

# PAARAgraphs

Celebrating 61 years as an *active* ham radio club—*Since 1937*  
Newsletter for the Palo Alto Amateur Radio Association, Inc.



## CALENDAR

- Jan.....8, **PAARA Meeting**, 7:30  
Menlo Park Recreation Center  
700 Alma Street, Menlo Park
- Jan.....13, **PAARA Board Meeting**, 7:30  
Red Cross Bld., 400 Mitchell Ln., Palo Alto
- Jan.....14, **PAARA Winter Party**
- Feb.....5, **PAARA Meeting**, 7:30
- Feb.....10, **PAARA Board Meeting**, 7:30



## PROGRAM

January 8, 1999  
7:30 P.M.

**Speaker:**  
**Eric Schwartz, WA6HHQ**

**“EleCraft”**

PAARA Radio NET every Monday evening at 8:30 P.M., local time  
on the 145.230 -600 MHz repeater, PL tone off

## PRESIDENT'S THOUGHTS

—**Andreas Junge, AD6FQ**



Thank you for your confidence in me by electing me to be the president.

First I want to thank **Dave Bailey, WS6W** for the great job he did last year in his function as Vice President and acting President of PAARA. It certainly is a lot of time and effort to do both duties. I will have to work hard to match his example. Dave is leaving California to take on a new job on the East Coast. I wish him well and hope he will be able to stay in contact with us.

I am also looking forward to working with our new VP, **Jon Zweig, AD6FX** and Secretary **Dave Rice, W6NUC**. Both are very enthusiastic about Ham Radio and like to operate. Dave and I have spent many hours working DX from our cars as part of the PAARA Mobile HF SIG. By now he has about 86 countries confirmed – all of them mobile. Jon loves CW and recently discovered QRP. It bothered him, not knowing what was going on in his Radio, so he bought a QRP Transceiver Kit and assembled it. Both have the same philosophy: Never stop learning and have fun operating.

I do not want to give away too much but we have a couple of good speakers for our club meetings in the pipeline already. **Steve Stuntz, K6FS** came up with the idea of a special event station for the senior members of our club. Here is the catch: You have to be 75 or older to operate the station. Let me know what you think about it and please contact me if you would like to help or operate.

Well, we also depend on YOU, the members, to make the next year a successful one for PAARA. I hope we can count on you, to give us a hand.

See you at the meetings!

73, Andreas, AD6FQ

See **BY-LAW** amendment  
to be voted on at the January meeting ( page 8)

## Miscellaneous Dates

**Flea Market at Foothill** (info at: <http://joslin.com/FleaMarket>)  
Schedule will return in Spring '99

**PAARA** Palo Alto Amateur Radio Association  
meets 1st Friday 7:30 each month, Net 145.230 each Monday 8:30,  
contact: Dave Bailey, WS6W 408 730 5215

**EMARC** Electronics Museum Amateur Radio Club  
meets 4th Friday 7:30 each month,  
contact: Sheldon Edelman 650-858-2176, Edelman@richochet.net

**NCDXC** Northern California DX Club  
meets 2nd Friday 7:30 each month, repeater for member info 147.360, Thur  
8:00PM, contact: Bob Mammarella KB6FEC 408 729 1544.

**NorCalQRP** Northern California QRP Club  
meets 1st Sunday each month,  
contact: Jim Cates 3241 Eastwood Rd., Sacramento, CA 95821.

**Perham Foundation,**  
contact: Jerry Tucker WA6LNV 650-961-3266

**SPECS** Southern Peninsula Emergency Communication System  
meets each Monday 8:00PM on Net 145.27, 224.36, 440.80 MHz  
contact: Mike Hastings KB6LCJ, 408-243-6745 or 408-249-6909.

**SCARES** South County Amateur Radio Emergency Service  
meets 3rd Thursday 7:30 each month, San Carlos City Hall.  
Net is on 144.45 & 444.50 (PL-100) 7:30 Monday evenings.  
contact: Dick Collins K6ANN 650-593-8952

**SCCARA** Santa Clara County Amateur Radio Association  
Operates W6UU repeater 146.385+ Nets: 2m, W6UU, 7:30 Mon; 10m,  
28.385, 8:00 Thur. meets 2nd Mon each month.  
contact: Jack Ruckman AC6FU

**SVECS** Silicon Valley Emergency Communications  
Operates WB6ADZ repeater (146.115 MHz+)  
contact: Lou Stierer WA6QYS 408 241 7999

**WVARA** West Valley Amateur Radio Association  
operates W6PIY repeater 147.39+, 223.96, 441.875, 1286.2  
meets 3rd Wed every month.  
contact: Glen Lokke Jr. KE6NBO at 408 971 8626, or glokke@pacbell.net

### Disaster Services,

**PALO ALTO CHAPTER, American Red Cross**  
Meets 3rd Wed. each month 7:30PM,  
HF, packet, BBS, ATV, OSCAR Gateway, NASA satellite,  
contact: Alan Ball 650-688-0423.

**SAN JOSE CHAPTER, American Red Cross**  
contact: Scott Hensley KB6UOO, 408 249 7093, fsh@richochet.net

**VE Exams,** 3rd Saturday each month, 11AM, 145.23- PL=100Hz  
American Legion Hall, 651 El Camino Real, R.C.  
contact: Joe KB6OWG.



# CONGRATULATIONS TO PAARA 1999 OFFICERS & DIRECTORS

## Palo Alto Amateur Radio Association, Inc. PO Box 911

### Menlo Park, CA 94026

President	Andreas Junge KF6NEB.....	(650) 233 0843
Vice President	Jon Zweig, AD6FX.....	(650) 324 8751
Secretary	Dave Rice, W6NUC.....	
Treasurer.....	Doug Schliebus, K1DIT.....	(650) 851 0727
Membership*.....	Vic Black, AB6SO.....	(650) 366 0636
Trustee/Property/Badges..	Fred Canham, K6YT.....	(650) 948 9238
ARES Officer.....	Lily Anne Hillis, N6PGM.....	(650) 325 5484
Club Historian.....	Steve Stuntz, K6FS.....	(650) 322 4952
Advertising.....	Bob Korte, KD6KYT.....	(650) 595 1842
Webmaster.....	Andreas Junge AD6FQ.....	(650) 233 0843

\*New Committee 12/98

### Board of Directors

Charles Grandjean, WD6FAF	(408) 739 5185	'00
John Buonocore, KD6ZL	(650) 366 1658	'99
Terry Conboy, N6RY	(510) 944 5388	'99
Steve Stuntz, K6FS	(650) 322 4952	'99
Doug Schliebus, K1DIT	(650) 851 0727	'00

(see "Calendar" for Board meeting times, visitors welcome)

### PAARAgaphs Staff

Editor.....	Wally Porter, K6URO.....	(650) 494 7038
Database.....	Don Trask, KF6JMQ.....	(408) 251 6494

**PAARAgaphs e-mail address: [wmporner@aol.com](mailto:wmporner@aol.com)**

Submit material for PAARAgaphs by the 15th

**PAARA Website <http://www.qsl.net/paara/>**

## 1999 PAARA DUES

Some members still owe '97, '98 dues. See your PAARAgaphs mailing label.

**\$12 for full membership**

\$6 each for additional family member same address

One copy of newsletter

payable to PAARA and mail to:  
**PAARA, Box 911, Menlo Park, CA 94026**

or to:

**Treas. Doug K1DIT**

(be sure to include names and calls of all members)

PLEASE include a completed copy of  
**MEMBERSHIP FORM**

(The form was in Oct. PAARAgaphs and available at PAARA meetings)

# THANKS TO PAARA OUT GOING OFFICERS

**Vice President Dave Bailey, WS6W**  
**Secretary Andreas Junge KF6NEB**  
**Director Vic Black, AB6SO, Past Pres**



## WEB WANDERINGS

de Vic Black, AB6SO

Do you live in a condo or apartment and can't erect a full size, permanent HF antenna? Or maybe you've been looking for a lightweight, HF beam for portable use. Consider using Hamsticks to build a custom antenna to fit your needs.

Hamsticks are inductively loaded verticals with a radiating whip on top.

With quick disconnects at the base of each Hamstick, you can give a quarter turn twist by hand to attach the antenna to its mount, or to dismantle it for storage, in less than a minute. Valor Pro-Am makes a similar antenna with a collet at the top of the loading coil so you can further dismantle and reassemble it using only a small wrench without measuring the whip extension each time.

The simplest antenna would be a Hamstick with quarter wave counterpoise wires for a ground system. If you have a metal guard rail on a balcony, you could use a CB "mirror mount" to hold the antenna and use the rail for ground. HRO sells antennas, quick disconnects and dipole adapters at reasonable prices. Radio Shack sells similar CB mirror mounts for attaching antennas to trucks. You may even be able to find them at "pick your part" auto dismantlers.

**Stan Cooper K4DRD** used a Hamstick dipole on an apartment balcony in San Mateo. The system can be easier and cheaper to build than buying special, thin wall telescoping aluminum tubing for a standard rotatable dipole. It can be mounted horizontally or vertically. It's not as efficient or as broad banded as a full size dipole, but Stan found the high Q design quite satisfactory using QRP since he tuned it for the QRP calling frequency. He could sneak out at night, erect the antenna to do some work and disassemble it in a few minutes so the neighbors wouldn't be upset by visual pollution. What they don't see won't upset them.

The next logical extension to the idea is a small, lightweight portable Yagi-Uda beam using additional Hamsticks. Add a director and reflector to your dipole to create forward gain and increase the front/back ratio. Current, coupled by induction from the driven element to the parasitic elements, re-radiates later in time and produces constructive interference off the front of the beam and destructive interference off the back of the beam because of phase differences. Element spacing is determined by the distance radio waves travel from the driven element to the parasitic elements to create phase differences.

Each Yagi design is a compromise among forward gain, half power beam width and front/back ratio. These parameters vary as the element spacing changes. Element spacing can vary from about 1/8 to 1/4 wavelength. It's possible to use closer spacing, but the drive impedance drops to a very low level and makes transmission line matching more difficult, although a hairpin match may handle it.

HF hams normally choose close element spacing to achieve

narrow band width and high forward gain whereas commercial users and VHF contesters often use longer booms to achieve moderate gain with higher front/back ratios and broader half power beam widths. Tune the driven element to resonance and make the director about 5 - 6% shorter and the reflector 5 - 6% longer than the driven element.

Credit for the idea of building a Hamstick Yagi goes to **Rick Dorsch NE8Z** of Hamburg, MI. He mentioned it to **Russ Wilson VE6VK** who implemented the design in Calgary, Alberta. Russ, an experimenter, likes mobile and portable operation, including IOTA, using CW, SSB and Pactor on HF and 2 meters. Russ describes a 3 element 20 meter mini-beam with design data, specs and photo on his web page at <http://www.eng.mu.edu/~usi/hamstick.html>. The antenna uses three boom sections of 1-1/4 inch diameter aluminum tubing, each 4 feet long, for easy storage and transport. The boom can be re-assembled using internal plugs, or in the case of a square boom, external angle stock at the joints. Square tubing might be best if you build the antenna using hand tools.

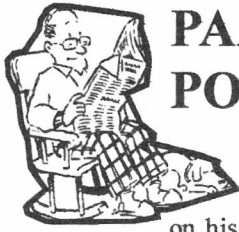
Russ mounted a 40 meter Hamstick on top of the beam to provide a "double whammy". The vertical uses the Yagi and its support as a small ground plane. Two feedlines mount to the supporting mast. The longest element (reflector) is 15 feet long, tip to tip, mounted on the 12 foot boom. The 3 element 20 meter beam, 40 meter vertical, balun and feedlines weigh about 12 pounds in a storage tube.

Maybe this idea will get the creative juices flowing in our membership. Six or ten meters would be a good start. **Chip Angle N6CA**, who has worked Hawaii on 18 bands (!), reports that "Recent surveys of Alinco, Kenwood, Yaesu & ICOM indicate that more than 30,000 radios which contain six meters have been sold in the past few years alone". Who will be the first to build a 2 element portable VE6VK Hamstick Yagi for SSB on 6 or 10 meters with a vertical Hamstick on top for FM use?

I stumbled across the No-SSB International group, the answer to the No-Code International group. Here are a couple of their well conceived, non emotional, basic doctrines: "Anywhere you find Single Side Band, you also find Mr. Splatter. Mr. Splatter is not our friend. NSI members don't like Single Side Band. It sucks." For some light hearted fun, go to <http://www.qsl.net/kh2d/nosssb.html>. Also check sister clubs: No-FM International, No-RTTY International, No-SSTV International, No-QRP International and No-QRO International at <http://www.qsl.net/kh2d/home.html>. Join for free if you would like to become a member. If you don't find these clubs to your liking, they'll start another just for you. It's possible that they induct most new members on April 1. The clubs, headquartered in high tech Guam, are growing fast and some already have as many as two members. ☺☺☺ —**AB6SO**

*Youth is when you're allowed to stay up late on New Year's Eve. Middle age is when you're forced to.*

—Bill Vaughn



## PAARA PONDERINGS

de VIC BLACK, AB6SO

**Ron Carmichael KQ6RS** scored 100% on his Extra Class written exam Nov 21. The only hurdle now is the 20 wpm CW test. That will come very quickly after he gets on the air daily for 30 minutes or so. Congratulations, Ron.

Many Hams reported extremely gratifying results from meteor scatter during November's Leonids shower. Meteor scatter usually uses high speed CW since burns are few, far between and short lived. This year's Leonids produced an unusually large number of exploding fireballs with ionized trails lasting up to 9 minutes. This allowed 10 - 12 SSB QSO's per burn in some cases. The 432 MHz DX record may have fallen as **Patrick Coker N6RMJ** in Lancaster, CA worked **Arliss Thompson W7XU** in South Dakota at 2036 km, according to The ARRL Letter Online. **Larry Lambert N0LL** reports working Vermont on 2 meters over 1400 miles from his Kansas home. **Bill Mitchell K0WLU** used only 90W into a Cushcraft 17B2 Yagi to work nearly 125 stations in 99 grid squares on 2 meters from Minnesota. That's almost VUCC in one non-contest evening!

MIR cosmonauts hid in the Soyuz escape module during the shower as a precaution. The only visible damage was from a previous minor fender bender. (Remember, objects in the mirror are closer than they appear). Incidentally, Astronaut **Mike Foale KB5UAC** relied on Ham Radio to report the status of Mir and the crew's welfare after the Spektr module collided with the space station in June, 1997.

Experienced watchers reported the Leonids peak occurred 14 - 19 hours earlier than predicted with QSO's on 6 meters through UHF. European and Middle Eastern viewers reported up to 250 meteors/hour with Asian reports of 490/hour. This was a major shower rather than a storm so next year will probably be the long anticipated storm. Heads up next November!

The CA Legislature attempted to outlaw "predicting the future" in order to protect consumers from fortune tellers, even though their customers didn't want to be protected. The idea died when it was realized that the proposed legislation would outlaw stock market trend analysis, WWV propagation forecasts and National Weather Service and NOAA weather predictions. Whew! That was a close one. I wouldn't be able to predict winter weather if that law had come to be.

A year ago I predicted a wet winter even though we had had very little rain by December. El Nino finally arrived with a vengeance during January and February causing Pacific Ocean surface temperature rises of up to 12 degrees F and subsequent record rainfall, floods and land slides in Northern CA. It was important for Hams to be prepared with extra batteries, foul weather gear and other equipment needed to protect ourselves and to help others. 1998 winter storms pounded San Francisco with more than 47 inches of rain (27 more than usual) with

most arriving during only a few weeks. Los Angeles more than doubled its normal 15 inches of rain. The 1998 El Nino was described as the most powerful of the 20<sup>th</sup> century. Weather was truly "unusual, as usual".

By Spring, naughty El Nino's little sister La Nina promised more weird weather as ocean surface temperatures began to swing from warm to cool. Pacific weather buoys, anchored to the sea floor, monitor surface temperatures and relay information to data processing centers. By July some buoys reported temperatures dropping from above average, through normal and then 5 - 6 degrees F less than normal. Equator surface temperatures dropped 15 degrees F in only a few weeks.

What's in store for us this winter? We can probably expect above average precipitation and below average temperatures in the Pacific Northwest, Midwestern and Great Lakes states including OR, WA, ID, WY, MT, ND, SD, MN, MI, WI, IL, IN, OH and PA. Expect heavy snow there. Look for below average precipitation and above average temperatures in the Pacific Southwest and eastward through Southern CA, Southern NV, AZ, NM, TX, LA, MS, AL, GA, FL, NC and SC. This could bring unseasonable drought and wild fires to the W4/W5 sunbelt.

In between the extremes, weather may be pretty much average for Northern CA, Northern NV, UT, CO, NB, KS, IA, MO, AR, OK, KY, TN, VA, WVA then up through NY, NJ and the New England States. Be ready, if called on, to help with weather related emergencies in affected areas or any minor local flooding that may occur in Northern CA. Keep abreast of La Nina related weather at <http://elnino.noaa.gov/lanina.html>.

A treat for Northern CA Hams may be VHF tropo ducting caused by barometric highs extending from Northern CA eastward and southwestward toward Hawaii. Winter and spring VHF contests may be especially enhanced and can be enjoyed by all classes of licensees without a major equipment investment. An example will help to illustrate the point.

Once while I photographed the Winter Nationals Drag Racing Championships, a driver damaged his engine on his first practice run. He raced on a tight budget and was depressed to think that he was out of the competition until a thorough reading of the rules revealed that one racing class would have few entries and wouldn't require an expensive car in order to have some fun. A quick trip to a rental agency secured a 4-door American Motors Rambler Brougham Sedan with automatic transmission. Decals were stuck on with cellophane tape so the driver was eligible for "contingency" prize money in case he placed. By the end of the weekend the car went back to the rental lot with about 5 miles added to the odometer. The driver returned home several thousand dollars richer in prize money and a National Champion in the obscure V Gas Automatic Class.

Techs and Tech Pluses can enjoy VHF contests, but so can Novices on the 222MHz and 1.2 GHz bands. Because the bands are so little used, it's possible to win your section, especially if you enter FM QRP with an HT. Prepare now and give

(Continued on page 8) Ponderings

## Amateur Radio Emergency Service Information Sheet

Town of Atherton & City of Menlo Park Section

### What is the Amateur Radio Emergency Service?

The Amateur Radio Emergency Service (ARES) is a group of Federally licensed Amateur Radio (slang = "ham radio") operators who volunteer their skills to assist public safety agencies in the event of a disaster or other incident. During calamities such as earthquakes and hurricanes, the Amateur Radio Emergency Service has typically been among the first to respond, filling the communications void left by downed telephone lines and power outages - quickly linking and coordinating relief efforts. These activities are an integral part of the purpose of Amateur Radio as defined by the Federal Communications Commission (FCC § 97.1(a); § 97.401(a)). Amateur Radio is very different from "C.B.": Amateur Radio operators must pass a Federal examination and be issued a Federal license, which grants them "operating privileges" - such as the right to use high power transmitters (over a thousand watts), different modes (such as voice, Morse code, and even television), and thousands of frequencies. Furthermore, those Amateur Radio operators who are members of ARES are trained in emergency communications (and related skills) and are Registered Disaster Service Workers (DSWs). Members of ARES have very diverse backgrounds - but share the common goal of assisting when called upon by their communities.

### How Does the Amateur Radio Emergency Service Assist Local Agencies?

In San Mateo County, the Amateur Radio Emergency Service is coordinated with the San Mateo County Sheriff's Office of Emergency Services (OES) and the South County Amateur Radio Emergency Service (SCARES). Statewide, Amateur Radio is integrated into the California Office of Emergency Services (CA OES) Auxiliary Communications Service (ACS) and the Standardized Emergency Management System (SEMS) (Cal. Code § 8607). In the event of a disaster, ARES Emergency Responders perform a number of tasks to assist local fire, law enforcement, and other public service agencies:

- **Back-Up Emergency Communications:** Most public service communications today are heavily reliant upon land-line telephone, cellular telephone, and fax systems to conduct routine operations. In disasters such as earthquakes (or even power-outages), these systems fail. Subsequently, police, fire, and other public service radio channels become rapidly saturated. ARES Emergency Responders are capable of providing such agencies with a complete back-up radio communications system with many additional channels. Furthermore, ARES is capable of using radio frequencies instead of phone lines to transmit computer data (through radio modems, a.k.a. "packet radio").
- **Inter-Agency Communications:** Most agencies have dedicated frequencies and radios that operate only on those frequencies. ARES members can be assigned to "shadow" key people at different agencies' operations centers and in the field to allow inter-agency communication when the agencies are not able to communicate through normal channels. Furthermore, because of the special frequency and power-output privileges Amateur Radio Operators have, direct links can be established to locations out of range of normal public safety radios (such as California State OES in Sacramento or FEMA in Washington, D.C.).
- **Health and Welfare Information:** ARES members can collect and transmit health and welfare messages to the Red Cross and out-of-area family members on behalf of emergency workers and people in the community, freeing personnel to

concentrate on priority matters.

- **Simulated Emergency Tests:** To maintain operator skill and to develop working relationships with the agencies they serve, ARES Emergency Responders participate in various disaster drills, exercises, and related activities.
- **Community Events:** In non-emergencies, ARES volunteers may assist local authorities by providing supplemental communications for various local events such as parades. ARES Emergency Responders also volunteer for special duty to supplement local agency operations.

### How Can I Get Involved?

The first step is to contact the South County Amateur Radio Emergency Service (SCARES) and arrange to be trained to get your Amateur Radio license:

Tel. 650-780-7145;

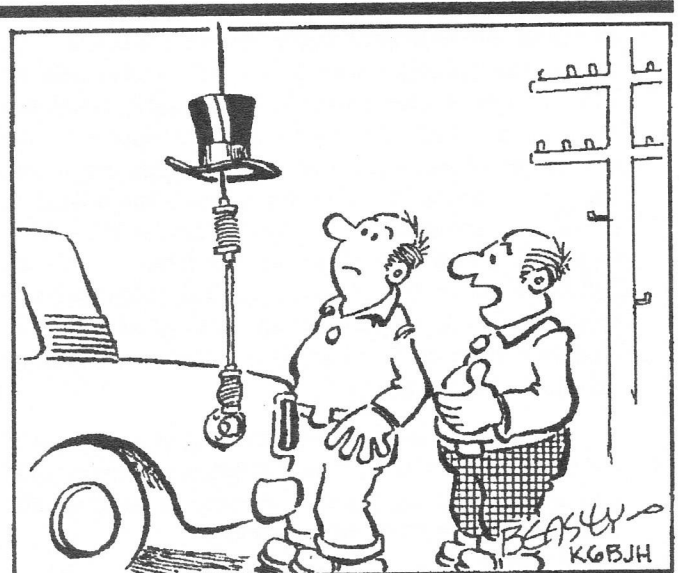
E-mail: [scares@hotmail.com](mailto:scares@hotmail.com);

Web: <http://www.belmont.gov/orgs/scares/>.

SCARES holds meetings every 3rd Thursday of the month at 7:30 p.m. in the San Carlos City Council Chambers. (If you already have a license: There is also a radio net: Mondays at 7:30 p.m. on 144.45 Simplex or 444.500 (-) PL 100.0. The San Mateo County Sheriff's Office of Emergency Services (OES) holds a net every Tuesday at 8:00 p.m. on 146.865 (-) PL 114.8 and 146.925 (-) PL 114.8.) Another local Amateur Radio group is the Palo Alto Amateur Radio Association (PAARA) which meets every 1st Friday of the month at 7:30 p.m. at the Menlo Park Recreation Center (E-mail: [paara@qsl.net](mailto:paara@qsl.net); Web: <http://www.qsl.net/paara/>).

**We need your help! Get involved in the Amateur Radio Emergency Service today!**

—from Ken Dueker, KB6BPM



I TRIED A TOP HAT LIKE YOU SAID, BUT IT DOESN'T DO ANY GOOD

A few members owe '98 membership dues, even a few owe for '97. Your mailing label indicates the year you are paid up to. PAARA dues are not great but they do help support the cost of PAARAgaphs. Send payment to our treasurer:

Doug Schliebus K1DIT, P.O. Box 911, Menlo Park, CA 94026

(Our new VEEP)

## 80 meter 3525 Khz interference

From: Brad Wyatt <bwyatt@arasmith.com>  
 To: w6iso@juno.com  
 Subject: 80 meter 3525 Khz interference matter  
 Date: Wed, 9 Dec 1998 05:58:45 -0800 (PST)  
 Message-ID: <199812091358.FAA00288@arasmith.com>

Hi all—I have been following the messages so am aware of the problem as currently defined. Unfortunately, until we can pin down some specific examples and situations my opinion is that we will have a difficult time.

I have a number of inquiries outstanding on this matter at the moment. Unfortunately, there have been no responses to date, but I am following actively.

I suggest the following actions ---

1. Let's try to isolate at least one specific case or situation which we can identify as to unit, serial number..... I have listened here, but do not hear the problem here..... but lousy qth .....

2. When we get that key specific situation isolated, then I suggest that the finder let us all know what specifics have been found.

3. I would suggest that we share that information especially with the ARRL Section Managers (so far W6RGG in East Bay and KD6MFM in Santa Clara Valley.... see page 12 of QST), Jim W6CF, and me so we can work this from the ARRL point of view.

4. Perhaps some one of you with the specific problem and with the device identified specifically might want to call Riley Hollingworth at FCC Washington, DC at the FCC/CIB Amateur Interference Hotline (202) 418-1184 to start the discussion with him. This number and the FCC interest in interference in the Amateur bands has been noted in QST, the Pacific Division Update for the last couple of months. You may have also noted that some FCC action on various situations has started to happen ..... something new. Before anyone calls Riley (K4ZDH), please have all the facts in hand .... let's not call him until the device(s) are specifically identified and located. I would suggest that you not call or fax to the local FCC office as they take their direction on all Amateur Radio matters from DC.

5. Please keep the information flowing so we can get to the bottom of all this. W6NL's information is very good and useful, but I believe that we need to have specific examples and situations to work with.

Good luck to all of us...

73, Brad Wyatt K6WR

(thanks to Kit Kohlmoos, W6ISO, for relaying the above)

## MESSAGE FROM THE VEEP

Jon Zweig, AD6FX)

Vice-President and Program Chairperson



I am very excited about working with Andreas and everyone else in the club next year. I have learned so much in the past year and am having a great time!!

We have some terrific programs lined up for 1999. The January speaker will be Eric Swartz WA6HHQ who, with Wayne Burdick N6KR designed the EleCraft K2 transceiver. This is the most exciting project that I have heard of in a long while. It is a beautifully designed rig, which can run QRP or QRO. Eric will tell us a little about the evolution of the K2 as well (I hope) about plans he has for other EleCraft projects.

We are looking forward to the "Old Timers' Special Event Station" which hope will be on the air in the Spring.

It would be fun to have monthly Saturday morning discussion series covering more technical aspects of radio communications. Some ideas for topics are ? How do you design a filter?

? How do phase lock loops work?

? How do antennas work?

? What is digital signal processing?

? What about oscillators?

? What do those propagation predictions mean and how do you interpret them?

Please let Andreas or me know if you have other suggestions or you might be able to lead the discussion on any of these!

—Best 73s De Jon AD6FX, Jzweig@sirius.com



# Dave WS6W, is leaving us

—See page 7—

## One Last Message From the Veep

We elected our 1999 officers and Board members at the December 4 meeting.

Our 1999 officers are:

President - **Andreas Jung (AD6FQ)**

Vice-President- **Jon Zweig (AD6FX)**

Secretary - **Dave Rice (W6NUC)**

Treasurer- **Doug Schliebus (K1DIT)**

**Charlie Grandjean (WD6FAF)** was elected to another two-year term on the Board.

I enjoyed being your vice-president and acting chairman this year. Being an officer of PAARA for the past four years was a terrific experience for me. I met a lot of great people. Right after the Winter Party, I will be moving to the Washington, DC, area to work at Booz-Allen and Hamilton. I will miss everyone in PAARA, but I will stay in touch and even send an article or two to PAARAgaphs. Happy New Year to all.

73, **Dave Bailey (WS6W)**, Vice-President and Program Chairperson

## PAARA 1999 WINTER PARTY



The 1999 Winter Party will be held on Thursday, January 14, 1999, at Capriccio (325 Sharon Park Drive, Menlo Park, where the Velvet Turtle used to be), 7:00 p.m. Menu selections will be:

*Minestrone soup*

*Capriccio salad*

*Capellini con pomodoro fresco (angel hair pasta with tomato and garlic)*

*Grilled salmon with saffron butter*

*Chicken piccata (chicken sautéed with capers, lemon, and butter)*

*Veal parmigiana (veal topped with mozzarella cheese and baked in a marinara sauce)*

*Coffee and no-host bar*

*Spumoni*

If you want to attend just contact **Andreas (AD6FQ)** or me. Order and pay at the restaurant - the cost will depend on what you order. The most inexpensive entree is the capellini (less than \$10, excluding tax and tip). If you sign upon or before the January 8 meeting, you will receive a 1999 Repeater Guide at the dinner. You must be present to receive it. —**Dave WS6W**

**GUESTS ARE WELCOME**

(Continued from page 4) Ponderings  
 it a try.

In October's Web Wanderings, I discussed the VHF/UHF Century Club (VUCC) Award for confirmed simplex or satellite contacts with stations located in a minimum number of 2 degree (long.) by 1 degree (lat.) Maidenhead grid locators. VUCC requires 100 confirmed grids on 6 meters, 2 meters or for satellite contacts. What if you don't want to collect wallpaper and just want the thrill of being on the DX end of a pile up?

At December's PAARA meeting, **Bill Rausch AA6PA** described working the "easy satellites" using hand held antennas and handy-talkies. A couple of days later I mentioned it to **John Mock KD6PAG** from Richmond. He described his passion for activating "rare" grid squares via VHF satellites using HT's and handheld homebrew wire log periodic dipole arrays. John describes his activities at <http://qsl.net/kd6pag>.

Surprise!! Some rare grids are local. How about a DXpedition to Santa Cruz? It's located in the north east corner of grid CM86 which is considered rare on VHF since the city is close in to the Santa Cruz Mountains with the rest of the grid in the Pacific Ocean. It's very difficult to access on VHF except by satellite. That makes it a very desirable VHF DX destination.

Give the "easy satellites" a try then get out your grid square maps and plan a local DXpedition for some real fun. Incidentally, the awards come as a natural result of the pileups you create. On HF there's an adage that says that the easiest way to increase signal strength is to use an exotic DX callsign. On VHF the easiest way is to operate from a rare grid square.

The ARRL reminds us that the Outgoing QSL Service fee increases to \$6/pound, or portion thereof, January 1<sup>st</sup>. US first-class postage increases to 33 cents. Send your Incoming QSL Bureau extra postage or fees for envelopes on file with 32 cent stamps. ☺☺☺

—Vic Black, AB6SO

### PAARA BY-LAW AMENDMENT

At the December Board meeting a motion was made and passed to amend PAARA By-Laws as follows:  
 (changes are underlined)

#### Amendment 1

Article II, Second sentence, shall read:

**Five members of the Board of Directors shall constitute a quorum for the transaction of business.**

Article III, shall read:

**The Board of Directors shall consist of the officers, four directors and the immediate past president.**

(January 8, 1999)

from PAARA By-Laws, 1996

### ARTICLE XII BYLAW AMENDMENT

The Bylaws of the corporation may be amended by a three-fourths vote of the membership in attendance after due notice as provided herein. Proposals for amendment shall be submitted in writing at a regular meeting of the corporation. Motion to amend the Bylaws of the corporation made at any regular meeting shall be mailed to each member at least fifteen days prior to the next regular meeting, at which time a vote will be taken. Votes of absentee members may be exercised by written proxy.

## ARRL Online

From ARRL Pacific Division: December 1998

### Foundation for Amateur Radio Scholarships Available:-

The Foundation for Amateur Radio, Inc., a non-profit organization with headquarters in Washington, D.C., plans to administer sixty-six (66) scholarships for the academic year 1999 - 2000 to assist licensed Radio Amateurs.

The Foundation, composed of over seventy-five local area Amateur Radio Clubs, fully funds ten of these scholarships with the income from grants and its annual Hamfests. The remaining fifty-six (56) are administered by the Foundation without cost to the various donors. Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2500 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs.

Clubs are encouraged to announce these opportunities at their meetings, in their club newsletters, during training classes, on their nets and on their world wide web home pages. Additional information and an application form may be requested by letter or QSL card from the following address. Applications must be postmarked prior to April 30, 1999.

FAR Scholarships  
 Post Office Box 831  
 Riverdale, MD 20738

Thanks, FAR.



**VE** session of December 19, 1998 was held again at the Veterans Building in Redwood City. All the regular examiners were there. We were honored with the help of **Gordon Girton, W6NW**, the head, head honcho of this area. Present were **Joe Horne Sr. KB6OWG**, **Al Montoya WB6IMX**, **Bill Sooman WB6UVO**, **Dan Curry WB6STW**, & **Ron Pantan W6VG**. The session was held in the bar, but very watchful eyes kept anyone from going behind the bar. Not too many applicants, guess the proposed regulations have slowed the applications until the ground rules are a fact. **Ron, W6VG**

**Bring a Show & Tell**  
 to the next  
**PAARA meeting**





Lud Indihar  
Store Manager  
**Excess Solutions**  
430 E. Brokaw Rd  
San Jose, CA 95112  
408 / 573-7045  
408 / 573-7046 Fax

We Buy & Sell EXCESS Inventory  
New Location!



605 SPAR DRIVE  
REDWOOD CITY  
CA 94065

(415) 593-2652  
HmOffice/Fax

(408) 534-4285  
V.M./Pager

**BOB KORTE**

RGK4U@aol.com

**LYNN JOHNSON ELECTRONICS**

*I want to buy Excess Electronics*  
Test Equipment, Vacuum Tubes, Ham  
Gear  
Legacy Electronic Equipment.

408-274-3559 VOC-FAX  
408-982-9311 warehouse  
Email, lynn@lyntec.com

966 Parker Court  
Santa Clara Ca 95050



**MICHAEL J. ALLISON**  
Principal Software Engineer

**AHHA! Solutions**  
4429 Guilford Place  
Livermore, CA 94550

510 447-5414  
kn6zt@amsat.org

**HALTEK**  
ELECTRONICS

**Chris Chalfant**  
Manager

1062 Linda Vista Avenue • Mountain View, CA 94043  
Telephone (415) 969-0510 • (408) 744-1333 • FAX (415) 964-6973

**PAARAgaphs Ad Rates**


PAARAgaphs accepts paid advertisements from non-members.  
(short personal ads remain free for members in good standing).

All ad rates listed are per issue only.

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 are for "scanner-ready" copy or text-only ads.



**PAARA PRIDE**  
wear your  
**PAARA Badge**  
to  
meetings, picnics, field days, winter parties, ham fests,  
flea markets, Pacificons...  
(if you need one, contact Fred, K6YT)

Join us for pre-meeting eyeball  
**QSO January 8th**  
gab & gobble

6 pm— at Su Hong Restaurant  
1039 El Camino Real, Menlo Park  
—across from Kepler's Book Store—



**PAARA** ☐ 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 Recreation Center, 700 Alma Street, Menlo Park, CA.
- Radio NET every Monday evening, at 8:30pm, on the 145.230-600 MHz repeater, PL tone off.

Membership in PAARA is \$12.00 per calendar year which includes a subscription to PAARAgaphs, \$6 for additional family members (no newsletter).  
Make payment to the Palo Alto Amateur Radio Association.  
Permission is granted to reprint from this publication with appropriate source credit.

# January 1999

Palo Alto Amateur Radio Association, Inc.  
**PAARAGraphs** Newsletter  
 P.O. Box 911  
 Menlo Park, California 94026



## INSIDE:

Calendar & Program	1
Presidents Thoughts	1
Miscellaneous Dates	2
1999 PAARA Election	2
Wanderings	3
Ponderings	4
Menlo ARES	5
80 Meter Interference	6
VEEP	6-7
Winter Party	7
VE	8
FAR Scholarships	8
By-Law Amendment	8

## FIRST CLASS MAIL

Korsak, Andy Paid Thru 98  
 VE3FZK  
 504 Lakemead Way  
 Redwood City, CA 94062-3919

### PAARA

Celebrating 61 years as an  
*active ham radio club*  
 Since 1937

**Local for the**  
**Who Hows How**  
**on the World Wide Web**  
 http://www.hamradio.com

**AMHERST, CA 92301**  
 9331 N. Escalante St.  
 (714) 532-2700  
**(800) 854-6046**  
 John M. Winkler, Mgr.  
 Near Overland

**BARBARA, CA 91506**  
 2492 W. Victory Blvd.  
 (818) 842-1786  
**(800) 854-6046**  
 Ken M. Winkler, Mgr.  
 Victory Blvd. at Buena Vista  
 1 mi. west 15

**OKLAND, CA 94608**  
 22710 Livingston St.  
 (510) 542-5177  
**(800) 854-6046**  
 Ken M. Winkler, Mgr.  
 1.800 at 2nd Ave. ramp

**SAN DIEGO, CA 92123**  
 5375 Kearny Villa Rd.  
 (619) 560-4900  
**(800) 854-6046**  
 Ken M. Winkler, Mgr.  
 Hwy 163 at Carmichael Mesa

**SUNNYVALE, CA 94086**  
 510 Lawrence Expwy.  
 (408) 736-9496  
**(800) 854-6046**  
 Ken M. Winkler, Mgr.  
 KCMHAMRADIO.COM

**NEW CASTLE, DE 19720**  
 1929 N. Dupont Hwy.  
 (302) 322-7092  
**(800) 844-4476**  
 Bob Winkler, Mgr.  
 Rt. 1295

**PORTLAND, OR 97223**  
 1515 W. Park Ave.  
 (503) 598-6555  
**(800) 854-6046**  
 Gary S. Winkler, Mgr.  
 Hwy 99 & K. 217

**DALLAS, TX 75223**  
 1500 S. Stemmons  
 (214) 742-7373  
**(800) 444-9476**  
 Jim K. Winkler, Mgr.

**ATLANTA, GA 30340**  
 6071 Buford Highway  
 (404) 444-7827  
**(800) 444-7827**  
 John K. Winkler, Mgr.  
 Dawson, 1 mi. no. of I-285

**WOODBRIDGE, VA 22191**  
 11681 Blvd. America Dr.  
 (703) 596-4799  
**(800) 444-4799**  
 Rick K. Winkler, Mgr.  
 Exit 61, I-95, So. to US 1

**SALLEN, MN 55079**  
 Boston, MA area  
 227 N. Broadway  
 (612) 835-2700  
**(800) 444-4047**  
 Chuck K. Winkler, Mgr.  
 CCMHAMRADIO.COM

**LA, CA, CO, GA, VA**  
 Prices, specifications,  
 descriptions, subject  
 to change without notice

**12 Store Buying Power!**

# HAM RADIO

# WORLDWIDE DISTRIBUTION

## WORLDWIDE DISTRIBUTION

**COME VISIT THE STORE NEAREST YOU:**

**SUNNYVALE, CA 94086**  
 510 Lawrence Expwy. #102  
 (408) 736-9496  
 (800) 854-6046

---

**KENWOOD**

**TS-50S/TS-60S HF Transceiver**

- TS-50S - World's smallest HF Transceiver
- 100W out (50W TS-60S 50MHz only)
- SSB, CW, AM FM
- 12V Gnd. Cw. Rk. 6.4 lbs. 7.16 x 2.4 x 3.32"
- 100% performance range - 100 Ohms - 50S only
- DPE (Digital Power Enhancer)

**Call Now For Our Low Pricing!**

**TH-79A(D) HF Transceiver**

- 2-7W 2W, 2W, 440
- 5W Optional
- 82 Memories
- 82 Memory Menus
- Built in CTCSS Enc. Dec.
- User Friendly Menu Sys

**CALL NOW FOR INTRO SPECIAL!**

---

**IC-775/DSP HF Transceiver**

- 20W HF Transceiver • 101 memories
- DSP built-in • Digital noise reduction
- 82 Memories
- DSP Digital CW filter • Built-in AC supply
- Twin PBT • Dual watch

**Call Now For The Ultimate Radios!**

**IC-706 HF VHF Transceiver**

- 100W HF
- 100W VHF
- 50 Memories

**Call For Introductory Pricing!**

---

**DL-65T AM/FM**

- 200 Mhz. Channel
- Built-in CTCSS
- Auto-Dialer memories
- Channel Scope
- 4 SW universal battery

**CALL NOW FOR LOW INTRO PRICES!**

**DX-70T HF Transceiver**

- 100W 160-10 Mhz • 10W 6M Gmox. Fx.
- Full DSP 100 Mem's • Compact Removable
- Dual VFO • 1200's • 9.9 lbs

---

**FT-51R**

- 2W standard
- 5W Optional
- 120 Memories
- Spectroscopy
- DTMF Paging
- Coded SSTL built-in

**Special Low Pricing!**

**FT-50R**

- 2W standard • Compact HF
- Alpha numeric display
- Wide Band receive
- Memory Search
- 100 Memories
- Hi-Speed scanning
- Hi-Speed
- Hi-Speed

**Call For Introductory Pricing!**

---

**FT-1000MP HF Transceiver**

- Enhanced Digital Signal Processing
- Enhanced SSB filter built-in
- 100W Power supply built-in

**Call Now For Low Intro. Pricing!**

**COAST TO COAST FREE SHIPPING UPS - Next Business Day!**

**The Store Nearest To You!**