antenna for 80 meter operation and worked well on 160 meters as a 1/3 wavelength antenna with the use of an MFJ tuner at the base. This vertical, which worked as the transmit antenna, used sixteen slightly lifted 50' ground radials.

For receive capability, a Beverage antenna that is 300 feet long and five feet off the ground was deployed on the Field Day site. The Beverage antenna is a traveling wave antenna terminated at one end with a resistor equal to the characteristic impedance of the antenna. At the other end of the antenna is a 9:1 balun to match the antenna to the radio.

Okay, but we are talking about two different antennas, one transmit and the other receive ported into the same radio. The answer to this is an automatic transmit and receive switch (T/R switch). Because of high loss incurred by the antenna being so close to the ground, a preamplifier is required to increase the signal to noise ratio (S/N) in order to pull the wanted signals out. An Ameco PT-3 pre-amp was used to do this.

During the Friday before Field day, I spent most of the day putting up the Beverage antenna so it could be tested that evening. The vertical antenna would not be deployed until Saturday night because 160 and 80 meters are not active during the day due to D layer absorption. So after deploying the Beverage antenna and setting up the GOTA station, I began testing the Beverage antenna.

To test the Beverage antenna, I listened to WWV and WWVH on 2.5 and 5.0 MHz. Because a Beverage antenna is directional and it's major lobe faced Northeast while the null faced Southwest, WWV located in Fort Collins, Colorado (Male voice) should come in strong while WWVH located in Hawaii (female voice) should come in weak. The results indicated that the antenna had the expected directionality. During the daytime the GOTA station worked 20 and 15 meters while at night the station worked 160 and 80 meters as non-GOTA. Thus, FARS operated Field Day in the 3A category. Next was to put up the 165 foot vertical antenna. Just before the pot luck barbeque, we laid down the sixteen 50 foot radials in the paved parking lot.



As the Sun started to set and the wind died down, the helium balloon was filled to a diameter of approximately 5-6 feet. The 18 gauge insulated antenna wire was attached to the balloon and a small fishing line lure

swivel to counteract balloon wind rotation was attached to the antenna. Because of the size of the antenna, a safety line consisting of 30 lb test monofilament fishing line was also attached in case of antenna breakage and balloon escape.

Now with the antenna up it had to be matched; matching was done with an MFJ versa tuner which tuned the antenna with no real problem on 160 meters. Since this antenna is so large, it was susceptible to broadcast interference which causes problems with antenna tuning. So to eliminate the broadcast interference, a Dunestar 160 meter bandpass filter was used and it worked well.

Initially the first contacts were on 160 meters using CW followed by a few SSB contacts. 80 meters saw more field day activity than 160 meters with many more contacts made. This pretty much sums up the HF low band antenna performance for the FARS Field Day 2010.

Field Day 2010 in General

This year, field day went fairly smoothly. Our field day classification was 3A, meaning three HF stations operating at one time on alternative energy (gas powered generators). We made a total of 990 contacts between all the stations including the GOTA station. This year FARS got a lot more press as we hosted a reporter from the Los Altos Town Crier. The reporter spent several hours at our field day site interviewing the field day captains and operators about the purpose and functions of amateur radio in an emergency setting. This article appeared in the Los Altos town Crier the first week in July. Thanks to all those who helped set-up, operate and tear-down the FARS 2010 Field day. See ya next year!!

- 73s TNX de, Phil Hawkins, KA6MZE



Welcome to Field Day



Ready to lift the SSB tower



Prepping the SSB antenna



The tower for the digital station



Photos above © Peter AF6DS



OPERATING REPORT: Upcoming Special Event Stations

K2USA

Memorial Day – NEW JERSEY

Fort Monmouth Amateur Radio Club

5/30/11

Look for them in the General portion of the 20 and 40 meter bands. Additional information and QSL card details can be found on www.QRZ.com.

W2W

D-Day Commemoration – BALTIMORE, MD

6/4-6/6/11, 1400Z-2200Z

Operating from the National Electronics Museum, look for this station around 7.187, 12.241, 7.041 and 14.041 MHz. Additional information can be found on www.QRZ.com or on the club website www.k3nem.org.

OPERATING REPORT: Special Event Stations Spotted

4Z13AR

Arthur Rubinstein 13th International Piano Master Competition -- ISRAEL

5/14/11

Arthur Rubinstein is widely considered one of the greatest classical pianists of the twentieth century, per Wikipedia.

W1E

Special Event Station – Burley, WASHINGTON Commemorating the historical significance of Friday the 13th!

Burley Amateur Radio Club

5/13-5/14/11

GB4HRH and too many additional call signs to list!

Special Event Stations – ENGLAND

End of April to beginning of May

In celebration of The Royal Wedding of HRH Prince William and Miss Catherine Middleton on 4/29/11.

The Sands Amateur Radio Contest Group near Lancashire activated Special Event Station GB4HRH, one of several clubs and individual hams to participate in the celebration. In addition to Special Event call signs, those who applied and were approved were allowed to add an "R" to their standard call signs.

HAM RADIO IN THE NEWS:

Two recent NPR stories on Ham radio:

Ham Radio Growing In The Age Of Twitter

<http://www.npr.org/templates/story/story.php?storyId=125586086>

Ham Radio Volunteers Worry About Spectrum Plan

<http://www.npr.org/2011/04/30/135873302/ham-radio-volunteers-worry-about-spectrum-plan>

OPERATING REPORT: ARRL Rookie Roundup

The ARRL Rookie Roundup on SSB took place in April and you might recall a write up in the April FARS Relay on my operation at Stanford W6YX. Well the results are out and I am happy to report that I took 1st Place in W6!



Joanna K6YL (your newsletter editor) operating the ARRL Rookie Roundup SSB in April 2011 at W6YX (Stanford). This is the 2nd year of this new event.

A Rookie is defined in this contest as someone who was first licensed in the last 3 years (2009, 2010, 2011). There are 2 more Rookie Roundups in 2011:

- The ARRL Rookie Roundup on **RTTY** is in August!
- The ARRL Rookie Roundup on **CW** is in December!

HR-607 UPDATE FOR IMMEDIATE RELEASE

May 19, 2011, Massapequa Park, NY - A delegation of Amateur Radio operators from the Long Island / New York City area met this morning with Congressman Peter T. King (R-NY) to discuss his recent proposed legislation, HR 607, and its impact on Amateur Radio.

Congressman King said that he fully understands and appreciates the importance of Amateur Radio and the service it provides to the community, and that he would see to the modification of the bill so that the 420 - 440 MHz band would be excluded from the spectrum to be auctioned. The delegation included Mike Lisenco, N2YBB, ARRL Section Manager for New York City / Long Island (NLI), Peter Portanova, WB2OQQ, NLI Local Government Liaison (LGL), George Tranos, N2GA, NLI State Government Liaison (SGL), and Jim Mezey, W2KFBV, NLI ARES Section Emergency Coordinator (SEC).

"The Congressman went on to explain that it was never his intention to remove the 70 centimeter band from Amateur use. He further asked us to 'get the word out' and inform the Amateur Radio community that 70 centimeters is not in jeopardy," said Lisenco.

Lisenco, Mezey and Tranos spoke about the importance of Amateur Radio emergency communications while Portanova, who is also the local AMSAT representative, addressed satellite and other amateur use of the 70 centimeter band.

The Congressman was very receptive to the group, who also extended an invitation to attend Field Day locations in his District.

From:

<http://www.arrl.org/news/senate-companion-bill-to-hr-607-avoids-impacting-amateur-spectrum>

REPORT: FARS GENERAL LICENSE CLASS HAS BEGUN!

Class is in session! On Thursday, May 19th an impressive 31 students turned out for the first night of the new FARS General License Course. There are 5 evenings of class, held on consecutive Thursdays in Mountain View. The test is then administered on the 6th Thursday.

Instructors include Kevin K6XXX, Mikel KN6QI, Mikey NE6RD, Kristen K6WX, Peter AFDS, Phil KA6MZE, and Joanna K6YL, with class sessions neatly organized by chapters of the ARRL General License book.

Note that these students will hold General Class licenses just in time for Field Day 2011!

ON THE AIR: MUSEUM SHIPS WEEKEND

June 3-5th, 2011 0000Z June 4, through 2359Z June 5, 2011
(1700 PDT Friday, June 3 through 1659 PDT Sunday, June 5)

While operation on any amateur frequency is allowed, most ships will be operating in the General portion of the bands.

CW Freq (KHZ): 3,539, 7,039, 10,109, 14,039, 18,079,
21,039, 24,899, 28,039, 50,109

SSB Freq. (KHZ): 3,860, 7,260, 14,260, 18,160, 21,360,
24,960, 28,360, 50,160

PSK 31 Freq. (MHZ): 14.070, 10.142, 18.100, 21.070,
28.120

For a list of ships and rules, see: www.nj2bb.org/museum/



**The USS Hornet
Alameda, CA**

Elvin JA3CZY traveled all the way from Nishinomiya, Japan to attend the DX Convention at Visalia.

While in town he took a tour of the USS Hornet Museum ship, one of the ships which will be on the air for Museum Ships Wknd.

FARS Relay

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

Please contact Joanna.K6YL@gmail.com

FARS Weekly Net

FARS members meet at **8:00 PM each Thursday evening** on the N6NFI repeater, 145.23-/100Hz. The 100Hz PL is off for the net. Non-members are welcome to check in. The purpose of the net is to keep club members informed about club activities; to exchange other club-related info; and to socialize.
This net is open to all interested hams.

9AM Talk Net

This is an informal net which meets at **9:00 AM weekdays** on the N6NFI repeater, 145.23-/100Hz. www.9amtalk.net
All guests are welcome.

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%)

www.baears.com – This group holds “Ham Crams” 4 times a year, with the next one scheduled for 6/4 in Fremont. Pre-registration required.

www.amateur-radio.org – The Sunnyvale VEC has upcoming test sessions on 6/11 in Sunnyvale and 6/18 in Redwood City. Walk-ins only, no pre-registrations.

<http://www.pdarrrl.org/vec/vecscv/> – The Silicon Valley ARRL VE holds test sessions on the 1st and 3rd Saturdays of each month from 8 AM to 11 AM at the Saratoga Fire Station (must arrive before 11 AM). Upcoming sessions are 6/4 and 6/18. Walk-ins only, no pre-registrations.

<http://www.sbara.org/> – The Tri-City VE Group holds test sessions at Hurricane Electric in Fremont each month, alternating between a Saturday morning at 9 AM and a Tuesday evening at 6:30 PM. Upcoming sessions include 6/14, 7/9 and 8/9. Walk-ins welcome.

FARS Member Badges Seeking Owners

Bruce Riter KE6EEX

Rick Huisman N6DQ * Keith Remillong K6ZJI

John Bahun N6API * Michael KG6CHX

Randy Cook KI6EAA * Russell Lait AF6EQ

Alex Tudor KI6EQG * Gary Pedro KF6FPU

Mark Yvanovich K6FTF * Frank Ingle AF6GU

Margie Rauch KJ6GVY * Joe Mallon AF6HM

Joani Yvanovich N6JCY * Tim Connelly KI6LC

Don Steinbach AE6PM * Steven Elliott W9RAL

Roger Wildensten K7RCW * John Williams KD6RW

Bob Van Tuyl K6RWY * Rob Lupo KG6SKA

George Savage K6TSR * Bob Bynum WB2URF

Curt Hutchings KG6WLO * Gwendolyn, no call

Available for pick up at the next club mtg

BAEARS Ham Cram

Next Session: Saturday, June 4th
8 AM
Fremont, CA
www.baears.com

Electronics Flea Markets 2011

Saturday 5 AM to 12 Noon

3/12 hosted by PAARA 7/9 hosted by FARS !!
4/9 hosted by SPARK 8/13 hosted by SVECS
5/21 hosted by SCCARA 9/10 hosted by WVARA
6/11 hosted by SPECS 10/8 hosted by SVCARC

www.electronicfleamarket.com

WEDNESDAY Amateur Radio LUNCHES

11:30 AM
Fresh Choice on El Camino Real
in Mountain View, CA

Weekly FARS Net

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

ARRL East Bay Section CONVENTION 2011

June 4th, 2011
0900 to 1300

www.eastbaysectionarrl.org

The first annual ARRL East Bay Section Convention will be cosponsored by the The ARRL East Bay Section and the California Historical Radio Society. The event will be held at the KRE Building – Home of the California Historical Radio Society, Bay Area Radio Museum, and W6CF Memorial. 601 Ashby Ave., Berkeley, CA 94710

- * Free Admission *
- * Door Prizes *
- * Swap Meet *

Speakers:

Kristen K6WX – “PSK-31 on iPad”
Bruce K6BP – “Codec 2”

THE TIME IS ALMOST HERE

Field Day 2011

June 25th – 26th
www.arrl.org/field-day



The single most popular on-the-air event held annually in the US and Canada. Each year over 35,000 amateurs gather to operate.

Save the date !!

FARS will again come together to operate this exciting event.

We are looking for operators!

www.fars.k6ya.org/events/fieldday

See page 10 of this newsletter for details!

Answer to question on page 4: d

The ARRL Pacific Division Convention

Pacificon 2011
comes to Santa Clara, CA
October 14-16th, 2011

www.pacificon.org



FARS Membership Renewal Form

Note that the dues for 2011 have been reduced to \$15. You may also renew online by logging onto the FARS website, then using PayPal to pay.

<https://www.fars.k6ya.org/membership>

Date: _____

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

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

Mailing Address: _____

Home Phone: _____ Work Phone: _____

ARRL Member? _____ Email: _____

Preferred Modes (e.g. HF-SSB/CW/VHF/QRP/Other): _____

I'm willing to Elmer new hams with: _____

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

Dues: \$15 per year. Membership runs from January 1 to December 31. New membership applications accepted later in the year may have their dues prorated (see dues schedule). Please include \$9 for a club badge if desired. Your call sign and first name as it appears above will appear on the badge. Renewing members should provide at least their name, call, and the date. Also include any info that may have changed. Put "N/A" where you wish to remove (or not provide) info.

Send your check payable to FARS, to:

FARS c/o Michael Lechner, 436 Memphis Drive, Campbell, CA 95008



How to get to FARS meetings (*Visitors are 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 [N6NFI](#) (145.230-; 100Hz PL) repeater or the [W6ASH](#) 145.27- (100Hz PL) repeater.