

April 2011

Volume 41, Number 4

*2 months until Field Day!*

[www.fars.k6ya.org](http://www.fars.k6ya.org)

## April Club Meeting

**Date:** Friday, April 22<sup>nd</sup>, 2011

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

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

### 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, will explain NARCC's rationale and how 2-meter band operations would be affected. He will also explain the grass-roots petition to counter NARCC's proposed action.

### 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, will show 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. Be prepared to gain dB's as

Steve guides us through controversial territory fraught with misconceptions, error and mistakes

**Snacks:** Cookies and coffee will be served.

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

## April Raffle Prizes

The prizes for the raffle at the April meeting are:

First Prize: Wouxun KG-UV3D-2/UHF

2M/440 Dual Band HT (by Powerwerx)

Second Prize: Lido LM-801EXP Adjustable Cup Holder Mount with belt-clip/button mount and AMPS plate

Third Prize: RF Parts CW10B Coax Silicone Tape

Fourth Prize: Bongo Ties

Fifth Prize: Two PL-259 with UG-176 Reducers

\*Special Prize\*: Two tickets to the Maker Faire!



## President's Corner



**Membership Meeting.** Our next membership meeting is scheduled for Friday, April 22<sup>nd</sup> at 7 PM. At this meeting Dan Curtis, N6WM, would like to present a petition objecting to NARCC's plan to convert some of the current 2-meter simplex frequencies for use by repeaters.

**Am-Tech Day.** The next Am-Tech Day is scheduled for May 14<sup>th</sup>. Check the website ([k6ya.org/amtechday/](http://k6ya.org/amtechday/)) or the email list ([k6ya.org/mail/](mailto:k6ya.org/mail/)) for the latest news and information. At the April 2<sup>nd</sup> Am-Tech Day, Dr. Brad Aagaard talked about "Prepping for Large Earthquakes on the San Andreas and Hayward Faults." Dr. Aagaard is a Geophysicist for the U.S. Geological Survey in Menlo Park. He showed some simulations of possible earthquakes in the bay area and how they might affect us.

**Electronics Flea Market.** The next electronics flea market is scheduled for May 21<sup>st</sup>. This is the third Saturday of May and not the usual 2<sup>nd</sup> Saturday. The host and beneficiary of this flea market is the Santa Clara County Amateur Radio Association (SCCARA). Check out [www.electronicfleamarket.com](http://www.electronicfleamarket.com) for all the details.

**Dues reduced for 2011.** 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.

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

de Mikel, KN6QI

## Upcoming Events

**Meetings:** Friday, April 22<sup>nd</sup> and Friday, May 27<sup>th</sup>

**Am-Tech Day:** Saturday, May 14<sup>th</sup>

**Electronics Flea Market:** Saturday, May 21<sup>st</sup>

**FIELD DAY:** Friday-Sunday, June 24<sup>th</sup>-26<sup>th</sup>

**FARS Hosts the Electronics Flea Market:** Sat, July 9<sup>th</sup>

**The Wish-You-Were-Here prize** is 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](http://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 KI6FXV  
K6YA Trustee: Phil Hawkins KA6MZE

Contact the FARS Board of Directors at [fars-board@sypal.org](mailto:fars-board@sypal.org).

**Email Announcements:** Members and non-members are encouraged to subscribe to the FARS Announcement list by browsing [www.fars.k6ya.org/mail](http://www.fars.k6ya.org/mail), clicking on Subscribe/Unsubscribe and following the instructions under "Subscribing to fars-announce". You may submit announcements to the FARS Announcement at [fars-announce@sypal.org](mailto:fars-announce@sypal.org). The list is moderated and messages will be posted as approved by the list 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 the club 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.

## Amateur Radio Technology Day (#77)

**Saturday, May 14, 2011**

SLAC National Accelerator Laboratory

Menlo Park, CA

**\*Radio\* \*Food\* \*Friends\* \*Fun\***

*Am-Tech  
Day !!*

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

*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.

## CALENDAR OF UPCOMING EVENTS

[www.fars.k6ya.org/events/calendar](http://www.fars.k6ya.org/events/calendar)

*Visitors are welcome at all events!*

### APRIL

- 22 [Club Meeting](#), Covington School, Los Altos, 7PM
- 23 [BAEARS Ham Cram](#), Los Altos, 8AM
- 30 [Annual Hamfest](#), Sonoma, 8AM

### MAY

- 1 [Pacific Coast Dream Machines](#), HMB Airport
- 5 Board Mtg, Los Altos Town Crier, 7:30PM
- 6-8 [EMCOMMWEST 2011](#), Reno, NV
- 14 [Am-Tech Day](#), SLAC Natl Accelerator, 9AM-6PM
- 19 [FARS General Class Ham License Course begins!](#)
- 20-22 [Hamvention 2011](#) Dayton, OH
- 21 [Electronics Flea Market](#), DeAnza College, 5AM
- 21-22 [Maker Faire](#) DIY Festival, San Mateo, 10AM
- 27 [Club Meeting](#), Covington School, Los Altos, 7PM

### JUNE

- 2 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

### JULY

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

**Congratulations to Keith on your  
new call sign!**

# K6ZJI

## MARCH MEETING REPORT

March's presentation can be found on the FARS website.

Link: <https://www.fars.k6ya.org/docs/#wd6dbm>

**March Speaker: Eric Norris, WD6DBM**  
**Topic: "MAGNETIC LOOP ANTENNAS**  
**– The Best Kept Secret in Amateur Radio"**

\* \* \* \* \*

Eric discussed the magnetic loop antenna.

Magnetic loop antennas behave differently from dipoles and monopoles. Everything about a loop is different – its impedance, directivity pattern, how these depend on height above earth, earth's conductivity and dielectric constant.

Also, the sensitivity of loops to nearfield noise pickup is different. Now for the good news. In nearly every aspect, the difference gives the advantage to the loop.

Magnetic loop antennas do not have to be as high or as big to perform great. Eric explained the ins and outs of using magnetic loop antennas.

### Why a Portable Magnetic Loop?

- Extremely fast setup (<3min)
- Best designs high efficiency (>80%)
- Very easy experimentation
- Very easy design (using online calculators)
- Very easy to buy – PY1AHD, MFJ, and more
- Excellent noise null
- High-Q good for mult-TX environment
- Need only 1 loop diameter above ground
- Resonant – No tuner needed
- No radials or trees necessary

Alex's website is a MUST for loop fans

[www.alexloop.com](http://www.alexloop.com)

*Congrats to the March raffle prize winners!*



**Happy Prize  
Winners**

**Paul KJ6AMM** won First Prize: Powerwerx SS-30DV Power Supply, 138V, 25A Continuous, 30A Peak

**This Happy Prize Winner** won both 2nd prize and 3rd prize!  
Second Prize: MFJ 260C 300W Dry Dummy Load  
Third Prize: LF-01 PDK Light Flare Blinking LED

**Greg WY6P** won Fourth Prize: Four PL259 Coax Connectors

**Greg AF6IA** was the FARS member chosen for the Wish-You-Were-Here drawing... but unfortunately wasn't present to collect the CASH prize

A magnetic loop behaves electrically as a coil (inductor) with a small but non-negligible radiation resistance due to its finite size. It can be analyzed as coupling directly to the magnetic field (opposite to the principle of a Hertzian dipole which couples directly to the electric field) in the near field, which itself is coupled to an electromagnetic wave in the far field through the application of Maxwell's equations.



**Eric WD6DBM (speaker)**



**Steve K9WS**

Displaying their Magnetic Loop Antennas



[www.alexloop.com](http://www.alexloop.com)





## REPORT: IDXC – International DX Convention Visalia, CA

The 3<sup>rd</sup> weekend in April was the 62<sup>nd</sup> International DX Convention in Visalia, CA.

Those who made the drive south of Fresno experienced an impressive number exhibitors, seminars and demonstrations. Where else do you have the opportunity to make eyeball QSO's with 600+ hams?

### Exhibitors

Exhibitors included Alpha Amplifiers, Elecraft, ICOM, Kenwood, Yaesu, M2, SteppIR, FlexRadio, WaveNode, CQ Magazine, Hi-Q Antennas, US Towers, Ham4Less, Hamation, and much more!

### Raffle Prizes topped \$45,000 !!

They included the following:

- One of the Elecraft K3's from the VP8ORK DXpedition
- Acom 1010 and Alpha 8410 amplifiers
- Flex-1500
- ICOM IC-2200H (two), IC-718 (two), IC-7000 (two)
- Kenwood TS-590S
- ICOM IC-7600
- SteppIR gift certificate
- US Towers MA-40 Tubular Tower
- Yeasu FT-450D (two), FT-950D, FTDX-5000D
- WaveNode WN-2
- Yeasu VX3R (two)
- and much more!



[www.dxconvention.org](http://www.dxconvention.org)



"Attitude Adjustment Hour"



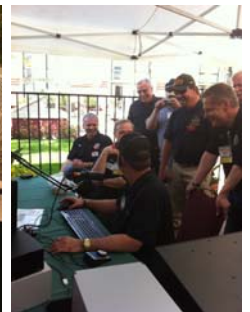
Saturday's BBQ Lunch



Prep on Friday: a SteppIR MonstIR antenna (42 ft boom!) being mounted on a US Tower (est 65') for use by the N6V special event station. The antenna actually sold by 9:00 AM Friday morning!



CeCe KJ6BNO pulled the raffle tix



N6V Special Ev Stn



Numerous exhibitors displayed products and more. Radiosport and Hi-Q were popular tables, and I paid extra attention to Pixel's magnetic loop after the last FARS mtg.



The exhibit hall, packed with friendly hams, exciting conversations, and lots of great vendors.



**REPORT continued:**  
**IDXC – International DX Convention**  
**Visalia, CA**



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

**April's Electronics Flea Market at DeAnza College did not disappoint.**

The WX was beautiful and the turnout great for this event., hosted by SPARK (South Peninsula Amateur Radio Klub).

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

**NEXT FLEA MARKET: May 21, 2011**  
**Hosted by: SCCARA**

**FARS will host the Electronics Flea Market**  
on **July 9<sup>th</sup>**, so **SAVE THE DATE!**  
This is a great opportunity  
for the club to make money.  
Volunteers and donations are appreciated.



*Photo © Peter AF6DS*

Reminder – Don't forget to purchase a parking pass for \$2 from one of the yellow machines. Or they'll getcha.



## REPORT: April's Amateur Radio Technology Day

April 2<sup>nd</sup>, 2011

### Amateur Radio – Technology Day #76

SLAC National Accelerator Laboratory, Menlo Park, CA

#### **Presentation By: Brad Aagaard, Ph.D.**

**Geophysicist, U.S. Geological Survey, Menlo Park, CA**

The recent terrible earthquake and tsunami actions that began in Japan are of great interest to U.S. Geological Survey (USGS) scientists & researchers. As a well known Menlo Park facility geophysicist, Dr. Aagaard reviewed the existing information available about local past earthquake actions, and specifically discussed both the 1868 Hayward and the 1906 San Francisco earthquakes. The well known San Andreas and Hayward faults were reviewed, as well as other significant Bay Area earthquake faults.

- Dr Aagaard presented excellent 3-D visual models of various San Francisco Bay Area earthquake faults!
- Assisted in the understanding of past earthquake actions
- Explained the efforts being made today to estimate ground motions
- Discussed methodologies used to determine hazards posed by large earthquakes
- Provided information about current tools used in earthquake determination

Brad gave an eye-opening presentation on earthquakes, emphasizing possible effects in the San Francisco Bay Area but also focusing on the recent event in Japan.

It is estimated by the USGS that there is a 63% probability for at least one magnitude 6.7 or greater earthquake to occur in the SF Bay Area in the next 30 years. The probability for Northern California increases to 93%. The probability when taking into consideration all of California increases to 99%!

Are you prepared?



The WX was beautiful during Am-Tech Day #76



Byron  
KG6UOB

**The next Am-Tech Day is on  
Saturday, May 14<sup>th</sup>.**

## OPERATING REPORT: ARRL Rookie Roundup

This is the second year of this new event, which supports SSB (April), RTTY (August), and CW (December). A Rookie is defined as being licensed in the last 3 years (2008, 2009 or 2010), but non-rookies could also be contacted for points.

Several FARS members participated in this event, from either their home QTH's, parks, vehicles or borrowed stations. For up to 6 hours on Sunday, April 17<sup>th</sup> we were on the air.

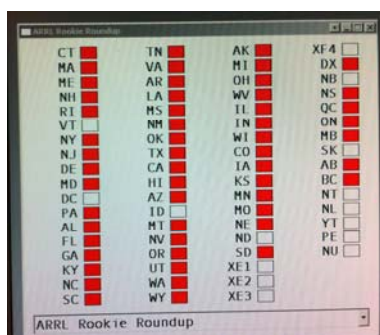
I thank everyone for their q's while I operated from W6YX!



**Joanna  
K6YL**  
operating  
Rookie  
Roundup  
from W6YX  
at Stanford

It was a non-stop 6 hours. And what a good turnout of Rookies – I have 100 of them in my log! Both Rookies and non-Rookies sounded excited to be involved in the contest.

15m proved to be very fruitful for me. I made 2/3 of my 404 qso's here, as well as 3/4 of my 54 multipliers, before switching over to 20m just after 22:15. My DX for the contest included Belgium, Italy, Germany, Wales, Spain, Greece,



England, Scotland, Venezuela and Puerto Rico, though several of them were surprised to be asked for the year they were first licensed (part of the exchange, hi hi). FYI, the states I missed were VT, DC, ID and ND, and I also missed 7 of the Canadian provinces and all 4 of the

Mexican call areas (see multiplier window from Write Log).

Be on the lookout for Rookie Roundup results in a future FARS newsletter!

Joanna K6YL

**MakerFaire 2011 is coming!**  
World's Largest DIY Festival  
May 21st & 22nd, 2011  
San Mateo, CA

**Maker Faire**

*Come celebrate MAKE magazine's 10th Maker Faire  
and sixth anniversary in the Bay Area,  
showcasing creative and resourceful people  
in the areas of science and technology, engineering,  
food, and arts and crafts.*

**Two tickets to Maker Faire  
will be raffled off  
at the April FARS meeting!**

### **FARS is sponsoring a booth at the Maker Faire again.**

Each year we try something new. This year we will be demonstrating RF Modulation. We will have one station sending psk31 over the computer speakers and another receiving the signal through the computer microphone. We will also fake some Radio by using dummy loads as antennas for other modes. We'll have monitors using Fldigi and other applications to show what various modes look like. We have participation from ARRL, PAARA and SBARA as well.

The Maker Faire is May 21 & 22.

Yes, that is the same weekend as Dayton. But if you can't make it to Ham Radio Mecca, attend the Maker Faire at the San Mateo Event Center. Tickets can be purchased online at <http://makerfaire.com/>.

If you would like to volunteer, send me an email at [mikey@mikey.com](mailto:mikey@mikey.com).

At Maker Faire, **Blackberry REACT sponsors a mobile/portable HF amateur radio station** staffed by volunteer hams. We welcome licensed volunteers to operate Special Event Station K6M on 20M (and other bands, as the case may be). A schedule for volunteers and more information is on our Web page at <http://www.philipstripling.com/makerFaireVols.html>

You get free admission to Maker Faire in exchange for as many hours of volunteering as you care to give. Visit the Maker Faire website at <http://makerfaire.com/> for more information on this great event. Contact Phil Stripling at [af6wi@arll.net](mailto:af6wi@arll.net) if you are interested in volunteering. If you have a technician license, you still can operate HF with Phil or Louise (KG6IMA) as control operator. We will also monitor U/VHF frequencies for talk-in of all amateurs at the event. Stop by and sign our 73s poster even if you can't volunteer.

## Dr. Know-It-All

April 2011

This month I devote this space to reviewing a new book on antenna tuners: Joel R. Hallas, W1ZR, *The ARRL Guide to Antenna Tuners*, American Radio Relay League, 2010, ISBN 0872590984, \$22.95. Antenna tuners are an important part of nearly all amateur radio stations. The topics of SWR, transmission line loss, and impedance matching were covered here in August 2010. Antenna tuners match antenna impedance to line impedance and, when used properly, enable maximum power transmission over the line from your transceiver to your antenna.

This book is very elementary. To give you some idea of how elementary, consider this. There is only a single Smith chart in the entire book, and its appearance is gratuitous. The chart is blank. There is no data shown on the chart. No example is given of how the chart is used. The text contains no mention of it. Moreover, the caption “A Smith chart used for the graphical determination of input impedance of a lossless transmission line” is false. The chart can indeed be used for lossy transmission lines. The chart shown has the loss scale at its bottom. In addition, the chart enables one to determine the impedance at any point along a line looking in either direction. It’s not just for input impedance. The book is totally lacking in the theory of impedance matching and loss – pretty sad for a book that claims to be a guide to antenna tuners.

So how can a book about antenna tuners get by without Smith charts? By not explaining transmission line impedance transformation, that’s how. Instead the book steers the reader to Dean Straw N6BV’s computer program *TLW* (Transmission Lines for Windows). Even following this approach, the book fails to mention that there are many utility programs available for transmission line and match calculations. Limiting the discussion of transmission line calculations to a single program *TLW* would have been acceptable if the program were provided on a CD with the book. Sadly it is not. The reader must purchase *TLW* separately. The book missed the chance to do the reader a real service by introducing and comparing programs such as Fritz Dellsperger HB9AJY’s *Smith*, Nathan Iyer’s *QuickSmith*, Agilent’s *AppCAD*, or even hard to find but incredibly useful programs like Dan Maguire AC6LA’s *XLZIZL*, EagleWare’s *winSMITH* or Ansoft’s *Serenade SV*.

Hallas’s name appears alone on the title page, a place normally reserved for an author’s name. But while Hallas certainly wrote many of the chapters, he clearly did not write chapters 14 and 15, which are reprints of articles from *QST*. Given the book’s makeup, the title page should have listed Hallas as editor and credited the authors of the material in chapters 14 and 15. Making it appear that Hallas is the author of the whole book is not honest.

Chapter 14 states the authors and original sources of the republished articles, several of which were written by Hallas. Unfortunately, chapter 15 breaks this style and republishes articles with author credit (none by Hallas) but without citation. The original publication location and date are hidden from the reader. Another recent book from ARRL, *Antenna Compendium Volume 8* is guilty of the same thing. Let’s hope these instances are not signs of a developing trend in ARRL books.

Another complaint is that the book does not have a list of references at the end of each chapter. An elementary book like this should give recommendations for further reading to benefit readers who wish to dig deeper. The

### **Review:**

Joel R. Hallas, W1ZR,  
*The ARRL Guide to Antenna Tuners*,  
American Radio Relay League, 2010

book fails to meet this need. It would have been trivial to cite authoritative sources. For example, at the end of chapter 11, the writings of Jerry Sevick W2FMI, Doug DeMaw W1FB, or Jim Brown K9YC, could have been cited. (*cont. next page*)



(cont. from previous page) The book's pages are numbered in the style "*n-m*" where *n* is the chapter number and *m* is the page number within the chapter. The chapters contain references to notes on different pages. However, these references are done poorly. Some are blatantly wrong, many are sloppy, and for most the style is inconsistent. Competent editors do not tolerate sloppiness on such basic matters. Here are a few examples to illustrate the problems.

### **Review:**

Joel R. Hallas, W1ZR,  
*The ARRL Guide to Antenna Tuners*,  
American Radio Relay League, 2010

On page 2-3, the text states "Notes appear on page 6." What does "page 6" mean? One guess would be page 2-6. Check out page 2-6. That is not it. Check out page 2-5. OK, this works but how is the reader to figure this out?

Another problem occurs in references to the text in republished articles from *QST*. On page 15-10, the text states "Notes appear on page 35." To what does "page 35" refer? The highest page number in chapter 15 is page 15-20. Ah, the mystery is solved. 35 is the page number for notes in *QST*. Of course, the reader should have guessed that. Similarly, on page 15-17, the text states "Notes appear on page 36." And again, the reference is to a *QST* page number.

Occasionally, the book does get it right. On page 14-13, the text states "Notes appear on page 14-35," and the notes do appear on page 14-35. In yet other instances, the book almost gets it right. On page 8-3, at the bottom of the right column the text states "Notes appear on page 5," and the notes appear on page 8-5. Similarly, on page 3-7, the text states "Notes appear on page 9," and the notes are on page 3-9. But sometimes the numbering is inexplicable. For example, on page 15-4, the text states "Notes appear on page 11," when the notes are actually on page 15-16.

Apart from problems in the page numbering of references, the book has an inconsistent style regarding where notes are placed. Sometimes notes are placed at the end of the chapter, sometimes on another page, and sometimes on the same page as the reference to it. For example, pages 4-6, 7-5, 7-6, 9-3, 11-2, and 11-5 all have notes on the same page on which the reference occurs. In other instances, notes are placed elsewhere.

One may complain about what a book contains. With this book, however, one can complain about what it does not contain. The book contains major omissions. (Pardon the oxymoron.) The index covers barely half of the letters in the English alphabet. The letter *C* is missing, as are the letters *M* through *R*. You cannot look up Characteristic impedance, Conjugate matching (or what's wrong with it, [1]), Matching, Maximum power transfer, Reflected power, or *Q*. Any book on antenna tuners should have such words in its index. The table of contents lists 15 chapters plus an Appendix A. However, there is no Appendix A. Apparently, in the rush to publish, the publisher left it out. Sadly, the reader cannot learn about loss calculations using decibels.

In summary, the cover art is pretty, but the book is a disappointment.

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

## **References**

1. *FARS Relay*, pp. 3-7, August 2010.

## BAEARS Ham Cram

Next Session: Saturday, June 4<sup>th</sup>  
8 AM  
Fremont, CA  
[www.baears.com](http://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](http://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

## EMCOMMWEST 2011

May 6<sup>th</sup> – 8<sup>th</sup>  
Reno, NV

[www.emcommwest.org](http://www.emcommwest.org)

The ARRL Specialty Convention EMMCOMMWEST will again be held in Reno, Nevada.

Friday Evening: Welcome BBQ

Saturday Morning: Swap Meet

Saturday Morning Keynote ARRL Speaker:  
Mike Corey, W5MPC, Emergency Response and Planning Manager from Newington, CT.

Saturday Night Banquet Speaker: Former ARRL president, Jim Haynie, W5JBP who served 3 terms as League president, and made some awesome contributions to Amateur Radio, incl his creation, "The Big Project" to attract young people into the hobby.

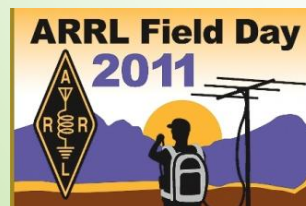
Sunday Breakfast Speaker: Tom Taormina, K5RC.

**\*\* Lots of door prize drawings \*\***

**Grand prizes: ICOM 7000, KENWOOD TS-2000!**

## Field Day 2011

June 25<sup>th</sup> – 26<sup>th</sup>  
[www.arrl.org/field-day](http://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 licensed operators!

Mikey NE6RD will be the Get-On-The-Air (GOTA) captain again.

This is a great opportunity for new hams (licensed since June 2010), guest hams (no license), and even HF-inactive hams (talk to Mikey about the definition) to get on the air, have fun, as well as earn some points for the club. [mikey@mikey.com](mailto:mikey@mikey.com)

## Dayton Hamvention 2011

May 20-22, 2011  
Dayton, OH  
[www.hamvention.org](http://www.hamvention.org)



Since 1952

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



## MUSEUM SHIPS WEEKEND

**June 3-5<sup>th</sup>, 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/](http://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.

## OPERATING NEWS: CQ World-Wide WPX SSB Contest

This contest took place March 26-27<sup>th</sup>. The goal was to contact as many amateurs and prefixes as possible. Keith K6ZJI (*KG6ZJI at the time of the contest*) and Byron KG6UOB took part from Keith's QTH in Mountain View.



Keith K6ZJI



Byron KG6UOB

### FARS Relay

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

*Please contact [Joanna.K6YL@gmail.com](mailto: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](http://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](http://www.baears.com) – This group holds “Ham Crams” 4 times a year, with the next ones scheduled for **4/23 in Los Altos** and 6/4 in Fremont. Pre-registration required.

[www.amateur-radio.org](http://www.amateur-radio.org) – The Sunnyvale VEC has upcoming test sessions on 5/14 in Sunnyvale and 5/21 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 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 5/7, 5/21, 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 5/14, 6/14 and 7/9. Walk-ins welcome.

## *FARS Member Badges Seeking Owners*

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*

# Get Your General Now!

(LAST chance before the question pool changes this year!)

## FARS General License Class - May 19<sup>th</sup> – June 23<sup>rd</sup>, 2011

**Dates:** 6 two hour weekly classes starting Thursday May 19<sup>th</sup> and running through June 23<sup>rd</sup>, 2011

**Time:** 7 pm – 9 pm on Thursday evenings

**Location:** Mountain View Fire Administration Building, 1000 Villa Avenue, Mountain View CA 94041

**Cost:** \$30 (\$25 for K-12 students, or seniors 65 or older), text book not included, exam cost is included!

This course will cover everything you need to know in order to pass the FCC General Class License Exam!

Now's the time to pass that upgrade exam! Not only will you gear up to pass the exam, you'll also gain valuable general radio and amateur radio practice knowledge, see several demos, and other fun stuff.

The exam is given as the last class session, and its cost is included!

There will be a maximum of 30 students so that everyone has a chance to ask questions.

While a Technician class license is recommended, it is not required to take this course.

Sign up now and reserve your slot!

*(address any questions to Kevin Weiler, K6XXX at [k6xxx@arrl.net](mailto:k6xxx@arrl.net))*

### Mail-in Sign-up Form

<b>Name:</b>	<input type="text"/>
<b>Call:</b>	<input type="text"/>
<b>Email:</b>	<input type="text"/>
<b>Phone:</b>	<input type="text"/>
<b>Address:</b>	<input type="text"/>
	<input type="text"/>

Mail this form with a check for \$30 (\$25 for K-12 students, or seniors 65 or older) payable to FARS to:

FARS License Class  
c/o Kevin Weiler  
14341 Liddicoat Circle  
Los Altos Hills, CA 94022

Please write the call sign of the student on the check.

**OR: Sign up via the Internet using at <http://www.fars.k6ya.org/classes>**



**FARS**  
FOOTHILLS AMATEUR RADIO SOCIETY

"Come and learn with your friends!"



## 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.