

June 2011

Volume 41, Number 6

Field Day is here!

www.fars.k6ya.org

#### **June Club Meeting**

Date: Friday, June 17<sup>th</sup>, 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: Dr. Jason D. Lohn

Associate Research Professor Carnegie Mellon University, Silicon Valley Campus

# Topic: "Automated Antenna Design and Optimization"

Current methods of designing and optimizing antennas by hand or computer are time and labor intensive, allow limited complexity, and require significant expertise and experience.

Evolutionary design techniques can overcome these limitations by searching a design space and automatically finding effective solutions that would ordinarily not be found. Dr. Lohn will discuss automated antenna design optimization that produced the "evolved" antennas that flew on NASA's Space Technology 5 (ST5) mission, the first ever artificially-evolved objects to fly in space. He will also describe the software tools that he and his colleagues developed to automate the design of these evolved antennas.

**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.

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

# The FARS RELAY President's Corner

Membership Meeting. Our next membership meeting is scheduled for Friday, June 17<sup>th</sup> at 7PM. At this meeting Dr. Jason D. Lohn from Carnegie Mellon University talks about "Automated Antenna Design and Optimization".



Amateur Radio Field Day is scheduled for June 25<sup>th</sup> & 26<sup>th</sup>. Setup will take place on Friday June 24<sup>th</sup> and Take Down on Sunday June 26<sup>th</sup>. It's time to volunteer to help with this important and exciting activity. We always need assistance with setup and take down, but we also need operators to work the radio stations. You can sign up for operating positions at the membership meeting, or sign up now on the website at <a href="www.k6ya.org/events/fieldday">www.k6ya.org/events/fieldday</a>. Up to two operators may sign up for each two-hour slot, so bring a friend or a family member so you can trade off who operates and who logs. Also, feel free to sign up for more than two hours. The late Saturday afternoon and early Sunday morning slots are the most understaffed, so sign up there first. People who sign up get priority on each station. We're looking forward to a great event!

**Am-Tech Day.** The June 11<sup>th</sup> Am-Tech Day was the last Am-Tech Day at SLAC. We are currently looking for a new location, but no word on that yet. Check the website (k6ya.org/amtechday/) or the email list (k6ya.org/mail/) for the latest news and information.

**Electronics Flea Market.** The next electronics flea market is scheduled for July 9<sup>th</sup> and this one is hosted by FARS. This means that we need volunteers from the membership to help out. Michael Pechner, NE6RD, has volunteered to organize this event for FARS. Be sure to contact Michael to volunteer to help bring supplies, work at the booth, and/or help with seller admission. The proceeds from this market go to FARS, so volunteer today. Check out <a href="https://www.electronicsfleamarket.com">www.electronicsfleamarket.com</a> for all the details.

de Mikel, KN6QI

#### June Raffle Prizes

The prizes for the raffle will be:

First Prize: Tigertronics SL-USB-8R Signalink

Sound Card – Radio Interface

Second Prize: Maha MH-C9000 Wizard One

Charger Analyzer

Third Prize: ARRL "Basic Radio, Understanding

the Key Building Blocks"

Fourth Prize: ARRL Repeater Directory for 2011/2012







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

#### **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

Mark Hardy K6MDH Peter Chow AF6DS Charlie Morrin K16FXY

K6YA Trustee: Phil Hawkins KA6MZE

Contact the FARS Board of Directors at <a href="mailto:fars-board@svpal.org">fars-board@svpal.org</a>.

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 <a href="www.fars.k6ya.org/mail">www.fars.k6ya.org/mail</a>, click on Subscribe/Unsubscribe and follow the instructions under "Subscribing to fars-announce". You may submit announcements to the FARS Announcement at <a href="fars-announce@svpal.org">fars-announce@svpal.org</a>. 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 CA\$H Wish-You-Were-Here drawing at each membership meeting.

<u>Newsletter</u>: 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.

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

# CALENDAR OF UPCOMING EVENTS

#### www.fars.k6ya.org/events/calendar

Visitors are welcome at all events!

#### **JUNE**

- 17 <u>Club Meeting</u>, Covington School, Los Altos, 7PM
- 23 Test time for the FARS General License Class!
- 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\*
- Am-Tech Day, NEW LOCATION TBD, 9AM-6PM Assuming a new location can be found in time...
- 22 Club Meeting, Covington School, Los Altos, 7PM

#### **AUGUST**

- 4 Board Mtg, Los Altos Town Crier, 7:30PM
- 13 <u>Electronics Flea Market</u>, DeAnza College, 5AM
- 26 <u>Club Meeting</u>, Covington School, Los Altos, 7PM
- 27 <u>Am-Tech Day</u>, NEW LOCATION TBD, 9AM-6PM *Assuming a new location can be found in time...*

#### **SEPTEMBER**

- 1 Board Mtg, Los Altos Town Crier, 7:30PM
- 10 Electronics Flea Market, DeAnza College, 5AM\
- 17 <u>Am-Tech Day</u>, NEW LOCATION TBD, 9AM-6PM *Assuming a new location can be found in time...*
- 23 <u>Club Meeting</u>, Covington School, Los Altos, 7PM

#### **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 CA\$H 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.

#### MAY MEETING REPORT

At May's FARS meeting we laughed and we cried, thanks to an exciting presentation by Rick N6DQ.

#### 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.

We learned how Rick, N6DQ, quickly saw the error of his ways...but not before the great antenna and mast went byebye. More importantly, we learned how Rick turned this ham tragedy into a ham triumph!



Left: Rick N6DO

**Lower Left:** Rick's previous station – A 65' US Tower (MA770) with a SteppIR 3 element antenna

Lower Right: Rick's new station – A 52' Force12 tower (LPT-52) with a K4KIO Hex Beam antenna





Both have proven ability to bust pile-ups!





Dave AA6XV testing FARS' new radio

Raffle time!

#### CQ CQ CQ!

## With Field Day upcoming on June 25<sup>th</sup> and 26<sup>th</sup> we are recruiting operators for all stations!

See p. 8 for details.

At the May meeting we discussed FARS' eager anticipation for Field Day. With our multi-station set up in Los Altos we're ready to put our equipment to use and have some fun! Come join us! This is also a great time to show ham radio to your friends and family.

During Field Day FARS will be using its new Yaesu FT-950 as one of the HF rigs (pictured bottom left with Dave AA6XV), and now in addition we have procured the DMU-2000 for additional capability. See the Report on June's Am-Tech Day for photos on the new setup. It's beautiful and clear display is eye-catching and provides information not only to the users but to bystanders whom we may be encouraging to become hams.

#### Congrats to the May raffle prize winners!



Steve K60IK won First Prize: SWR/Power Meter – Daiwa CN-101, 1.8-150 mhz PEP

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

Mikey NE6RD won Third Prize: 3 Foot Patch Cable – MA-HRO-8X-3P, RG 8X

Joanna K6YL won Fourth Prize: 10 Pack of PowerPoles - Powerwerx 30A

Fifth Prize: Northern California Repeater Directory for 2011 - by NARCC

The FARS member chosen for the Wish-You-Were-Here

drawing was again not present to collect the CA\$H prize!

# REPORT: June's Amateur Radio Technology Day

### June 11<sup>th</sup>, 2011 Amateur Radio – Technology Day #78

SLAC National Accelerator Laboratory, Menlo Park, CA



We celebrated our 78<sup>th</sup> Am-Tech Day and our 75<sup>th</sup> month at SLAC.

Photo © Karl KJ6GUK



FARS' new Yaesu FT-950 HF/6m rig with DMU-2000 data mgmt. unit made up the K6YA GOTA station.



The BBQ lunch has always been very popular, and includes numerous fixin's carefully prepared by Dave K6WA.



A large number of people turned out and enjoyed wonderful weather, good people, and exciting radio fun.







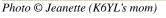




Photo © Karl KJ6GUK

While FARS hosts Am-Tech Day, this is an event enjoyed by numerous clubs, hams, and even those who aren't yet licensed. It is an incredible opportunity to test equipment, meet new people, share knowledge, and have fun.

# REPORT: June's Amateur Radio Technology Day continued

N6DQ teaching CW to prospective hams! Quick learners.



Photo © Jeanette (K6YL's mom)



Photo © Karl KJ6GUK



Photo © Jeanette (K6YL's mom)

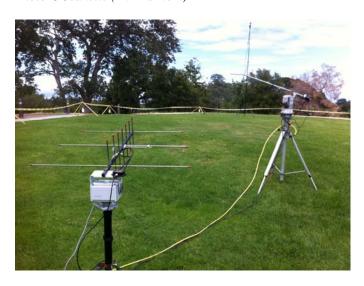
As many of you have already heard, this was the last Am-Tech Day at SLAC National Accelerator Laboratory in Menlo Park

...but it does not mean it's the end of Am-Tech Day.

We are actively looking for another venue and look forward to much more amateur radio fun! Stay tuned!



Photo © Jeanette (K6YL's mom)



Thank you to SLAC for allowing Amateur Radio Technology Day to use your incredible facility for 75 months!

And thank you to Dave K6WA for working so hard to put this event together for all these years.

# **REPORT:** FARS General License Course

The FARS General License Course continues to educate 30 students in preparation for upgrading their licenses. There are 5 evenings of class, held on consecutive Thursdays in Mountain View. The test is then administered on the 6<sup>th</sup> Thursday which is coming up soon on June 23<sup>rd</sup>.

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

- Introduction/Strategies/Motivation
- Procedures & Practices
- Rules & Regulations
- Components & Circuits
- Radio Signals & Equipment
- Antennas
- Electrical & RF Safety
- Propagation

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



Peter AF6DS teaches components and circuits at one of the classes for the FARS General License Course

# REPORT: June's Electronics Flea Market

June'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 Flea Market is operated by ASVARO, and each month is hosted by a different group. June's event was hosted by the Southern Peninsula Emergency Communications System (SPECS) and next month is FARS' turn to shine.

# **FARS** will host the Electronics Flea Market on **July 9**<sup>th</sup>, so **SAVE THE DATE!**

This is an important opportunity for the club to earn \$\$\$.

#### \*\*\* Volunteers are needed. \*\*\*

Contact Mikey NE6RD (ne6rd at arrl dot net) if you can assist with:

- Friday afternoon collection of supplies from the Red Cross in Palo Alto
- Morning ticket sales to vendors
- Setup of the snack tent
- Sales of coffee, donuts, sodas, etc
- Kicking out vendors at 1pm
- Clean up

# **OPERATING REPORT: Museum Ships Weekend 2011**

**Museum Ships Weekend 2011** took place the weekend of June 11<sup>th</sup> and 12<sup>th</sup> and was sponsored by The Battleship New Jersey Amateur Radio Station (NJ2BB).

The USS Hornet (NB6GC) in Alameda, CA was one of 79 ships participating in this on-the-air event, which included aircraft carriers, submarines, battleships, destroyers, ice breakers, lightships, minesweepers, hospital ships, and more from all over the world. They were as close as the San Francisco Bay and as far as Portugal, Australia, France, Sweden, Stockholm, Austria, Norway, Germany, Quebec, Russia and more. It was a fantastic turnout.

The USS Hornet in Alameda is open for tours (<a href="www.nj2bb.org/museum/">www.nj2bb.org/museum/</a>) and has an amateur radio club that operates monthly from the ship under call sign NB6GC (<a href="http://hornet-arc.us/">http://hornet-arc.us/</a>).

Of the 79 museum ships on the air during Museum Ships Weekend, successful contact with 15 of them earned you a nice certificate, aka "wall paper". :-)

You might recognize some of these operators on the USS Hornet as they are FARS members! Present were Byron KG6UOB, Joanna K6YL, Rick N6DQ and even Dave AA6XV.

















# FIELD DAY 2011 June 24<sup>th</sup> to 26<sup>th</sup>



#### FARS will be participating in **CATEGORY 3A** again this year.

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3 stands for the 3 HF transmitters below.

A is for Club / Portable entries (> 3 people operating in a temporary location and not tied to the power grid)

## HF STATION PHONE

PHONE 10m/15m/20m/40m

# VHF/SATELLITE STATION PHONE

## 70cm/2m/6m

An exciting amount of effort has been poured into a tracking system for satellites, thanks to a lot of hard work by Nimit K6XOX over the last year (also winner of the home brew competition at the December meeting).

(this transmitter not counted in Category #)

### **SETUP** FRI 11AM

START SAT 11AM

CLEAN UP SUN 11AM

## HF STATION PHONE 80m/160m

For Receive – we'll set up a 300 foot beverage antenna down the length of the soccer field.

For Transmit – we'll launch a large helium balloon into the air around dinner time on Saturday to support a vertical antenna.

# FARS FIELD DAY 2011

THE EXCHANGE IS:

"K6YA
3A
Santa Clara Valley"

## HF STATION

DIGITAL: CW/PSK31/RTTY 10m/15m/20m/40m

# G.O.T.A. STATION PHONE 0m/15m/20m/40m

10m/15m/20m/40m Get-On-The-Air

For non-hams, newly licensed hams, and even long-term hams with no HF experience (ask Mikey NE6RD if you qualify for this last category – ne6rd at arrl dot net).

(this transmitter not counted in Category #)

## BBQ POTLUCK SATURDAY 5:30pm

Bring a dish to share

#### **LOCATION:**

The Maryknoll Residence in Los Altos, 23000 Cristo Rey Drive, Los Altos (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

## SEE LAST PAGE FOR YOUR FULL FIELD DAY GUIDE, INCL DIRECTIONS.

#### **PHOTOS:** From the FARS 2010 Field Day

#### We are looking for operators of all levels, who are ready to have fun in 2011:

- 1.) Sign up at the upcoming FARS meetings (June)
- 2.) Sign up by emailing Phil KA6MZE at sputnik at pacbell dot net
- 3.) Or sign up on the FARS website (requires login)  $\rightarrow$ 
  - Sign up for Friday Setup here: https://www.fars.k6ya.org/cgi-bin/fdcrew
  - Sign up for Sunday Takedown here:
  - https://www.fars.k6ya.org/cgi-bin/fdcrew
  - 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





Ready to lift the SSB tower



The helium balloon for the 160m transmit antenna





The digital station



The SSB station



Antenna for the digital station



Tower for the SSB station



Prepping the SSB antenna





#### !! SCIENTIST PREDICT RARE 'HIBERNATION' OF SUNSPOTS!!

By Kerry Sheridan, 6/14/11, Yahoo News <a href="http://news.yahoo.com/s/afp/20110614/ts\_afp/usspacesun">http://news.yahoo.com/s/afp/20110614/ts\_afp/usspacesun</a>

For years, scientists have been predicting the Sun would by around 2012 move into solar maximum, a period of intense flares and sunspot activity, but lately a curious calm has suggested quite the opposite.

According to three studies released in the United States on Tuesday, experts believe the familiar sunspot cycle may be shutting down and heading toward a pattern of inactivity unseen since the 17th century. The signs include a missing jet stream, fading spots, and slower activity near the poles, said experts from the National Solar Observatory and Air Force Research Laboratory.

"This is highly unusual and unexpected," said Frank Hill, associate director of the NSO's Solar Synoptic Network, as the findings of the three studies were presented at the annual meeting of the American Astronomical Society's Solar Physics Division in Las Cruces, New Mexico. "But the fact that three completely different views of the Sun point in the same direction is a powerful indicator that the sunspot cycle may be going into hibernation."

Solar activity tends to rise and fall every 11 years or so. The solar maximum and solar minimum each mark about half the interval of the magnetic pole reversal on the Sun, which happens every 22 years. Hill said the current cycle, number 24, "may be the last normal one for some time and the next one, cycle 25, may not happen for some time. "This is important because the solar cycle causes space weather which affects modern technology and may contribute to climate change," he told reporters.

Experts are now probing whether this period of inactivity could be a second Maunder Minimum, which was a 70-year period when hardly any sunspots were observed between 1645-1715, a period known as the "Little Ice Age."

"If we are right, this could be the last solar maximum we'll see for a few decades. That would affect everything from space exploration to Earth's climate," said Hill.

Solar flares and eruptions can send highly charged particles hurtling toward Earth and interfere with satellite communications, GPS systems and even airline controls.

Geomagnetic forces have been known to occasionally garble the world's modern gadgetry, and warnings were issued as recently as last week when a moderate solar flare sent a coronal mass ejection in the Earth's direction.

The temperature change associated with any reduction in sunspot activity would likely be minimal and may not be enough to offset the impact of greenhouse gases on global warming, according to scientists who have published recent papers on the topic.

"Recent solar 11-year cycles are associated empirically with changes in global surface temperature of 0.1 Celsius," said Judith Lean, a solar physicist with the US Naval Research Laboratory.

If the cycle were to stop or slow down, the small fluctuation in temperature would do the same, eliminating the slightly cooler effect of a solar minimum compared to the warmer solar maximum. The phenomenon was witnessed during the descending phase of the last solar cycle.

This "cancelled part of the greenhouse gas warming of the period 2000-2008, causing the net global surface temperature to remain approximately flat -- and leading to the big debate of why the Earth hadn't (been) warming in the past decade," Lean, who was not involved in the three studies presented, said in an email to AFP.

A study in the March 2010 issue of Geophysical Research Letters explored what effect an extended solar minimum might have, and found no more than a 0.3 Celsius dip by 2100 compared to normal solar fluctuations.

"A new Maunder-type solar activity minimum cannot offset the global warming caused by human greenhouse gas emissions," wrote authors Georg Feulner and Stefan Rahmstorf, noting that forecasts by the Intergovernmental Panel on Climate Change have found a range of 3.7 Celsius to 4.5 Celsius rise by this century's end compared to the latter half of the 20th century. "Moreover, any offset of global warming due to a grand minimum of solar activity would be merely a temporary effect, since the distinct solar minima during the last millennium typically lasted for only several decades or a century at most."

#### !! 'DRAMATIC' SOLAR FLARE COULD DISRUPT EARTH COMMUNICATIONS !!

By Kerry Sheridan, 6/7/11, Yahoo News

http://beta.news.yahoo.com/unusual-solar-storm-could-disrupt-earth-communications-194814480.html

An unusual solar flare observed by a NASA space observatory on Tuesday (6/7) could cause some disruptions to satellite communications and power on Earth over the next day or so, officials said. The potent blast from the Sun unleashed a firestorm of radiation on a level not witnessed since 2006, and will likely lead to moderate geomagnetic storm activity by Wednesday, according to the National Weather Service.

"This one was rather dramatic," said Bill Murtagh, program coordinator at the NWS's Space Weather Prediction Center, describing the M-2 (medium-sized) solar flare that peaked at 1:41 am Eastern time in the United States, or 0541 GMT. "We saw the initial flare occurring and it wasn't that big but then the eruption associated with it -- we got energy particle radiation flowing in and we got a big coronal mass injection," he said. "You can see all the materials blasting up from the Sun so it is quite fantastic to look at."

NASA's solar dynamics observatory, which launched last year and provided the high-definition pictures and video of the event, described it as "visually spectacular," but noted that since the eruption was not pointed directly at Earth, the effects were expected to remain "fairly small."

"The large cloud of particles mushroomed up and fell back down looking as if it covered an area of almost half the solar surface," said a NASA statement.

Murtagh said space weather analysts were watching closely to see whether the event would cause any collision of magnetic fields between the Sun and Earth, some 93 million miles (150 million kilometers) apart. "Part of our job here is to monitor and determine whether it is Earth-directed because essentially that material that is blasting out is gas with magnetic field combined," he told AFP. "In a day or so from now we are expecting some of that material to impact us here on Earth and create a geomagnetic storm," he said. "We don't expect it to be any kind of a real severe one but it could be kind of a moderate level storm."

The Space Weather Prediction Center said the event is "expected to cause G1 (minor) to G2 (moderate) levels of geomagnetic storm activity tomorrow, June 8, beginning around 1800 GMT." Any geomagnetic storm activity will likely be over within 12-24 hours.

"The Solar Radiation Storm includes a significant contribution of high energy protons, the first such occurrence of an event of that type since December 2006," the NWS said. As many as 12 satellites and spacecraft are monitoring the heliosphere, and one instrument in particular on board NASA's lunar reconnaissance orbiter is measuring radiation and its effects.

"Certainly over the (two-year) lifetime of the mission this is the most significant event," said Harlan Spence, principal investigator for the cosmic ray telescope for the effects of radiation, or CRaTER. "This is really exciting because ironically when we were developing the mission initially we thought we would be launching closer to a solar maximum when these big solar particle events typically occur," Spence told AFP. "Instead we launched into a historic solar minimum that took a long, long time to wake up," he said.

"This is interesting and significant because it shows the Sun is returning to its more typical active state."

The resulting geomagnetic storm could cause some disruption in power grids, satellites that operate global positioning systems and other devices, and may lead to some rerouting of flights over the polar regions, Murtagh said. "Generally it is not going to cause any big problems, it will just have to be managed," he said.

"If you fly from the United States to Asia, flying over the North Pole, there are well over a dozen flights every day," he added. "During these big radiation storms some of these airlines will reroute the flights away from the polar regions for safety reasons to make sure they can maintain communications.

"People operating satellites would keep an eye on this, too, because geomagnetic storming can interfere with satellites in various ways whether it is the satellite itself or the signal coming down from the receiver."

The aurora borealis (Northern Lights) and aurora australis (Southern Lights) will also likely be visible in the late hours of June 8 or 9, NASA said.

#### Video of the Solar Flare on YouTube:

http://www.youtube.com/watch?v=Q 3u 0NN7OM&feature=player detailpage

# UPDATE: MAKERFAIRE 2011

At least four of the students in the June 4<sup>th</sup> <u>BAEARS Ham Cram</u> in Fremont were from MakerFaire! This event back in May was very successful, and we're always happy to see growth in the Amateur Radio community.

#### OPERATING REPORT: Special Event Stations Spotted

#### **K2USA**

Memorial Day - NEW JERSEY

Fort Monmouth Amateur Radio Club

#### W2W

#### **D-Day Commemoration – BALTIMORE, MD**

Operating from the National Electronics Museum. Additional information can be found on <a href="www.k3nem.org">www.k3nem.org</a>.

#### **W0FSB**

#### Commemorating Memorial Day and the 5 Sullivan Bros

Five Sullivan Brothers Amateur Radio Club in Waterloo, IN. All 5 brothers died during WWII after Japanese attack on the USS Juneau.

#### **W9IMS**

#### 100<sup>th</sup> Anniversary of the Indianapolis 500

Indianapolis Motor Speedway Amateur Radio Club

#### W0E

#### 200th Anniv of the New Madrid Earthquakes of 1811-12

Some of the largest earthquakes in US history, they forever changed the topography of the Midwest. An estimated 7.5 magnitude overwhelmed what was then the Missouri territory, along the New Madrid fault line. http://www.w0sjs.com/w0e/

#### TJ3IC

51st Anniversary of the Independence of Camaroon

#### W7PIG & W7FLY

#### When Pigs Fly – Washington State

Had to work both station calls to receive a QSL card -- The Boeing Employees Amateur Radio Operators North Society (BEARONS – W7FLY) and the Stanwood-Camano Amateur Radio Club (SCARC – W7PIG)

#### K0K

#### 125<sup>th</sup> Anniversary of Coca Cola

Atlanta Amateur Radio .Club. www.k0kspecialevent.com

#### **International Castle Weekend**

Castles on The Air! www.cashota.co.uk/

#### Airfields on The Air

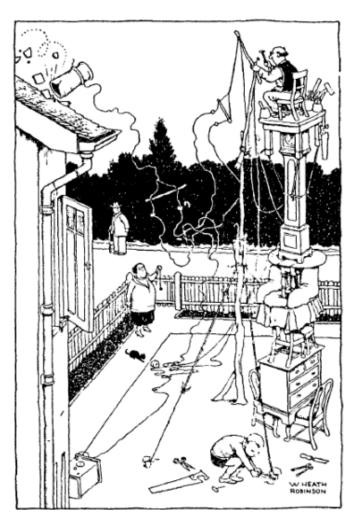
Hosted by The Royal Air Force Amateur Radio Society

## UPDATE: NEW ARRL SCV SECTION MANAGER

Phil Steffora, K6TT, of Los Altos, California, was appointed as Santa Clara Valley Section Manager on May 25. ARRL Membership and Volunteer Programs Manager Dave Patton, NN1N, made the appointment in consultation with Pacific Division Director Bob Vallio, W6RGG. appointment extends through June 30, 2012. First licensed in 1998 as KF6PEO, Steffora upgraded to General in 2006 and then Amateur Extra in 2008. He has served as a Santa Clara Valley Assistant Section Manager since January 2009, and was Vice President of the Northern California DX Club (NCDXC) from 2009- 2011. Steffora holds Worked All States, DXCC and other DX and contest achievements. The Section's top ARRL Field Organization position has been open since Bill Dale's, N2RHV, term of office concluded on June 30, 2010. Dale served as Section Manager of Santa Clara Valley for two terms.

Congratulations Phil!

#### **RADIO FUN:**



# REPORT: ARRL East Bay Section Convention 2011

The East Bay section of the ARRL held its first annual convention on June 4<sup>th</sup>, cosponsored by the California Historical Radio Society. The turnout was incredible and the place was packed! The location was the KRE Building in Berkeley, which is the home of the California Historical Radio Society, the Bay Area Radio Museum, as well as the W6CF Memorial. Door prizes and a swap meet were accompanied by two great speakers. Kristen K6WX presented her personal journey to create "PSK-31 on an iPad", and Bruce K6BP spoke on "Codec 2, the new codec written by hams for digital voice". I'm sure it will be back again in 2012, and likely at a larger venue as this was a big hit.

#### **MYSTERY PHOTO**



Recognize me?

Answer on page 14.

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. <a href="www.9amtalk.net">www.9amtalk.net</a> All guests are welcome.

# Ready to Upgrade Your License? \*NEW QUESTION POOL FOR GENERAL TEST 7/1/11\*

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

<u>www.baears.com</u> – This group holds "Ham Crams" 4 times a year, with the next one scheduled for 9/24 in Redwood City. Pre-registration required.

<u>www.amateur-radio.org</u>– The Sunnyvale VEC has upcoming test sessions on 6/18 in Redwood City and 7/9 in Sunnyvale. Walk-ins only, no pre-registrations.

http://www.pdarrl.org/vec/vecscv/ — The Silicon Valley ARRL VE holds test sessions on the 1<sup>st</sup> and 3<sup>rd</sup> Saturdays of each month from 8 AM to 11 AM at the Saratoga Fire Station (must arrive before 11 AM). Upcoming sessions are 6/18 and 7/2. Walk-ins only, no pre-registrations.

<u>http://www.sbara.org/</u> – 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 7/9 and 8/9. Walk-ins welcome.

## 7ARS Member Badges Seeking Owners

Bruce Riter KE6EEX
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, September 24th 8 AM Redwood City, 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.electronicsfleamarket.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 Rookie Roundup 2011 on RTTY!**

The objective of a Rookie Roundup is for newly licensed operators to experience competitive Amateur Radio. Experienced operators are also strongly encouraged to participate in order to help new operators – either on the air or in person.

This event is held in SSB, RTTY and CW.

#### RTTY is up next on August 21<sup>st</sup>!

During this event a Rookie will be defined as a ham first licensed in 2009, 2010 or 2011.

#### What is RTTY?

RTTY, also known as Radioteletype, allows communication using two radios and a modulation technique such as frequency shift keying (FSK). Many ham radio operators enjoy using modern PCs and soundcard software or TNCs to take advantage of this fun mode.

## THE TIME IS ALMOST HERE

## Field Day 2011

June 25<sup>th</sup> – 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 8 of this newsletter for details!

The photo on the previous page was from HRO Sunnyvale.

The ARRL Pacific Division Convention

Pacificon 2011 comes to Santa Clara, CA October 14-16<sup>th</sup>, 2011

www.pacificon.org



#### **FARS Membership Renewal Form**

Note that the dues for 2011 have been <u>reduced to \$15</u>. 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/re	newal 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 <u>prorated</u> (see <u>dues schedule</u>). 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 <u>N6NFI</u> (145.230-; 100Hz PL) repeater or the <u>W6ASH</u> 145.27- (100Hz PL) repeater.



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 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
- GOTA (Get On The Air) station

**SETUP:** Friday, June 24<sup>th</sup> at 11am

OFFICIAL START TIME: Saturday, June 25th at 11am

#### **POTLUCK DINNER & BBQ:**

Saturday, June 25<sup>th</sup> around 5:30pm

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

#### **TAKEDOWN:**

Sunday, June 26<sup>th</sup> at 11am

#### SIGN-UPS:

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

- 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)  $\rightarrow$ 
  - Sign up for Friday Setup here: https://www.fars.k6ya.org/cgi-bin/fdcrew
  - Sign up for Sunday Takedown here: https://www.fars.k6ya.org/cgi-bin/fdcrew
  - 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



#### **GOTA Station**

(Get On The Air) for non-hams, newly licensed hams, and even longer-term hams with no HF experience (ask Mikey NE6RD if you qualify in this last category – email ne6rd at arrl dot net). Photo © Peter AF6DS (2010)

## YOUR FIELD DAY 2011 GUIDE

#### **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.

#### **FARS LOCATION:**

The Maryknoll Residence in Los Altos (on the soccer field) 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  $37^{\circ}19.962'$  N by  $122^{\circ}04.919'$  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.







Visitors are welcome to join us!

www.fars.k6ya.org