



FARS

FOOTHILLS AMATEUR RADIO SOCIETY

The FARS Relay

April 2014

See you down the log

Volume 44, Number 3

www.fars.k6ya.org

APRIL CLUB MEETING

When & Where

Date: Friday, April 25th, 2014

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

Guests are welcome to join us

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

Snacks: Cookies and coffee will be served.

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

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



Raffle Prizes

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

1st Prize: Wouxun KG-UV3D-2/UHF
2m/440 Dual Band HT

2nd Prize: Diamond SRH77CA
HT Antenna 2m/440

3rd Prize: NARCC 2014 NorCal Repeater Directory

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



Presentation

Main Presentation:

**The Evolution of
Handheld Radios
from Walkie Talkie
to Modern HT**

Speaker:
Ed Fong WB6IQN



Bonus Presentation:

FARS youth member
Rohan KG6LXV
will give a short presentation on

APRS & Smart Phones

[See page 4 for a details!](#)

CALENDAR OF UPCOMING EVENTS

www.fars.k6ya.org/events/calendar

* Visitors are welcome at all FARS events! *

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

APRIL

25 **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM
**The Evolution of Handheld Radios
from Walkie Talkie to Modern HT**

MAY

4 **Radio in the Park**, Agnews Historic Park, Santa Clara, 9:30am-12:30pm
Sponsored by FARS

10 **Electronics Flea Market**, DeAnza College, 5AM

14 Board Meeting, Los Altos, CA, 7:30PM

11 **BARC Meeting**, Panera Bread, Cupertino, 3PM
*Bay Area Radio Builders Club
See the website / Yahoo Group for details.*

23 **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM

JUNE

8 **Radio in the Park**, Agnews Historic Park, Santa Clara, 9:30am-12:30pm
Sponsored by FARS

tbd **BARC Meeting**, Panera Bread, Cupertino, 3PM
*Bay Area Radio Builders Club
See the website / Yahoo Group for details.*

11 Board Meeting, Los Altos, CA, 7:30PM

14 **Electronics Flea Market**, DeAnza College, 5AM

20 **FARS Club Meeting**, Covington School, Los Altos, CA, 7PM

28 **Field Day 2014**
Come join FARS for this on-the-air event!

UPCOMING

7/18 **ARRL National Centennial Convention**, Hartford, CT
A 3-day celebration w/ forums, exhibits, flea market, banquet & more

9/14 **ARRL VHF Contest**, 1800 UTC Sat – 0259 UTC Mon
Fun on the air!

10/4 **California QSO Party**, aka “CQP”
Fun on the air!

10/10 **Pacificon Amateur Radio Convention**, Santa Clara, CA

FARS Membership

**Joining FARS
and
renewing your
membership to FARS
provides:**

**Much needed
support for your club
activities,**

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

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

Join us!

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

*Email your FARS newsletter
editor at K6YL@ARRL.net*

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

Mikel KN6QI

Membership Meeting. Our next membership meeting is on April 25th and our program delves into the history of a piece of equipment most of us are very familiar with, the HT. "The Evolution of Handheld Radios from the Walkie Talkie to Modern HT" will be presented by Ed Fong, WB6IQN. In a special double feature, we'll also see a short presentation by one of our own youth members, Rohan KG6LXV, titled "APRS and Smart Phones". See page 4 for details.



See the

Field Day 2014 is only 2 months away. Mark your calendars for June 28th-29th! FARS is planning to operate in the 3A category with 3 HF stations – SSB/Voice (80-10 meters), CW/Digital (80-10 meters), and Low Band (160-80 meters). We also plan to have a VHF station (6m, 2m and 70cm) and a HF GOTA (Get On The Air) station (20-10 meters). Reserve the Saturday and Sunday for some operating and fun, as well as the preceding Friday (setup). Sign-ups will begin soon and we'll be looking for our members' help to put the event on the air.

Word from Nimit in Thailand. Nimit, a former regular at FARS meetings and activities, reports that he has upgraded to a Thai Intermediate Amateur Radio License, which effectively equivalent to a US General Class License. He also reports that he is regularly on air between 6am-9am PDT at 7.128 MHz and would like to hear from his friends here in California.

Next Electronics Flea Market on May 10th. I expect to see many of you there! The Electronics Flea Market started its 2014 schedule on March 8th and will run through September 13th. There is no market in October this year since it conflicts once again with Pacificon the same weekend. Full details at <http://www.electronicfleamarket.com/>.

Time To Renew Your Membership. Well we are into April, so it's time for you to renew your membership if you have not already done so. Membership is only \$20 (\$10 youth rate for applicants under 18) for the year and supports all of our activities including our monthly programs, and our radio operating events. Look for a membership form on the back of this newsletter, or check on-line on our web site at <http://k6ya.org/membership>.

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

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

de Mikel KN6QI

O P E R A T O R S N E E D E D O N 4/26

March of Dimes Walk America – Amateur Radio Event

We are in dire need of at least four more operators to make this event work as planned. If you have not yet volunteered, please consider doing so. Absolutely no experience is necessary. Your help is appreciated.

- **LINK TO SIGN UP:** <https://www.scc-ares-races.org/activities/eventdetail.php?id=416>
- **OR CONTACT TERRY DIRECTLY:** Terry KD6DIF, hickengr@sonic.net

It is time again for the March of Dimes Walk America amateur radio communications event. The event will happen on Saturday, April 26th. The event location will again be in downtown San Jose with the start/stop location at Cesar Chavez Plaza. The route will be slightly different due to some current construction. As last year, we will be there no later than 7:30am and it will go until about noon. We will have positions available for water stops, checkpoints, bicycle, shadow, mobile, and net control. Lunch is normally provided as well as some sort of breakfast foods. One of the main reasons for coordinating this event is to train people in a non-emergency situation.

Your help is appreciated by the March of Dimes team.

FARS PRESENTATION FOR APRIL

Details

When: Friday, April 25th, 2014
Speaker: Ed Fong WB6IQN
Presentation: The Evolution of Handheld Radios from Walkie Talkie to Modern HT

The evolution has been 50 years — from 3-transistor walkie talkies that went a little farther than you can shout to today's full featured dual-band HT's using SDR architecture and costing only \$35.

Ed Fong, WB6IQN, will share his 50-year relationship with the "walkie talkie" from the early days of the Allied Knight C100 100-mW walkie talkie, to the present day inexpensive yet effective Wouxun and Baofeng radios.

Along the way, he will discuss the famous Motorola HT220 and its architecture, the Tempo S-1 which was the first hand held synthesized radio, and first mini dual band HT's. The first mini HT's being the Standard 508C, the Icom IQ7a, and the Yaesu VX2.

For military history buffs, Ed will show a Motorola SCR536 (the radio that landed on Omaha Beach), a PRC77 (the primary backpack radio used in Vietnam), a GE Pocketmate (the radio that was used in the Watergate Break-in) and many more.

About the speaker: Ed Fong, WB6IQN, has had an illustrious and diverse career as a circuit design engineer at National Semiconductor and EE instructor at UC Berkeley. However he is best known to Radio Amateurs as the inventor of the DBJ-1 dual-band J-pole antenna and its successor the DBJ-2 roll-up dual-band J-pole featured in QST, in February 2003 and March 2007 respectively. Ed spoke about his antennas at the FARS October 2005 meeting.

Double Feature Presentation: FARS youth member Rohan Agrawal, KG6LXV, will give a short presentation on "APRS and Smart Phones."



RADIO IN THE PARK

Fun in the sun!

On Sunday, April 13th FARS sponsored an operating event at Agnews Historic Park in Santa Clara, and several hams showed up to play with radios and antennas and enjoy good company. This is the 2nd month for this event, and three more are scheduled! All hams and even non-hams are welcome to join us. Bringing your own equipment is not required!

Future Dates for Radio in the Park: May 4th, June 9th, July 13th, August 3rd

Time: 9:30am to 12:30pm



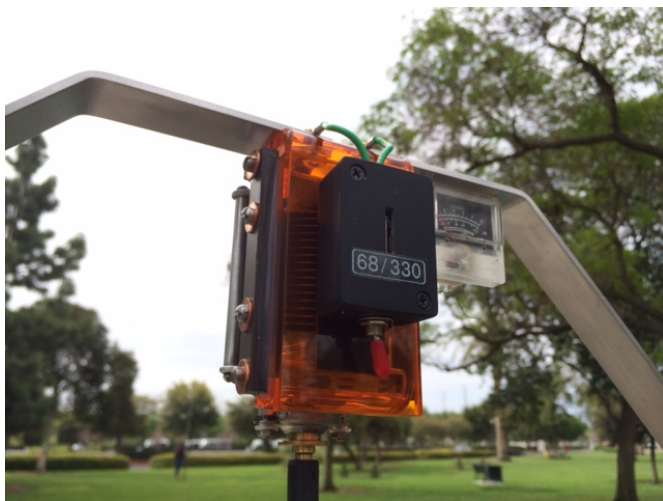
Signage on Lafayette at Palm Drive



Brand new SteppIR CrankIR antenna still in its bag!



Triplexer and filters in use!



RADIO IN THE PARK

Continued

Thank you to FARS for sponsoring these events! Come and join us at the next event in May!



THAILAND AMATEUR RADIO

Report from Nimit HS1FU / K6XOX

Nimit is a long-time FARS member currently living in Thailand

Recently Nimit received his Intermediate Class license, equivalent to the General Class license in the United States. *(photo at right)* With this license Nimit has been able to finally take advantage of HF operating privileges in Thailand. Congratulations Nimit!

Thailand does have a separate Extra Class license, but it doesn't sound as popular since the frequency privileges are actually the same as the General Class license. What is the difference you may ask? The General Class is limited to 100 watts while the Extra Class can pump it up to legal limit assuming their equipment can handle it.



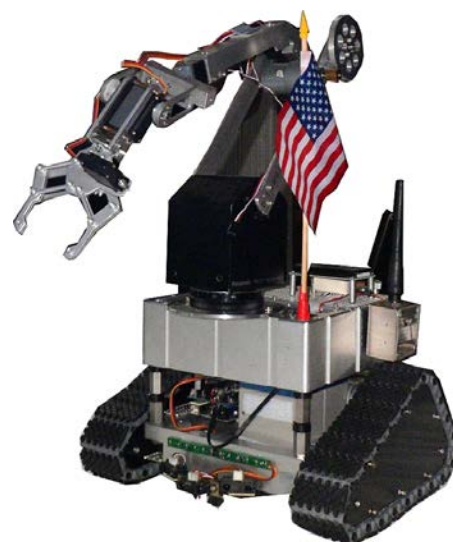
Nimit's setup is comprised of a Kenwood TS-570D and a G5RV Jr, and with it he has been able to contact Australia, Indonesia, Timor, Singapore, China, Hong Kong, and Hawaii. He mentioned that neighboring countries like Indonesia and Myanmar talk quite a bit on HF, and also make use of the DX window on each band.

Nimit often operates on 7.128 Mhz, with both CW and phone. It's a bit of long shot from California, but if you ever find yourself with a nice 40m antenna pointing at Thailand then be sure to listen out for him! A popular time on 40 meters in Thailand is 8pm-11pm, which translates to 5am-8am Pacific Time. There are some big guns on the band who will certainly respond to your CQ on 7.128 MHZ if they can hear you. This is a frequency and band that Nimit says he and his friends like to check often as well as rag chew on.

Nimit is lucky that he purchased his Kenwood TS-570D back at HRO in California (\$700), as he found out the same rig in Thailand costs \$2000 USD (65,000 Thai baht). For another comparison take the Yaesu FT3000DX which costs around \$4000 in the US – I understand this same rig is illegal to own/buy/sell in Thailand but it is available on the black market for around \$6000 USD (200,000 Thai baht).

The NBTC (National Broadcasting and Telecom Commissioner) in Thailand is equivalent to the FCC in the United States. It sounds like they control the regulations though they do not enforce the law to the same level as the FCC. Perhaps they are busy making money from selling cellular bandwidth for 3G, 4G and new digital TV DVB-T2 (not same band in US). Responsibilities such as revising the list of approved rigs allowed in Thailand has been a lower priority for the NBTC, and attempting to work with this agency to complete the necessary paperwork for importation and customs and then NBTC inspection for an off-list radio is quite a lot of work. Thus smugglers and the black market make their business.

To obtain the Intermediate Class license Nimit completed the necessary paperwork for the NBTC and referenced his US General Class license. After waiting 2 weeks he received an approval letter and was able to apply for the official license card. This works because Thailand has a reciprocal license agreement in place with several countries, including the United States. In fact, this is almost considered a loophole for becoming a Thai ham radio operator since they can bypass the difficult cw portion of the Thai test by first being licensed in the US where cw is no longer required, and then transferring over as Nimit did. To give you an idea of the difficulty, at a recent test session only 4 out of 200 passed the Morse code requirement, making it a significant barrier to amateur radio in Thailand. If I understand the situation correctly, Thailand even has several US VE's who are able to provide the US exam in Thailand!



Nimit's suggestion is that if you plan to visit Thailand for more than 2 weeks then go ahead and apply to NBTC as he did for the Intermediate license. You'll find that the process is now much easier and faster than it used to be!

If you recall, when Nimit was in California he built this robot which incorporated a Geiger counter plus APRS capabilities.

ELECTRONICS FLEA MARKET 2014

Sponsored by ASVARO

The Association of Silicon Valley Amateur Radio Organizations

www.electronicfleamarket.com

When: The Electronics Flea Market is held on the second Saturday (pre-dawn) of each month, March through September, 5AM to 12 noon.

Where: The market is located in the parking lot of De Anza College in Cupertino, near highway 85 and Steven Creek Blvd. (~ ¾ mi. south of I-280 on highway 85). GPS N37.3215 W122.0435

Note: Buyers enter free. Parking at the college is \$3 (in one dollar bills or quarters).



DIRECTIONS

From the Peninsula:

Take Highway 101 or 280 to Route 85 south. Exit east on Stevens Creek Boulevard.

From the East Bay:

Take Highway 880 south to route 237. Take Route 237 west to Route 85. Exit east on Stevens Creek Boulevard.

From Gilroy/Morgan Hill:

Take 101 north to Route 85 north. Exit east on Stevens Creek Boulevard.

Enter the Campus from Stelling Road:

From Steven Creek Blvd. turn south onto Stelling Road and enter on the right. Park in the open parking in lots B and C, obtain a day-use parking permit (\$3).

Support your local non-profit electronics organization!

SCHEDULE 2014

Saturday, Mar. 8	Hosted by Silicon Valley Emergency Communications System (SVECS)	
Saturday, Apr. 12	Hosted by West Valley Amateur Radio Association (WVARA)	
Saturday, May 10	Hosted by Palo Alto Amateur Radio Association (PAARA)	*NEXT ONE*
Saturday, June 14	Hosted by South Peninsula Amateur Radio Klub (SPARK)	
Saturday, July 12	Hosted by Santa Clara County Amateur Radio Association (SCCARA)	
Saturday, Aug. 9	Hosted by Southern Peninsula Emergency Communications System (SPECS)	
Saturday, Sep. 13	Hosted by Foothills Amateur Radio Society.	
Saturday, Oct. 11	Canceled due to conflict with Pacificon	

See you on May 10th !!

FARS Member Badges

Place your order online or at the meeting.

Available for pick up at the next club mtg

BAEARS Ham Cram

Next Quarterly Session: Saturday, June 7th

8 AM

Fremont, CA

www.baears.com

FARS Email Notices

Easy to subscribe!

www.k6ya.org/mail

Receive reminders of activities and other news.

Weekly FARS Net

Thursdays @ 8 PM

N6NFI Repeater 145.230(-), 100 Hz PL

Bay Area Radio Builders Club

“BARC”

A FARS Special Interest Group

*We are a group of mostly
Amateur Radio operators who want to gain
a better understanding of the topics covered
in the General and Extra class tests.*

*We want to learn electronics, antenna theory,
kit building, and kit design.*

Meetings: Usually the 2nd Sunday of the month.
The next meeting is May 11th at 3 pm.

Location: Panera Bread in Cupertino
(20807 Stevens Creek Blvd)

Join the Yahoo Group:

http://groups.yahoo.com/group/ba_radio_builders/

More Info:

www.barbc.org

Next Electronics Flea Market

May 10th

**De Anza College
Cupertino**

5AM to 12 Noon



HAM RADIO NETS – Getting On The Air

FARS Weekly Net Thursdays @ 8 PM

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

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

9AM Talk Net Weekdays @ 9 AM

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

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

READY TO UPGRADE YOUR LICENSE?

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

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

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

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

- Saturday 6/7, 8 AM @ Fremont (exam starts at 4 PM)

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

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

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

- Saturday 5/10, 10:30 AM @ Sunnyvale
- Saturday 5/17, 10:30 AM @ Redwood City
- Saturday 6/14, 10:30 AM @ Sunnyvale



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

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

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

- Saturday 5/3
- Saturday 5/17
- Saturday 6/7

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

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

Walk-ins welcome. \$15

- Saturday 5/10, 9 AM
- Tuesday 6/10, 6:30PM
- Saturday 7/12, 9 AM

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

CLUB INFORMATION

www.fars.k6ya.org

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

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

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

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

Meetings: FARS meetings are held at 7 PM on the fourth Friday of each month except January (Winter Banquet); and sometimes there are changes for June (for Field Day) and November & December (for holidays). **Visitors are always welcome!** Directions on the website as well as in this newsletter.

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

Newsletter: The FARS *Relay* is the official monthly newsletter of the Foothills Amateur Radio Society. Contributions to the newsletter from members, family, and guests are earnestly solicited! Photos, operating news, articles, etc. can be submitted to the editor at any time. Contributions are subject to editing and/or compression.

Newsletter Editor:

Joanna Dilley K6YL

K6YL at arrl.net

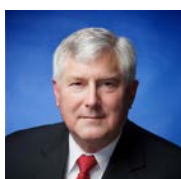
PO Box 399, San Carlos, CA 94070

Also available at FARS meetings.

Photos © K6YL unless noted otherwise.



Mikel KN6QI



Steve K6OIK



Dick N6ATD



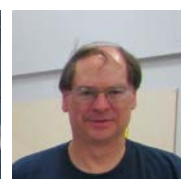
Phil KA6MZE



Joanna K6YL



Charlie KI6FX Y



Bob WB2URF



Doña KI6DAR

FARS New Membership / Renewal Form

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

Date: _____

Name: _____

Callsign: _____ Phone: _____

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

Email: _____

Mailing Address: _____

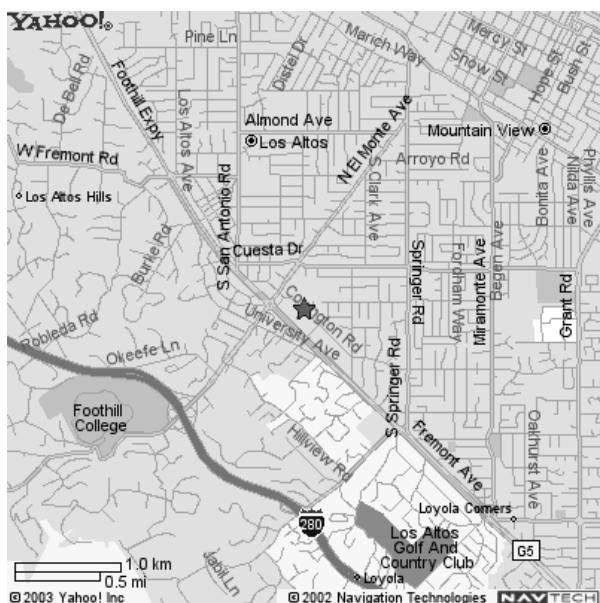
Special topics of interest / suggestions for club meeting speakers: _____

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

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

Send your check payable to FARS, to:

FARS, PO Box 112551, Campbell, CA 95011



DIRECTIONS TO FARS MEETINGS:

Visitors are always welcome.

Meetings are held at the Covington Elementary School on the fourth Friday. Socializing at 7 PM with the regular meeting at 7:30 PM. There may be changes in the meeting dates for January, June, November, and December.

From Interstate 280 – Take the El Monte exit Northeast. Cross Foothill Expressway. * At the first traffic light turn right on Covington. Immediately at the fork take the left street (Covington). Go about 1/10th of a mile. Turn left into the parking lot. The gym is the tall building to your right with red and white stripes.

From Foothill Expwy – Turn Northeast onto El Monte, then follow directions as above at the *.

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

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