

PAARA NEWSLETTER VOLUME 53 NUMBER 2, February 2004



PAARAgraphs

Celebrating 67 years as an active ham radio club—Since 1937 Newsletter for the Palo Alto Amateur Radio Association, Inc.



CALENDAR

February......6 PAARA Meeting, 7:30 Menlo Park Recreation Center 700 Alma Street, Menlo Park

February....11 PAARA Board Meeting, 7:30 Red Cross Bld., 400 Mitchell Ln., Palo Alto

March...... 5 PAARA Meeting, 7:30

March.....10 PAARA Board Meeting, 7:30



PROGRAM

February.....6, 2004 7:30 P.M

Speaker: Jignesh Desai, VU3JDI

IOTA "Islands on the Air" **DXpeditions**

Join us for pre-meeting eveball at Su Hong Restaurant , 1039 El Camino Real, Menlo Park 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 order and bill.

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

February 6th PAARA speaker:

Jignesh Desai, VU3JDI

Forget the National Geographic and Nova specials. Do not miss this special event! Join PAARA and visitors on Friday, February 6th, at 7:30 p.m. for: IOTA "Islands on the Air" DXpeditions activated by Jignesh Desai, VU3JDI and fellow DXpedition members. Spectacular full screen pictures will leave you breathless.

Enjoy the beauty and adventure of Cotorra Island / SA-63, YW8D, where Jignesh and DXpedition members were airlifted by the Venezuelan National Guard, and then continued by riverboat to Cotorra Island, where local military authorities provided "round the clock" armed soldiers for their protection. Waraos Indians, ravenous mosquitoes, and other insects live in the area. Severe thunderstorms ruined several laptops and radios.

Two weeks after returning from Cotorra Island, Jignesh and DXpedition members traveled to Los Monjes archipelago / SA-015, YW5M, which is located in the extreme west of Venezuela, near the Colombian coast. Their host was the Venezuelan Navy. The reason was the celebration of the 180th anniversary of the sea-battle of the Lake Maracaibo and also the inauguration of the new lighthouse on the southern island of Los Monjes. The island is claimed by both Colombia and Venezuela. The new lighthouse is powerful enough to be seen by Colombia.

In 2001 to commemorate Navy-Day, Jignesh and DXpedition members left Caracas bound for Cayo Sombrero, 4M1X FK5ØVV, part of an archipelago of small islands near Venezuela. "A Place like Paradise" describes the beauty of Cayo Sombrero. The water is unbelievably clear and the sand is really white. The nearby boats seem to float in the air, because you see the boat, and it's shadow on the ocean floor, through the transparent water.

For more information on all of the above IOTA trips go to: http://www.hfdx.com/

Jignesh Desai VU3JDI Home page: http://www.qsl.net/vu3jdi/

~Jim.K6AK

2004 DUES ARE DUE

Celebrating 67 years as an active ham radio club—-Since 1937

Miscellaneous

ELECTRONIC FLEA MARKET @ Foothill College

Sponsorship by A.S.V.A.R.O.

[Association of Silicon Valley Amateur Radio Organizations] Second Saturday of month, March-October, 6 AM-2PM Howard M. Krawetz, N6HM 650-856-9761

PAARA Palo Alto Amateur Radio Association

meets 1st Friday 7:30 each month, Net 145.230 each Monday 8:30, contact: Andreas Junge N6NU......(650) 233 0843

FARS Foothills Amateur Radio Society meets 4th Friday 7:30 each month, contact; http://www.fars.kóya.org.

NCDXC Northern California DX Club meets 2nd Friday 7:30 each month, repeater for member info 147.360, Thur 8:00PM,

contact: Mike Gavin W6WZ, (650) 851 8699.

NorCalQRP Northern California QRP Club meets 1st Sunday each month,

contact: Jim Cates 3241 Eastwood Rd., Sacramento, CA 95821.

SPECS Southern Peninsula Emergency Communication System meets each Monday 8:00PM on Net 145.27, 440.80 MHz, www.specsnet.org contact: Tom Cascone, KF6LWZ, 650-688-0441 specs@sypal.org

SCARES South County Amateur Radio Emergency Service meets 3rd Thursday 7:30 each month, San Carlos City Hall.
Net is on 146.445 [PL 114.8] & 444.50 (PL-100) 7:30 Monday evenings.

SCCARA Santa ClaraCounty Amateur Radio Association
Operates W6UU & W6UU/R, repeater 146.385+(pl 114.8)
Nets: 2m, 7:30 Mon; 70cm, 442.425+ (pl 107.2) Thur.
Web site www.qsl.net/sccara
meets 2nd Mon each month @ 7:30 PM.
contact: Clark Murphy KE6KXO 408-262-9334
ARRL/VEC license testing contact 408-243-8349

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 WVARA now has a 6M repeater, linked to 440 and 1.2gHZ meets 3rd Wed every month.

contact: Bill Ashby N6FFC, 408-267-3118 or N6FFC@Juno.com or N6FFC@ARRL.NET

Perham Foundation (discontinued)

Disaster Services,

PALO ALTO CHAPTER, American Red Cross, www.paarc.org

400 Mitchell Lane
Meets 3rd Wed. each month 7:30PM,
HF, packet, BBS, ATV, OSCAR Gateway, NASA satellite.
contact: Mac Millian 650-688-0423. MACM@paarc.org

SAN JOSE CHAPTER. American Red Cross contact: Scott Hensley KB6UOO, (408) 967 7924, FSHENSLEY@NOVELL.COM

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: Al WB6MX@att.net.

Swap meet, LosPositas College, Livermore, 1st Sunday each month.
Contact: Cliff Kibbe (209) 835 6715 or Eliot Ross (925) 606 7710

(please send changes to PAARAgraphs editor: k6uro@arrl.net)

LIFE MEMBERSHIP

Awarded by Action of the PAARA Board

Ron Panton, W6VG Leslie Vickery, W6AKR

Palo Alto Amateur Radio Association, Inc. PO Box 911

Menlo Park, CA 94026

PresidentAndreas Junge N6NU......650-233 0843 n6nu@arrl.net Vice President.....Jim Rice, K6AK......650-851-2274 k6ak@arrl.net SecretaryTerry Finn, AF6TF......650-366-9111 Bob Korte, KD6KYT......650- 595 1842 rgk4u@aol.com Membership......Vic Black, AB6SO......650-366 0636 ab6so@smrn.com Membership.....Lisa Rice, KG6KQS......650-851-2274 lisarice@earthlink.net W6OTX & K6YQT Station Trustee.Gerry Tucker, N6NV..650- 326 4908 Property......Gerry Tucker, N6NV.......650-326 4908 Badges......Dave Rogers, K5DKR650-361-1555 dkr@bigfoot.com Sign Maker.....Steve Brune, KG6OUB......650-740-4367 Ticket Master.....Kyle Rice, KG6MSK Ticket Master assistant, .Ian Brune, K6IAN. Advertising.....Terry Finn, AF6TF.....650-366-9111 Field Day Coordinator.....Gerry Tucker, N6NV.......650-326 4908 FD Logistics Coordinator .Steve Brune, KG6OUB......650-740-4367 stevebrune@sbcglobal.net ASVARO representative Howard Takaoka, KG6GRO 650-856-9761 htakaoka@excite.com WebmasterCurt Kolovson, AE6EJ..... ae6ej@arrl.net

Board of Directors

Gerry Tucker, N6NV.........650-326 4908.....'05
gerry_tucker.@juno.com
Rolf Klibo, N6NF1..........650-856-2748'05
klibo@earthlink.net
Adrianus Schrauwen, W6AJS...650-494-6256 ...'04
hagenes@att.net
Bob Korte, KD6KYT........650-595 1842 ..'05
rgk4u@aol.com

.see "Calendar" for Board meeting times, visitors welcome-

PAARAgraphs Staff

PAARAgraphs e-mail address: k6uro@arrl.net Submit material for PAARAgraphs by the 15th Use WORD, rich text, ascii, or .jpg, send pictures as attachments.

PAARA Website: www.paara.org
PAARA Forum: http://www.paara.org/forum/

Twenty-six of the men elected U.S. president have been lawyers.

Celebrating 67 years as an active ham radio club—Since 1937



PAARA HONORS

Steve Stuntz, K6FS.

by Terry Finn AF6TF

ALPHA, BRAVO, CHARLIE,

Have you ever wondered where the phonetic alphabet came from or who may have been responsible for this rather unique and essential method of verbal communication? Well, fellow amateur radio operators and members of PAARA, once you have read this profile, you will know the answer and quite possibly, you will have some questions of your own.

Allow me the pleasure of introducing to you, yet another highly skilled and experienced licensed radio operator who lives in our community and has been an active PAARA member since 1974.

Mr. Steve Stuntz, K6FS.

Stephen Emil Stuntz was born on May 8, 1913, in St. Louis, Missouri. As a child he moved with his family to Chicago, then on to a suburb known as Wheaton, Illinois. At ten years of age, in 1923, the family moved to Worthington, Ohio, a suburb of Columbus. In 1926 the family moved again to Findlay, about 50 miles south of Toledo, Ohio, where Steve graduated from the Findlay High School in 1931 at age nineteen.

Steve's father, Ralph Emil Stuntz was originally from northern Ohio and Pennsylvania areas. He graduated as an electrical engineer from the Case School of Applied Science in Cleveland, which is now known as the Case Western Reserve University.

Steve's mother, Hazel Stuntz (Howlett) was originally from Denver, Colorado, and

met Ralph while attending Case. During the summer breaks from school she worked with the Denver & Rio Grande Railroad out of Denver. She graduated with a BA and married Ralph in 1912. Hazel was primarily a homemaker during her life and raised Steve, his brother David and his sister Margaret. Brother David is 83 years of age and lives in Brunswick, Maine, while his sister Margaret Hager is 88 years of age and lives in San Diego, California.

Steve earned a scholarship that paid for tuition for two years, so he enrolled at Miami University in Oxford, Ohio. It should be noted that the Country was still suffering the effects of the 1929 depression in 1931 (the economy really did not recover for ten years). Once the scholarship money was depleted, Steve joined the U.S. Army and became a PFC specialist. He was sent to Fort MacArthur radio school in San Pedro, California where he learned what the Army could teach him between August 1935 and July 1936. This Army training school was named after the father of the famous General Douglas MacArthur.

Although Steve had first been exposed to amateur radio during high school when he took photographs of his friends shack and station, he really did not get bitten by the radio bug until he was in Army radio school. The technical sergeant at the school was **Mariam Brashear**, W7MB (SK) who worked with Steve to build a homebrew 50 watt transmitter on 40 meters using tubes like a 210 power amplifier; a 47 oscillator and 46 amplifier. They also had

access to a National receiver with plug in coils. Oh, what fun they had with that equipment. The radio school ham station license at that time was **W6KNK**. The radio school was part of the HQ Battery, 63rd Coast Artillery, Anti-Aircraft Unit and was considered a mobile unit. At the time, the idea of having a completely mobile radio command post was innovative due to the obvious requirement for this type of military control.

It should be noted that during that time in his life, Steve had always wanted to be a broadcast radio engineer and had actually studied and passed the Federal Radio Commission (now the FCC) exams in Detroit, Michigan in 1934. As a result, he earned the first class radio telephone operator license, which did not include any code or CW qualification requirement. Steve learned the international code while attending Army radio school in California.

Steve was subsequently sent overseas to Manila in the Philippines to work as a qualified Army radio operator and technician. He can remember leaving Angel Island in the San Francisco Bay on a U.S. Army troop transport named the 'Ulysses', in the late

summer of 1936. This ship had been a former German luxury liner that had been impounded by the U.S. Government in Baltimore during World War I. Steve was a passenger on the same ship when he returned home in August of 1939 and was discharged at Fort McDowell on Angel Island. During those days, it was referred to as: 'expiration-term of service'. Steve was honorably discharged and made his way back to Oxford, Ohio. While serving in the Philippines, he was stationed at Army HO located on Corregidor Island, on the mouth of the bay, about 26 miles from Manila Bay. His daily work included transmitting & receiving all of the official Army CW dispatches from Washington, D.C. via the station at Fort Shafter in Hawaii. This is where Steve honed his CW skills. Just imagine it, if you can. Working CW at over 35 words per minute, almost

eight hours a day !! Steve applied for his first amateur radio license here through the Bureau of Posts, which was authorized by the Federal Radio Commission and was issued call KA1US. This particular amateur station had been operated earlier by Chuck Larcom, who became W7ALQ (SK) when he returned home.

In 1941 Steve graduated with a BA in Speech (now Theater Arts) with a minor in experimental psychology from Miami University in Oxford, Ohio. He subsequently enrolled as a graduate student at the University of Iowa, in Iowa City, near Cedar Rapids (original home of Collins Radio). He was working on speech research, however he ran out of money when that scholarship was depleted, so he moved to Chicago and took a Federal Civil Service job at Army HQ as, you guessed it, a radio operator. Again, he was pounding the key at 35 wpm for eight hours a day and handling all of the official military and government traffic.

Steve recalls an unusual event that occurred about that time in Indiana. Apparently the then Governor Paul V. McNutt, who later became the high commissioner of the Philippines, authored and pushed through some legislation in Indiana that would make the mathematical value of PI be 3.00 rather than 3.1416... just to simplify things in that State. The academic community became outraged and the law was dumped in rather short order.

(Continued on page 16) Steve Stuntz, K6FS

Celebrating 67 years as an active ham radio club—Since 1937

(Continued from page 15) Steve Stuntz, K6FS

Just before December 7, 1941, the Army Colonel who was operating the HQ radio station asked Steve if he would move to a facil-

ity in Battle Creek, Michigan, to start up, open, and operate an Army radio repair & logistics training center. Naturally, Steve jumped on the opportunity and while there, actually did a study on the applicability of musical aptitude and morse code learning ability, which he sent off to the National Research Council. Steve realized that there may be a value to this type of study to determine who would make the best radio school candidates for future training.

There were only about 25 civilians at this Army base, and Steve had the good fortune to meet one of them at a base Christmas party in

1941. Elizabeth was working at the base telephone switchboard although she had earned a BA in English. They were both

bitten hard by the love bug and were married on February 8, 1942 at the Unitarian Church in Kalamazoo, Michigan. Steve remembers it as a cold Sunday. I am sure he is just referring to the outdoor weather at the time, because he and Elizabeth are still together today in their home in Menlo Park.

In September 1942 the still newly married couple moved to another Army Signal Corps contract school in Lexington, Kentucky. Steve was teaching radio theory to the radio students as there was now an urgent demand for qualified military and civilian operators. In January 1943 they moved again, this time to Chicago where Steve became a member of a unique Army Navy research project where they were experimenting on radio operators to refine the techniques of selecting and training new radio operators.

The theory was that based on certain criteria, new operators could be taught to communicate at 13 wpm very quickly so they could be used by the military.

It was in Chicago in 1943 that Anne Margaret was born to Steve & Elizabeth. Meanwhile, Steve was still developing new training aids that included using a wheatstone perforator to punch holes in paper tape, much like a typewriter, for CW communications. They also designed, built & recorded audio training on 16 inch vinyl disks that could be played on record players at 16 & 2/3 rpm. Steve actually spent three weeks in New York at Columbia Recording studios to make the training records. The audio

was fascinating as they purposely included actual copies of enemy audio radio jamming so that the radio operator students could learn how to copy code in the worst conditions. Steve can recall

riding on the famous 20th Century Limited train from New York to Chicago during this time as he worked on this special project until

1944, when the whole program was down graded and moved to New York.

Steve took a job teaching radio theory and broadcasting techniques at a women's college in Columbia, Missouri, known as Stephens College. What we now take for granted and refer to as networking was something that Steve did on a regular basis back in those days. So, in the spring of 1945 he was hired back to the special radio operator project which had moved to Mamaroneck, New York, which is a suburb of Whiteplains and New York City. Steve was able to design and build a CW copying machine using a modified IBM typewriter while working at the special project. This was the first machine that could copy CW off the air

and type the characters onto paper. It was considered a real innovation. One of the machines was purchased by the Canadian Gov-

ernment while the other may quite possibly be on display in the Smithsonian or another fine museum.

It was here in August of 1945 that Kathryn was born. The special project was cancelled at the end of the war and Steve went to work at a counseling center for returning war vets. The center was part of New York University and they

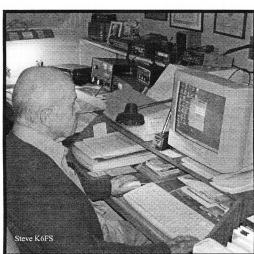
would pay the tuition for any employee who wanted to take classes. Needless to say, Steve took advantage of that opportunity and graduated in 1948 with his Masters degree in experimental

psychology. His thesis was all about, psychoacoustics, which is the study of recorded music and how people heard and understood the sounds that they were hearing. Steve then took a job at Kent State University in Kent, Ohio, for a short period of time as a teacher. However, in January 1949, he was asked to come on board a special project at the new submarine base in New London, Connecticut. Steve worked there for five years in the psychoacoustics research side of Naval aviation and other Government agencies. He then went to the new U.S. Navy underwater sound lab for another five year stint where they were experimenting with human engineering and speech communication research.

In 1959 Steve took a job at the U.S. Air Force lab in Cambridge, Massachusetts. They had a new project relating to the development of a phonetic alphabet. He was there for five years and had the opportunity to present two papers at the ITU in Japan on the benefits of this new alphabet that enhances speech and communi-

cation, especially over the radio. This particular project had been funded in part by the ICAO (International Civil Aviation Organi-





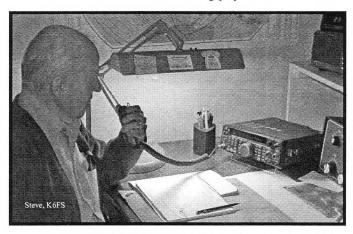
(Continued on page 17) Steve Stuntz, K6FS

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(Continued from page 16) Steve Stuntz, K6FS

zation) which immediately authorized its use in world wide civil aviation operations. Can you believe this? This is our very own **Steve K6FS**, who you have probably talked with or met at a PAARA meeting.

In 1964, the Stanford Research Institute asked Steve to move out to California and work on some rather special projects that they had involving speech. He worked there until retiring in 1977, although he went back as a consultant on several projects until the end of 1978. One of the more interesting projects that Steve was



involved with was actually commissioned by the ARRL for their presentation at the 1979 IRU Congress. Steve had to do some extremely difficult and unusual research of traveling around the world and interviewing various commercial broadcasters about how they perceived their audience. This material was then prepared for the ARRL people who went to the IRU to argue that amateur radio operators should not lose more of the available frequencies and possibly should benefit with other frequencies when the commercial broadcasters move or use other frequencies. You should know by now that the work completed by Steve and used by the ARRL has had a dramatic effect that we are actually seeing and benefiting from today. Steve Stuntz was issued amateur radio call sign W2SMT in 1945 in New York. He later was issued call sign W1RXX in Connecticut in 1949. In 1974 he was reexamined at the FCC offices on Battery Street in San Francisco and earned his extra class license and was issued call sign W6RCO. He later applied for and was issued his current call sign, K6FS.

Steve uses his Kenwood TS450 and multi band vertical and his 10 watt Elecraft K2 frequently. He was one of the early, original field testers for the Elecraft unit. Steve is a DXCC award holder and has 276 countries confirmed, mostly on voice side band. Steve was one of the PAARA members who used to put together this fine PAARAgraphs publication years ago when they used to mimeograph things and stay up late as a group making sure the newsletter was ready for mailing. Please take a moment to introduce yourself to Steve at a PAARA meeting and thank him for all of the contributions he has made over the years to the amateur radio service, our hobby and PAARA.

~Terry Finn. AF6TF.



Technical Tip

By Vic Black AB6SO

Alternate Energy Sources

After our June, 2003 meeting featured solar power for the Ham shack, there were requests for local sources of photovoltaic (PV) panels. Incredibly, there don't seem to be any local "one-stop" shopping sources for complete solar engineering solutions in Northern California. They are much more popular in Arizona. We have local sources for the panels, though, so you can engineer your own system with careful shopping.

West Marine is a boating supplier with headquarters in Watsonville, CA. Their retail outlets located in 36 states carry an extensive line of 12-volt lighting, batteries and PV panels as well as wind generators, which are a viable alternative here on the SF Peninsula. (Small wind generators can easily generate 300 - 400 watts). Other products of interest to Amateur Radio operators are stainless steel fasteners, Dacron lines for antenna guys, marine VHF radios and navigational aids, compasses, radars and GPS systems. Marine stores are especially good sources because boats operate under conditions similar to portable Amateur Radio. (As a landlubber I consider most boats as emergency shelters). West Marine has local Bay Area retail outlets in Oakland (next door to HRO), Palo Alto, San Francisco, San Jose, Santa Cruz and So. San Francisco. You can pick up a free 1,000-page catalog when you visit the store. To find the store nearest you, call their toll-free number 1-800-BOATING or visit their web site at http://www.westmarine.com.

Real Goods is an alternative living center with their flagship retail store located on highway 101 in Hopland (Mendocino County). It's probably not worth a drive all the way up there for most people although I have done it. The store, constructed of stucco covered rice straw bales and rebar uses passive solar heating and cooling to keep the inside temperature constant throughout the year. All electricity is generated on-site using products they sell. Besides residential sized solar panels, they also feature solar ovens, solar water stills, and wind and hydro generators. Their web site is located at http://www.realgoods.com. The local Berkeley store is at 1324- 10th Street. Real Goods offers a large assortment of renewable energy and energy efficiency products such as fluorescent lighting, but be prepared to pay top dollar.

Don't overlook Ham Radio Outlet as a source if you are serious about getting off grid. Their big battery and solar panel products are perfect for permanent installation at remote bases and repeater sites. They aren't a solar specialty store, however, so they can't discount prices as much as most Amateurs might prefer.

If you prefer to do business with other Amateurs, check the website for Sun Light Energy Systems which is maintained by well-known Amateur Mike Bryce WB8VGE at http://www.seslogic.com. Mike carries a complete line of solar panels, charge controllers and inverters. Some of the lightweight panels were especially chosen for use by portable operators.

For excellent pricing, see the web site http://www.industrialliquidators.com/wesell/solarpanel.html. This is a liquidator so the product mix changes from time to

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(Continued from page 17) Alternate Energy Sources

time. Try the Electronic Goldmine at http://www.goldmine-elec.com/. Click "on-line store", then "Search". Enter the word "Solar" to go to the panels in stock. Each panel can be selected for a more complete description. These are discontinued or surplus products and are probably less efficient than newer technology panels, but if the panel does the job at the right price it can be a bargain. Homepower magazine features a simple homebrew printed circuit solar panel charge controller using 20 or so components located at http://www.humboldt1.com/~michael.welch/extras/pwmhp75.pdf

The PCB layout files are at http://www.homepower.com/download.htm. Homepower is a good source for alternative energy ideas.

If you're handy with tools, you can make your own wind generator. I've seen them made from used car alternators with plastic flowerpots as covers for the alternator. Propeller blades were purchased as spare parts from the wind generator companies since the blade shape is critical (they change shape or pitch with varying wind speed to self regulate). Tails were made from PVC tubing with used wind surfboard fins from a swap meet to keep the generator headed into the wind. The amount of energy extractable from the wind is more than you might imagine. Wind energy rises as the cube of the change in wind speed. This means that you get 8 times more energy from 20 mile per hour wind as you do from 10 mph wind, for instance. (That's also the reason that you get better gas mileage from your car at low speeds. To overcome wind drag as you double speed from 30 mph to 60 mph requires 8 times more energy).

This principle was amply demonstrated one lunch break when my friend was flying a 5 square meter kite in the park. We decided to try the 8.5 square meter parafoil kite so he put on a body harness and attached the control bar to the harness. Winds aloft increased just as the kite reached a neutral position 100 feet directly overhead. I had to reach up and grab him as the kite lifted his 150 pounds off the ground. Several months later he was pulled from waist high water while landing a 15 square meter sailing traction kite and slammed into a nearby concrete wall. He was in a coma for 10 weeks as he fought for his life at the Stanford Hospital Intensive Care Unit. (After expensive reconstruction, he is now known as the "Miracle Two Million Dollar Man".

Finally, check the solar page of **Kim Robinson's KM6OH** at http://www.knjcomputers.com/solar/solar.htm. Kim featured this project at a talk he gave to PAARA. He started the project intending to put his station on emergency solar power and ended up taking his entire house off grid in San Lorenzo. Scrounging and good luck allowed Kim to do the entire job for about \$3,000. He has more than 500 watts of panels on the roof and has converted his household electrical system to 12 volts DC. The system operates lights, computers, televisions and all the other "essentials" as well as a nicely appointed HF/VHF Amateur station. The biggest power hog is the refrigerator, which requires some augmentation from the power grid. Kim says he is able to run a full 100 watts in contest mode non-stop for several cloudy days.

PAARA Forum:

http://www.paara.org/forum/

AMATEUR RADIO LICENSE PLATES FOR YOUR VEHICLE !!!

Yes, it is about time that you ordered your California license plates with your amateur radio call sign on them. Most active hams already have their radio call sign displayed, not just because they are unique and hardly anyone outside of our radio world knows what they are, but, because we can. Let us not forget that we worked long and hard to earn the license, therefore we should be proud to display this accomplishment. Not only that, it helps us identify other hams, especially when we are going somewhere to meet other hams. When you see the call sign license plates, you know that you have arrived at the correct location!!

Andreas Ott, K6OTT, has done a little research and found the exact web addresses to obtain the required information and DMV forms for you to use.

http://www.dmv.ca.gov/pubs/vctop/d03/vc5005.htm http://www.dmv.ca.gov/forms/reg/reg17a.htm http://www.dmv.ca.gov/forms/reg/reg17a.pdf

The second link will provide you with the appropriate DMV form that you need to take to the DMV personally with a copy of your FCC license. The other links will provide the necessary information regarding the fees, etc.

So, your mission, should you choose to accept it, is to take some time and travel down to your closest DMV office to apply for the new license plates. The time spent standing in line at the DMV can be used effectively to observe all forms of life and consider the caliber of people that are being issued new drivers licenses. Have fun, and don't forget to put the new amateur call sign license plates on your favorite vehicle that you use for ham events.

~Terry Finn, AF6TF

(Save time, make appointment. Nice thing is someone honks; dit dit dit dit dit dit and it dawns on you 15min later it was a ham sending "HI". Ed.)

Oswald Garrison "Mike" Villard, W6QYT, SK

Mike passed away sometime in the past week though I have no further details at this time. You will remember him as one of the early developers of SSB, the first amateur SSB to SSB QSO between W6YX on the Stanford campus and a W0 whose call eludes me at the moment. He also invented the "Q-multiplier" and wrote many QST articles in the 50s and 60s.

Professionally Mike was an EE professor at Stanford and director of the Radioscience Laboratory. In 1970 Villard moved his research and research staff to Stanford Research Institute (now SRI International). He conceived the idea of using LARGE (~2.5 km) hf arrays for back-scatter clutter mitigation which with the development of highly linear and stable sweep frequency generators led to the development of the highly successful US OTH-B radar program. Today it lives on as the Navy ROTHR and the SRI WARF facility in central California. In later years Mike was actively involved in the development of Low Observable (LO) technology.

Mike was my mentor and friend during my undergraduate years at Stanford. I worked for him part time all during school and though that might have lowered my GPA I learned far more from him then most classes.

He will be missed.

~Doug W6JD

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THE PAARA FIELD DAY TRAILER WINTER UP-DATE.

Once again, almost exactly one year after the PAARA field day trailer was moved to the new storage location, the PAARA regular volunteers were working to keep it safe and dry. It was the late afternoon of December 24/03, just before the really big rain fall, when Gerry Tucker, N6NV, his very capable brother Rich Tucker and Terry Finn, AF6TF, met

at the RV storage facility in Redwood

City.

PAARA had purchased a new, heavy duty, silver colored tarp that was 30 feet by 20 feet in size to be used for covering the trailer. The trailer was inspected for damage and physical security before the tarp was permanently installed to protect it from the heavy rain. Only several small water leaks and a few rather wet ants were discovered. The field day trailer is now nicely wrapped up for the winter as PAARA probably will not use it again until field day in June 04.

Please note that PAARA is seeking a person with lettering or sign painting experience to apply some specific wording on the trailer later in the spring when the field day committee will be getting things prepared. Please contact Gerry Tucker, N6NV, if you can assist.

PAARA wants to thank Terry Finn,

AF6TF, for making the arrangements to have the field day trailer parked at this particular RV storage facility. He was able to convince the management at the Harbor Village Mobile Home Park located at 3015 East Bayshore Road in Redwood City to allow PAARA to store the trailer on their property FREE. This, of course, was due to the fact that PAARA is a non profit organization who provide emergency communications for the public through the members activities as radio operators with the amateur radio service.

Terry Finn, AF6TF

FIELD DAY 2004

Mark your calendars now for participation in the 2004 Field Day exercise that will happen on the fourth weekend in June. Starting Friday, June 25 about 9 AM and ending Sunday, June 27 in the PM. PAARA requires your assistance with this Association project. PAARA did exceptionally well with contacts and earned points during

the 2003 field day. We want to do even better this year. The overall exercise coordinator will be Gerry Tucker, N6NV, who will be aided by Steve Brune, KG6OUB, who will handle logistics. Electrical power will be supervised by Doug Teter, KG6LWE. Tower and antenna transportation and construction will be handled by Gerry Tucker, N6NV, and his able brother Rich Tucker. The operations end of the exercise will be divided into three divisions. The CW captain will be Andreas Junge, N6NU, while Gerry Tucker, N6NV will be the phone captain. The Get On The Air station captain has not yet been named. Please note that many volunteers are required for this threeday event to make it run smoothly and effectively. Please contact the

persons named in this article to offer your assistance in whatever way you can. This annual field day exercise is designed for amateur radio operators to practice what they do best in an outdoor, completely self sustained, environment. There are all sorts of little jobs that will be available for you. PAARA wants you to participate, even if it is your first time

Terry Finn, AF6TF.

Tucker, N6NV

PAARA

Is now

67 years old

Celebrating 67 years as an active ham radio club-Since 1937



Technical Tip

ALINCO DJ-S11

Transceiver Programming Procedure by Arvid E. Hamer, WA6UUT

A. To select a frequency

1. Select VFO mode (Pressing V/M selects VFO or MEMORY).

2.Press UP or DOWN to select the frequency you want (or see Section I).

3.If you want to record this frequency as a simplex channel into memory, go to section D. If it is a repeater frequency continue with section B. Select VFO mode (Pressing V/M)

B. To select repeater offset

1.Press F key and SCAN key together.

2.Press UP or DOWN to select the offset you want. (Usually 0.60).

3. Press SCAN to select + or - offset (or blank, which eliminates offset).

4.Press PTT to exit.

C. To select CTCSS tone. (PL)

1. Press F key and DOWN key together to enter programming mode for CTCSS.

2.Press DOWN key or UP key to select tone.

3. Press F key and DOWN key together. "T" will show in readout.

4.If you decide not to put in CTCSS tone, press F and DOWN again.

5.Press PTT to exit this mode. Readout will show frequency, and offset and tone

D. To program a frequency into a memory channel

1. Press F key and V/M key together, (M blinks).

2. Press UP or DOWN key to select a memory channel.

3.Press V/M key to memorize displayed frequency (Including offset and tone if it is a repeater frequency).

4.Press V/M key again (Memory mode shows channel number, and frequency memo-

5.If you want to memorize another frequency, repeat the above procedure.

E. To SCAN

1.Press SCAN.

2.Or hold UP or DOWN key for a few seconds.

3.To stop SCAN, press UP or DOWN key.

F. To SCAN the memory channels: (0 thru 19)

1.Select M by pressing V/M

2.Press SCAN key.

3.To Stop SCAN, press UP or DOWN key.

G. TO SCAN the VFO channels (144.00 to 147.99 MHz)

1. Select VFO by pressing V/M key.

2.Press SCAN key.

3.To stop SCAN press UP or DOWN key.

H. To select a MEMORY channel

1.Press V/M to bring up the MEMORY channels.

2. Press UP or Down to select the MEMORY channel you want.

3.Or hold UP or DOWN key for a few seconds to SCAN.

4. Press UP or DOWN key to stop SCAN.

I. To select a VFO channel

1.Press V/M to bring up VFO channels.

2. Press UP or DOWN to select the VFO channel you want.

3.Or Hold UP or DOWN key for a few seconds to SCAN.

4.Press UP or DOWN key to stop SCAN.

J. To eliminate BEEP

1. Press MONITOR and turn on transceiver.

K. To set up a new frequency

1. Press V/M key to bring up VFO channels.

2.Press F key once (MHz digit flashes).

a QUICKLY press UP or Down key once to change MHz digit by one digit.

b.Two presses of UP or DOWN key changes MHz digit by 2 MHz.

3. Press F twice and digit to right of MHz digit flashes.

a. Quickly pressing UP or DOWN key changes this digit.

4. The last digit can be changed directly by pressing UP or DOWN key.

L. change POWER OUTPUT

1.Press PTT and hold it while you press SCAN key.

a.If LOW appears on the display, you are in LOW POWER.
b.Pressing the sequence again changes POWER OUTPUT to high power. LOW disappears from display.

M. SIMPLEX operation

1.If Tone (T) or Offset (+ or -) show on a VHF frequency, they should be removed for simplex operation on that frequency.

a.To remove OFFSET, see Section B.

b.To remove TONE, see Section C.

N. To use external power on the transceiver

1.DO NOT APPLY EXTERNAL POWER IF DRY CELLS ARE INSTALLED IN TRANSCEIVER.

2. Rechargeable batteries installed. (NICAD'S, etc)

a.NICADS can be recharged by applying REGULATED 5.5 Volts DC (negative ground) to the power terminal on top of the transceiver.

b.ALINCO chargers EDH-18 or EDC-78/79 may be used to charge NICAD batteries in the TRANSCEIVER.

O. To UNMUTE the preset SQUELCH (To hear a weak signal)

1.Press and hold MONITOR key together.

2. Letting up on MONITOR key resets SQUELCH.

P. To LOCK the keys

1. Press the F key and MONITOR keys together.

2."L" is shown on display.

Q. TO UNLOCK the keys

1. Repeat Section P.

2."L" is removed from display.

R. To toggle between 1750 Hz tone and ALERT tone

1.Press and hold CALL key and turn on power.

S. To emit 1750 Hz tone

1. Press UP or DOWN key while transmitting.

T. To emit ALERT tone

1.Press UP or DOWN key while transmitting.

U. To select CHANNEL STEP

1. Press the F key and UP key together.

2. Select step by pressing UP or DOWN key.

3. Press PTT key to exit.

V. AUTO-POWER-OFF timer

1. Press the F key and the LAMP/APO key together. (APO shows on display). 2. Press UP or DOWN key to select time POWER should go off (30, 60, 90, 120 minutes or OFF).

3. Press PTT to exit.

W. To select CALL channel

1.Press CALL key.

2.To resume original frequency, press CALL key again.

X. To activate ALARM function (When signal is received)

1. Press the F key and the CALL key together

a. Bell appears on display.

b. Electronic sound is heard when a signal is received.

2. Repeat X1 to deactivate alarm.

Y. Courtesy BEEP (on-off)

a. Press and hold UP and turn power ON.

a. Press and hold DOWN and turn power ON.

Z. CHANNEL INDICATION

a, Press and hold V/M and turn power ON.

a. Repeat Z1a.

AA. RESET transceiver

1. NOTE THIS WILL ERASE EVERYTHING IN MEMORY - USE SPARINGLY! 2. Press and hold F key and turn power ON, then reprogram everything!

I hope these procedures will make it easier for you to operate and enjoy your Alinco DJ-S11 Transceiver. Please bring any errors, changes or improvements to the attention of Arv Hamer, WA6UUT. My Email address is arvhamer @ aol.com.

When the Alinco DJ-S11 first came out, the accompanying instructions were very difficult to understand. Arv, WA6UUT, wrote up a set of instructions that were clear and easy to follow. Arv distributed many copies at that time. I recently needed to use my DJ-S11, but apparently I had lent out my copy of Arv's instructions.

Arv very kindly sent me his last copy, which I've scanned into my computer. As I recall, these instructions also apply to the 440 version of this radio. Mikel, KN6QI, has posted these instructions on the FARS website, so they are available to the entire ham community. Go to http://www.fars.k6ya.org/ and scan down the home page. Near the bottom, you will see a paragraph that starts out: "Learn about Smith Charts .. Alinco DJ-S11 programming instructions." Click on "programming instructions" to copy the information.

The DJ-S11 is still currently for sale according to the HRO Summer 2003 catalog.

~de Rich, W6APZ

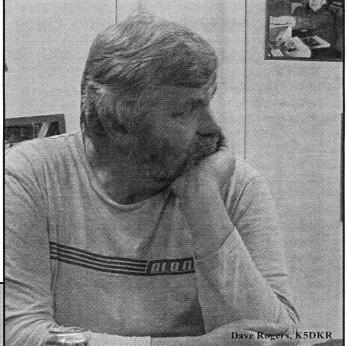
Celebrating 67 years as an active ham radio club—Since 1937

BOARD OF DIRECTORS ACTIVITIES.

The PAARA Board of Directors met at the Palo Alto Red Cross offices on Wednesday, January 7, 2004 for the regular monthly meeting. The President, Andreas Junge, N6NU, was unable to attend due to business commitments so the meeting was chaired by Board member Gerry Tucker, N6NV. In attendance was Vice President Jim Rice, K6AK;

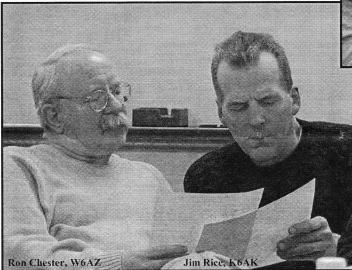
Secretary Terry Finn, AF6TF; Treasurer Ron Chester, W6AZ and PAARA graphs editor Wally Porter, K6URO. Also attending was Vic Black, AB6SO; Adrianus Schrauwen, W6AJS; Howard Takaoka, KG6GRO; Dave Rogers, K5DKR and Steve Brune, KG6OUB.

The meeting was called to order at 1930 hours with a review of the various committee chairs and coordinators & a lively discussion was had regarding the duties of these posi-



Howard Takaoka, KG6GRO will be coordinating with Al Montoya, WB6IMX, and attempting to establish a morse code training class for PAARA members & others. February 2004 is the 67 th anniversary of PAARA. We were formed on that date in 1937, which makes us one of the oldest, active, amateur radio clubs around. The meeting was adjourned at 2050 hours. Respectfully submitted by the PAARA Secretary.

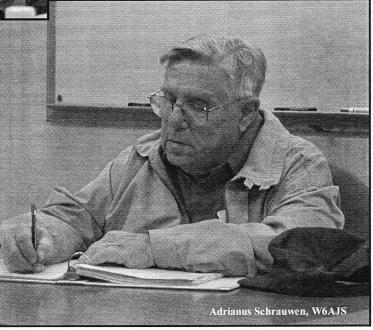
~Terry Finn, AF6TF.



tions and new people. The DMV registrations for the field day trailers was handled (both are owned by PAARA). Plans were made regarding the changes required at the bank for our club accounts. Speakers for coming PAARA meetings were briefly discussed as these are generally handled by Vic Black, AB6SO and Jim Rice, K6AK.

New membership cards will be mailed to paid up members of PAARA. Anyone renewing after January 15/04 will have to pick up their cards at the meetings. This membership card is required to be shown if seeking the special PAARA discount at the candystore.

Dick Kors, KM6EP, the official PAARA photographer has asked that he be relieved of his duties, so Steve Brune, KG6OUB will step in as the photographer coordinator for the time being. Steve will take digital photos of prize winners at the meetings & some special photos of members for inclusion in PAARA-graphs.



Attention Members and Visitors: Raffle Prizes for the February 6th PAARA Meeting:

Garmin eTrex GPS receiver

- **+THREE RADIOS**
- +Two FOURTH place PRIZES
- + BONUS PRIZE

PRIZE,
COND
ZE: TWO,
Vizard Orvith light.
raffle ion to s, free rechance to ound Table a lot of fun.
TINGS
ES and
K6IAN for
~Jim, K6AK Come try your hand at winning the FIRST PRIZE, Garmin eTrex, 12 Channel, GPS receiver; SECOND PRIZE: Icom IC-T2H, 5W, HT; THIRD PRIZE: TWO. Motorola Talkabout FRS Radios OR Sharp Wizard Organizer OR 12 Volt Portable Air Compressor with light. Don't forget about the TWO / FOURTH place raffle prizes plus a Bonus Prize of a 1 year subscription to WORLDRADIO. 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! Kyle, Ian and I are having a lot of fun. THANKS AGAIN FOR MAKING THE MEETINGS VERY EXCITING!

The PAARA Raffle is FULL of SURPRISES and YOUR LUCKY DAY may be February 6th.

> Contact Kyle, KG6MSK and Ian, K6IAN for tickets at the meeting.

Hello everyone:

I stumbled upon an interesting ham map system at: http://www.mapability.com/grids/t1index.html . It consists of seven continental maps and 27 subcontinental maps covering the entire globe. For each map you can select any one of several map overlays to add information to the map. These include CQ & ITU zones, grid locators, lat/lon, prefixes, IOTA entities, cities, and more. I tried their Western Caribbean demo and was impressed with it. TI understand their promo correctly, you can download all their maps and overlays for 19 Euros, which is around \$21 I think.

I thought this might interest others in the club.

73, Ron W6AZ

PAARA BADGES

to order one, pay membership coordinator

Lisa Rice KG6KQS

lisarice@earthlink.net next meeting pick up from

Dave Rogers, K5DKR

dkr@bigfoot.com

or contact at next PAARA meeting

Congratulations

PAARA Raffle Prize Winners

January 2nd 2004

Ist Prize: Jean-Claude Guillon W6JVG / Declined Prize / Thank you JC for your gracious gesture! JC was December 2003 "Dream to Reality" Icom 706 MK IIG winner. "Your karma grows stronger." 1st Prize: Dan Ryan K6DJR / FT-1500M Mobile 2nd Prize: Curt Kolovson W6RQ / Two Motorola **FRS Radios**

3rd Prize: Leigh Klotz WA5ZNU / Dual Band An-

4th Prize: Dan Ryan K6DJR / General License Man-

4th Prize: Terry Finn AF6TF / 1,000,000 Candlepower Spotlight

Bonus Prize: Paul Jemelian KG6JLE / 1 year subscription to WORLDRADIO

PAARA Members and Visitors: THANK YOU FOR YOUR SUPPORT of the PAARA 2003 Dream to Reality Raffle as well as the exciting monthly raffles!

PAARA has had a remarkable year in 2003, and YOU are responsible! If you aren't a member, please join PAARA and experience fun events with the Friendliest club around.

~Jim,K6AK 🖏

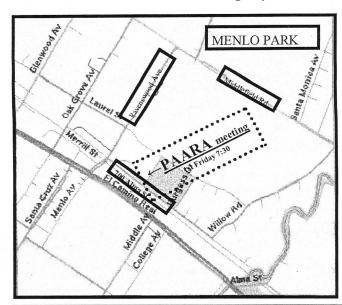
Join us for pre-meeting eyeball Feb 6th gab & gobble

Food will be served at 6:00 sharp, so guests will be on time for the PAARA

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

—across from Kepler's Book Store—

PAARAgraphs February 2004 Celebrating 67 years as an active ham radio club—-Since 1937



Want and For Sale ads in **PAARAgraphs** are FREE to members (Submit by e-mail or letter before the 15th of the month)



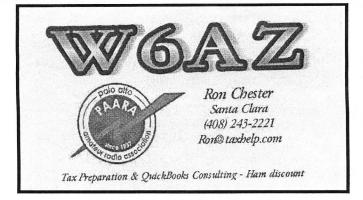
REDWOOD CITY -

- 650-366-9111

SAN FRANCISCO — SAN JOSE -

— 415-495-2245 - 408-266-2245

TERRY FINN AF6TF, CA License #1A38965 234 Marshall Street, UPSTAIRS #3 Redwood City, CA 94063-1550



PAARA Radio NET

every Monday evening 8:30 P.M., local time on the 145.230 -600 MHz repeater

PL tone off

control operators

1st Mon KG6ILA, Pinkney Foster 2nd Mon N6NU, Andreas Junge 3rd Mon AD6FX, Jon Zweig 4th Mon AA6PA, Bill Rausch 5th Mon tha

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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

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 any existing arrangements with the association.

The PAARAgraphs editors reserve the right to reject any ad deemed to be not in the best nterest of the Association. All fees payable in advance by the year with "scanner-ready" copy or text-only ads. Give payment and copy to Bob Korte

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 PAARAgraphs, \$6 for additional family members (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.





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FIRST CLASS MAIL

Korsak, Andy KR6DD 504 Lakemead Way Redwood City, CA 94062-3919

Sunnyvale, 510 Lawrence Exp. #102 (408) 854-6046

