

**W6OTX**PAARA NEWSLETTER  
VOLUME 54, NUMBER 4, April 2005**K6YQT**

# PAARAgraphs

Celebrating 68 years as an active ham radio club—Since 1937  
The Palo Alto Amateur Radio Association, Inc.

## CALENDAR

- Apr..... 1 **PAARA Meeting**  
7:30-9:30  
Menlo Park Rec Center  
700 Alma Street  
Menlo Park, CA 94025
- Apr..... 6 **PAARA Board Meeting**  
7:30pm  
Red Cross Bld., 400 Mitchell Lane Palo Alto  
*(due to Parking Lot problems location may change, check net before Bd. meeting)*
- May..... 6 **PAARA Meeting, 7:30pm**
- May..... 11 **PAARA Board Meeting, 7:30pm**



## NEXT MEETING

Friday, April 1, 2005, 7:30pm

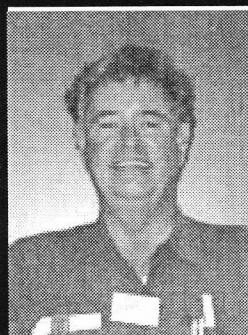
## Wi-Fi and 2.4GHz for Hams

### Speaker: Mark Cohen, KRIPTO

PAARA member **Mark Cohen, KRIPTO** is a networking expert, and he will introduce us to the world of 2.4GHz data communication—a band where hams are licensed to operate, but which has also become extremely popular for providing wireless Internet and networking under the so-called unlicensed spectrum rules.

Mark will introduce us to amateur radio High-Speed Multi-Media (HSMM)—the use of 2.4GHz and other bands capable of high data rates give us hams more sophisticated transmission capabilities and ensure we don't lose our priviledges on these frequencies. He will also teach us how to adapt Wi-Fi networking products meant for unlicensed operation for use under the amateur radio Part 97 rules, and using VoIP (Voice over Internet Protocol) for making phone calls over Wi-Fi in the HAM spectrum with experimental power and features.

~Peter, K6WEB



## PRESIDENT'S CORNER

CALLING ALL XYL'S  
OR  
GOOD COOKS

The PAARA sponsored Field Day activity will have yet another new twist this June as we follow up on the streamlined planning for a successful three day event. As you may recall during many of the previous years of Field Day activities, one of the highlights was the barbequed steak dinner with all of the trimmings. Well, as a result of a mandate by the PAARA treasurer, we will no longer be providing that type of meal during our annual outdoor radio event. (Some of you will remember the visitor last year who came from the local VA nut house and actually consumed three complete meals all by himself).

This year, PAARA will only purchase hot dogs, hamburgers, buns and beans. All of the rest of the consumables shall be provided by the volunteer camp cooks who will be more than happy to bring along their pot-luck specials !! I am of course referring to the XYL'S; YL'S; significant others and those who want to bring along some food and beverages to make our event a success.

The pot-luck afternoon barbeque will be on Saturday, however the contest operators; tower & antenna installers and equipment handlers will require snacks, meals and beverages from noon Friday through noon Sunday. So, your mission is to think about what you can prepare that will help feed at least 30 hungry radio amateurs and a few guests during the weekend.

PAARA is fortunate enough to have a very nice lady by the name of Kathy Erken who has agreed to help coordinate this huge undertaking of food & beverage planning. She can be reached at: [kathy@kathyerken.com](mailto:kathy@kathyerken.com) or 650-222-6500. She will hold the title of Food Captain and has asked if all those wonderful wives, girlfriends, husbands, boyfriends or significant others will contact her with the information on what they will be cooking and bringing. I am sure that she will also have a few suggestions regarding other items that will be required. So, please, at your earliest convenience, contact Kathy and see what you can do to assist in the kitchen and food department. ~73: Terry Finn. AF6TF

## Miscellaneous Info

### VE Exams, 3rd Saturday each month, 10:30AM, 145.23-PL=100Hz

Redwood City Main Library..Community Conference Room  
 1044 Middlefield Road, Redwood City, CA  
 contact: <http://amateur-radio.org/> or AI, WB6IMX@att.net

### ELECTRONICS FLEA MARKET

Sponsorship by A.S.V.A.R.O.  
 (Association of Silicon Valley Amateur Radio Organizations)  
 Second Saturday of month, March-October, 6am-2pm  
 Howard M. Krawetz, N6HM 650-856-9761  
 Host: *Closed until Spring.*  
 Contact: <http://www.electronicfleamarket.com/>

### LARK Swap meet

LosPositas College, Livermore, 1st Sunday each month.  
 Contact: Cliff Kibbe (209) 835 6715 or Eliot Ross (925) 606 7710  
<http://www.livermoreark.org/swap/swap.html>

### PAARA Palo Alto Amateur Radio Association

meets 1<sup>st</sup> Friday 7:30pm each month, Net 145.230 each Monday 8:30,  
 contact: <http://PAARA.org/> or Terry Finn, AF6TF, 650-366-9111

### FARS Foothills Amateur Radio Society

meets 4<sup>th</sup> Friday 7:30pm each month  
 contact: <http://www.fars.k6va.org/>

### NCDXC Northern California DX Club

meets 2<sup>nd</sup> Friday 7:30pm each month,  
 repeater for member info 147.360, Thur 8:00PM  
 contact: <http://ncdxc.org/> or Mike Gavin W6WZ, (650) 851 8699

### NorCalQRP Northern California QRP Club

meets 1<sup>st</sup> Sunday each month  
 contact: <http://www.norcalqrp.org/>

### SPECS Southern Peninsula Emergency Communication System

meets each Monday 8:00pm on Net 145.27, 440.80 MHz  
 contact: <http://specsnet.org/> or Tom Cascone, KF6LWZ, 650-688-0441

### SCARES South County Amateur Radio Emergency Service

meets 3<sup>rd</sup> Thursday 7:30pm each month, San Carlos City Hall.  
 Net is on 146.445 [PL 114.8] & 444.50 (PL-100) 7:30 Monday evenings.  
 contact: <http://k6mpn.org/>

### SCCARA Santa ClaraCounty Amateur Radio Association

Operates W6UU & W6UUR, repeater 146.985-pl  
 Nets: 2m, 7:30pm Mon; 70cm, 442.425+ (pl 107.2) Thur.  
 meets 2<sup>nd</sup> Mon each month @ 7:30 PM.  
 contact: <http://www.qsl.net/sccara/> or Clark Murphy KE6KXO 408-262-9334  
 ARRL/VEC license testing contact 408-507-4698

### SVECS Silicon Valley Emergency Communications

Operates AA6BT repeater (146.115 MHz+)  
 contact: <http://www.svecs.net/> or Lou Stierer WA6QYS 408 241 7999

### WVARA West Valley Amateur Radio Association

operates W6PIY repeater 147.39+, 223.96, 441.875, 1286.2  
 WVARA now has a 6m repeater, linked to 440 and 1.2GHz  
 meets 3<sup>rd</sup> Wed every month.  
 contact: <http://wvara.org/>, Bill Ashby N6FFC, 408-267-3118, N6FFC@Juno.com, or  
 N6FFC@ARRL.NET

### DISASTER SERVICES

#### American Red Cross, PALO ALTO AREA CHAPTER

400 Mitchell Lane  
 Meets 3<sup>rd</sup> Wed. each month 7:30PM  
 HF, packet, BBS, ATV, OSCAR Gateway, NASA satellite.  
 contact: <http://paarc.org/> or Mac Millian 650-688-0423. [MACM@paarc.org](mailto:MACM@paarc.org)

#### American Red Cross, SANTA CLARA VALLEY CHAPTER

contact: <http://santaclaravalley.redcross.org/> or Scott Hensley KB6UOO, (408) 967 7924  
[fshensley@Novell.com](mailto:fshensley@Novell.com)

(please send changes to PAARAgaphs editor: [k6uro@arrl.net](mailto:k6uro@arrl.net))

PAARAgaphs E-mail address: [k6uro@arrl.net](mailto:k6uro@arrl.net)  
 Submit material for PAARAgaphs by the 15th

Text: WORD, MS Publisher, RTF, or ASCII  
 Photos: JPEG, PNG, or TIFF raster images  
 Diagrams and ads: AI, EMF, or EPS vector files

PAARA Web/WAP site: [www.paara.org](http://www.paara.org)

## Palo Alto Amateur Radio Association, Inc.

PO Box 911 Menlo Park, CA 94026

### Officers

President .....	Terry Finn, AF6TF	650-366-9111
	<a href="mailto:af6tf@arrl.net">af6tf@arrl.net</a>	
Vice President .....	Peter Sheerin, K6WEB	415-298-7383
	<a href="mailto:k6web@arrl.net">k6web@arrl.net</a>	
Secretary .....	Adrianus Schrauwen, W6AJS	650-494-6256
	<a href="mailto:w6ajs@arrl.net">w6ajs@arrl.net</a>	
Treasurer .....	Ron Chester, W6AZ	408-243 2221
	<a href="mailto:w6az@arrl.net">w6az@arrl.net</a>	

### Directors

Past President .....	Andreas Junge, N6NU	650-233-0843
	<a href="mailto:n6nu@arrl.net">n6nu@arrl.net</a>	
Director (*05) .....	Gerry Tucker, N6NV	650-326 4908
	<a href="mailto:n6nv@arrl.net">n6nv@arrl.net</a>	
Director (*05) .....	Rolf Klibo, N6NFI	650-856-2748
	<a href="mailto:n6nfi@arrl.net">n6nfi@arrl.net</a>	
Director (*05) .....	Bob Korte, KD6KYT	650-595 1842
	<a href="mailto:kd6kyl@arrl.net">kd6kyl@arrl.net</a>	
Director (*06) .....	Kristen McIntyre, K6WX	
	<a href="mailto:k6wx@arrl.net">k6wx@arrl.net</a>	

See the calendar for Board meeting times. **Visitors are welcome.**

### Appointed Positions

Membership .....	Vic Black, AB6SO	650-366 0636
	<a href="mailto:ab6so@smrn.com">ab6so@smrn.com</a>	
Membership .....	Lisa Rice, KG6KQS	650-851-2274
	<a href="mailto:lisa.rice@sbeglobal.net">lisa.rice@sbeglobal.net</a>	
Database .....	Lisa Rice, KG6KQS	650-851-2274
	<a href="mailto:lisa.rice@sbeglobal.net">lisa.rice@sbeglobal.net</a>	
Chaplin .....	Rev. Rick Line, KG6TMD	650 323 8544
	<a href="mailto:kg6tmd@arrl.net">kg6tmd@arrl.net</a>	
Station Trustee .....	Gerry Tucker, N6NV	
Property Manager .....	Gerry Tucker, N6NV	
Badge Coordinator .....	Doug Teter, KG6LWE	650-367-6200
	<a href="mailto:dteter@wewi.com">dteter@wewi.com</a>	
Sign Maker .....	Steve Brune, KG6OUB	650-740-4367
	<a href="mailto:stevebrune@sbeglobal.net">stevebrune@sbeglobal.net</a>	
Raffle Coordinator .....	Jim Rice, K6AK	650-851-2274
Ticket Master .....	Kyle Rice, KG6MSK	
Ticket Master Assistant .....	Ian Brune, K6IAN	
Field Day Coordinator .....	Gerry Tucker, N6NV	
ASVARO Rep .....	Howard Takaoka, KG6GRO	650-856-9761
	<a href="mailto:htakaoka@excite.com">htakaoka@excite.com</a>	
Webmaster .....	Peter Sheerin, K6WEB	

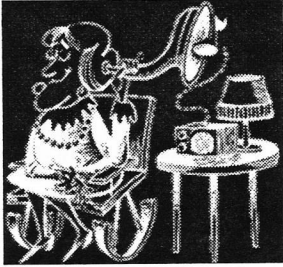
### PAARAgaphs Staff

Editor .....	Wally Porter, K6URO	650-494 7038
	<a href="mailto:k6uro@arrl.net">k6uro@arrl.net</a>	
Photography .....	Steve Brune, KG6OUB	650-740-4367
	<a href="mailto:stevebrune@sbeglobal.net">stevebrune@sbeglobal.net</a>	

Additional pictures.....  
 Dick Kors, KM6EP, John Larribeau, KR6MR, Wally Porter, K6URO  
 Advertising .....

	Terry Finn, AF6TF	650-366-9111
	<a href="mailto:af6tf@arrl.net">af6tf@arrl.net</a>	
News .....	Terry Finn, AF6TF	650-366-9111
Member Profiles .....	Terry Finn, AF6TF	650-366-9111
	<a href="mailto:terry@incognitoservices.com">terry@incognitoservices.com</a>	
Technical Tips .....	Vic Black, AB6SO	650-366 0636
	<a href="mailto:ab6so@smrn.com">ab6so@smrn.com</a>	

Good Old Stuff..... Andy Korsak, KR6DD  
[kr6dd@arrl.net](mailto:kr6dd@arrl.net)  
 The Satellite Beacon..... Emily Clarke, W0EEC  
[w0eec@arrl.net](mailto:w0eec@arrl.net)



## GOOD OLD STUFF

from PAARAgaphs' Past  
Andy Korsak KR6DD@arrl.net

OUR illimitable Andy Korsak, VE3FZK/W6, has decided that talking to people is not enough, so he has joined in the formation of an ATV club in Beautiful Milpitas... [Kit WA6PWW, you undoubtedly remember that]

**30 years ago April 1975 VOL. XIX No.4**  
NEXT MEETING April 4, in the widely-acclaimed Menlo Park Recreation Center  
PROGRAMME: Docket 20282!! Yes, we've got Doc Gmelin, W6ZRJ, ARRL Pacific Division Director... history making proposal... restructuring... [big changes by FCC]

**GET RICH QUICK!!! SELL YOUR GONK AND GOODIES HERE!!!** Lots of FOR SALE items, e.g. Gonset Communicator III, model 3133 2 meter xmtr-rcvr, for 110 VAC or 12 VDC with manuals, schem, power chords, all in new condition... \$100.00, Charles Carpenter K6HPP, Menlo Park [must be SK -- not at QRZ.com, anyone remember him?]

NEW MEMBERS OF PAARA: We Welcome: William Tallmon, W6DVB ... retired after 32 years with Eimac ... a charter member of PAARA when reactivated in 1947 [presumably no PAARA during WW II]

**BIG MYSTERY OF CY6 PREFIX EXPLAINED** de K6FS Calgary, Alberta, is celebrating its 100<sup>th</sup> year throughout 1975.

**Board of Directors discussion:** ... need a two meter simplex frequency for FM for the PAARA net when we all abandon AM and Get With It on wonderful FM

**CODE PRACTICE AND BULLETINS** K6RAU, Merced, 3840 kHz A-3 (Yes, AM phone!) This can be copied on a crystal set ... how nostalgic.

**THE PAARA NET FREQUENCY DILEMMA or NOW WHAT DO WE DO????**

(article by Hal Moore W6DEF and Rick WA6NCX)

... more and more members are getting FM gear .. the March issue of World Radio News... a listing of Repeater Simplex Frequencies ... 147.48 looks like a good candidate [eventually 147.45 was selected – probably there will be more discussion of this in a future 1975 issue]

**20 years ago April 1985 Vol.27 No.4** Meeting Fri. April 5 1985 7:30PM Speaker: "Radio in S.E. Asia" by AJ6Q

**President's Corner** ... Field Day continues to be much on the mind of the board of directors and Field Day Committee...

PAARA roster published in this issue listed 130 members

**Contest!** ... VHF/UHF Spring Sprints will start on two meters on April 15, from 7:00 p.m. to 11:00 p.m. WA6AZP will be on in an attempt at the top score

**QUEMENT ELECTRONICS AD:** FT-757GX HF ALL MODE Computer Aided Transceiver

**10 Years ago March 1995 VOLUME 44, NUMBER 4** Program April 7 Speaker: Wes Irish, WA2CRQ will present a talk on the American Red Cross Emergency Communications Van from XEROX Corp ... completely self sufficient with antennas, power supplies, extra batteries and chargers... several operating positions for HF, VHF, and UHF as well as Red Cross frequencies, cellular telephones and facsimile

**Radio Class** EMARC (Electronics Museum Amateur Radio Club) is sponsoring amateur radio classes ... FREE!(only \$15 for Now You're Talking textbook – reg. \$19)

**PAARA Members' News** Ron Carmichael KD6RFI studied hard and long for his 5 WPM Novice code test. The examiner was set up for 20 WPM so Ron took that as a "warm up" ... to his surprise, Ron easily passed the 13 WPM test ... Maybe Ron should team up with Jeff Furman KD6MNP. After son Mike KD6OCS recently passed his General Class test, Jeff passed the written exams for General, Advanced and Amateur Extra Class in **one sitting**. He then passed the 5 WPM test [and here's the rest of the story I just got from Mikey over the phone: every year after that, Jeff was ace'ing all the written tests, being an EE and expert on all the technical questions, but kept flunking the high speed Morse code tests! He finally got his Amateur Extra current call AD6MX when they dropped the requirement back to 5 WPM] Andy Korsak VE3FZK was surprised when Phil VE3FZL called him on a local repeater. At first each thought the other was pirating his call sign Phil was in San Francisco on business and took the train to Menlo Park to attend the Feb PAARA speaker's dinner, club meeting and after meeting pizza gathering. A big PAARA thanks to Paul Thekan N6FEG for the great job as net control for the PAARA Net Monday night at 2030 local time. The switch from simplex to the 145.23 repeater has allowed everyone to hear each other without relays... de Vic Black, AB6SO

**PAARA Picnic** Saturday, June 3, at Ron & Helga's house from 11 AM to 3 PM. The club will supply beer, cold drinks, charcoal, and a cold cut plate... door prizes... de Lilly Anne K6PGM

**Directors' Corner** de Koert KC6WCI This year's Foothill flea Market was an event to remember. No mega bucks for the club but mega rain. Actually it was fun to watch all those hams in their rain suits and poncho's ... flash lights looking under tarps... Most hams are of sound mind [where did he get that idea?] and that's why attendance was not that great... St. Anthony's in Redwood City was the beneficiary of the surplus hot dogs and buns and the homeless had a better time because of it. Another club will buy the surplus soft drinks from us... around the corner ... June 3 we will have the picnic ... a mini fox hunt ... by VE3FZK

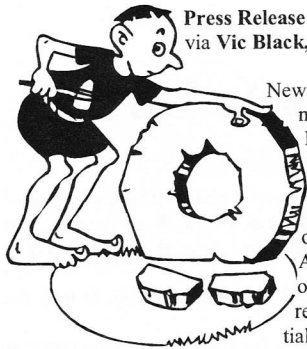
**H F Propagation Forecasting** by Vick Black AB6SO If you ask a gold prospector where the gold is located, he'll tell you it's wherever you find it ... Predicting HF propagation often seems like gold prospecting ...

**DX** by W6VG [Ron Panton] I feel like a Novice – writing about my thoughts about DX. After enjoying ham radio and DX for 64 years, I decided to become a volunteer ham radio license examiner. Now I find myself writing about DX. My interest in DX started in 1930 when I found my call listed in Qst "Calls Heard". I was heard in New Zealand! .... [Hang in there with us, Ron – I hope you read this and we may see you again at a PAARA meeting]









Press Release for Release April 1, 2005  
 via Vic Black, AB6SO

**New Service authorized for Utility Companies**

Industry sources announced that a new service has been authorized for sale by California power utility companies. The service called Radio over Power Lines, or RPL, was authorized partly to placate Amateur Radio operators who had previously complained about what utilities referred to as “unfounded fears of potential radio interference from BPL”, or

Broadband over Power Lines.

Utilities originally tried selling BPL during the solar cycle low hoping that digital signals leaking from power lines wouldn't travel far. After testing revealed that even during the solar low period radio signals emanating from the lines would travel long distances, the companies took a different approach. In a complete turnaround, they put a new spin on the leakage of signals into and out of power lines and are now marketing leakage as a design feature rather than admitting it is a problem. They are hailing the service as one of several new technologies designed by the power utility industry.

For an unspecified “nominal” monthly fee, plus applicable local, state and federal taxes and installation fees, Amateur Radio operators would be allowed to inductively couple radio signals into power lines using interface boxes leased from the utilities. Power lines would then act as long wire antennas.

Interface boxes would be built inexpensively in China with software designed in India, thereby improving international relations, one of the mandates for amateur radio.

RPL is expected to be especially popular in urban settings where antennas are difficult or impossible to erect on small lots. The plan is also expected to play well in rural areas of the Central Valley where electric utility lines are laid out in rectangular east-west and north-south grids. Under the cloak of anonymity, one spokesperson said, “We aren't interested in the profit motive, but are instead attempting to serve the perceived needs of the Amateur Radio community”. He added that power company professionals could design antenna systems better than “amateurs” could.

Radio signals would be coupled into power lines of various lengths depending on the distance between isolation transformers. Service fees would vary according to the length of the lines involved. Subscription fees must be paid in advance and the companies have vowed not to increase fees during the first six months of operation. In order to make the service viable, it may be necessary to require all Amateur Radio stations to subscribe whether their antennas are used or not. Some companies are considering a basic cable fee plus a “pay per play” pricing structure charged in half hour increments similar to pay per view television charges. Other companies are considering surcharges for various types of modulation schemes citing “technical considerations” as justifications for higher fees in some cases.

Utility companies have stated the new service is expected to generate a large number of new jobs and would be a boost to the economy and the common good.

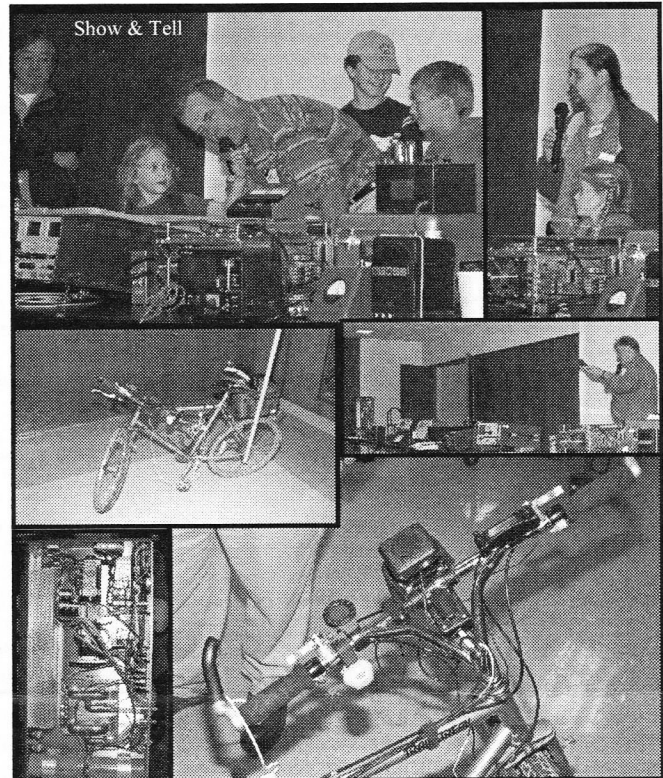
One new category of jobs would be “radio police” who would drive through neighborhoods searching for outlawed antennas using radio direction finders originally designed by amateur radio operators. In many areas, underground utility lines would need to be raised above ground to accommodate the new service. This would provide much needed jobs for the construction industry.

Conversion costs would be borne over time by users of the new service. Utility marketing departments are calling the plan a win-win situation for all parties.

Not everyone supports the power companies' plans. Residents of Berkeley, California have vowed a legal fight calling the new service a violation of local anti-radiation ordinances. Not to be outdone, Palo Alto defenders of the common man have also announced a legal battle to prevent deployment of RPL within the city limits of Palo Alto citing fears of theoretically possible “radiation” dangers. They are also concerned that the new service would attract radiation from other parts of the state into Palo Alto, which operates its own power utility. “Besides”, an anonymous spokesman added, “Isn't radio obsolete? It was replaced by ‘wireless’ wasn't it?”.

Bob Vallio W6RGG, Pacific Division Director of the American Radio Relay League, the national Amateur Radio organization, was overheard stating, “Power companies should concentrate on what they do best and that's providing PPL or Power over Power Lines”.

Barring unforeseen difficulties the RPL is expected to roll out beginning April Fools Day, 2006



**FIELD DAY PLANNING COMMITTEE.**

On Saturday, March 12/05 about noon, the PAARA Field Day Planning Committee met at a restaurant in the Sunnyvale area right after the first electronic flea market of the year.

Chaired by the Grand Daddy of Field Day operations, **Gerry Tucker, N6NV**, the committee was made up of the following PAARA members.

**Terry Finn, AF6TF; Vic Black, AB6SO; Ron Chester, W6AZ; Mikey Furman, N6IL; Mark Cohen, KRIPTO; Peter Sheerin, K6WEB** and “**The Q**” himself, **Rob Goodson, N2RAG** who had his daughter visiting the meeting with him.

**Ron Chester** had an impressive list of statistics and suggestions for improvements which was discussed at length. **Peter Sheerin** developed a listing of various required positions and jobs for the event that will be placed on the PAARAsite. **Ron Chester** had already developed a good list of potential radio operators for the 24 hour contest event and will be refining the list as we get closer to the date in June.

It was agreed that this year PAARA will operate four (rather than two) complete stations plus a GOTO station (Get On The Air) for the newbies and visitors to the site. We will have fresh operators available for the various stations to allow more actual operational time for the PAARA members and increase the potential of earning points. We will also operate just about every other mode of RF communication device to qualify for the extra points. Please view the list of the jobs and positions on the PAARAsite at: [www.paara.org](http://www.paara.org) for further information.

The last weekend in June is the three day Field Day activity. We will require volunteers on all three days to assist in antenna/tower raising; power distribution; radio installation; tent erection and food preparation and distribution as well as the usual tear down and clean up on Sunday. We expect this to be our best year to date with respect to PAARA member participation; contest points earned and a great time.

~Terry Finn. AF6TF.





## TECHNICAL TIPS

# Which Way Is Up?

Ron Chester, W6AZ

To orient an antenna properly for Field Day or other field operations, it is helpful to have a simple method for determining true north with a fair degree of accuracy. The first thing that comes to mind is a compass. But a compass points at the magnetic north pole, not quite the same as true north, so you will need to find out how many degrees are needed to correct for that at your location. And you will find that with the short little compass needle, it's not that easy to get in a good position for properly sighting in the direction of true north to mark it accurately.

There is a beautifully simple and effective method of determining true north by the sun which is described in early ARRL Antenna Books. It is in the 1946, 1970, and 1983 editions that I own, but it is not in the more recent 2000 edition.

Determining north by the sun is based upon the fact that at noon, local time, the sun bears due south. That means it casts a shadow from a vertical stick or rod which will bear due north. And that is true north, just what we want, not magnetic north!

All you do is place a camera tripod at the spot where you want to determine true north and hang a plumb bob from the center of the tripod. This gives you a vertical line for creating the shadow that will bear due north. Have a nice long ruler or straight edge handy. You want the weight of the plumb bob to be enough so that it doesn't wave around in any breeze you might have that day, and you want a sunny day that makes a nice dark shadow from the plumb line. You'll see the direction of the shadow change as the day progresses. Hey, this is nothing more than a portable sundial that you can locate anywhere you want! At the appointed time, the shadow will bear due north. So at that time, you line up your long ruler on the ground right along the edge of the shadow and you have your bearing.

Simple, eh? Well I did gloss over one point, when I said, "At the appointed time." In general, that's noon local time, but not exactly. You actually need to make three adjustments to that time.

### Standard time correction

Noon local time really means noon local *standard* time. So if we're currently on daylight savings time, then noon standard time is really 1:00 pm local time. After all, the sun doesn't know about daylight savings time.

### Longitude correction

The time for each time zone is actually set at a particular meridian of longitude. EST is based upon the 75<sup>th</sup> meridian, CST on the 90<sup>th</sup> meridian, MST on the 105<sup>th</sup> meridian, and PST on the 120<sup>th</sup> meridian.

If you're standing right at a longitude of 120 degrees, the sun will bear due south at noon. But if you're a little east of that longitude, the sun will bear due south a few minutes earlier, and if you're west of that longitude, the sun will bear due south a few minutes later. So you need to adjust for that.

For every 15 arc minutes of longitude difference from the reference time zone meridian you need to add or subtract one minute to get the appointed time. If you're east of the 120<sup>th</sup> meridian, you'd subtract the time adjustment. If you're west of the 120<sup>th</sup> meridian, as we are, you'd add the time adjustment.

For example, take a longitude of 122 degrees, 10 minutes and 11 seconds west (the PAARA Field Day site in recent years.) We can round this to 122 degrees and 10 minutes, which is 130 minutes of arc west of the 120<sup>th</sup> meridian. So this longitude requires a time adjustment of nine minutes (130/15 = 8.67) or 8'40" to be exact.

So when we're on standard time, we'd mark due north from the shadow of the plumb line at 12:09 pm. When we're on daylight savings time, we'd mark due north from the shadow of the plumb line at 1:09 pm. Well, actually, not quite! There's one other adjustment to make, as follows.

### Date correction

Here's the final rub. The earth is not in a circular orbit around the sun; it is elliptical. So it gets a little closer to the sun or further from the sun, depending upon the season. When it is closer to the sun, the earth speeds up a bit along its orbit and when it is further from the sun it slows down a bit. When it's further along in its orbit than usual, your longitude has to rotate a little further to point at the sun. So the time at which it shines exactly due south varies according to the season.

The correction for this varies from +13 minutes to -16 minutes. Just look up the date you plan to mark your true north in Table I and apply the corresponding correction to your appointed time. For example, if we do this on June 20<sup>th</sup>, we would be on daylight savings time. So the appointed time for marking due north would be 1:09 pm, plus a date correction of one minute from Table I, for a corrected time of 1:10 pm. We'd start getting the tripod and plumb line setup around 1:00 pm and at 1:10 pm we'd mark the location of the shadow of the plumb line for our due north bearing. Of course to make sure we had an accurate time, we could use our WWV clock that is synched to the WWV time signal. As soon as we saw the digital readout click over to 1:10 pm we'd mark the shadow and that gives true north. It takes a bit of calculation to arrive at the correct time to use, but once that is done, the marking of true north becomes very easy.

**TABLE I: THE EQUATION OF TIME**  
 Date correction to apply to noon to get true north

JAN 1	+4	APR 10	+1	JUL 10	+5	OCT 10	-13
10	+8	20	-1	20	+6	20	-15
20	+11	30	-3	30	+6	30	-16
30	+13						
FEB 10	+14	MAY 10	-4	AUG 10	+5	NOV 10	-16
20	+14	20	-4	20	+3	20	-14
28	+13	30	-3	30	+1	30	-11
MAR 10	+10	JUN 10	-1	SEP 10	-3	DEC 10	-7
20	+8	20	+1	20	-7	20	-2
30	+4	30	+4	30	-10	30	+3

Pick a sunny day and try this at your home. You will be amazed at how simple it really is. Take your tripod, plumb line, ruler, and WWV clock to your next Field Day and use this procedure to get your antennas pointing correctly for the best propagation.

~Ron Chester, W6AZ





## BOARD OF DIRECTORS MEETING.

March 9, 2005

The PAARA Board of Directors meeting was held at the Palo Alto Red Cross bldg. Construction work for next door transportation center was still limiting the parking availability. The meeting started at 19:45 hours.

There was NO quorum, so only discussions were taking place. (Club officers, board members and directors please take note of this.)

In attendance were:

President: **Terry Finn AF6TF**

Secretary: **Adrianus Schrauwen W6AJS**

Treasurer: **Ron Chester W6AZ**

Boardmembers: **Gerry Tucker N6NV** and **Rolf Klibo N6NFI**

Membership: **Vic Black AB6SO**

Badge Coordinator: **Dough Teter KG6LWE**

### SECRETARY and TREASURER REPORTS:

**Adrianus Schrauwen** reported there are still a lot of members that have not renewed. The minutes of last month PAARA Board meeting was accepted by those present. **Ron Chester** reported on the status of club finances. He was pleased to see the number of members that had renewed, with the assistance received from "MEMBERSHIP"

### OLD BUSINESS:

**Bylaws revisions:** There was no action taken by the "Bylaws revision Committee", because additional research before final draft is needed.

### Field day:

**Ron Chester**

**Gerry Tucker** reported on the 3 various sites we were on. He will be talking to the people in Menlo Park. **Ron Chester** discussed the e-mail he send around regarding field day items to be considered and decided on at this board meeting. Time is of the essence; therefore a committee was formed consisting of **Gerry Tucker, Ron Chester, Vic Black and Dough Teter** to go ahead with planning and coordination. They will meet in near future to finalize plans for the field day. Discussions about field procedures and the use of login software operator, and emergency standby generator followed.

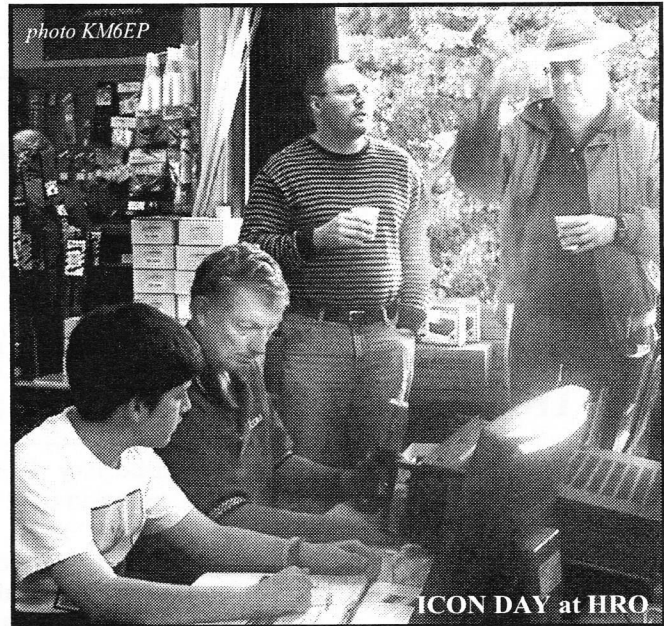
### NEW BUSINESS

**Terry Finn** has contacted a Grant writer and plans to continue with research to obtain a grant for the PAARA.

The meeting was adjourned at 21:10 hours

*Respectfully submitted by PAARA Secretary*

*Adrianus Schrauwen W6AJS*



### SEMINAR & EXAM: AMATEUR ("HAM") RADIO

Amateur Radio Operator ("HAM") Training: Get your radio license in One Day & become an emergency communications resource for your community.

WHAT: a one day study session for Technician or General theory, followed by FCC testing. (No Morse Code).

WHEN: Saturday, April 9, 2005, 8:00am - 5pm

WHERE: Manteca, CA

FEE: \$30.00

REGISTER: [www.sanjoaquines.org](http://www.sanjoaquines.org)

CONTACT: David Coursey: (209) 835-6893; [david@coursev.com](mailto:david@coursev.com)

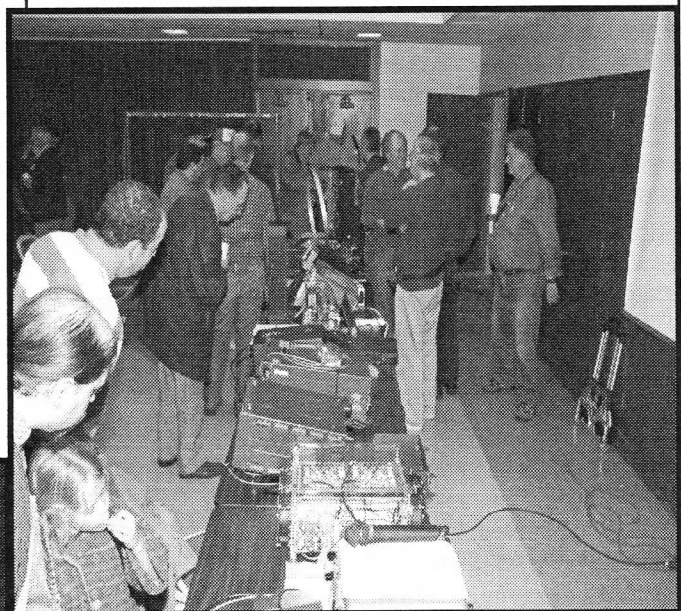
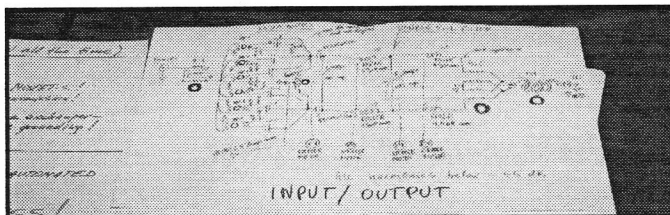
This session is produced by:

Bay Area Educational Amateur Radio Society - member W5YI VEC

Web site: <http://baears.org/>

Sponsored by:

College of San Mateo Electronics Technology Department (<http://gocsm.net/>)



March Show & Tell



# PAARA

## April 1<sup>st</sup> Meeting and Raffle

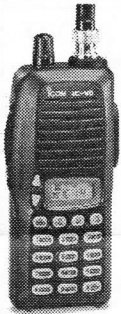
PAARA “The Friendliest Club Around”

Palo Alto Amateur Radio Association, Inc. [www.paara.org](http://www.paara.org)

### Raffle Prizes:

**FIRST PRIZE:** Alinco DJ-C7T 144 / 430MHz FM Dual Band HT

Revolutionary “New-Generation” credit card size HT  
SMA antenna port  
Lithium-Ion “snap in” battery pack  
Smoother and louder output  
Split-operation, cable-cloning, 200 memories  
\$169.95 value “HamStop, thanks for the help.”



**SECOND PRIZE:** Icom IC-V8 2m/5.5W/HT

With battery and drop-in charger  
107 Total Memory Channels  
Fast Scanning - 40 Channels Per Second  
PC Cloning Capability  
\$119.95 value “HRO, thanks for the help.”

**THIRD PRIZE:** Heil “The Traveler” Headset and cable for your radio

**FOURTH PRIZE:** Power Panel UPS / AC to Battery Switcher \$59.95 value /  
donated by HamStop

New and Improved “Traveler” headset with boom microphone  
A 3-way in-line pendant switch with PTT, Up frequency and DOWN frequency  
Cables for VHF mobile, HF rigs, and HTs  
The First High Performance Headset for HTs  
\$89.95 value “HamStop, thanks for the help.”



**FIFTH PRIZE:** Powerex Worldwide travel charger with Four NiMH batteries

**SIXTH thru EIGHT PRIZES:** ARRL 2005 Handbook with CD, SMA Flexible HT Antenna,  
1-year subscription to World Radio

Since February 2003, 62 Radios, including a YAESU FT-847, an ICOM 706 MK IIG, and Two  
Elecraft KX1’s have gone to Fellow Hams.

Enjoy our fabulous speakers, free refreshments, chatting with your friends, and the  
chance to take home an unbelievable prize. See you at Round Table after the meeting!

Contact:

Kyle, KG6MSK and Ian, K6IAN, “Two of PAARA’s youngest members” for tickets at the meeting.

Special Thanks to:

Bob, Howard, Mark, Rick, and everyone at HRO for their continued SUPPORT!

~K6AK Jim

## Wear Green

His name was Fleming, and he was a poor Scottish farmer. One day, while trying to make a living for his family, he heard a cry for help coming from a nearby bog. He dropped his tools and ran to the bog. There, mired to his waist in black muck, was a terrified boy, screaming and struggling to free himself. Farmer Fleming saved the lad from what could have been a slow and terrifying death.

The next day, a fancy carriage pulled up to the Scottsman's sparse surroundings. An elegantly dressed nobleman stepped out and introduced himself as the father of the boy Farmer Fleming had saved.

"I want to repay you," said the nobleman. "You saved my son's life."

"No, I can't accept payment for what I did," the Scottish farmer replied waving off the offer. At that moment, the farmer's own son came to the door of the family hovel.

"Is that your son?" the nobleman asked.

"Yes," the farmer replied proudly.

"I'll make you a deal. Let me provide him with the level of education my own son will enjoy. If the lad is anything like his father, he'll no doubt grow to be a man we both will be proud of." And that he did.

Farmer Fleming's son attended the very best schools and in time, graduated from St. Mary's Hospital Medical School in London, and went on to become known throughout the world as the noted Sir Alexander Fleming, the discoverer of Penicillin.

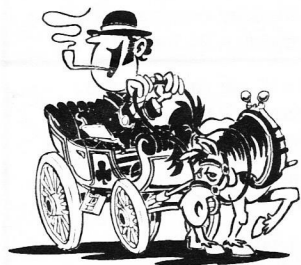
Years afterward, the same nobleman's son who was saved from the bog was stricken with pneumonia.

What saved his life this time? Penicillin.

The name of the nobleman? Lord Randolph Churchill. His son's name?

Sir Winston Churchill.

Someone once said: What goes around comes around.



Work like you don't need the money.

Love like you've never been hurt.

Dance like nobody's watching.

Sing like nobody's listening.

Live like it's Heaven on Earth.

AN IRISH FRIENDSHIP WISH: You had better send this back!! Good Luck!

I hope it works...

May there always be work for your hands to do;

May your purse always hold a coin or two;

May the sun always shine on your windowpane;

May a rainbow be certain to follow each rain;

May the hand of a friend always be near you;

May God fill your heart with gladness to cheer you.

~ Stanley Towle

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### Project OSCAR Contact Failures - Fixed

The site host for Project OSCAR recently made unannounced changes in the mail server to as an anti-spam measure. This resulted in the failure of the site to forward Contact Form information to Project OSCAR.

We have resolved the issue and the Contact Form is now working properly.

I apologize for any inconvenience this may have caused. If you have requested a subscription to the Satellite Beacon or have tried to contact Project OSCAR for presentations or event support please re-submit your request. 73,

~Emily

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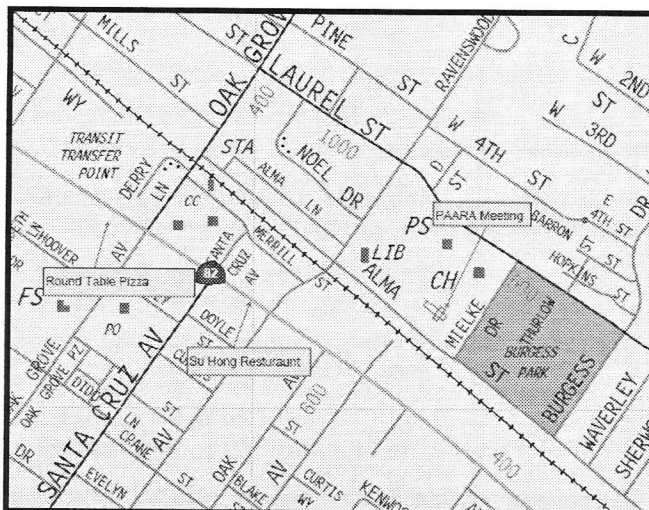
**The Real Big ONE (March Back Cover)**

This was a picture of a catfish that a guy recently caught at Lake Texoma. According to the news, he was fishing from the shore with a 20 pound test line. When he realized what a huge fish he had caught, he stayed in the water with it and kept it close to shore with his hands. He used his cell phone to call a friend and tell him to bring a scale. The friend got there and the scale topped out at 100 pounds. They took it to the nearby Bait shop and weighed it there. It weighed 121 pounds!

Luckily a Game Warden was there and called the Athens Freshwater Fisheries Center and asked them if they wanted the fish. They sent a 'live truck' to the site and brought the fish safely to Athens. They are getting it ready for the public to view. The paper said that it would be two to three weeks before they'd release into the public tank.. They estimated that the 121 pound catfish was about 27 years old!

~Fred Steward

*(PAARAgaphs published the picture last month, March, for fear it might be misunderstood as an April Fool Joke...ed)*



**Directions to PAARA meeting:**

<http://paara.org/meetings/>

**PAARA Web/WAP site**

<http://paara.org/>

**HAM FEST**

at

**ANGELINO'S RESTAURANT**

3132 Williams Road, at Winchester Blvd.

2:00 PM

Second Sunday each month, starting April 10.

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

**PAARA BADGES**

To order one, contact our Badge Coordinator:

**Doug Teter, KG6LWE**

[dteter@wewi.com](mailto:dteter@wewi.com)

**Palo Alto Amateur Radio Association**

P.O. Box 911, Menlo Park, California 94026-0911

Club meetings are on the first Friday of each month, 7:30pm at the Menlo Park Rec Center, 700 Alma Street, Menlo Park, CA.

Radio NET & Swap Session every Monday evening, at 8:30pm, on the 145.230 –600 MHz repeater, PL tone off.

Membership in PAARA is \$18.00 per calendar year, which includes one subscription to PAARAgaphs \$6 for each additional family member (no newsletter).

Make payment to the Palo Alto Amateur Radio Association, P.O. Box 911, Menlo Park, CA 94026-0911

Permission is granted to reprint from this publication with appropriate source credit.

**PAARA Radio NET**

and Swap Session  
 every Monday evening  
 8:30pm local time

on the

**145.230 –600 MHz repeater**

*PL tone off*

*control operators:*

Week	Operator
1 <sup>st</sup> Mon.	Pink Foster, KG6ILA
2 <sup>nd</sup> Mon.	Peter Sheerin, K6WEB
3 <sup>rd</sup> Mon.	Peter Sheerin, K6WEB
4 <sup>th</sup> Mon.	Bill Rausch, AA6PA
5 <sup>th</sup> Mon.	<b>Volunteer!</b>



*Food will be served at 6:00 sharp, so guests will be on time for the PAARA meeting. Those arriving late will be responsible for their own food order.*

**6 pm—at Su Hong Restaurant**  
 1039 El Camino Real  
 Menlo Park

*across from Kepler's Book Store  
 on El Camino Real  
 Walking distance from Caltrain!*







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 CROISSANTS • MUFFINS • PASTRIES  
 BREAKFAST • SANDWICHES • BURGERS  
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 are **FREE** to members




Howard at HRO says: "HAM accessories  
 and gift certificates are available at  
 HRO. Congratulations to PAARA on a  
 successful year."



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1. Not-for-profit ads by association members for ham-related items and wants. No cost for business card-size ads (additional space at \$2.50 per business card size).
2. For Profit organizations and/or individuals: \$5-business card size, \$25-half page, \$50 full page or back cover.

These fees may be reduced or waived in exchange for a valuable consideration that is given to the Association or its general membership. Such consideration must be in addition to any existing arrangements with the association. The PAARAgaphs editors reserve the right to reject any ad deemed to be not in the best interest of the Association.

All fees payable in advance by the year with "scanner-ready" copy or text-only ads. Give payment and copy to Terry Finn, AF6TF

