

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Web Site Break In Report

by Paul KB5MU

On the 12th of November I received a "dear webmaster" message from Google informing me that some of the web pages on palomararc.org could "cause users to be infected with malicious software." I investigated, and sure enough, some unwelcome additions had been made to our club's web site. I administer the CentOS Linux computer the site runs on, along with about a dozen other sites for friends and family, and I feared that all those sites would have to be nuked from orbit and rebuilt.

A survey revealed that the obvious damage to palomararc.org was limited to just a few files, and there was no similar damage visible on any of the other sites on the server. That was good news, in two ways. First, it suggested that the intruder probably didn't get full root access to the server, so the mess would be easier to clean up. Second, it left traces that I was able to follow to see exactly how the break-in was accomplished.

Some of the damaged files were part of the Zenphoto photo gallery installation, which has been part of the web site for just over a year now. Most of the web site is very simple static

HTML, which generally isn't subject to security bugs, but the photo gallery is a rather extensive PHP application. Though Zenphoto is one of the simpler and more security-oriented photo gallery packages available, anything that complicated is going to have bugs that can be exploited. I checked the Zenphoto project's web page, and found a security update bulletin, which pointed to a support forum discussion that gave plenty of details.

Those details checked out, matching what I could see in the server's logs. I could see the initial break-in happen on November 7, and I could see the intruders return daily, making the actual changes to the web site files on November 9. Armed with this knowledge and the two-day-old security patch from Zenphoto, I was able to restore everything to its undamaged state and, presumably, prevent a recurrence of this specific kind of break-in. After a re-scan, Google gave the site a clean bill of health once again.

Save the Date

Club Meeting **4 January 2012**

Lithium Ion Batteries
How they work,
Why they fail
by Michelle W5NYV

Board Meeting **11 January 2012**

Palomar Amateur Radio
Club board meeting at
7:00pm at K2RP QTH.

ARRL Contest **Kids Day**

1800Z-2359Z, Jan 8
<http://www.arrl.org/kids-day>

Club Membership for January Edition

New Members: KJ6SQP and N6PDZ. And, five members reinstated their membership. Welcome back.

Have you visited the club Web Site lately? There is a new feature there that lists our current members by call, and lists their renewal date. Please check it out. Maybe your membership expired some time ago! If your call isn't listed, maybe membership made a mistake, but more likely your membership expired! We really do need and appreciate renewals.

AI
W6GNI

October's Fold & Staple Crew
W6GNI AI WA5ACE Sonny
KB6NMK Jo KB6YHZ Art & Janet

The ARRL San Diego Section now has a Section Emergency Coordinator.

Bruce Krypton, KG6IYN, has agreed to fill the position. I am confident that Bruce will do an outstanding job.

Steve Early, AD6VI

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
***Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories***
Email sales@impulseelectronics.com

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!

scope@palomararc.org

Lunch Bunchers -

We had a great Friday group at Callahan's on the 2nd of December 2011 and from the QRM level at my end of the table everyone enjoyed the lunch. :-)

Many of you know that Harv introduced the Friday lunch group to Callahan's years ago and some many of us were remembering our good friend today. Harv became a silent key on February 13, 2008. This DX club bulletin (link below) is posted on Bud/N7CW website. It's a flash back for many of us and I will always remember Harv's passion for ham radio and his passion for life.

See you all next Friday,
Tom
www.W0NI.com

<http://www.n7cw.com/downloads/hillerk6qk.pdf>

Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

AMERITRON ALS-600 SOLID STATE NO TUNE FET AMPLIFIER WITH AMERITRON 50 VOLT SWITCHING POWER SUPPLY. NEW, NEVER BEEN OUT OF THE BOX \$900.00 FIRM.

ED GENEST
w6abe@arrl.net

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150.

12-volt power supplies

Samlex SEC 1223 23 amp switching \$70

Astron 12 amp \$35

Ron K2RP@arrl.net
760 436-8109



RF PARTS[™]
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS
3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7
4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Adventures on 10m

by Michelle W5NYV

10m is my favorite band. I'm of the school of thought that the different bands attract a different crowd. The folks on 20m seem different to me than the usual suspects on 80m, and those who hang out on 40m are different still. The 10m crowd is interesting, humorous, friendly, civil, cooperative, and helpful. Plus, there are 10-10 numbers to be exchanged, and that is always a fun thing to do on the air! While this belief is somewhat self-fulfilling, in that if you believe in a positive outcome, then it seems more likely to occur, I am inevitably drawn to 10m operation, and hold a torch for that band, even during the long band closures we have experienced recently.

I've been remarkably lucky to get two extremely pleasant opportunities this past year to be the DX station on 10m.

In March 2011, a group of us YLs put together a DXpedition to Curaçao. We inhabited the PJ2T station for three days of operating, and I ended up on 10m a lot. Being the DX station is a substantially different experience than chasing DX on 10m back home, where I have a wire loop on a mountain and about 100 watts to work with. While I can be surprisingly well-heard, being on the other end of the pileup was exciting, challenging, and fun.

The weather in Curaçao was perfectly designed for my tastes. It was warm, breezy and sunny, with the deep blue ocean only meters away from our four stations arrayed in a large room with expansive windows. The galley-style kitchen was at our backs, and a constantly-in-use table separated the two areas. We had an enormously good time, and learned a lot from the experience. 10m cooperated, and there were enough people calling to keep me busy for hours at a time. I noticed how the band opening rolled across the United States, with different areas of the country being heard over time. You get an immediate appreciation for propagation effects when there are people calling you. It's difficult to see this in reverse. The DX station might come in and out, and you can explain it to yourself because most propagation effects are understood. There are, in other words, certain times of the day where you might expect to work, say, Curaçao, or France, or Hawaii. However, when you are the DX station, you hear the many stations calling, and can experience propagation changes with the many stations as samples. It makes for a strong "visualization" of propagation, and is probably my favorite thing about working pileups. Our YLDXpedition operated as PJ2W for the Russian DX Contest, and we operated under our personal

call signs. I was PJ2/W5NYV.

Back home from Curaçao, I worked CQP and another couple of contests, and made efforts to work DX stations whenever I had some free time. With the station being at a second home outside of the CC&R bound city, and not having remoted the station yet, my radio time is, as is often the case with many of us, quite limited. Paul KB5MU and I operated as W6NWG, our club call.

I enjoyed our club's Field Day (Palomar Amateur Radio Club) more than I ever had before in terms of operating. Only the anemic operator turnout was a downer, but our club is hoping to reverse this trend in the coming years.

We took our travel trailer to the Field Day site, and were assigned 40/15m to work. Not being a night owl in any way, shape, or form, I popped back up at 3am to work until after dawn, and traded short shifts back and forth with my partner Paul KB5MU until Field Day ended. While I didn't get a chance to work 10m at Field Day, it was on my mind, and I spent some time visiting all of the other stations, especially 10m.

Our 10m "specialist" in the club is Preston W6ASP. He seems to be able to work for many long hours! He is also quite a good sport, as we told him during setup that the 10m beam was missing, and sent him round and round the field to find it. He should have looked up, as it was already installed at his station. He forgave us, and we had some good runs on 10m. His was the only station with air conditioning, and it felt great since our Field Day site was a bit warm.

October 22nd was a Saturday, and I had my three kids and my mom loaded up in the minivan for a trip up to the mountain home. I was looking forward to some radio time in between all the other things that keep us busy. While in the driveway, I noticed I'd missed a call on the mobile phone. I decided to go ahead and return the call before setting out on our journey.

It was Wild Bill Wiederhold WB6BFG, and he had a question. "What's your spontaneity meter looking like today?" I had to laugh, wondering what in the world this was going to be about.

"Well," he continued. "You know that trip we've been planning to Rarotonga? We had someone drop out at the last minute. Is there any way you might be interested in perhaps coming along?"

Oh boy!

"We leave tomorrow night at 11pm."

Oh boy.

"The trip is scheduled to be two weeks long."

Oh. Boy.

I told him I'd know the answer in two hours. I called my family members and told them about the invite, and asked them if it was in the realm of possibility. I was very cautiously optimistic, as it is in my nature to up and go when the going is in the offing. However, leaving for up to two weeks during the school year on short notice was going to be, I reckoned, a big uphill battle leading to "no".

However, to my surprise, delight, and gratitude, everyone in the household was supportive! Everyone said yes, even the children. Although they don't really have as much of a vote as they seem to think they do, it's immensely easier for mommy to traipse off to play radio on tropical islands when they are excited about the trip (and even more excited when the first thing I mentioned was how many wonderful island treasures I might be able to bring back!).

The team of 8 operators and 3 companions had been assembled and planning and packing for some time, and had already collected equipment for 4 stations, to be set up at a motel on water's edge on the island of Rarotonga, in the South Cook Islands. Our goal was to compete in the CQWW SSB contest, and then operate as a DXpedition afterward. The team had been doing this contest, from places all over the world, for many years. They were all very experienced and skilled operators, and I was hoping I would fit in and that my skills would be up to the challenge.

I was instructed to pack as light as possible. This is a skill I manage to have! My check-in bag ended up weighing about 15lbs, as it was mostly space ready for equipment to be load-balanced to avoid baggage fees. When I arrived at the airport the next evening, I was able to take on a lot of extra "stuff" in the bag.

The team was friendly, welcoming, enjoyable, helpful, and interesting. Most everyone was from Southern California, with a few exceptions. I already knew Wild Bill and his comrade Ellen N6UWW. Ellen and Bill and I had all been in Curaçao together, and knew each other relatively well. The others I knew either by reputation or not at all, but by the end of the DXpedition I had a wealth of friendship to show for it. A lighter pocketbook as well, but that comes with the territory of last-minute international travel.

Our operating team consisted of Dick Norton N6AA, Art Goddard W6XD, John Cashen W5UG, John Fenoglio AB6BH, Ellen Utschig N6UWW, Wild Bill Wiederhold WB6BFG, Oliver Sweningsen W6NV, Michelle Thompson W5NYV (me) and Marty Woll N6VI.

John Fenoglio's companion Cindy, Art's wife Mary Ellen, and John Cashen's wife Maggy also joined us on the journey, with Dick's companion Cindy joining us a few days after the contest concluded. Mary Ellen brought a library's worth of books with her to share, and served us several delicious meals. Both Cindys were stellar company, with John's Cindy rising to the challenge and earning her scuba certification while we were on the island. Maggy had ready answers to all sorts of questions, was a great conversationalist, and had the best "raised eyebrow" look of the entire group.

I had a small Hello Kitty carry-on with a computer and a notebook stuffed in it, and my violin case, which went in the overhead baggage.

The direct flight from Los Angeles to Rarotonga took 9 hours. We landed at an airport ringed with volcanic mountains shrouded in the last bits of morning fog. The lovely morning light streamed down over the jagged tops, and heavy flower necklaces were presented to us in greetings compliments of Victor E51CG, a local ham and an invaluable contact and advisor. He helped us move all our baggage and recommended restaurants and services, and was immensely engaging in conversation. I look forward to his future visit to the United States.

Victor loaned us a very useful item - his five-element 10m beam! This went on the balcony of one of the ocean-facing rooms at the Kiikii Motel, which is where we stayed while on the island. The Kiikii consists of two long buildings each housing a set of rooms, with a pool and porch and yard in between. The rooms on the ends overlook the coral beach. There are two stories on the beach-facing end. The buildings drop down to single story for the inland rooms. I had the most inland room on the office side of the building. Spacious, simple, and peaceful, in this room the hot water came from a solar tank on the roof. Every room had a kitchen and a seating area. With a market within walking distance, and a fruit stand on the way, life was good in terms of being able to cook in your room. Life was equally good for going out to eat, as there were all sorts of restaurants and pubs all over the island. We tried our best to get to them all!

continued on page 6

The antennas were unpacked from their containers and put up over the first few days. For 40m, 20m, 15m, and 10m we had vertical dipoles, each with a reflector. For 80m and 160m, we put up large verticals. The 160m had a delta loop for tuning, which is a way to change the electrical length of a fixed physical length of antenna. Guying the antennas on a beach made almost entirely of large chunks of not-very-dense coral made for a challenge, but we adapted and figured out ways to make the guy wires stable and secure.

When Victor came over with the five-element 10m beam for the contest, the vertical dipole remained largely unused until I worked 10m for three days after the contest. Since not a lot of power was put through the 10m vertical dipole, we didn't have the same sort of trouble with arcing across the insulators that we experienced on 40m and 15m, and almost experienced on 20m. The insulators near the bottom of the antennas would get salt water sprayed on them, and running 500 watts through them resulted in a high voltage at the end of the dipole. Eventually, enough salt water collected to where it arced over and burned the insulator. For 15m, Ellen suspected this was the problem with the band when it didn't treat us as well as it should have treating us, and we ventured down to the beach to investigate. Sure enough, the insulator was well-burned. We swapped the insulator in the reflector with the one in the driven antenna, and put it back up, all in about 20 minutes. While this repair didn't magically return 15m to full operation, we counted it as a repair victory.

Other challenges were antennas blowing down and the 160m delta loop being moved by someone mowing the lot that the loop was guyed down within. The mower had very kindly untied everything, mowed down the jungle, and then retied everything as best he or she could, but the tying was approximate, and therefore the tuning wasn't exactly right. We noticed it before our last night of operation, and were able to fix it.

10m for the contest was our best band. 10m stayed open and busy the entire time. I put in two shifts on 10m and the rate kept me hustling. There is an interesting phenomenon with working a pile-up. If you start out on simplex, and more and more people try to call you, your rate goes up... for a while. There is a point where there are so many people calling that you start to have real trouble distinguishing call signs from each other. After this saturation point, your rate can actually go down. At this point, it makes sense to run split and spread people out, so you can get the rate

back up. The rate was almost too fast for me, but since my shift was only 4 hours long, and the rate slowly trended up, I hung in there and worked simplex the entire time. It was fast enough to get an "atta girl" from one of the more experienced operators.

With all the logging computers connected together, you could see the contacts being made on all the other bands rolling by in a window at the bottom of the screen. 10m stayed good and hot for almost the entire time, with many hours seeing more 10m contacts than the other bands. 20m was closed during the day a lot longer than we expected, and 15m was tough going the entire time. 160m was devastated by an enormous amount of local noise, although we eked out 6 contacts. 40m was wild and woolly at night. 80m was pretty good - I worked a very early morning 4-hour shift and got to see grey line propagation first hand, as the pileup slowly marched across the United States, from the eastern seaboard until the very last west-coast station, someone in Canada, managed to get in a last QSO. Then, it went silent.

After the contest, we returned the 10m beam, took down the 160m vertical and the 40m station, and I dragged up the coax from the 10m vertical dipole antenna to the 20m station room. We left 80m, 20m, and 10m up after the contest. Oliver was active on 80m. For the next three days, I traded back and forth with Marty as he worked 20m and 10m RTTY on his K3, and I worked 10m SSB whenever we weren't visiting, eating, watching dance shows, shopping for treasures, or telling tall tales. One of my missions was to secure a real treasure. Rarotonga is known for black pearls, and I had my eye on one or more. I got my wish, as myself and two other members of the group got a recommendation and ventured out to a black pearl shop.

I got a handful of odd-shaped ones for the children to have as keepsakes, and then picked out a few more expensive ones. If all goes well, I'll design and set these into some jewelry to be handed down the children when they are older. Of course, I do plan on wearing them in the meantime! In the end, I selected three pearls: gold, silver/green, and an amazing blue.

My comrade-in-pearl-shopping selected three matched black rose pearls as a gift for his spouse, and I can't wait to hear how it was received. They were an amazingly lovely triad.

On the first post-contest day of operation, I logged 430 contacts. I had a completely wonderful time on the air chatting and working people from all

over. I decided I would try for 1000 contacts on 10m.

Working a contest is different from working as a DX station. You don't have any time for conversation during a contest, and you're swept up in the excitement of competition. During the first part of CQWW, we tried to maximize QSO rate. During the last part, we started looking a lot more carefully at multipliers. Marty made a list of stations needed on 20m, and we began to try and coordinate. Whenever we worked a station that another one of our bands still needed, we would ask that station to check us out on our other bands. All of the information was on the networked screens - you could tell who had yet to work a particular zone, and what frequency

lot of US stations. I worked many Canary Island stations, and a few from other places. Only a few times did I have to call CQ, but one long stretch prompted Lloyd NH7RO?? to come back and tell me I had, indeed, worked out the entire band. I laughed and thanked Lloyd for keeping track, and told him I sure hoped I hadn't, since I still had another full day left of operating, and hadn't quite made 1000 contacts yet. When the dust settled on the third day, I had logged a few more than 1000, and subtracting out dupes and such, I expect that number to hold.

Alas, it came time for me to depart. I left a few days before the remaining DXpeditioners, so I didn't do much in the way of taking down the last set of antennas. I heard that the last antennas

The 5-element 10m beam can be seen in the upper right. From left to right along the beach are 160m and 80m verticals, then 10m, 15m, 20m, and 40m vertical dipoles with reflectors.



our other stations were on. The software we used is called Wintest, and although I had not used it before, it was easy to learn and by the end of the operation I was almost an old hand.

For 10m, the rule of thumb that I learned in Rarotonga is that you're most likely to contact stations that are directly across solar noon from your location. In other words, find where you are on a map, look at solar noon, and find your opposite side counterpart. Sure enough, that rule of thumb worked out well enough to be a solid predictor of radio activity on 10m.

I worked during the morning on all three days, and during the afternoon into early evening for two of those days. I worked a lot of Japanese stations, a big batch of eastern Europe, and a

came down in the rain!

I took two large suitcases of equipment back with me as checked baggage, while my belongings, in another checked bag, took a vacation through Australia, to be returned at a later date. After landing in the United States, and making it through customs and immigration with no difficulties, I met up with the owner of the equipment and handed it over before continuing the drive back to San Diego.

The DXpedition was successful, enjoyable, and very educational. I was very happy to be able to participate in a DXpedition where I could operate so many different times on 10m, and look forward to the next time with great anticipation.





Above, 2011 PARC Christmas Party Panorama, taken at Carlsbad Safety Center. Photo by Don KD6FWE.
Below, November 2011 Membership Meeting photos by Paul KB5MU.



Minutes

Palomar Amateur Radio Club Board of Directors Meeting

November 9, 2011

The meeting was called to order by President Dennis Baca KD6TUJ at 7:35pm at the home of Ron Pollack K2RP. In attendance were:

President Dennis Baca KD6TUJ
Vice President Ron Pollack K2RP
Secretary Paul Williamson, KB5MU
Director #1 Don Johnson, WD6FWE
Newsletter Editor Michelle Thompson W5NYV
Membership Chairman Al Donlevy W6GNI
Repeater Technical Chairman Conrad Lara, KG6JEI

Secretary's Report

No meeting minutes were available.

Treasurer's Report

Treasurer KI6LAV had distributed the Treasurer's Report by email, and copies were distributed. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by W5NYV. Motion passed unanimously.

Upcoming General Meeting

K2RP reported that the December meeting will be the annual holiday social and elections. The January meeting is scheduled to be presented by W5NYV on Lithium Ion Batteries: How they work, why they fail. The February meeting is scheduled to be presented by KB5MU on some aspects of APRS.

2012 Club Officers

K2RP reported that the Nominating Committee recommended at the November general membership meeting that existing officers KD6TUJ, K2RP, KB5MU, WD6FWE, and K7ELH be re-elected, and proposed David Ochs KI6LKP for Treasurer. No nominations were heard from the floor.

KD6TUJ (as presumptive President-elect) asked each of the present committee chairs W5NYV, W6GNI, and KG6JEI if they would agree to serve again in 2012, and all agreed. The Repeater Site Chair remains open.

Membership

W6GNI reported that the membership is up a few to 266.

Repeater Technical Report

Repeater Technical Chairman Conrad Lara KG6JEI reported that power converters for the packet equipment have been purchased and received, but not installed. Don WD6FWE is planning to make a 6m J-Pole antenna for the repeater site. A TNC is ready to be re-installed. There are reports of reduced receiver sensitivity on the 145.05 MHz packet node.

Operating Day

KD6TUJ reported that the PAPA group would again participate at Operating Day, November 20.

SANDARC Bylaws Amendment

KD6TUJ reported that the San Diego Amateur Radio Council (SANDARC) bylaws amendment was defeated, 14 nay to 11 aye. A two-third vote was needed to pass. The standing Bylaws Committee remains active, and KD6TUJ has been invited to participate.

SCRRBA Band Plan Change

KG6JEI reported that the Southern California Repeater and Remote Base Association (SCRRBA) has changed channel spacing in the 70cm band plan from 25 kHz to 12.5 kHz for D-STAR channels. Implementation is some years in the future.

Cycle for Life

KG6JEI thanked the Club for use of the repeater during the recent Cycle for Life event.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm (new time) on December 14, 2011.

Adjournment

The meeting was adjourned at 8:50 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

NiCd Lady Company

Grace Lloyd

N6WPA

grace@nicdlady.com

www.nicdlady.com

**Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs**

20585 Camino Del Sol • Unit B

Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

**KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON**

**Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!**

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. – 5:30p.m. *Ask about our great prices*
Monday thru Saturday
858 560-4900
or toll free 1-800-854-6046

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!

Work Party, December 11, 2011

by Dennis KD6TUJ

Don WD6FWE, Conrad KG6JEI, and Dennis KD6tUJ went up the hill to work on a few items. 6 meters needed a new antenna, power converters needed to be placed into service for packet, and general checks of equipment for winter.

Dennis constructed an antenna based on the plans of <http://www.qsl.net/w8cwe/6meterj.html>. Put it together at TOWizard and tried to match it. Works great at 54.14 MHz. Need to adjust better. The day is now done, take it home. At home it was set up against the tow truck to continue matching. As I go to adjust the match, the antenna decides to shift to ground level! Well at least the truck mirror stopped the fall. Now the nice, new, straight j-pole is slightly bent towards the top and the J is no longer parallel. RATS. Lets check the match to see how bad it is and if I need to start over. 1.1 to 1. Don't change a thing. Sending to the mountain. Conrad came by Sunday and used his premounted antenna transport system. (900 MHz antenna mounted on the right rear side of the bed and the right side mirror.)

When we arrived at the site, we proceeded to unlock the sheds, or not. I did not bring keys as it was not on my list. Conrad forgot to bring his keys. Got the key from the lock box, so now we can replace the 6m antenna. Checking my bag, I found old keys returned to me. NOT working, not working, worked. The key needed was so used, it was hard to open the radio rooms. After changing the antenna Don checked the match. Still 1.7, too high for the cavities to function. Change thought pattern for a while. Switch out power supplies for converters. This will bring voice, packet, and 220/Convair machines to battery backup power if line voltage is lost. A check of the repeaters showed they survived the scheduled power outage with no issues. Back to thinking about why the 6m antenna SWR did not change. Did the feed line change back to the other lead? NO. Took down an antenna, replaced an antenna, forgot about the dipole antenna that was tried and still connected to the feed through. Changed the feed line, checked the SWR and found 1.3. Much better. Narrowed down 6m problem to cavities. The project continues....

Dennis

Work party photos submitted by Dennis KD6TUJ.



METRO NET WITH CONVERTER IN MIDDLE REPLACING LARGE POWER SUPPLY



145.050 WITH CONVERTER INSIDE AT TOP RIGHT



LOWER RIGHT BNC CONNECTION LOOSE.



NEW 6M BENT ANTENNA ON FOLD OVER MA40 MAST



SNOW ON THE GROUND FROM FOUR DAYS BEFORE.

The Biggest Thank You

by Tom K16IET

I had an accident. I fell 40 feet. It caused a lot of problems. I was in the hospital for nearly a year, and that's when my father gave me a scanner to listen to, because TV was getting boring. I started playing around with the scanner, and I came across the winsystem. K6JSI is the owner. It's a linked repeater system that is also connected in with the IRLP. 18 different states and 5 different countries are linked. I heard people from California talking to people from Australia! Hearing people talk to each other from so far away was intriguing.

It was around 11:30 at night and they were doing the Insomniac Net. The guy that owns the system, Shorty, was the net control operator. Somebody asked him for his website, and he said it out loud, and I grabbed my laptop, and went to it. I sent him an email, because they asked trivia questions on the net, and you gave answers.

"Listen, I'm not a ham radio operator, I'm in the hospital, but here's the answers to the questions."

They let me participate from the hospital, through email. This made me feel welcome and appreciated.

After the net, he sent me an email back, suggesting that I should go into ham radio. It will keep you busy. He said I might be able to do it in the hospital, depending on which part I was in.

Somebody from PARC sent me the technician tapes for the exam. I listened to that for three months. I got out in four months, and somebody sent me an email talking about Handihams.

We have this camp once a year, and if you come up here, you can take the test. If you pass, you get a radio. This was the summer of 2007.

So, I did that. Borrowed the money from my dad to go to Minnesota. And I took the test, and passed!

During the week while I was there, there was a guy named John (one of the instructors), he helped me learn the questions and the correct answers. He would read, then give correct answers. It was a week-long process.

Only missed two questions! They were diagram questions. The day after I took the test, the FCC announced that you didn't have to take code in order to get your license.

I had studied code to take the code test, but I was relieved to not have to. I got my radio, and then came back to San Diego, and went on the Palomar website to find repeaters that I could use. I was listening to 73 machine, and people talked about the club. I joined, and everyone started helping me out a lot.

N6HPO gave me a 2m/440 Kenwood GW400a as a base station. It was an older radio, but 10 memory channels, a voice chip, and big numbers in the display. He also gave me a 2m/440 J-pole.

I went to camp again the next year, summer 2008 I earned my General license.

A Yaesu FT757 was loaned to me in order to get on the air. Everyone in the club taught me all sorts of stuff about HF. AC6V gave me one of his books, and he talked to me a lot and taught me about so many different things. He suggested to ignore people that have bad attitudes about people like me, and told me it was very important to have good radio etiquette at all times.

Some people believe that people like me shouldn't be on the air, because we may not speak or respond as quickly as they would like.

I participate in Handihams. Now that I have passed the Extra exam this year, I am going to start teaching next year.

People in the club are so nice. I may not know everyone's face, because I cannot see very well, but I recognize the voices, and I know that there are many anonymous people that have helped me out in so many ways. I want to thank everyone wholeheartedly for helping me with my radios and antennas and installations.

I'm on the radio every day, either on 2m or 440 or HF. I spend a lot of time on HF now. I want to thank the anonymous people for donating the Cushcraft antenna that I have. I want to thank Dennis N6KI especially for the 6m antenna. Bill gave me the J-pole and a G5RV. Terry helped me with a voice chip in a radio. These people help me so much. I really appreciate each and every one. For someone in my situation, I don't make a lot of money. Without the generosity of PARC and Handihams and the anonymous radio operators, I would not get to do this.

Amateur radio is a lifeline for me. It makes a huge difference.

One of my current challenges is quitting smoking. I have been a smoker for a long while, and this is

an uphill battle for me. I'm making progress on this goal, but it does make me a bit cranky! Quitting smoking is hard work, but worth it.

The city of Oceanside has this ordinance now, that says your antenna can only be so high. It can be only so many feet off the top of the roof. I am just under this limit. The best times on HF are when the weather is lousy. I get better skip when the clouds are thick. I can skip over the ocean better. Maybe it's because of my location, being a couple of blocks from the ocean and two stories up. There is nothing higher than my antenna anywhere near where I live. I'm in the redevelopment area, where the height limit is 3 stories. There is nothing in between me and the beach. I get very good signals to the west. East is kind of hard, since I can't quite get over the mountains, but there are times when I can talk all the way to Maine. I can hit different states, sometimes.

I have this list. I'm trying to get at least one contact in each state. I keep a log, and I've contacted 20 states. I'm slowly working further east as I go along. I have all the western states, and Texas and Kansas and Ohio. I've talked to Handihams on HF in Minnesota. Florida was difficult, but I managed to get a contact. Mississippi and Louisiana were contacted. I talked to a woman in New Orleans. What a conversation that was!

I usually work the radio late at night

One night about 2-3am, I got up to work the radio. I wasn't able to sleep. There was this deep voice. She was talking to someone in Kansas, and then asked if there was anyone else out there wanting to make a contact. I answered, and she came back to me!

My HT got stolen about a year ago. I go to the beach almost every day, and keep the HT in the back pocket of my wheelchair. I was listening to the radio through headphones, and it was exceptionally silent. When I got home, though, the radio was missing. The lifeguards and the police



Tom KI6IET at the October 2011 PARC Auction. Photo by W5NYV.

kept a lookout for it for a long time, because they know how much it meant to me.

I consider everybody in ham radio to be part of my family. The biggest thing is that I want to put a big thank you out to the PARC for anybody that has ever helped me with any of the many things that have benefited me and made my life better. To me, it means a lot to me. The kindness of the club members has changed my life and I want all of you to know how much it means to me.

Being able to talk with others that accept me for who I am, and talk with me about anything and everything, and aren't afraid to talk with me, makes my life so much better. By just being there, by just talking to me!

SCOPE
P.O. Box 73
Vista, CA 92085-0073

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Return service requested



Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 4th of January 2012, Michelle W5NYV will talk about Lithium Ion Batteries, How They Work and Why They Fail. There may be some shennanigans.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Who was the featured listing on QRZ on 21 January 2012? Why, Preston, W6ASP of course!

Call: N6KI
Operator(s): N6KI
Station: W6HCD

Class: Single Op LP
QTH: CA
Operating Time (hrs): 10

Summary:
Band QSOs Mults

160:	56	13
80:	64	20
40:	138	44
20:	158	45
15:	184	46
10:	168	28

Total: 768 196 Total Score = 150,528

Club: Southern California Contest Club

Team: SCCC #2

Disappointing condx overall. never got anything going on 10 and 20. 80 mtrs was a real struggle but 160 surprised me as I could actually get few small runs going. 15 and 40 yielded most Mults per QSOs

Still working on noise issues at this hilltop site and hope to relocate noise sense antennas closer to the source of a neighbors noisy DLP TV nearest one set of antennas.

K3, 3 El SteppIR @ 40 ft - 2 El Shorty 40 @ 46 ft, 80 and 160 inv V dipoles at 70 ft

N6KI

Save the Date

Club Meeting

1 February 2012

APRS by Paul KB5MU

Board Meeting

8 February 2012

Palomar Amateur Radio
Club board meeting at
7:30pm at K2RP QTH.

Social Event

Food Massacre!

It's a tradition. Talk to
Dennis N6KI.

Club Membership for February Edition

New Members Joining PARC: WA6GHW and KC9IYR.
Several members reinstated their membership, which had lapsed. Thanks to all.

A number of members have elected to receive the SCOPE on the WEB. This saves the club the cost of printing and mailing, which is good. The 'not so good' is that they do not get the monthly reminder that their membership is up for renewal - which is printed on the mailing label for those that receive the SCOPE by mail.

Now club membership is listed on the web site, along with the renewal date. If your call is not listed, maybe you have upgraded and have a new call, or maybe I made a mistake along the line, or is it possible that you have forgotten to renew?

AI
W6GNI

The ARRL San Diego Section now has a Section Emergency Coordinator.

Bruce Krypton, KG6IYN, has agreed to fill the position. I am confident that Bruce will do an outstanding job.

Steve Early, AD6VI

January Issue Fold & Staple Crew
We had the whole crew, new and old!!
W6GNI AI & Kathy KB6NMK Jo & N6UZH Terri
WA6ACE Sonny & W5EPM Roni
KB6YHZ Art & KI6LKP Dave
Tyler Brewer & Matthew Brewer &
Micak Brewer

The last Fold & Staple for 2011!

IMPULSE Electronics
(760) 747-5277 – (866) 747-5277
www.impulseelectronics.com
***Your Connection for
Emergency Power Solutions***

Power Products
Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products
RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
***Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories***
Email sales@impulseelectronics.com

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!

scope@palomararc.org

**RF PARTS[™]**
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS
3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7
4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

AMERITRON ALS-600 SOLID STATE NO TUNE FET AMPLIFIER WITH AMERITRON 50 VOLT SWITCHING POWER SUPPLY. NEW, NEVER BEEN OUT OF THE BOX \$900.00 FIRM.

ED GENEST
w6abe@arrl.net

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf). The last free ad I was able to find was from your April issue. I have relisted the items (minus the ones he sold) for you to place back into your scope newsletter for the next few months as he desires to sell his stuff. Here is what is left:

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000 Transceiver	\$2,000.00
Kenwood TS-950 S, 10-160 M Transceiver	\$2,000.00
Simpson Analog Multimeter, Model 260	\$60.00
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Centurion amp 1kw with spare 3-500 tubes	\$1,500.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,500.00
6 Tubes EIMAC 3-500	\$100.00 ea.

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis Firenze
760-536-3372
760-224-0849 (cell)
firnzied@att.net

What Has Changed on the W6WNG Repeaters?

By Bernie, N6FN

In mid-January, Art, KC6UQH and Bernie, N6FN, took a trip to the repeater site to install a re-worked 447.000 repeater, which Art had modified to operate using low-side injection (rather than high-side injection) with the objective of preventing image interference caused by another repeater service on Palomar Mountain. This had been a serious problem for over a year and was measurably improved mid last year after Art improved received signal filtering by installing an additional cavity duplexer. But under certain conditions, interference could still occasionally be heard on the squelch tail. Art's low-side injection modification should completely eliminate the interference.

PL is now required on 146.730: On the same trip the firmware controlling the 146.730 repeater was replaced with modified code so that it now defaults to PL on. For the last year or so, it had been the club's practice to enable PL on the 146.730, just like all of our other repeaters. But the way the 146.730 controller firmware was written, it defaulted to PL off. Consequently it had to be re-enabled "by hand" every time the power failed or the controller was reset. Now it operates just like all of our other repeaters, defaulting to PL on whenever power is reapplied. If you are having trouble accessing the repeater, make sure your radio has 107.2 CTCSS tone encode enabled.

At the same time the firmware for all of the other repeaters was also changed. Most of the modifications will be transparent to repeater users, as they primarily affect how the repeaters are remotely controlled via a separate control link frequency.

What has changed contest: One of the firmware changes made to the repeaters should be noticeable to observant users. What this change is will be announced in next month's SCOPE. In the meantime, we are having a contest, awarding a \$40 Gift Certificate via a drawing that can be entered by those that figure out what changed. The \$40 Gift Certificate is good for any of the amateur radio guides and books available from the Nifty Ham Accessories web page: www.niftyaccessories.com.

Hints:

1. The change can be noticed by monitoring conversations on any of the W6WNG repeaters.
2. What was changed had previously been

in effect since 1993, when the currently used repeater controllers were originally installed.

How to enter the contest: If you have figured out what has changed, send an email to

berniel@niftyaccessories.com

stating what you think it is. Please place "What has Changed" in the subject line of the email so that I can pick out your email from all the others I receive. All correct entries will be placed in a drawing, from which one will be drawn at the next meeting to receive the \$40 Gift Certificate.

Minutes

Palomar Amateur Radio Club
Board of Directors Meeting
December 14, 2011

The meeting was called to order by President Dennis Baca KD6TUJ at 7:09pm at the home of Ron Pollack K2RP. In attendance were:

President	Dennis Baca KD6TUJ
Vice President	Ron Pollack K2RP
Secretary	Paul Williamson, KB5MU
Treasurer	Dave Ochs KI6LKP
Director #2	Eric Hutchins K7ELH
Membership Chairman	Al Donlevy W6GNI
Repeater Technical Chairman	Conrad Lara, KG6JEI
ex-Treasurer	Georgia Smith KI6LAV

Approval of Committee Chairs

KD6TUJ re-appointed Al Donlevy W6GNI as Membership Chairman, and W6GNI agreed to serve. KD6TUJ re-appointed Michelle Thompson W5NYV as Editor of the newsletter, and KB5MU relayed W5NYV's agreement to serve. KD6TUJ re-appointed KE6JEI as Repeater Technical Chairman, and KE6JEI agreed to serve. KD6TUJ stated that the position of Repeater Site Chairman remains open. Motion by K2RP that the newly elected members of the Board approve these appointments. Seconded by KB5MU. Motion passed unanimously.

KD6TUJ designated committee chairmen W6GNI, W5NYV, and KE6JEI to serve as directors. Motion by KB5MU that the newly elected members of the Board approve these designations. Seconded by K2RP. Motion passed unanimously.

Treasurer's Report

Treasurer KI6LKP distributed copies of the Treasurer's Report. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by K2RP. Motion passed unanimously.

KI6LKP stated that he'd find it convenient to have an ATM card to facilitate making deposits. KI6LAV stated that the type of account we have does not allow ATM cards.

KB5MU asked if we can move our account away from Bank of America "because they are evil." KI6LKP agreed to investigate options.

KI6LKP stated that there are two big boxes of Treasurer's records and asked if they could be stored at the TOWizard storage site. KD6TUJ agreed.

KI6LKP asked about the purpose of the self-insurance account. It was explained that the club set aside money against the need to replace equipment in preference to paying for equipment insurance. K2RP stated that the ARRL equipment insurance deal was much improved since the club opted out of it.

Secretary's Report

KB5MU distributed copies of the minutes of the October and November Board meetings, previously sent by email. Motion by KG6JEI to approve the October minutes as published. Seconded by K7ELH. Motion passed unanimously with KI6LKP abstaining. Motion by W6GNI to approve the November minutes as published. Seconded by K7ELH. Motion passed unanimously with KI6LKP abstaining.

Upcoming General Meeting

K2RP reported that the January meeting is scheduled to be presented by W5NYV on Lithium Ion Batteries: How they work, why they fail. The February meeting is scheduled to be presented by KB5MU on some aspects of APRS. March will mark the club's 75th anniversary of affiliation with ARRL, but by general agreement that will not be the main focus of the meeting.

Membership

W6GNI reported that the membership is 260, and that the online membership query and join or renew facilities are working well.

Repeater Technical Report

KG6JEI reported that the work party trip on Sunday was quite chilly. DC-DC power converters were installed on the metro net and 145.05 MHz packet nodes. The packet repeater is still off the hill for repair. The county (or someone) has done

a lot of brush clearing on the slope below the repeater site. The tower was examined to find a mounting site for the PTZ camera, and John Kuivinen WB6IQS was consulted by phone and will fabricate mounting brackets.

KG6JEI asked about placing a second lock box at the site to hold a full set of keys to the buildings not unlocked by the key in the existing lock box. The consensus was that this would be a good idea.

The new 6m antenna built by KD6TUJ was installed, but slightly bent, and showing a 1.3:1 VSWR on the tower. An antenna analyzer shows at least a 2:1 VSWR on the cavities, which still need to be tuned.

Sensitivity complaints about the 145.05 MHz packet node were investigated but not confirmed. The squelch on that receiver was adjusted. There may be a lingering squelch issue on the 147.13 MHz repeater. Otherwise the repeaters seem to working well.

The repeater site is in good shape and ready for the winter. No scheduled work parties are scheduled until spring.

The generator stored at the site is not able to run the battery chargers, because they require 240VAC and a very stable frequency. The plan calls for both the generator and the battery chargers to be replaced.

KD6TUJ stated that his cost to construct the 6m antenna was \$83. Motion by K2RP to reimburse KD6TUJ \$83. Seconded by KB5MU. Motion passed unanimously.

Meeting Room Availability

KD6TUJ reported that we have reserved a meeting room at the Carlsbad Safety Center for all club meetings in 2012, including the auction meeting in October. We also reserved a meeting room for VE testing for all dates in 2012 but one. That exam date will just be canceled.

Operating Day

KD6TUJ reported that the Operating Day scheduled for November 20 was canceled due to unpleasant weather. It will be rescheduled for the spring. It was suggested that the parking lot at Fry's Electronics might be good, perhaps on March 18. KD6TUJ agreed to ask Fry's about it.

SANDARC Bylaws Amendment

KD6TUJ reported that he had received no responses to his email asking other clubs about

continued on page 6

continued from page 5
the San Diego Amateur Radio Council (SANDARC)
bylaws amendment.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on January 11, 2012.

Adjournment

The meeting was adjourned at 8:22 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

Minutes

Palomar Amateur Radio Club
Board of Directors Meeting
January 11, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:32pm at the home of Ron Pollack K2RP. In attendance were:

President Dennis Baca KD6TUJ
Vice President Ron Pollack K2RP
Secretary Paul Williamson, KB5MU
Director #1 Don Johnson, WD6FWE
Director #2 Eric Hutchins K7ELH
Membership Chairman Al Donlevy W6GNI
Repeater Technical Chairman Conrad Lara, KG6JEI

Treasurer's Report

KD6TUJ distributed copies of the Treasurer's Report. The \$587.28 expense listed under Repeater Equipment is a reimbursement to KG6JEI for DC-DC power supplies and DC cutoff relays. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by K2RP. Motion passed unanimously.

Secretary's Report

KB5MU distributed copies of the minutes of the December general membership meeting and the December board meeting, previously sent by email. Motion by W6GNI to approve the general membership meeting minutes as published. Seconded by WD6FWE. Motion passed unanimously. Motion by KG6JEI to approve the board meeting minutes as published. Seconded by WD6FWE. Motion passed unanimously.

Upcoming General Meetings

K2RP reported that the February meeting is scheduled to be presented by KB5MU on APRS. K2RP asked WD6FWE to do a presentation on 6m

for March. Joe Coronas N6SZO has volunteered to present on hidden transmitter hunting for April.

Membership

W6GNI reported that the membership is 277.

Repeater Technical Report

KG6JEI reported on an unscheduled trip to the repeater site to investigate problems with the 147.130 MHz repeater. It appears the power supply is in overcurrent shutdown. It was replaced with a spare supply, but the repeater failed again while the work party was driving home.

The 147.175 MHz repeater is still having squelch problems, but they don't interfere with normal use of the repeater.

The 6m cavities were removed from the hill. They are in surprisingly good condition inside. Some teflon insulators might be fabricated to mount the tuning rods more securely, reducing the need for periodic percussive maintenance.

Would it be a good idea to ask for permission to link our 6m repeater to the N6LXX linked system? Perhaps this can be discussed after the repeater is working again.

Field Day

Field Day is coming. We don't have a chairman or a site yet.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on February 8, 2012.

Adjournment

The meeting was adjourned at 8:23 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

A Home Brew Story

by Ron K2RP

January QST's theme was "Do it Yourself," and highlights construction projects, including an article on building a 1950s style Novice CW transmitter.

This article inspired me to share the story of a home brew transmitter of this variety that I own, even though I did not myself build it from scratch. First, let me share the story of how it came into my possession. A few weeks ago I attended a swap meet in Carlsbad sponsored by an antique radio association which emphasizes broadcast receivers and home entertainment. Although my interest lies in short wave equipment, I had heard that such equipment, as well as parts and tubes, show up frequently at these meets.

On the tailgate of a truck at the very first spot was a homebrew project with a chassis on which several tubes and coils were mounted. Closer examination revealed that it was a 75 watt transmitter, built from plans in the 1962 ARRL Handbook, with a copy of the construction article included. It appeared to have been built almost exactly as the article suggested. A conversation with the owner revealed that the coils included were for the 40 meter band, and that he had tested the unit, and while there was some output, there were some issues. As was common at that time, the design was for separate plug in coils for each band-no bandswitch. Thinking of the upcoming "Straight Key Night," a deal was quickly struck, at a very reasonable price.

A word here about the seller: It turns out that he is a ham. Bill, KC9IYR, has recently moved to our area from Wisconsin, and lives only a few blocks from me. Immediately, he was invited to PARC's December social meeting, where he met many of our members, and joined on the spot! Welcome, Bill!

The circuit is very similar to many Novice units of the era. The heart of the transmitter is a 6AG7 oscillator driving a 1625 amplifier. Old timers will remember the 1625 tube as the 12 volt filament version of the popular 807, often used as an AF or

continued on page 12

RF amplifier handling about 75 watts input (as power was measured at that time). The 1625s were used as final amplifiers in the ARC5 Command sets that were popular after World War II for conversion to amateur use. The tubes were available at that time for 25 to 50 cents each, brand new surplus! This transmitter design, unlike many others, included separate rectifiers, (6DE4s) for the low voltage requirements, as well as a string of NE2 neon bulbs as voltage regulators. The original builder substituted an 0C3 regulator tube for the NE2 bulbs. This attention to the B+ system no doubt accounts for the fact that there is no chirp distinguishable on the output, unlike most similar home brew, and many commercial, low power simple transmitters.

When I examined my acquisition, I found a few deficiencies that needed to be corrected before plugging it in and testing it. The electrolytic filter capacitors were suspect, so they were replaced.



Hi Michelle,

Here are the pdfs about that article that was found that made it into a 1940s QST, for PARC's archives.

Two of the pdfs are of the actual newspaper clipping; one is a bit clearer which is a copy of the actual article without the date. The other is from the newspaper which was sent to me by a friend who found it while researching other items. Having this date allowed me to actually dig thru the old magazines my dad had saved, finding the actual article which I then scanned.

Regards,

Roni Elsberry
W6EPM



Building and Tuning a Three-Element Beam

Complete Details on a Practical Home-Made Rotary

BY HAROLD ULMER,* W6EPM

ABOUT a year ago I decided to put up a Q-fod antenna and later convert it into a "Q beam." Looking over the good places to hang the antenna, I noticed a light pole with only a street lighting circuit attached to it. This seemed like just the support for a real antenna that any little gust of wind would not take down, and soon the "Q" was doing its stuff.

No more thought was given to the antenna until my neighbor across the street, a trouble shooter for the local power company, knocked on the door and said he had orders to cut down the antenna and let it fall in the yard. I immediately went scotching around and got in touch with a friend in the company who said that some poles were for sale which were of no value for line work but were considered good "fire wood." The enormous price was three cents per foot!

This was almost too good to be true, but my friend promised to pick out a good one and have it available in about two weeks. I borrowed some digging tools and had the hole ready the very next day and that afternoon, while I was at work, my friend phoned and said the pole was lying in the yard. That was really more than had been expected, but I bought a gallon of creosote on the way home and painted the base of the 40-foot pole.

That evening I went to see a close friend who happens to be a blacksmith. We looked at every picture of every rotary beam antenna in all the magazines and handbooks until we found one using a Model T Ford rear end and decided on that. Because we are right on the coast, we decided the greased bearings were just what we wanted, and that very evening we scouted around until we found what we wanted.

We first operated on the rear end by cutting off one axle at the edge of the differential casting. This end of the casting was covered with a plate to keep the grease in the housing, and then the sawed-off axle was jammed by welding two of the small differential gears together so that the untouched axle would move freely and with no differential effect. A nut put in the gears will also jam them satisfactorily, but welding can be relied upon not to jump out of place as a nut might do.

Next, a piece of 7½-inch water pipe was purchased from the city water company. The rear end was the right size that would set in the pipe nicely and a disc, with a hole large enough to take the sawed-off end of the differential, was made

and welded about 6 inches from the end of the piece of pipe. The differential was then welded in eight places—four around the end of the pipe and four around the internal disc. With this welding, any four places can break and the antenna will not come down. The pipe was slipped over the end of the pole and fastened by eight 3-inch lag screws.

When the rear end was in place, some of the fellows "who raise poles for a living" were kind enough to come by and see that the pole was put up properly.

The cross beam for the elements was the next thing for consideration. First it was necessary to decide on a good method of getting to the ends of the cross beam for adjustments. Thanks to W9HLE,¹ it was decided to make a strong cross beam and pivot it on two bolts in the ends of a turn table mounted where the car wheel used to go. The cross beam was made of two 18-foot lengths of 2 by 4, separated by six short lengths of 2 by 4, making the boom 4 inches high, 6 inches wide and 18 feet long. The turn table was made by first tearing apart the old wheel until only the hub remained. Then a piece of ¾-inch sheet iron 8½ inches by 14 inches was bolted and welded (safety first!) to this hub. Two pieces of 1 inch by 2 inch channel iron 3 feet long were welded to the plate and half-inch holes were drilled in the ends. The pieces must be at least half the thickness of the boom longer than the plate, to make it possible to tip the boom. Small blocks of ¾-inch iron 2 by 5 inches were welded at the ends of the channel iron to furnish additional side support to the boom. It is a very simple matter to remove either bolt and, by using hooks (five-foot pieces of thin-wall iron conduit with a hook at one end and a loop at the other) with ropes tied on the ends, it is possible to pivot the boom on the remaining bolt. The tipping is

¹Moore, "Supporting the Rotary Beam," *Radio*, March, 1939.

If you have gazed long and longingly at the rotary-beam ads but your purse didn't agree with your desires, you might be interested in some of the ideas in this story. You may not be quite as fortunate in your choice of friends as is W6EPM, but that shouldn't hold you back too much.

*302 N. Clementine, Oceanside, California.

LOCAL AMATEUR HAS ARTICLE IN RADIO MAGAZINE

Harold Ulmer, local postoffice employe and an amateur radio fan, shows his versatility this month by having an article published in QST, official organ of the Amateur Radio operators.

Ulmer, who operates amateur radio station W6EPM from his home at 302 North Clementine, has recently built and tuned a three-element beam, which is the latest development of the amateur operators.

In the article, which carries his by-line he tells how this was done, and of the pleasure he got from building as well as operating the beam.

In a letter to the Blade-Tribune from John Huntoon, of the American Radio League, he has this to say:

"Experimental work done by Ulmer and reported by him in his article has to do with the construction and installation of a short-wave directive antenna system. Interest among amateur radio operators in directive antenna systems, particularly those with variable directivity controlled by a motor-driven rotary, has been quite high in recent years; amateurs, of course, engage only in two-way communication and are therefore interested in transmitting a maximum signal in one direction only, rather than a broadcast in all directions. Such a policy, in addition to giving the receiving operator a stronger signal to work with, is a great help in eliminating interference in the crowded amateur bands. An additional feature of Ulmer's article is that complete details are given on the tuning and adjustment of the system."

Website Update

on Wed, Jan 4, 2012 at 11:55 AM, Joseph wrote:

I was thinking it might be nice to have the scheduled weekly NETs on the published calendar, I have that subscribed in my Google Calendar and on my iPad, it would give me a nice one spot to see when everything is happening.

Thanks!

OK, I've set up a Google calendar with the regularly scheduled nets on it, and put links to subscribe on the main page (below the regular calendar) and on the Nets page. Let me know if that seems to work for you.

3 -Paul KB5MU

done by one person on the ground pulling on the rope on the side of the turn table from which the pivot bolt has not been removed.

My good neighbor insisted that he help me when it came to climbing the pole, since he was experienced at that work. That sounded fine, so his offer was put to good use. The way the parts were arranged it was possible for just the two of us to put the cross beam up.

The turn table was made secure at the top of the pole in the same manner as if it were the wheel which belonged there, and we were then ready for the cross beam. We fastened a small block and tackle to the top of the pole, and while I did the hoisting my good neighbor guided the cross beam in to its resting place and put the bolt through the two channel irons and beam. We were then ready to put on the cross arms and elements.

The cross arms used were of 2 by 4 pine 8 feet long and were fastened to the cross beam by 3-inch lengths of 3-inch angle iron $\frac{3}{4}$ -inch thick. The elements were mounted through the holes in some type P18 insulators. In case this is an unfamiliar type to some of you, the type P18 is the kind used to tie the service lines on at the edge of houses near the meter box. They can be secured at most electrical supply houses and are very good for supporting beam elements because of their strength and the fact that they have a



The boom is raised by block and tackle after the cradle is in place on top of the pole. In this view, the boom is on the way up and a rope is being tied to the boom so that it can be pulled into place over the cradle.

single screw mounting. There is a single hole through the insulator which will take either $\frac{1}{2}$ - or $\frac{3}{4}$ -inch pipe, depending on the size insulators purchased.

The elements in this antenna were made of the new thin-wall hard-drawn copper water pipe and, using the "streamline" fittings, a neat layout is possible. We used a section of $\frac{1}{2}$ -inch pipe, then a piece of $\frac{3}{4}$ -inch pipe, and the last 6 feet of each half section was some $\frac{1}{2}$ -inch dural pipe which happened to be on hand. This type of element has some sag but is fine electrically, and the cost was only about \$9.00 for the six sections. Iron conduit was considered at first because of its rigidity, but it was impossible to get it plated at a poor man's price. To put it up without plating was simply out of the question, after our experience with iron for shielding in a transmitter. Iron proved to be a very poor conductor of r.f., as indicated by different r.f. potentials all over the shielding which was supposed to be at ground potential. That may be a word of warning to anyone thinking of using iron pipe for r.f. purposes.

Now that the antenna was all up, we couldn't wait to give it a check — even before the rotating gear was finished. The first step was to take the old Q-fed flat-top and put it in a vacant lot about 130 feet away and about 6 feet in the air. A thermogalvanometer was borrowed and put in the center of this antenna and, with the rig on low power, we checked the meter while rotating the antenna. We were very disappointed — the first

reading was 10 on the front side and 8 on the back. This showed us, of course, that the tables used for element calculation could not always be depended upon, and it also indicated that any of the already-cut-and-pretuned commercial beams cannot always be "on the nose." Again my good neighbor volunteered to go up the pole and adjust the element lengths. The first step was to lengthen the reflector $1\frac{1}{2}$ inches — the meter went to 20, showing that we were going in the right direction. After about two hours of adjusting, we found the reflector approximately 15 inches longer ($7\frac{1}{2}$ inches each side of center), the antenna okay, and the length of the director not to be very critical at all, so it was decided that the formulas were okay on the antenna and director. The antenna was tuned for 14,300 kc.; the director length is 32 feet, the antenna length is 33 feet 5 inches, and the reflector length is 35 feet 8 inches.

The feed line is brought down to the end of a 42-inch bracket mounted half-way down the pole. The bracket is pivoted on a 9-inch iron angle which allows the bracket to swing around the pole for about 300° rotation, effectively preventing the feeders from tangling at any time during the rotation of the antenna system.

Results

The final results were very pleasing. With the transmitter at about 800 watts input the meter went off scale with a bang — probably about 150, if the meter had read that far — on the front side but on the back side, with a full kilowatt, the meter read less than $\frac{1}{2}$ of one division, showing a ratio of at least 300 to 1.

The next step was to get the standing waves off the feeder. The conventional Y-matched impedance formula should be approximately correct or a good place to start at least. Most articles say to use a neon lamp to check the voltages along the feed line, but this is a little difficult with enameled wire, so a wavemeter type indicator was used, using the conventional coil, condenser and lamp in series. This type is the best, because it is cheapest, and if you drop it you don't

lose much. This part is important, because it is generally necessary to fasten a 10- or 15-foot stick to it in order to follow the feeders. If the point on the Y where the feeders connect can be reached, it is simple to tell which way to move the tap on points of the Y to the antenna. If the indicator lamp gets dimmer as you move down the feed line from the junction, the tap-on points on the antenna should be nearer the center. If the lamp gets brighter as you move away from the junction,

Two views of the steel cradle used to support the boom. As can be seen in the view at the right (the cradle is upsidown), only two bolts are used to hold the boom to the cradle. This allows the boom to be pivoted down parallel to the pole, so that adjustments can be made on the elements.

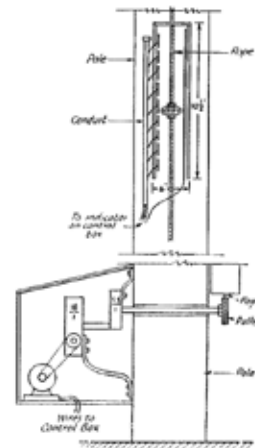
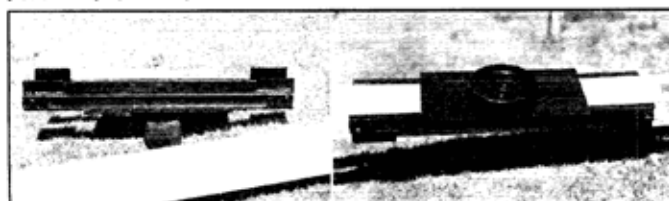


Fig. 2 — Two views of the pole, showing the direction indicator (above) and the rotating mechanism (below). The direction indicator uses a sliding contact fastened directly to the control rope. The contacts, in turn, are wired to the 16 dial lamps shown in Fig. 3.

The rotating mechanism, mounted on the side of the pole, uses an old washing-machine motor and reduction gears.

Two views of the steel cradle used to support the boom. As can be seen in the view at the right (the cradle is upsidown), only two bolts are used to hold the boom to the cradle. This allows the boom to be pivoted down parallel to the pole, so that adjustments can be made on the elements.





The Radio Amateur's Journal

Takes pleasure in awarding this Certificate of Merit to
WQ6X

In Recognition of the achievement of winning the **2011**

World Wide WPX Contest

UNITED STATES 6TH AREA

for the

division for

1ST PLACE SSB MULTI-SINGLE

A Total score of **4,958,590** *points was computed on the basis of the number of stations worked and call sign prefixes contacted. In witness of this achievement, we hereby affix our signatures on this day.*

#14 NORTH AMERICA #7 UNITED STATES OPS: N6KI WQ6X N6CY AF6WF K6KAL KD6HYN

Rabul K5ZD

CQ WPX Contest Director

D.S. W2VU

Editor, CQ

We Done GOOD !!!

We Used WQ6X CallSign

Thanks to all Ops for your efforts!

See Above Award

73, Dennis N6KI



The Radio Amateur's Journal

Takes pleasure in awarding this Certificate of Merit to
W5NYV/6

In Recognition of the achievement of winning the **2011**

World Wide WPX Contest

UNITED STATES 6TH AREA

for the

division for

1ST PLACE LOW POWER SSB SINGLE OPERATOR 40 METERS

A Total score of **153** *points was computed on the basis of the number of stations worked and call sign prefixes contacted. In witness of this achievement, we hereby affix our signatures on this day.*

#15 NORTH AMERICA #14 UNITED STATES

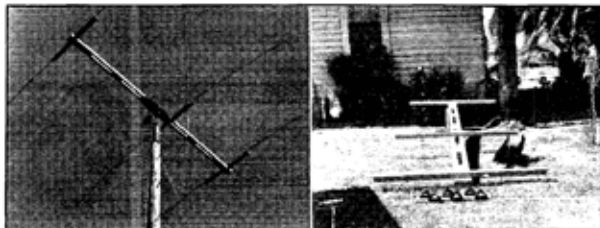
Rabul K5ZD

CQ WPX Contest Director

D.S. W2VU

Editor, CQ

Not to be outdone by Dennis, I had to share my 1st place finish in WPX as well. -Michelle



The 3-element beam is mounted on a turntable made from an old automobile rear-end and is rotated by a motor fastened near the base of the pole. Delta match is used between the feed line and the radiator and, by supporting the feeders away from the pole by a bracket (not shown), it is possible to rotate the beam through 360° without tangleing the feeders. Two ropes, broken up by egg insulators, support the feed line at the bottom of the delta section. The steel cradle used to support the boom and the brackets that hold the cross-arms to the boom are shown in the picture at the right.

tion, the taps on the antenna should be moved out farther from the center of the antenna. Our final adjustment was 53½ inches each side of the center. Incidentally, this feeder adjustment should be the very last adjustment because every other change will affect the distance between taps on the antenna. This type of feeder was selected because of the low resistance of the antenna on a three-element beam. When a center matching arrangement is used, it is necessary either to use two Q sections or slip rings and a J section. Slip rings were considered undesirable because if even one ohm resistance is introduced by the connection, approximately ¼ of the power is wasted in a 7-ohm antenna. The current at this point is of the order of 10 amps with 1 kilowatt input, so the connections have to be good or else avoided.

Rotating the Beam

The antenna was far from finished though, because we wanted it to be completely controlled from the operating position in the shack. We first mounted a 12-inch pulley on the drive shaft of the rear end and put a ¼-inch rope over the pulley.



Fig. 3—A sketch of the control box.

It would turn and stop nicely from the ground, so we next bored a hole directly through the pole large enough to take a piece of ¾-inch water pipe. This was for the bearing of a ¾-inch shaft on which a 3-inch pulley was mounted to turn the rope belt. A 12-inch piece of heavy coil spring was tied in the rope to take care of the expansion and shrinkage due to the moisture the rope absorbs at night, and the rope given two wraps on the small pulley to prevent slipping. This gave a ratio of 4:1 through the two pulleys, and with 3¼-to-1 in the rear end, we had a total ratio of 15:1. We next looked up the local washing machine repair man, and for \$3.00 we obtained two wringer gear boxes and gears with as high a ratio as possible. One turned out to be an 18-to-1 gear out of an old Maytag machine, and the other was 5¼-to-1 out of an unknown machine. This now made our ratio 1485-to-1, which is not bad for \$3.50, plus a dollar to the local machine shop to connect the two gears together and to the ¾-inch shaft. All we had to do now was to use a 1-to-1 pulley and drive the gears with a ¼ h.p. washing machine motor. We ran in 4 wires from the motor to make it reversible — it is only necessary to reverse the starting winding leads to the power leads and any induction motor becomes a reversible motor.

We could now drive the antenna in either direction but didn't know where it was pointed. A lot of book research was conducted but none of the ideas suggested seemed to suit our needs, so it was necessary to look at the situation from a different angle. We found out that the rope moved about 10½ feet for a complete revolution of the antenna. That meant that if we had indicators or contacts on the rope, we could have an indicator on the operating table. We made a trough out of wood 6 inches wide, 3 inches deep and 10½ feet long, and then measured the exact travel of the rope and cut 16 pieces of brass lineoleum binder

exactly 1/16 of the distance of travel. These 16 pieces were all mounted on one of the 3-inch sides of the box and connected to wires run to the operating table. The other side of the box had a single strip for the full length. This trough-like box was mounted on the side of the pole where the rope could run through the trough between the 16 pieces and the full length strip. A clamp was made to fasten to the rope and two spring brushes were mounted to make contact between the single strip and any one of the 16 contact strips. We now made a box and mounted our reversing switch, a push button to run the motor and 16 dial lamps in an equally divided circle about 4 inches in diameter. The 17 wires from the contact box were connected to the 16 dial lamps and a small transformer to light them and it was now possible to tell the position of the antenna in relation to the 16 points of the compass indicated by the dial lamps. It can be seen that there are 32 possible indications by the 16 lamps because two lamps will light at once when the brush is in the position where it passes from one contact to the next. This gives an accuracy of direction of one-half of 1¼° or 5¼° plus or minus. This is sufficient accuracy because the beam seems to be about 30° broad. This was determined during the adjusting procedure, because we found that if the beam were 15° off, the meter reading in the center of the receiving antenna dropped to half. Two extra contacts were considered to be used as safety lamps to indicate red when the antenna should be stopped to keep the feeders from wrapping around the pole. Those were not used, however, and the two U-shaped stops were put on the pole for the rope to run through and a clamp put on the rope. The stops were set so that the travel between them is exactly enough to rotate the antenna 30°. It is then of course impossible to twist the feeders around the pole because the drive pulley slips when the stop is reached.

After the antenna was all tuned and could be turned at the operating table we didn't know where we wanted to point it, so we set out to make a simple direction finder. A 5-inch globe mounted on a long bolt through the center looked like a good possibility. This was disassembled and remounted so the bolt went through our city instead of the North Pole as is customary. On a piece of drawing paper, a 1¼-inch circle was drawn and divided into 16 parts, each marked by its appropriate compass position — N, NNE, NE, ENE, etc. — and then pasted into position on the globe over our city. When the north-south axis lines up with the north and south poles, the rest of the points will be in their proper position. A stiff wire was soldered from the top to the bottom of the mounting bolt and made it possible to swing the globe so that any city in the world can be placed on the wire. Where the wire crosses the drawing paper marker, the direction of the desired city can be judged accurately to 2° or 3°.

In conclusion, it might be stated that whatever urge it takes to get started building a three-element beam, it certainly is worth-while. Thanks to my good friend, Alex Babics, who tuned the antenna and did all the climbing, and another good friend, Miles Rosh, who took the pictures and helped in the meter reading, I was perhaps a little more fortunate than some might be in getting the work done. Needless to say the antenna will really put out a signal and everyone who hears it gives us flattering reports, but to get the results, be sure and adjust the elements to the proper lengths and don't take someone's word that they are just right, or the results will never be as good as can be obtained.

Strays

And as further evidence of something or other, we find this in the April, 1914, issue: "The Secretary of Commerce recently approved a penalty of \$25 to be collected from an amateur wireless operator in San Francisco, for a violation of the 15th regulation of the wireless act of August 13, 1912, in that the wavelength emitted by his wireless station exceeded by 370 meters the limit fixed by law for his class of station." We're luckier nowadays — they don't assess the 25 buck!

In an issue of *Modern Electric* for one of the following years—1908, 1909, or 1910—I had an article published on the construction of a kroying relay. I wonder if any of the old timers may have this magazine.

—Howard R. Darling, W1FZ1

Silent Keys

It is with deep regret that we record the passing of these amateurs:

- Joe Barrett, W3BOG, Sulphur Springs, Texas.
- A. R. Cook, W7GCN, East Missoula, Montana.
- Homer M. Cooper, W8O10, Woodfield, Ohio.
- Sam W. Harry, W8ECJ, Dallas, Texas.
- Herman L. Hepp, W8UAE, Columbus, Ohio.
- John D. Lawson, VE4GD, Winnipeg, Man.
- L. A. Paulsen, W9MPT, Glenview, Illinois.
- Warren R. Rudd, W9QGX, Sidney, Nebraska.
- Herman A. Schmidt, W2AEN, New York.
- Arthur R. Winsor, W9TOW, Ft. Collins, Colorado.

February 1940

47

48

QST for

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

Open: 10a.m. – 5:30p.m.
Monday thru Saturday *Ask about our great prices*
858 560-4900
or toll free 1-800-854-6046

KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!

continued from page 7

and replaced. The meter, which was switched to read either plate or grid current was intermittent, and was replaced with a 200 ma meter I had on hand, and rewired to read only plate current. I modified the crystal oscillator to make it possible to use a VFO as well as crystal control, and the meter switch was rewired to offer VFO or crystal control. In addition, the voltage regulator tube was "dangling" by wires soldered to the tube, with no socket! I punched a hole in the chassis to accept a socket, and rewired it properly. A standard 1/4 inch socket was installed for the key, replacing a cumbersome arrangement in the original design. A few dubious connections were cleaned up, and it was time to give it a try. (I hasten to point out that Bill was not the builder of this transmitter, so any construction defects were not his doing!) After attaching the output of the transmitter to a dummy load/wattmeter, I plugged in a 40 meter crystal and a key, and turned it on. Immediately, it tuned properly with about 70 watts input, and about 40 watts out, which is typical for this kind of unit.

Now for the real test: How will it work on the air? I called my friend Dick, K6BZZ, in Arizona and asked him to listen for me. He immediately gave me a good report, with good tone and keying characteristics. He even held the phone to his speaker so I could hear it for myself.

The article gave the coil specifications for other bands, and my junk box yielded a piece of coil stock suitable for 80 meters. That was mounted on an octal plug, and in short order, I was on 80 as well.

January 1 of each year ARRL holds "straight key night," a 24 hour operating activity using straight keys. This nostalgic event usually brings out a great deal of vintage equipment, and this year was no exception. I used this transmitter to make several contacts on both bands with good reports and no problems.

I started 2012 by joining the "1950s 4H Club:" I used Heathkit, Hallicrafters, Hammarlund, and Homebrew equipment to kick off the year!

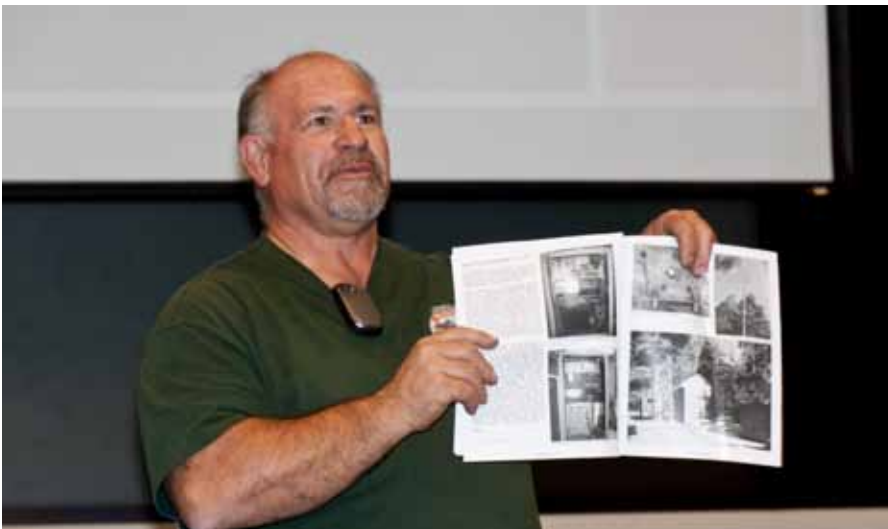




Hey! That's me! Thank you to everyone at the January membership meeting for making the Lithium Ion Battery presentation so fun to do. Only one person fell asleep! Photo by Paul KB5MU.



Dennis KD6TUI carries the flag before the pledge of allegiance at the January membership meeting. Photo by Paul KB5MU.



Dennis KD6TUI shows off the Scope at the January membership meeting. Photo by Paul KB5MU.



It might be winter, but Field Day is on our mind. Here's a shot from 2010. We need a Field Day Chair and a site. Can you help? Photo by Nash W6HCD.

NiCd Lady Company

Grace Lloyd
N6WPA
grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs
 20585 Camino Del Sol • Unit B
 Riverside, CA 92508
 800/906-6423
 951/653-8868
 Fax 951/653-5189

Your Complete Battery Source

Wife Friendly Mobile Installation

by AI W6GNI



Our car - Antenna shown - No holes drilled, full clearance in garage.



There it is! (Connected to the six car speakers for surround sound)



Not obvious when going grocery shopping.



Where did it go? Works with the lid closed, with only the microphone wire and microphone showing!

Balun Note from Dennis N6KI

Next time you order a balun and want to make sure you don't have to climb that 40 or 140 foot tower again anytime soon after a repair or replacement Caveat Emptor on Balun quality / construction

<http://www.balundesigns.com/servlet/the-template/Test/Page>

I have no pecuniary interest in this matter!
73, Dennis N6KI

80/160 mtr RX Loop needs to be mounted and
Bottom Hose Clamp too big
Spare Hardware is in limited supply and Home
Depot is 10 miles away
What to do...???

Help me out!
Write an article
for the Scope!



It's fun and
easy. I'll help
you. :+)



SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 1st of February 2012, Paul KB5MU will talk about Automatic Packet Reporting System (APRS).

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Section Manager Results

San Diego Section Manager Steve Early, AD6VI, of La Mesa, will continue as Section Manager in the ARRL's San Diego Section. Early received 363 votes; challenger Patrick Bunsold, WA6MHZ, of El Cajon, received 234 votes. Early has served as Section Manager since 2008.

DXCC Tip from KY6LA

Here is an almost up-to-date (Does not have Z0 replacing ST0 yet) DXCC Map.

The link is to a Free .PDF that you could either print out on normal paper or take to Kinko's to have them print you a wall sized one..

<http://hamradiomap.qth.com>

March Program

VP8ORK: South Orkney DXpedition 2011

Located just below 60 degrees south, the South Orkney Islands is one of only four DXCC entities within the UN Antarctic Treaty Zone. Both Britain and Argentina have scientific bases on the islands, but neither nation holds a recognized sovereign claim. But even without national bureaucracy, staging a major DXpedition to a stateless, international piece of land is still challenging and expensive. Icebergs, rugged cliffs, and strict environmental regulations are just a few of the reasons why these islands are so difficult to activate. Against the backdrop of stunning Antarctic scenery find out what took for the MicroLite Penguins to bring another one of the DX world's most unique, and most wanted, on the air. Filmed and produced by James Brooks, 9V1YC. Presented for the enjoyment of PARC members by Harry Hodges, W6YOO

Save the Date

Club Meeting
7 March 2012

Tales of the South Orkney
DXpedition, hosted by
Harry Hodges W6YOO

Board Meeting
14 March 2012

Palomar Amateur Radio
Club board meeting at
7:30pm at K2RP QTH.

Save the Date
18 March 2012

Operating Day at...
Fry's Electronics in San
Marcos! Come "Shop
and Op" with us.

Club Membership for March Edition

New Members Joining PARC: KF4LL, KJ6TKK, AE6O, KS1SPR. In addition, we had 3 returning members, reinstating their membership. WAY TO GO!! Please be sure to welcome the new and old returning members.

Above, is GOOD NEWS!! So how is it that I have to tell the board that in spite of all the new, and returning old members, we still lost membership last month? Well, we did!!

Check your label for your renewal date. If your mailed SCOPE didn't arrive, and you are reading this on the web site, as a fall back, maybe your membership ran out?? We do great on attracting "New Members", but not so great on the renewals! The club really needs all its members!! And, now, you can check your renewal date on the web!

AI
W6GNI

February Issue Fold & Staple Crew
WA5ACE Sonny KB6NMK Jo
W6GNI AI & Kathy
KB6YHZ Art

The WOUXUN 2m/440 handheld radio will be given out at the March meeting. The radio has been programmed with simplex and 42 2m repeaters, and 10 440 repeaters in San Diego County. All channels are alpha tagged for easier identification. Come join us and see who will take this radio home.

WANTED! CHAIRMAN FOR
PALOMAR's Field Day.

Site will be in San Marcos at Santar and Rancheros unless you find a better site! Dates are June 22, 23, and 24, 2012

Help provided by Board members and past Field Day chairs. Chance to learn about placement of transmitters and antennas in limited spaces. See or contact any Board member.

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!

scope@palomararc.org

**RF PARTS[™]**
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS
3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7
4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

AMERITRON ALS-600 SOLID STATE NO TUNE FET AMPLIFIER WITH AMERITRON 50 VOLT SWITCHING POWER SUPPLY. NEW, NEVER BEEN OUT OF THE BOX \$900.00 FIRM.

ED GENEST
w6abe@arrl.net

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950 S, 10-160 M Transceiver	\$2,000.00
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

Hi Michelle.

Found attached surprise in the home snail mail when I returned today from the Yuma Hamfest.

Yuma was a lot of fun.

This year Yuma hosted the ARRL Southwest convention, as well as the Arizona ARRL convention. The turnout was huge, and the vendors and tailgate area were packed.

The amateur radio forums were excellent. LOTW, Propagation, DSTAR, and SDR radio presentations were excellent, and also well attended.

The Propagation presentation was probably the best I have ever seen.

The ARRL announced at the Hamfest that next year's ARRL Southwest convention will again be held at Yuma. The Arizona ARRL State convention will also be held there simultaneously, again.

If the turnouts are the same, it will be an excellent repeat. Well worth putting on the calendar.

73 de NN3V
Charlie



Gayle, K6GO/ZF2GO (L) and Anna, W6NN/ZF2LL joined Joe, W6VNR/ZF2AH to put the Cayman Amateur Radio Society (CARS) HQ station, ZF1A, on the air for IARU. They used the club shack and excellent antenna farm on ZF1EJ's property to give out the CARS HQ multiplier in Zone 11. Outside the contest Gayle, Joe and Anna spent time relaxing on Seven Mile Beach on the west side of the island.

[Anna Sombor, W6NN]

QST - Devoted Entirely to A

Look who got their photo in QST!
We did not win but we had a blast.
Anyone want to do ZF1 in the future???
Check out next month's QST in advance.....
<http://www.arrl.org/contest-results-articles>

Lunch Bunch 10 February 2012

My Friends -

We were joined by 25 hams at Callahan's today to recognize Rod Dinkins/AC6V and Harvey Hiller/K6QK. No doubt this was a great tribute to two hams who shared our passion for amateur radio and inspired many many others. During our lunch, I heard several stories of fun times recounted with Harv and Rod. We will always remember these great guys who gave us so much.

Thanks to everyone for coming today,
73 de Tom - W0NI
www.W0NI.com



Contest: ARRL International DX Contest
 Callsign: NX6T
 Mode: CW
 Category: Multi Operator - Single Transmitter (MS)
 Overlay: ---
 Band(s): All bands (AB)
 Class: High Power (HP)
 Zone/State/....: CA
 Locator: DM14LL
 Operating time: 39h19

BAND	QSO	DXC	DUP	POINTS	AVG
160	34	17	0	102	3.00
80	105	38	1	312	2.97
40	586	93	1	1755	2.99
20	531	91	1	1593	3.00
15	332	84	4	996	3.00
10	190	53	1	570	3.00

TOTAL 1778 376 8 5328 3.00

TOTAL SCORE : 2 003 328

Operators : N6KI, WQ6X, K4RB, NN6X, N6EEG

Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis



Contest: CQ World Wide 160-meter Contest
 Callsign: N6KI
 Mode: CW
 Category: Single Operator (SO)
 Overlay: ---
 Band(s): Single band (SB) 160 m
 Class: High Power (HP)
 Zone/State/....: CA
 Locator: DM14LL
 Operating time: 13h29

BAND	QSO	DUP	DXC	S/P	POINTS	AVG
160	437	1	9	52	1039	2.38
TOTAL	437	1	9	52	1039	2.38

TOTAL SCORE : 63 379



Look who else won their category in World Wide WPX! Congratulations to Charlie NN3V.

Repeater Site Work Report 11 February 2012

I met Gary at the I-15 and Gopher Canyon Park and Ride. From there we reached the site in about 1 hour.

With Gary's help the receiver and local speaker assemblies were replaced and the .075 is now working normally. This spare receiver has an internal preamp and the squelch opens a less than 0.1 uV.

We looked at the .13 repeater and the power out was 3 watts. Gary noticed it was half scale when the 075 was full scale at his house before leaving this morning. A change in value of the control resistors was made to raise the voltage to the control FET bias on the PA module. This brought the power up to 18 watts on the Byrd power meter. A final adjustment needs to be made when we have a calibrated Watt meter.

I found the Byrd meter in the Freezer building, the movement will not balance out to Zero and the closest slug I could find was 50W 200-500 MHz. I assume it has been dropped and is in need of calibration. We also need a 50W slug that is designed to cover 6 and 2 Meters.

The Mountain temp was a brisk 38 degrees F when we arrived and 36 F when we left. A really Cool Day on Palomar Mountain!

Art,
KC6UQH

Tennessee QSO Party 2011

AE6IC

First Place

Multi Op, Fixed, Low Power, Mixed Mode, California
(Ops: AE6IC, KJ6JUS)



TCG
Certified
RadioActive

A handwritten signature in blue ink, appearing to be "Fred", is written over the "TCG Certified RadioActive" text.

Fred wins his category in the Tennessee QSO Party. Congratulations!

The Tennessee QSO Party is an annual amateur radio event which takes place on either the first or second Sunday of September. All amateur radio operators in the great state of Tennessee are encouraged to participate as antennas around the world rotate and point to the volunteer state.

The Tennessee QSO Party is hosted by the Tennessee Contest Group. Each year tens of thousands of QSOs occur between Tennessee amateur radio operators and hams worldwide. Personalized plaques are awarded for category winners, along with certificates suitable for framing, magazine subscriptions, and radio kits for other participants.

Preliminary report by Howard KY6LA

Honda vs. Yamaha Generator Shoot Out

Sound Test

2/4/2012

Meter Radio Shack Cat. No. 33-2050
 A Weighted Sound Test 0 dBA = 20 micropascals
 Generators exhaust located 90 degrees to test meter
 Meter Distance from source = 10'
 Ambient Noise 54 dBA

A/C Frequency 60.1 Hz

Yamaha EF2000i			
Eco Mode			
Load (W)	Volts	Amps	Sound (dBA)
0	124	0	61
250	124	2	62
500	124	4	64
750	124	6	68
1000	122	8	70.5
1500	120	13.5	73
2000	107	16	73

60.1 Hz		
Yamaha EF2000i		
Regular		
Volts	Amps	Sound (dBA)
125	0	68
124	2	68.5
123	4	69.5
123	6	71
123	8	72
120	13.5	72.5
108	16	73

Honda	
Regular	
Volts	Amps
126	
126	
125	
125	
124	
122	
109	

Emmission Compliance Life 500Hrs

500Hrs

Conclusion: Yamaha was slightly quieter than the Honda but not significantly different.

NiCd Lady Company

Grace Lloyd

N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries

• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B

Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source

59.9 Hz	
ES2000is	
regular	
	Sound (dBa)
0	70
2	71.5
4	71.5
6	71.5
8	72
13.5	73.5
16	74.5

250 Hrs

Observations - Objectionable Odors

- 1 Honda using Gasoline had a noticable and perhaps objectional exhaust odor
- 2 Yamaha under Propane operated no noticable exhaust odor.

Step Load Tests

Used HF Radio + 400 W Amplifier keyed at 8WPM to test step loads

Yamaha	
No Load	Full Load
122	102

Honda	
No Load	Full Load
124	99

Observation: Neither produced a chirp on the transmitted signals

Conclusion: Yamaha had slightly better step load regulation but not significant

Radio Noise Tests

Band	Line A/C	Yamaha	Honda
80M	S2	S3-S4	S3-S4
20M	Dennis to fill in		
15M	Dennis to fill in		
10M	Dennis to fill in		

Radio Spectrum Tests

Spectrum results photos will be added

We are unable to test in a S0 or better environment
so we make no conclusions as to the use of either generator in ultra low noise situations

Adventures on the Midway

Joe Eisenberg, K0NEB from CQ Magazine was flying in from Nebraska for a presentation to my ham club, Escondido Amateur Radio Society. I wanted to arrange something different for him to do while he was here, other than the San Diego Zoo, Legoland, Sea World...the usual places for tourists. After all, Joe is a ham!



JOE AND JOE ON USS MIDWAY

Once a month on the second Saturday the USS Midway volunteers operate the radios. So I contacted the USS Midway to see if we could volunteer to operate the radios. I send an email to the general information for the Midway and very soon received back an email from Joe Garza who was very informative about the opportunity. On Saturday, Jan 14, 2012 the special event was to commemorate the first nuclear ship underway in 1954 and also the US Navy Seals in 1964. He arranged for us to meet him at the entrance and gave me his cell number, with a warning that reception was iffy at best, due to the metal of the ship. We contacted one of the volunteers outside the ship and they contacted Joe via walkie talkie and soon we were meeting Joe at the entrance to this magnificent museum. We introduced ourselves and were led across the length of the ship, then to the elevator, up to the flight deck and to the tower. We then ducked into a doorway, down the steep ladder, over the high thresholds, to the right, left and right again, past a few rooms, then stepped into the radio room. It's a small room, three desks pressed up against the bulkheads, radios set up as efficiently as possible, one set on 40 m, one on 20 m, and one was being used for MARS practice communication.

Volunteers were already at the stations, talking to other contesters, making notes, logging contacts. Joe and Hal Hinesley introduced us to the others. With the issue with the cell phone reception, one of the volunteers was trying to set up an antenna just for the phones. He handed me the length of cable and I followed him around, dropping line close to the bulkhead, out of the way of foot traffic. Soon we were at a location to temporarily set up the antenna, calling back for others to check the bars on their phones. We then went back; I was coiling up the cable and then dropping it along a different path. Still not enough bars for the cell phones. I went back and Joe K0NEB was already on one of the Elecraft K3's, calling out on 20 m.

I walked to the next room where there was an Icom D-Star set up and with a bit of instruction and the script I was soon talking to others in Scotland, Ireland, Spain, Texas, England, San Diego... all over. D-Star is great!

After a few hours, Joe & I left and took a self-guided tour of the ship. We also played on the flight simulators, then back to the radio rooms. After about another hour or so, contacts were winding down, the bands were fading in and out except for D-Star, so it was time to leave.

If you at all think this sound like fun, please contact Joe Garza at jgarza@san.rr.com or Hal at halh@aol.com and volunteer for a wonderful day aboard the USS Midway!

Teri W6TRB

More Signature Card Adventures

When the Club elected a new treasurer, we needed to sign a new signature card to authorize the changed signers. Here's what happened!

Dave went to the local Bank of America branch to ask what was needed. Finding out that we needed a published account of our election, he asked Paul to send a letter stating the election results. Dave took this letter to Bank of America and was then told he also needed to have stated the new signers listed. Paul provided the new letter. An appointment was made for Dennis, Al, and Dave to be at the bank, because they were all now required to be at the bank for the new card. Al, Dave, and Dennis arrived at the bank at the appointed time and promptly waited over 30 minutes for the scheduled meeting. While waiting for the meeting, a bank representative came over to check on us and review our papers. After another wait we were finally seated for the meeting. The bank representative asked for our paperwork. We responded that the other rep took our paperwork. She then went to find the papers. Waiting near 10 minutes for her return continued our increasingly louder comments about the service provided to the customer. After confirming we were the three specified as the new signers, she asked where Georgia was. We told her that we were told she was not required to be here. She then asked for two forms of ID for each of us. We presented and were told that the second ID must have be Visa or MasterCard. We were told that our cards would not be on the account or associated with it, but the last four numbers would be listed??? We all commented that we should have all pulled our range cards. Next, she wanted to know where Paul was, and why he was not here. The last we knew he was in Texas. She had us call him to find out where he was, as she reluctantly would allow him to go to the local B of A branch to fill out another paper. This would have to be FedExed to the branch overnight, it could not be faxed or emailed as they are not secure. Another expense and diversion. Oh! She offered to have the Branch provide the FedEx service. Calling Paul, we found out he was back in Carmel Valley. The bank rep needed the Zip Code for Carmel Valley because she could not look up the local branch by city? A local branch was chosen, and Paul was instructed to be there before 2:00 PM and they would send the FedEx. Paul would need his ID and talk to the manager. Finally DONE. Many comments were made during the transaction including how easy it is to move our account to the bank down the street and how bad the service was. No reaction was offered by the Representative. Paul went to the branch in Carmel Valley that was agreed upon. He asked for the manager and told him who he was, and teller brought the paper for him to sign, (providing no ID.)

During this extraordinary visit Dave asked if we could have a deposit only ATM card. We were told yes. It came about two weeks later. As noticed in the paperwork with the card, it is required to go to a branch to activate the card. Dave went to the local branch tried to activate the card and was told that he was not a signatory and could not proceed. After explaining the past visit the branch contacted the Carmel Valley branch. The Carmel Valley branch located the document and said they would FAX it right away to the Vista branch. They did activate the card for Dave.

Can't wait for the next signature trip. It should be fun, and preplanned with range cards.

Dennis, Al, and Dave

HAM RADIO OUTLET <div>H R O</div> <div>Jose XE2SJB Jerry N5MCJ Joe N6SIX</div>	KENWOOD rf CONCEPTS DIAMOND US TOWERS KANTRONICS YAESU, MFJ, ICOM BENCHER, Inc. HUSTLER COMET AMERITRON	Astron, AEA, OUTBACKER Larsen Antennas TEN-TEC Hy-gain, Tri-EX, Cushcraft And Others too Numerous to Mention!	Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.
Open: 10a.m. – 5:30p.m. Monday thru Saturday 858 560-4900 or toll free 1-800-854-6046 <i>Ask about our great prices</i>	Directions: On 163, take Clairemont Mesa Blvd. off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on real antennas!		

ARRL National Convention

New York City — July 19-21, 1974

BY "DEE" LOGAN,* WB2FBF

WITH THE famous New York City skyline in the background and the luxurious Waldorf-Astoria Hotel as a unique setting, the 1974 ARRL National Convention gets underway on Friday, July 19, with a full weekend of activities celebrating the League's 60th birthday. Member clubs of the Hudson Amateur Radio Council, sponsor of the event, have arranged a jam-packed program, exhibits of the latest radio gear, prizes, varied activities and ample opportunities for eyeball QSOs with fellow amateurs from around the world.

"The 1974 Convention, with the theme 'International Friendship Through Amateur Radio' is an appropriate way to celebrate both the League's 60th anniversary and the 50th birthday of the Hudson Division," comments Stan Zak, K2SJO, Hudson Division Director. "Members of HARC's convention committee have been working for many months to insure that the program and its many activities provide something of interest to every amateur — be they QCWA members or satellite experimenters. The ARRL Board Meeting held in conjunction with the Convention means that all directors will be on hand for the weekend in addition to ARRL President Dannals, *QST* Editor John Huntoon and members of the headquarters staff plus FCC officials. I hope that every amateur who can possibly attend will join us at the Waldorf for what we believe will be an outstanding event."

A special observance of "Amateur Radio Week" in New York State will mark convention week, as proclaimed by Governor Malcolm Wilson, who publicly commended radio amateurs for providing "vital communications services in time of natural disaster and other emergencies in New York and other parts of the world."

Special room rates have been arranged for those staying at the Waldorf during the convention. Reservations should be made directly with the hotel, mentioning the radio convention. Special rates are \$22 per night for single rooms, \$28 for doubles, with the special rate applying to those extending their stay for up to one week beyond the convention dates.

* Assistant Director, Hudson Division.

Behind every convention there's an "army" of volunteers — here's the HARC Brigade marching full speed ahead for the National.

July 1974



FCC Examinations

Through special arrangements with the New York office of the Federal Communications Commission, radio amateur operator examinations for General Class or higher will be conducted at the convention on Saturday, July 20th. Application, with the appropriate fee (\$9 at press time), should be made in advance via Robert Reiley, WB2FHN, c/o Box 1032, Hall of Science Radio Club, Flushing, NY 11352. The test may be taken beginning at 10:00 A.M., with the cw examination given up to 1:00 P.M.

Equipment Show

One of the most popular portions of the Convention will be a three-day exhibit of amateur radio equipment featuring leading manufacturers, distributors, and radio publishers. Admission to the exhibit area is free. Also included: special booths with representatives on hand from ARRL, FCC, MARS, Amsat, MARCO, IMRA, QSL Bureau and others. Contests are scheduled, including a QSL card judging (bring yours), and a display of the many prizes being given away should attract an enthusiastic following.



WHO IS THAT YOUNG MAN?
K2RP, OF COURSE!



Ten Transmitters Operated Simultaneously

W6GAL/6 Mid Cities Amateur Radio Club 1021- A-16-14,378
W6NWG/6 Palomar Radio Club 674- A-38-11,563

Results, Twelfth ARRL Field Day

More Than 4600 Participants Afield in Annual Test of Portables

If the number of individuals participating in an ARRL Field Day is any indication of the willingness and ability of amateur radio to prepare for service in emergency, then amateurs in the field territory of the League are doing a fine job. Dedicated to emergency preparedness, this popular annual activity has enjoyed wider participation each year since its inception. The Twelfth ARRL Field Day, held last June 12th and 13th, dwarfed previous affairs, made them seem like mere trial runs by comparison. It was the largest field testing of amateur facilities ever held and one of which we may well be proud. There were 4660 individuals in the field; 305 club portable stations, manned by 4084 participants, were active; among the nonclub groups, 576 individuals kept 144 portables on the air.

The FD was rich in experience for its participants. It provided to many a better appreciation of the problems involved in operating portable equipment afield; it showed up defects in gear and pointed the way to improvement. Some groups gained a new awareness of the importance of operator proficiency and have come to realize that this is a factor equally as important as efficient transmitters, receivers and antennas. Aside from its serious aspects, another point stands out: the FD was fun! It was filled with interesting and amusing incidents that will linger pleasantly in the memories of those who took part. If you've taken part in an FD, you'll know just what we mean; if not, you'll just have to try a Field Day some time!

Under the rules, competition in Field Day is considered to be among stations employing similar numbers of transmitting set-ups. Score listings are arranged below according to the number of transmitters that were in simultaneous operation at each station. There always is, however, intense interest on the part of FD participants in knowing which groups, regardless of transmitter classification, had the highest scores and what

combinations of gear and bands were used. Some of the top scores in the various classes will be mentioned along with brief descriptions of lay-outs used.

Each year has seen Field Day groups on the West Coast inching up on their competitors to the east. In the 11th FD the Society of Amateur Radio Operators managed a second-place score which augured the possibility that the banner would move to the West in 1948. SARO's apparent ambition was realized in this Field Day; by a comfortable margin their 17,017-point score earned first-place honors. Operating 7 transmit-

TEN HIGH SCORES

Clubs		Others	
W6AEX/6	17,017	W6EYH/6	6197
W2OM/2	15,615	W9ERU/9	5225
W6AMT/6	15,129	W9JIE/6	4968
W6GAL/6	14,378	W9EDK/9	4707
W6BYP/6	14,334	W6NIK/6	4617
W6QV/6	13,689	W9BVG/9	4167
W6VB/6	13,487	W5AA/5	4152
W6ME/6	13,150	W1ORP/1	4131
W6DK/6	12,609	W6LDJ/6	4118
W9IT/9	12,126	W2UBU/2	3929

ters at W6AEX/6 from a ranch location near San Carlos, Calif., 30 members assisted in making 822 contacts. Power for all rigs was supplied from batteries charged by a gas-driven generator. Each transmitter used VFO control and was operated at 30 watts or less input. Efficient antennas helped the success of SARO's operations in no small measure: radiators for 3.5 Mc. were two half-waves in phase; for 7 Mc. a "V" beam; 14-Mc. c.w., two 8JKs; 14-Mc. 'phone, three-element rotary; 28 Mc., a three-element beam and a ground-plane job; 144 Mc., sixteen-element rotary. A breakdown of the contact total by bands shows the following: 78 QSOs on 3.5-Mc. c.w., 148 on 3.85-Mc. 'phone, 223 on 7 Mc., 109

The Wisconsin Valley Radio Association turned in a good FD performance, the highest score in the two-transmitter greatest number of contacts, 632. In this shot W9IBF pours coffee. W9CIC at one of the operating points.

on 14-Mc. c.w., 75 on 14-Mc. 28-Mc. 'phone, 56 on 144 Mc. stations on a grand FD performance.

A group with plenty of Field Day experience, the Tri-County Radio Association, second highest score, 15,615 points, the field in number of contacts, breaking total of 1390. Eight transmitters working at 30 watts or less input simultaneously under the call W6AMT/6, Watchung, N. J., on 3.5, 7, 14, 3.85, 14, 28, 50- and 144-Mc. operation was manned by 25 operators. Used ranged from doublets on 3.5 to a four-element Sterba with parasitic beams on 28 and 50 Mc. A ten-element rotary on 144 Mc. portable generator and battery power.

The Metropolitan Radio Club gave an excellent account of itself with W6AMT/6 from a spot in the Mountains of Southern California rolled up 15,129 points. Their 1159, was higher than that of the club but they were outscored as a result of the advantage of the battery power having been obtained from a portable plant. Power input was 30 watts or less on all except the 14-Mc. 'phone, ran 85 watts. A varied assortment of antennas was employed, including doublets, phased arrays, square-corner antennas on a ground plane. Operation was on 3.5 through 144 Mc.

In the nonclub category, scores were divided into two sections, by groups consisting of three or more operators that operated one or more transmitters and the other including single operators. The highest score in the nonclub category was obtained by one or two operators. The club score was made by a station in the 10-transmitter classification, W6EYH/6, operated by W6VUC at Big Bear, Calif. 6197 points resulted from 281 contacts on 7- and 14-Mc. c.w. The rig, a VFO, was a maximum of 28 watts, a PE-103 dynamotor; an NC-101



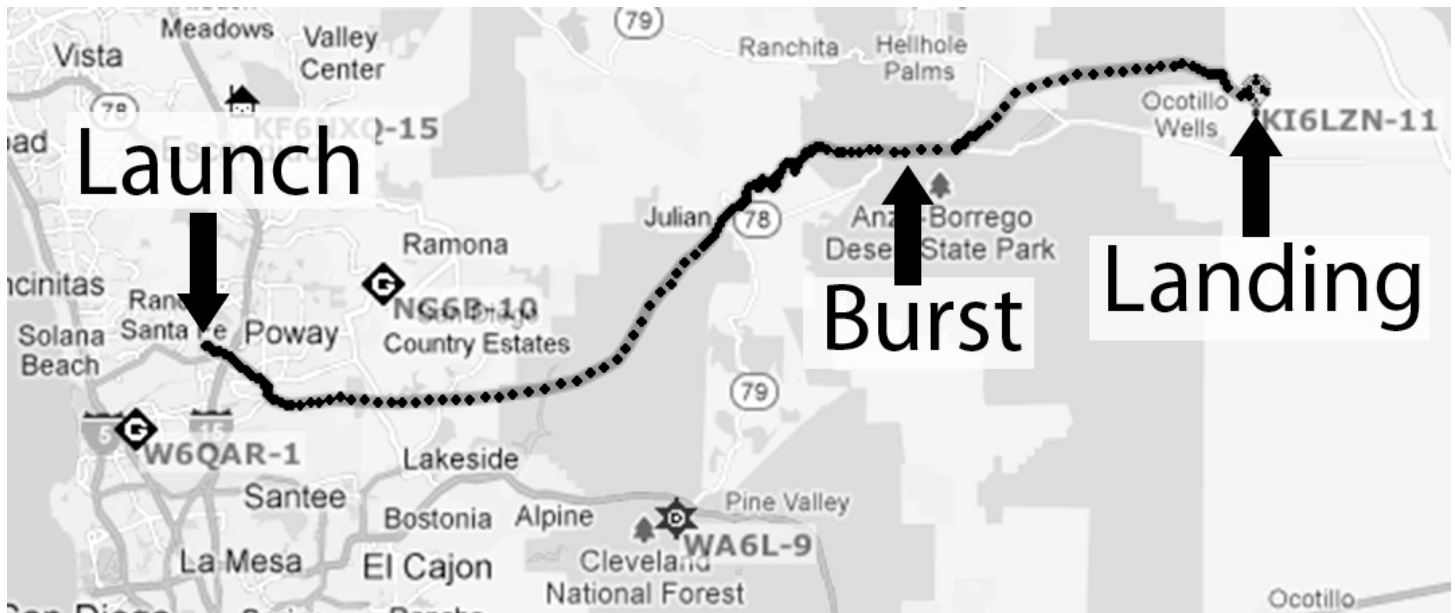
It didn't rain everywhere during Field Day! From this sun-drenched location, Geiger Summit, in their home state, the Nevada Amateur Radio Association had four transmitters on the air. Their regular FD site on Mount Rose was covered by six to ten feet of snow! Left to right: W7BIC, W7CX and a visitor.

QST for

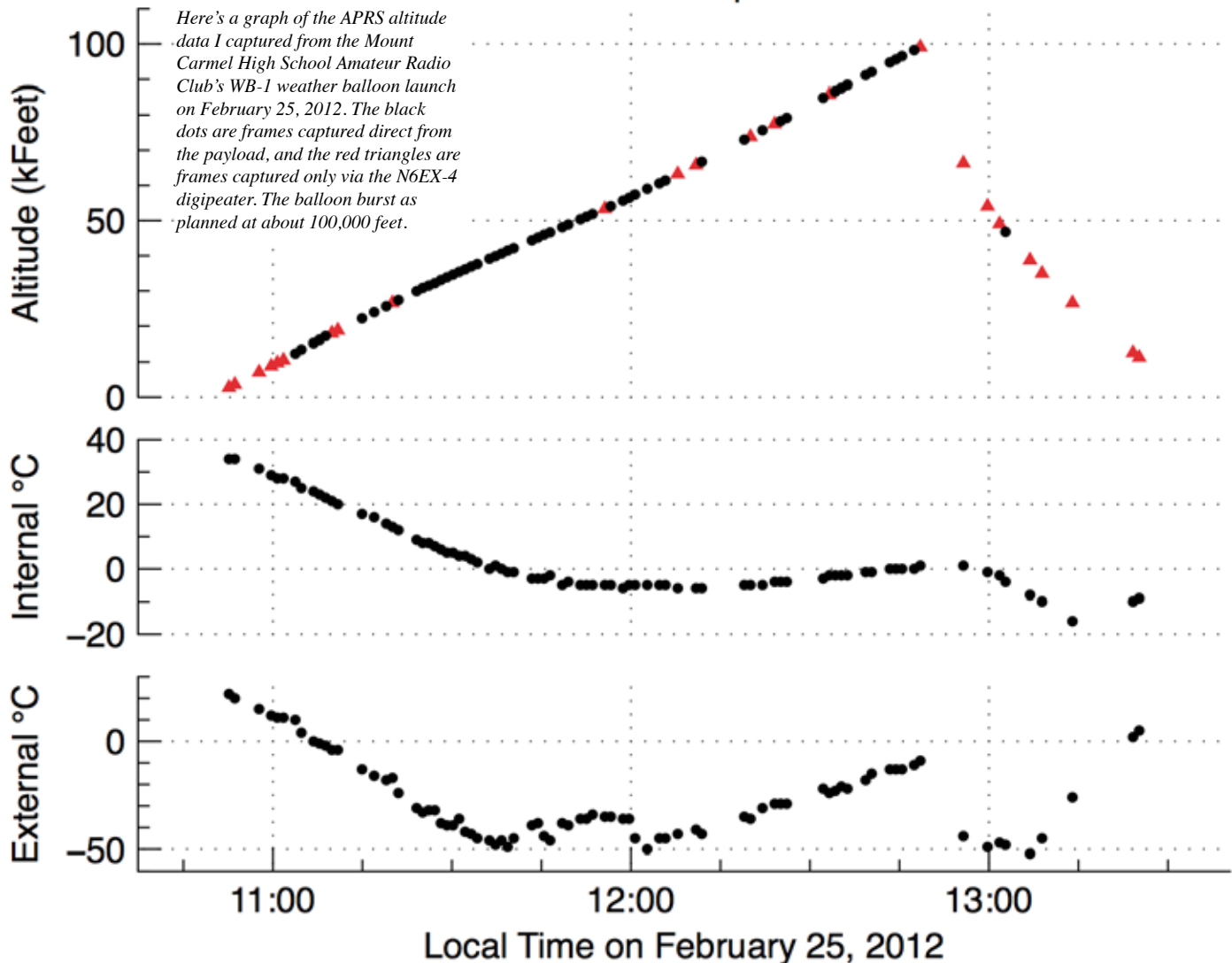
February 1949

Mount Carmel High School Amateur Radio Club Balloon Launch

Successful balloon launch 25 February 2012 was sponsored by John KG6EQU. Club student president is Lindsay KI6LZN. Graphics by Paul KB5MU.



WB-1 Altitude and Temperature Profiles



OPERATING DAY

Sunday, March 18, 2012



FRY'S ELECTRONICS

150 South Bent Street

SAN MARCOS, CALIFORNIA 92069

9:30 AM to 5:30 PM

HOSTED BY PALOMAR AMATEUR RADIO CLUB

www.palomararc.org

contact Dennis KD6TUJ (760) 672-0223

Come operate on the ham bands at Fry's

70cm, 2m, 6m, 10m, 15m, 20m



Palomar Amateur Radio Club will be conducting an Operating Day at Fry's Electronics at the North end of the parking lot nearest Highway 78 on March 18, 2012 (Sunday) between 9:30 AM and 5:30 PM. Joining us in our event are CERT, San Marcos Arc?, PAPA D-Star, possible participation by the Red Cross, and Skywarn. This will be a fun day demonstrating Amateur Radio to the public. With this location, there should be lots of opportunity. Wonder who we will contact this time! Also wonder what will Ron bring from the vintage warehouse. Come on out and join us for some radio fun. Thank Sean Archer, Manager, for approving the request locally and Glen Johnson WA6GHW in electronic components (computer) for speaking in our benefit. When this goes better than planned, we might be able to have a FRY'S Operating Day in November at all the Fry's with local clubs participating.

Dennis KD6TUJ

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 7th of March 2012, Harry Hodges will host a viewing about the DXpedition to the South Orkney Islands.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the Palomar Amateur Radio Club of San Diego, California.



Nash W6HCD, Almost 97 Years YOUNG!
Photo from Dennis N6KI.

To the Boards of PARC and EARS, I want to thank Ham radio in general, and Dave (Wd6DRI), Gene (Wb9COY), John (W9EN), Phil (Ka9Q), and Jim McLaughlin in particular, for their help with the Mt. Carmel High School balloon project. My students were thrilled with both the experience, and with all the work leading up to a successful event. But none of this would have happened without our mentors. The news article should have said more about their support. I certainly do not have the expertise nor the experience to pull this off! I also want to thank Dennis (N6KI) for his years of support of the Mt. Carmel High School Amateur Radio Club. Once again, ham radio shows that it is the best organization around!

Here's a link to the article if you missed it:
<http://www.utsandiego.com/news/2012/mar/01/high-school-students-send-balloon-edge-space/?scquest>

John A. Earnest
Mt. Carmel High School

Save the Date

Club Meeting
4 April 2012

Transmitter Hunting

Board Meeting
11 April 2012

Palomar Amateur Radio Club board meeting at 7:30pm at W6GNI QTH.

Save the Date
Late April?

Operating Day at... Fry's Electronics in San Marcos! Come "Shop and Op" with us.

Club Membership

New Members Joining PARC. KJ6TOG, KJ6TOQ, KJ6TOP, KJ6TKS, KJ6TOT, and KJ6TOO. In addition, two past members reinstated their membership.

Of course we welcome all members, new and "old", especially "new" old timers.

Please check your SCOPE label for your renewal date. If you are receiving the SCOPE by Web, please remember your renewal date is now posted on the web. If you are not listed on the web listing, there is an excellent chance that your membership has expired. There is also a small chance that I messed up the computer file - in any case, let me hear from you!! We now take PayPal for renewals. Please - Please renew.

AI
W6GNI

March Issue Fold & Staple Crew
March Issue Fold & Staple Crew
KB6NMK Jo WA5ACE Sonny
KB6YHZ Art & Janet

W6GNI AI & Kathy

The WOUXUN 2m/440 handheld radio was given out at the March meeting. The radio has been programmed with simplex and 42 2m repeaters, and 10 440 repeaters in San Diego County. All channels were alpha tagged for easier identification.

WANTED! CHAIRMAN FOR
PALOMAR's Field Day.

Site will be in San Marcos at Santar and Rancheros unless you find a better site! Dates are June 22, 23, and 24, 2012

Help provided by Board members and past Field Day chairs. Chance to learn about placement of transmitters and antennas in limited spaces. See or contact any Board member.

IMPULSE Electronics

(760) 747-5277 - (866) 747-5277

www.impulseelectronics.com

**Your Connection for
Emergency Power Solutions**

Power Products

Power Pole Connectors - Power Cables - Tools
AGM Batteries - Red/Black Zip Cord 14 - 8 GA

West Mountain Products

RIGrunner - RIGblaster - Accessories
PWRgates - Computerized Battery Analyzer
Coax Cable - Coax Assemblies - Adapters
Terminals - Coax Connectors - Battery
Chargers - Battery Accessories
Email sales@impulseelectronics.com

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!

scope@palomararc.org

**RF PARTS[™]**
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS
3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7
4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Selling HT-37 and HQ-180 as a pair for \$400. They are in perfect working condition and actively used by Brian, W0NW these last 20 years. If interested, I can forward a picture of the radios.

Bernie, N6FN
cell 760-505-6537
n6fn@niftyaccessories.com

For Sale

AMERITRON ALS-600 SOLID STATE NO TUNE FET AMPLIFIER WITH AMERITRON 50 VOLT SWITCHING POWER SUPPLY. NEW, NEVER BEEN OUT OF THE BOX \$900.00 FIRM.

ED GENEST
w6abe@arrl.net

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950 S, 10-160 M Transceiver	\$2,000.00
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

Call for Volunteers

The 3rd running of The Harding Hustle is only 20 weeks away! Maybe that sounds like a long time, but putting together a race takes a lot of early planning. Of course the biggest part of putting on a successful race is volunteers. So - I'm putting out my first call for volunteers. If you can help - please let me know. If you aren't sure yet - then let me know you are a "maybe". If you have friends or a group whom you can tell about this event, I would greatly appreciate it. The more help the better.

Some duties that I need to fill:

- Ham Radio
- Race Prep (course marking, etc)
- Aid Station workers on race day
- 4x4 drivers for transportation

Remember - volunteers get a short sleeve tech shirt + food for helping. Shift times vary. Please let me know if you are interested/available to help - and/or please help spread the word.

Thanks much!
Jessica DeLine, RD
<http://www.hardinghustle.com>

Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis



Coming Soon: New ARRL Benefits

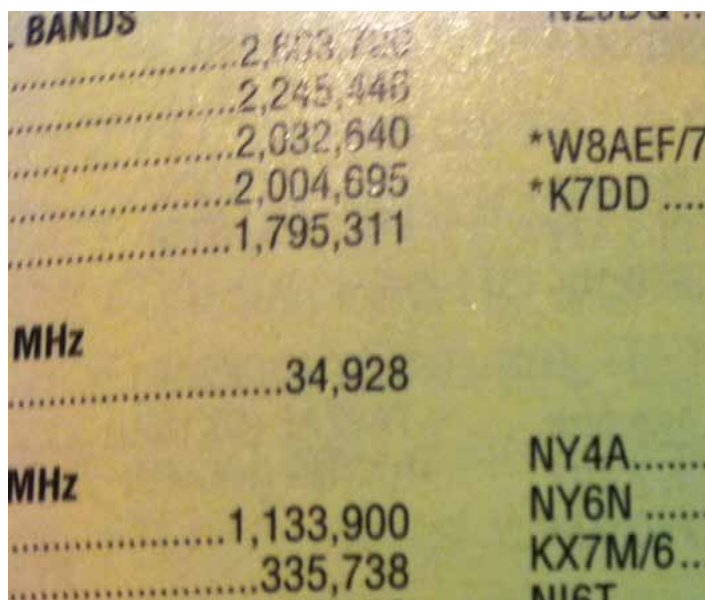
We are excited to announce two new ARRL membership benefits that will be introduced in June 2012.

In addition to the print copy of QST, all members will have access to an online, digital edition of QST at no extra cost. You will be able to access QST from anywhere--on nearly any computer, laptop, mobile device, smartphone and tablet (including Apple iPad, iPhone, and devices using the Android operating system).

Also in June, members will gain access to archived issues of QST from December 1915 to the present (previously, only issues through 2007 were available to members). If you are familiar with the current periodicals archive (which serves images of pages), that platform will be expanded to include all of QST from December 1915 through December 2011. A second, new archive will be introduced for issues beginning January 2012, featuring enhanced functionality including full-text search.

Be Prepared!

Members must have a valid ARRL website login to access the current digital edition of QST and archived editions. For a smooth launch of these exciting new benefits, and so that you will be able to quickly access the digital version of QST as soon it becomes available, we are e-mailing you some information that will help you login to the ARRL website prior to launch.



WQ6X FIFTH PLACE USA WPX CW MS HP 2011

"Ham Radio Now" Episode 3

...is on-line at www.HamRadioNow.TV

OK, hopefully many of you are thinking: Ham Radio WHAT is WHERE? And where are Episodes 1 and 2? (They're also at www.HamRadioNow.TV ... you've got some catching up to do)

Here's the deal. As you know, when I launched Amateur Radio/Video News, I started it by selling DVDs. That worked OK, but mailing DVDs is so 20th-Century. Internet delivery is ready to take over, and I'm shifting to that.

I began with the 2011 ARRL/TAPR DCC. Every forum is on-line at www.ARVN.TV.

And you may notice that I have a new web address, ARVN.TV. "ARVN.com" is not available, but "TV" is what we're all about, so that seemed like a good domain to get. My hosting service is working on transitioning the site there, but good old www.ARVideoNews.com will redirect you (and all those links out there).

Oh, yes, the DCC. It's all on-line at www.ARVN.TV. The video is actually hosted on YouTube, in wide-screen, high-definition. And that means you can watch it free. I'm asking for a contribution, as you'll see. So far, contributions have brought in about half of what previous year DVD sales did at this point. So I can't say that's working great, but I have a bigger plan.

And that brings me to:
HamRadioNow.TV

Ham Radio Now is my new video 'podcast.' This will be a weekly, maybe more than weekly some weeks, video talk show with occasional field produced pieces. Kind of like what I was doing in my guest-host slots on Bob Heil's Ham Nation. I had a lot of fun there, but I realized that there was so much I wanted to do that I couldn't squeeze into a guest spot now and then on Ham Nation. And it all comes much closer to my original vision for ARVN - to do something frequent and topical. DVD delivery didn't lend itself to that, but the Internet does.

FREE TO WATCH, BUT NOT FREE TO MAKE

Ham Radio Now videos are also on YouTube, so they're also free to watch. But they are part of my business, my livelihood. They take up a serious chunk of my week, in addition to the

expense of equipment, travel, web sites, and people (no employees yet, but I pay all the expenses for Cyndi, Jeff, Cliff and others who have assisted me on the road).

So I'm asking you to help. And here's my goal:

10,000 Hams — \$10 a year

And that would be for everything. All the documentaries, seminars and Ham Radio Now programs. If you'd still want a DVD, it would cost more, per DVD.

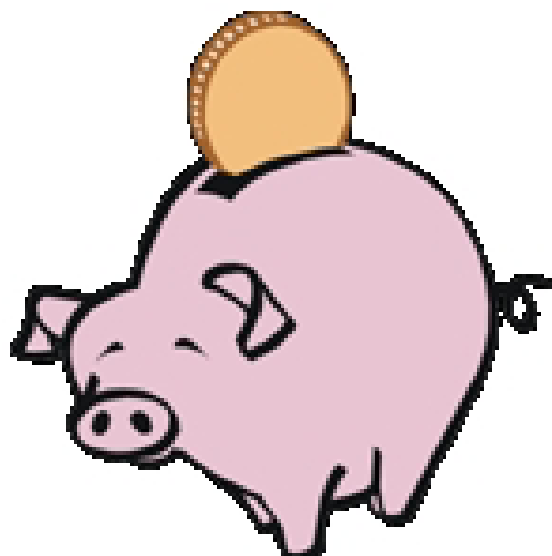
Yay, Gary gets \$100 Grand! First, I don't expect to reach that any time soon, if ever. It's a goal. Second, if I did hit that, I'd get maybe half. The rest would pay for all the stuff it takes to make this work.

So enough email. Time to watch some video. I hope you like it! Let me know.

And I'll see many of you at the Dayton Hamvention in May.

73,
Gary KN4AQ

ARVN: Amateur Radio//Video News
HamRadioNow.TV
Gary Pearce KN4AQ
508 Spencer Crest Ct.
Cary, NC 27513
kn4aq@arvn.tv
919-380-9944
www.ARVN.TV
www.HamRadioNow.TV



Arvin, the ARVN Mascot

Minutes

Palomar Amateur Radio Club Board of Directors Meeting

February 8, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:39pm at the home of Ron Pollack K2RP. In attendance were:

President	Dennis Baca KD6TUJ
Vice President	Ron Pollack K2RP
Treasurer	Dave Ochs KI6LKP
Secretary	Paul Williamson, KB5MU
Director #2	Eric Hutchins K7ELH
Membership Chairman	Al Donlevy W6GNI
Repeater Technical Chairman	Conrad Lara, KG6JEI

Treasurer's Report

KI6LKP distributed copies of the Treasurer's Report. The entry for "Bank Charge" is the Paypal fee for dues received via Paypal. The "Rental" income is from the Convair/220 Club. Motion by K2RP to approve the Treasurer's Report as published. Seconded by KG6JEI. Motion passed unanimously. KG6JEI noted that a CD is scheduled to mature on the date of the next Board meeting.

Secretary's Report

KB5MU distributed copies of the minutes of the January board meeting, previously sent by email. Motion by K7ELH to approve the board meeting minutes as published. Seconded by W6GNI. Motion passed unanimously.

Upcoming General Meetings

K2RP reported the March meeting is tentatively scheduled to be on Logbook of the World, and that Joe N6SZO will present on hidden transmitter hunting in April.

Membership

W6GNI reported that the membership is 268. Postage rates are up a little, and the cost of newsletters that can't be delivered as addressed is way up. Because of changes in USPS procedures, it now takes a minimum of 45 minutes to "drop off" the Scope at the Post Office.

Repeater Technical Report

KG6JEI reported that the failure of the 147.130 MHz repeater immediately after the last work party visit was due to a ground line left unconnected. Art McBride KC6UQH has a different squelch board for the 147.075 MHz repeater and will swap it in soon. The cavities for the 6m repeater are in KD6TUJ's garage.

Historical Goodies

KG6JEI reported that he has scanned some frequency coordination and other historical documents received from Stan Rohrer W9FQN.

SANDARC

KD6TUJ reported on the recent meeting of the San Diego Amateur Radio Council. The Lakeside ARC requested \$1000 for equipment to loan to their local fire department. This request might be on hold pending a potential grant. SANDARC is only supposed to spend excess funds from the present year (and there has been no income this year, other than the committed funds for SANDARC-VEC).

SANDARC is asking clubs whether they want to support the San Diego County Fair booth this year. Do we? Some discussion followed.

Operating Day

KD6TUJ reported that Fry's corporate headquarters has approved our request to hold Operating Day in the parking lot at the San Marcos store. We still need approval from the local manager. Tom Martin KG6RCW is interested in cooking, and Robert Todd KJ6RET is interested in bringing his solar trailer. The

PAPA system hasn't replied yet.

Field Day

Field Day is coming. We don't have a chairman or a site yet. KD6TUJ stated that somebody needs to ask Lusardi if we can use the San Marcos site again. K7ELH suggested two other possible sites. K2RP asked for Scope article soliciting Field Day volunteers, including a chairman.

Equipment Cabinet for Repeater Site

K2RP asked if we need an equipment cabinet on the repeater site. KG6JEI said no.

Help with Antennas

K2RP mentioned a new ham in ShadowRidge asking for help with antennas. KI6LKP said that Paul Dorey WN6K is already helping him.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on March 14, 2012.

Adjournment

The meeting was adjourned at 8:43 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

OffroadHam Yahoo Group

We wanted to make you aware that there is a new Yahoo Group for those who enjoy Offroad & HAM Radio. It is called OffroadHam and you can join for Free at www.offroadham.com and also join us for our HF Net on 40 meters / 7 MHz this Friday at 0100 UTC/GMT.

This Group is dedicated to those who enjoy Offroad touring and/or HAM Radio communication. Whether you travel via Jeep, Dirtbike, mountain bike, ATV or other Offroad vehicles; whether you like gravel roads, trails, mud or rock-crawling; whether you like scenery or challenges; whether you communicate with a HAM Radio from a base station or a mobile rig, this group is for you. We welcome singles, families, and people from all walks of life. Come join us and Enjoy the Journey!

73s

Ron, K4ORV

ARRL Seeks Comments on Proposed 9 cm Band Plan

03/06/2012

A few months ago, the ARRL UHF/Microwave Band Plan Committee asked the Amateur Radio community about current, planned and projected uses of the amateur bands between 902 MHz and 3.5 GHz. The response was beyond our expectations, with hundreds of comments and suggestions received. Thanks to all of you who took the time to share information with us.

After reading the feedback, the committee began working on the band plans; the first draft plan ready for review is for the 9 cm band (3300-3500 MHz). Please take a moment to look over the accompanying draft (see below) and let the committee know if you have any major concerns. Draft plans for the remaining bands under study will be released for comment as they become available over the next few months.

As a reminder, the purpose of these band plans is to share information about how the amateur bands are being used and to suggest compatible frequency ranges for various types of application. We recognize that local conditions or needs may necessitate deviations from a band plan, and regional frequency coordinating bodies may recommend alternatives for use in their respective regions.

Please submit your comments via e-mail by April 9, 2012.

Thank you once again for helping us complete this important project.

73,

Rick Roderick K5UR, Chair

ARRL Microwave Band Plan Committee



MARCH MEMBERSHIP MEETING PHOTOGRAPH BY DON WD6FWE



DENNIS KD6TUI, PRESIDENT OF PALOMAR AMATEUR RADIO CLUB, PRESIDES OVER THE MARCH MEMBERSHIP MEETING. PHOTOGRAPH BY DON WD6FWE



Palomar Amateur Radio Club Facebook. If you're interested in joining our group at

<https://www.facebook.com/palomar-amateur-radio-club/>

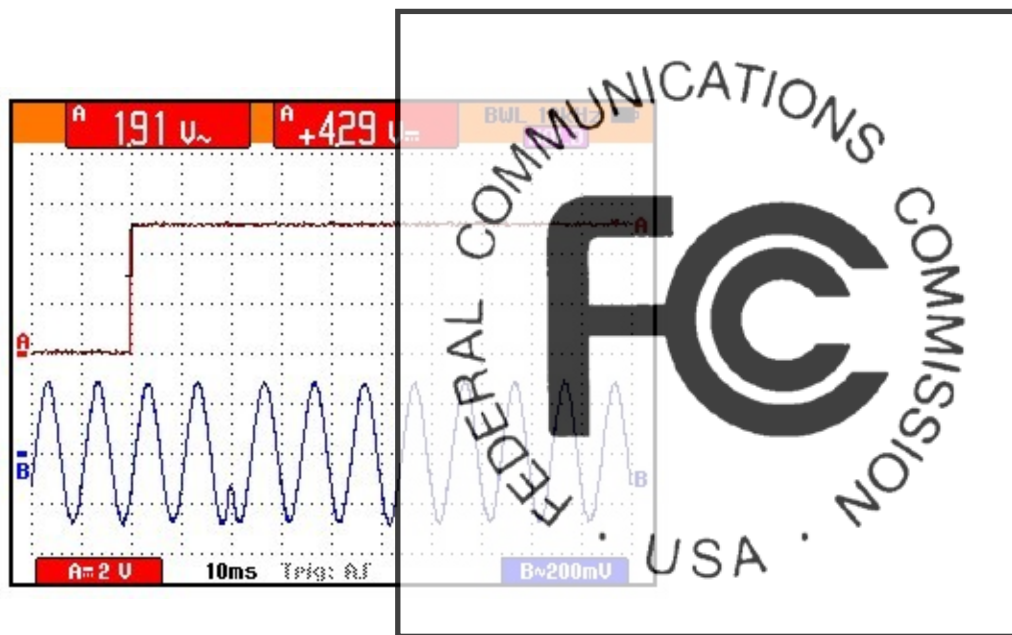


radio Club has a page on Facebook, consider joining

ok.com/groups/194674987710/

FCC Comment Period To Close Soon

On April 30 the FCC comment period will close for proposed regulations restricting the use of CTCSS (PL) tones 103.5Hz, 107.2Hz, 110.9Hz, and 114.8Hz at power levels above 5 watts on Sundays from 0800 to 1200 local time within 1 mile of a church. The proposed regulations stem from an investigation by Official Observers into complaints lodged by church choir directors nationwide that Ham radio CTCSS audible tone harmonics were interfering with some choir voices.



Back to Basics

by Howard KY6LA

Let's go back to basics for just a moment and understand where and why a roofing filter is needed and why a roofing filter might actually be detrimental under some conditions.

The purpose of a receiver is to receive a signal. (Basic enough?) Signals vary in strength. Your receiver can receive signals normally over a wide range of input power.

At one end is the noise floor.

Generally speaking you can't receive a signal whose power is less than the noise power in the same bandwidth. (No, let's not jump into a discussion of integration time and energy in coherent vs. non-coherent signals -- save that for another time.) At the other end is the point where the receiver starts to become non-linear, i.e. where the signal coming out is no longer an analog of the signal coming in. This is the compression point. At this point the receiver starts to generate a bunch of unwanted signals from the desired signals (intermodulation distortion or IMD). The range between these two points is the dynamic range of the receiver. (Yes, this is a simplistic description but please bear with me. We can get into the nuances some other time.)

Now here is an important point: each stage in the receiver has its own dynamic range and its own contribution to nonlinearity and IMD. The dynamic range of the receiver is the combination of all the dynamic ranges of all the stages. We can improve things by making the receiver have fewer stages and/or making sure that the signal doesn't pass through a stage to contribute to the problem. (Keep this in mind, it will become an important point later on.)

If there was only one signal to receive, we would be done but in HF and especially in ham radio, there are a lot of other signals besides the one we want to receive. Those signals are entering the receiver along with the desired signal. The combination of the desired and all the undesired signals passing through the receiver contribute to the RF power being amplified by the stages of the receiver. The trick is to remove as much of the undesired signals before they have a chance to saturate a stage causing compression and/or additional IMD.

Stages of the Radio

1. Antenna

The first place we can do this is at the antenna. Resonant antennas do a good job of receiving RF power at desired frequencies. Signals at frequencies outside the operating frequency are attenuated so their effect on the total RF power reaching the receiver is reduced.

2. Preselector

The next place we can attenuate the undesired frequencies is the preselector preceding the RF-amp and/or first mixer. The goal is to eliminate, as much as possible, the undesired signals before they reach the next active (amplifying) stage. The only problem is, if the undesired signal is very close to the desired signal in frequency, neither the antenna nor the preselector will be able to filter it out.

The undesired signal will then have to pass through the following stages of the receiver. We have no choice.

3. Mixer

The next place to get rid of undesired signals is in a filter immediately following the first mixer.

4. IF Stages

If we have a single-conversion receiver, we call this the IF filter. It is the only narrow bandpass filter we have. It gets rid of everything except a narrow band of frequencies, those that we want to receive. If we have a multiple-conversion receiver (one with multiple IF frequencies) then this filter has come to be known as a "Roofing Filter".

They call it that because the intention is not to use this filter to provide the final selectivity of the receiver but rather just to get rid of unwanted signals near the desired signal, that is, it shields or "roofs" the subsequent stages from most or all of the unwanted RF power. The final selectivity will be provided in a subsequent IF stage, usually at a lower frequency where selectivity is easier to come by.

If you have a "traditional" receiver, i.e. one made within the last 20 years designed to end of life 20th century standards like the FT-5000 or so, it probably has at least two (double conversion) and maybe three (triple conversion) IF strips. These receivers often provide general coverage and have a first IF in the low VHF (up around 70MHz) in order to eliminate images. The problem

with this high IF is that it is really difficult to make a very narrow filter. Getting a filter that is only 500 Hz wide at this frequency is very, very difficult. Most get by with a first IF "roofing filter" (Sometimes called a Bandpass Filter) of about 20KHz. That means that if a strong undesired signal is within 20KHz of the desired signal, it makes it through the first IF and must be dealt with in the subsequent stages. This is why it was so difficult in the past to get receivers that had good close-in (less than 20KHz) specs, e.g. blocking dynamic range (BDR), intermodulation by the undesired signal (IMD DR3), etc. And given that, in a contest, the undesired signals may only be a few hundred Hz away, these filters do nothing to make things better. They may as well not be there.

5. Retro-Design IF

So to deal with this some people decided to go back to the original receiver approach that was used many years ago, i.e. use the lowest first IF that will get you adequate image rejection but where you can get really narrow filters. I believe that it was Ten-Tec and Elecraft that "pioneered" this retro-design. As a result, their receivers got rid of all that undesired RF power early on in the receive chain and they performed better. All they gave up was general-coverage. For most hams that didn't matter and it was a general win. You have only to look at the performance of these receivers to be convinced. The FT-5000 is a uses the Retro Approach (9MHz) on VFO-A receiver and the "Modern 20th Century" Approach (40MHz) in VFO-B for General Coverage... basically a compromise with multiple IF's.

6. DSP

But now most good receivers have DSP. DSP has some real advantages. It is possible to build ideal filters, amplifiers, attenuators, modulators, and demodulators mathematically. Frankly, they perform much better than anything that can be constructed out of analog components. The only problem is, given the state-of-the-art in analog-to-digital converters (ADCs) and processors, these functions must be performed at a relatively low frequency, i.e. tens of KHz or so if you want dynamic ranges in excess of 100dB. (albeit ADC's are getting up into the 3GHz range) That means that we must convert again to a second or third, low IF so that the DSP can process the signal. The DSP then does the filtering functions and gives us the final filter shape with narrow bandwidths and very steep skirts.

Anyway, it turns out that several of the other "SDR" radios, e.g. the Elecraft K3, are really pretty standard dual-conversion superhet receivers, albeit very well designed. Yes, they have narrow roofing filters in the first IF but once your undesired signal is inside the passband of your roofing filter, it must get through that second mixer and the second IF amp to get to the ADC where it can be eliminated in the DSP. These additional components and stages degrade the receiver performance. Because they introduce all sorts LO Phase Noise and IMD.....

7. Design Limits of Traditional Filters

Their approach is to use narrower and narrower roofing filters to get rid of more and more undesired signal. If you want to spec your receiver at 2KHz spacing, make sure you have a roofing

continued on page 12

<h1>HAM RADIO OUTLET</h1> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> Jose XE2SJB Jerry N5MCJ Joe N6SIX </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; vertical-align: middle;"> H R O </div>	KENWOOD rf CONCEPTS DIAMOND US TOWERS KANTRONICS YAESU, MFJ, ICOM BENCHER, Inc. HUSTLER COMET AMERITRON	Astron, AEA, OUTBACKER Larsen Antennas TEN-TEC Hy-gain, Tri-EX, Cushcraft And Others too Numerous to Mention!	Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.
Open: 10a.m. – 5:30p.m. Monday thru Saturday 858 560-4900 or toll free 1-800-854-6046 <i>Ask about our great prices</i>	Directions: On 163, take Clairemont Mesa Blvd. off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on real antennas!		

filter at 1.9KHz spacing to get rid of that signal 2KHz away before it reaches the 2nd mixer. This works, after a fashion, but eventually you reach a point of diminishing returns and that is -- analog filters aren't perfect.

As you have probably experienced using very narrow analog filters on CW, you know that, as they get narrower they perform more poorly. They have increased loss, ringing, increased group delay at the edges of the passband, etc. Frankly, they muck up the signal. There is a point where they stop helping and hurt. In most cases you are better off using a wider roofing filter and letting the DSP be the sole provider of selectivity. This works because most of the time you don't need to get rid of a -20dBm undesired signal that is 200Hz away from a -110dBm desired signal. You can let the undesired signal(s) come through the first IF "roofing filter" to be dealt with by the DSP where you won't have the problem introduced by the narrow analog roofing filter. (This is why most people are throwing their money away when they fill their K3 or Orion II up with many expensive roofing filters.)

8. Why SDR's like Flex are Better.

Now we come down to the Flex radios and why they are different and why they don't really need roofing filters.

First off, the only reason you need a non-zero first IF frequency is for image rejection. If you don't care about image rejection or if you can get image rejection some other way, you can use an IF of zero Hz. (By Now almost everyone has probably heard a good direct-conversion receiver and marveled at the clarity of the signal relative to a superhet. Just ask Larry N6NC about his SDRIQ receiver if you want to hear a really fabulous receiver)

Back before we had good, cheap crystal filters, people made SSB transmitters and receivers using the "phasing" method. This method used two separate RF and baseband (zero Hz) IF channels that are 90-degrees out of phase. By combining the signals from the two channels properly you could cancel out either the upper or lower sideband, the unwanted sideband being the image. These were the first I/Q radios (I = in-phase, Q= quadrature/90-degree phase). The difficult part of these radios that made them tricky to align and perform only moderately was coming up with the all-pass filters that introduced the 90-degree phase shift for the low IF. With modern DSP this is a piece of cake as it is now very easy

to do this with great accuracy.

So that is basically how the Flex radio works:

1. RF from the antenna is split into two mixers
2. Quadrature Switching Detector (QSD) fed from a Local Oscillator (LO) that has two outputs in quadrature, converted to baseband, and
3. fed into two ADCs which then comprise the digital I and Q channels for processing in the DSP.

This gets rid of a LOT of extra hardware. If the hardware isn't there it cannot contribute to IMD which really improves the performance over older style radios filled with all those extra noise producing stages.

And the QSD, because it is basically just several on/off switches, is amazingly robust in the presence of very high-level signals. We don't need to worry about linearity because it isn't linear to begin with!

So now we have only a few components between the RF signal and the DSP, i.e.:

1. the input bandpass filter;
2. the RF [pre]amp;
3. the QSD;
4. the first IF amp;
5. the anti-aliasing filter;
6. the ADC.

This is almost the simplest RF/IF section you can build. There is very little there to contribute to reduced dynamic range and increased IMD because, well, there is very little there. Only receivers that dispense with the first mixer and connect the ADC directly to the bandpass filter are simpler but their need to do analog-to-digital conversion at RF frequencies limits their dynamic range as well. (Yes, I know we can narrow the bandpass filter, do subrate sampling, and then decimation to improve the dynamic range but I don't want to get into that here.)...BTW... there are now several newer ADC chips now that will do this up to 1GHz in the \$50 price range...

Flex Has Filters

And I promised I would explain why I say that the Flex radios have a roofing filter. As you recall, I said that the roofing filter follows the first mixer to get rid of RF power that is outside the spectrum of interest. Turns out the Flex radios have this but they call it by a different name -- anti-aliasing filter. The anti-aliasing filter is there to reduce the power above the Nyquist frequency, i.e. half the sampling rate. Power above the Nyquist frequency is folded back into the passband. It is another sort of image. So the filter is there following the QSD.

It is in the same location as a roofing filter and even performs many of the same functions. The only thing is, you can't change it. I suppose that an I/Q radio using a QSD could have anti-aliasing filters that track the sample rate or even cut off well below the Nyquist frequency in order to get rid of even more crud before it reaches the ADCs, just like a roofing filter.

So, when you get right down to it, the receiver design in the Flex family of radios should be able to outperform other receivers when the undesired signal is inside the passband of the roofing filter. This is why Flex says that they don't care what spacing anyone uses between the desired and undesired signal for test purposes. The performance of the receiver is the same for all spacing's. The FLEX has NO RINGING, DISTORTION or SIGNAL DEGRATION on CW down to 1 Hz Filter Bandwidth ...The other guys such as K3 and the FT5000 need to make sure that the "undesired" test signal is filtered out by the roofing filter in order to make their specs look as good as possible. And it is true that, if you can ensure that the undesired signal DOES fall outside the roofing filter, the other approach does work really well. But try a 250Hz interference spacing on a 300Hz Filter on you FT5000. It will get through unattenuated while the Flex Software will just dial down the software filter to 249Hz and completely block it.

After all, the K3, the Orion II, and the megabuck radios from Yaecomwood sport really good receivers. But, they are all dealing with issues from yesteryear that do not even arise in modern SDR receivers.

They are just not anywhere as good as the Flex in my not-so-humble opinion.



Did you know there are a lot of ham radio operators on Twitter? Above is a sample of some of the recent chatter about ham radio on Twitter.

Our family recently discovered MakerPlace, a complete metal, wood and electronic shop, classroom and work area.

They have a large number of expensive tools, many computer controlled, available for use to the membership. This is a subscription shop, with memberships available for the day, the week, the month, or the year.

www.makerplace.com

NiCd Lady Company

Grace Lloyd
N6WPA
grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B
Riverside, CA 92508
800/906-6423
951/653-8868
Fax 951/653-5189

Your Complete Battery Source

Transmitter hunting

From Wikipedia, the free encyclopedia

Transmitter hunting (also known as T-hunting, fox hunting, bunny hunting, and bunny chasing), is an activity wherein participants use radio direction finding techniques to locate one or more radio transmitters hidden within a designated search area. This activity is most popular among amateur radio enthusiasts, and one organized sport variation is known as amateur radio direction finding.

Transmitter hunting is pursued in several different popular formats. Many transmitter hunts are organized by local radio clubs, and may be conducted in conjunction with other events, such as a radio enthusiast convention or club meeting. Before each hunt, participants are informed of the frequency or frequencies on which the transmitters will be operating, and a set of boundaries that define a search area in which the transmitters will be located. Transmitter hunters use radio direction finding techniques to determine the likely direction and distance to the hidden transmitter from several different locations, and then triangulate the probable location of the transmitter. Some hunts may include limits on the amount of time allowed to find a transmitter. Although many transmitter hunts are conducted just for the fun of the activity, some more competitive hunts will recognize winners in publications and offer awards, such as medals or trophies.

Mobile transmitter hunts are organized events where participants travel exclusively or primarily in motor vehicles. Most mobile transmitter hunts use VHF transmitters and receivers. Some participants use radio direction finding equipment and antennas mounted on a vehicle, whereas others use antennas that are temporarily deployed in an open window or an opening in the vehicle roof that can be easily rotated by hand while the vehicle is in motion. Other participants employ handheld antennas and radios that can only be used when the vehicle is stationary. Some mobile transmitter hunts require participants to leave their vehicles and proceed on foot to reach the actual location of the radio transmitter. The winner of a mobile transmitter hunt can be either the first vehicle to arrive at the hidden transmitter, or the vehicle that travels the shortest overall distance to locate the hidden transmitter. Mobile transmitter hunts are more popular in North America than other parts of the world.

A regulated sport form of transmitter hunting by runners on foot is called Amateur Radio Direction Finding, known worldwide by its acronym, ARDF.

It is an amateur sport that combines the skills of orienteering and radio direction finding. ARDF is a timed race in which individual competitors use a topographic map and a magnetic compass to navigate through diverse, wooded terrain while searching for hidden radio transmitters. ARDF is the most popular form of transmitter hunting outside North America.

Some transmitter hunts feature a "mail-in" competition, in which teams in fixed locations work together to locate hidden transmitters, then secretly give the coordinates to the organizers without actually traveling to the transmitter location. The team which provides the closest coordinates wins, thus a team which believes that the transmitter is in the northwest parking lot at 2nd and Elm (if it actually is there) will beat a team which says that the location is 2nd and Elm. This type of hunt enables participation by contestants who are unable to travel, such as shut-ins, school groups, etc., and requires a greater level of skill and coordination.

Equipment

Directional antennas are popular choices for transmitter hunting. A directional antenna is more sensitive to received signals in some directions than others. When a directional antenna is rotated, a received signal will either increase or decrease in signal strength, information from which a skilled hunter can determine the likely direction to the transmitter. The most popular designs for mobile transmitter hunts are quad antennas with three to five elements. Special design considerations include adequate strength to withstand the wind at highway vehicle speeds and ease of repair after collisions with overhead tree branches. In mobile transmitter hunts, directional antennas are often turned by hand while the vehicle is in motion.

Some radio direction finding equipment popular with mobile transmitter hunters operates on the time difference of arrival principal. Two identical antennas are mounted a precise distance apart from one another. Specialty electronics compare the phase of the signal received on each antenna and determine whether the signal is coming from a direction closer to one antenna or the other. This information is commonly displayed with LEDs on a display. These devices are popular for mobile transmitter hunts where participants have to exit their vehicles and proceed to the transmitter location on foot.

Come to the April membership meeting to learn more about transmitter hunting.

OPERATING DAY

Sunday, March 18, 2012



FRY'S ELECTRONICS

150 South Bent Street

SAN MARCOS, CALIFORNIA 92069

9:30 AM - 5:30 PM

PALOMAR RADIO CLUB

Event was postponed due to weather! It is in the process of being rescheduled. Stay Tuned!



Palomar Amateur Radio Club will be conducting an Operating Day at Fry's Electronics at the North end of the parking lot nearest Highway 78 on some date in the future between 9:30 AM and 5:30 PM. Invited to join us in our event are CERT, San Marcos ARC, PAPA D-Star, possible participation by the Red Cross, and Skywarn. This will be a fun day demonstrating Amateur Radio to the public. With this location, there should be lots of opportunity. Wonder who we will contact this time! Also wonder what will Ron bring from the vintage warehouse. Come on out and join us for some radio fun. Thank Sean Archer, Manager, for approving the request locally and Glen Johnson WA6GHW in electronic components (computer) for speaking in our benefit. When this goes better than planned, we might be able to have a FRY'S Operating Day in November at all the Fry's with local clubs participating.

Dennis KD6TUJ

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 4th of April 2012, the program will be about Transmitter Hunting.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Ahhh...Field Day. That time of year when Ham Hearts turn to fancy and longing for that rare contact, that unexpected thunderstorm, the mosquito repellent, the long-boiled coffee at 2:00 AM Sunday morning.

Yes, Field Day is here again, and PARC is preparing for a great event!

First, let's look at some lubricious prose from the ARRL explaining what FD is all about.

This year, the ARRL website tells us that the purpose of FD is:

" To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions.

Continued on page 2

Save the Date

Club Meeting
2 May 2012

The meeting program will be on phone patches from Vietnam, presented by Dennis N6KI.

Board Meeting
9 May 2012

Palomar Amateur Radio Club board meeting at 7:30pm at W6GNI QTH.

Dayton Hamvention
18-20 May 2012

www.hamvention.org/

A contingent from PARC will attend.

Continued from page 1

Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. "

After some extemporaneous comments, the ARRL goes on to say:

"...most groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to local elected community leaders, key individuals with the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar."

So there you have it in a nutshell! But there is a lot more.

PARC has a long tradition of outstanding FD events. This year will be no different.

One of the principal objectives for PARC this FD is to get you, the Club member, involved!

FD is the **perfect opportunity for new hams to experience all modes of amateur radio operation**, as well as to get up close and personal with some of the hardware and software we use every day in all our Ham pursuits.

And many is the experienced ham who has been away from the hobby, or who has moved to an antenna restricted community, who can re-ignite the Ham fire!

Face it. Nowhere are you going to see multiple towers, beams, dipoles, slopers, and radios operating as freely as at a FD site. And you can bet your bottom dollar (or yen, rinimby, euro, real, or whatever your currency) that you just can not experience "emergency operating conditions" in as realistic a manner as at FD.

Many conversations around club meetings and on the repeaters reveal a yearning for getting more hams interested in the HF bands. FD is the best single way to invite newcomers to the hobby to experience it all!

Remember that at FD you do not have to be an extra to operate all those fancy bands and modes. The FD station captains serve as control operators to allow the new comer, or the General and below licensee, to get on the air.

And lest I forget. **FD is not a contest!** Granted. Once a FD station starts making contacts, it is difficult not to get excited. **But we want FD to**

be a training event, and operators are not all testers. **So don't be shy!**

And you do not have to be a PARC club member in order to participate in our FD.

So the club's challenge to the PARC membership is to get involved. Come operate. Join us in planning and setting up FD this year.

Briefly, we will have 5 HF stations, a Get On The Air (GOTA) station, and satellite station. This year we are thrilled to have one of the stations totally operated by the Club's Young Ladies (YL station). And we will be taking care to emphasize the digital communication modes on the HF bands.

Details are fully covered at the Club website www.palomararc.org.

So. GET INVOLVED. Sign up to operate one of the FD stations. Invite your friends. Print out the business card style notice at the PARC website and hand it out in the community.

FD planning net is held every Wednesday at 8:00 PM local time (except Club meeting night) on the 146.730 repeater. PARC FD coordinator is NN3V (Charlie)_ who can be reached on email at NN3V@ARRL.net. Send him an email and he will gladly add you to the FD information distribution.

Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis



OPERATING DAY

Sunday, May 6th, 2012



FRY'S ELECTRONICS

150 South Bent Street

SAN MARCOS, CALIFORNIA 92069

9:30 AM to 5:30 PM

HOSTED BY PALOMAR AMATEUR RADIO CLUB

www.palomararc.org

contact Dennis KD6TUI (760) 672-0223

Come operate on the ham bands at Fry's

70cm, 2m, 6m, 10m, 15m, 20m



Amateur Radio Classes

We're local amateur (ham) radio operators that are dedicated to helping others get their licenses and get started in ham radio.

We teach classes to help you pass your Amateur Radio Licensing Examinations. The most popular format of these classes is one day. We run the class from about 8:30 a.m. to about 5 p.m. and then examiners come in to administer the license test. You're in and out in one day, and most people pass their exams. (Our success rate is high; we're disappointed if only 90% of the attendees pass the exam on their first try.)

After you have your Technician license, we have Get On The Air (GOTA) seminars to get you over that "push-to-talk phobia" that many people share. We also offer upgrade classes to General class, and even Extra class. The classes are usually offered on an as-needed basis, as demand dictates.

You don't need to take a class to take an exam. You can study on your own and sign up for an exam session. Virtually every Saturday morning, there is a session held somewhere in San Diego County. Each session is led by a Volunteer Examiner organization. To find times and places which work best for you, visit the the exam sites for ARRL (second Saturday), and SANDARC (other Saturdays). (Both sites also have lists of local clubs.)

Scheduled Classes

Here are the firm class dates we have at this time:
05 May(Saturday),
General class: 800am-5pm, exam: 5pm-7pm.
Location: Escondido

02 and 09 Jun (Saturdays),
Extra class: 9am-5pm, exam: 9th 5pm-7pm.
Location: (Probably Kearny Mesa) -

Note: We need two days to cover all the questions; the exam is after the second day.

Visit our website at:

<http://web.me.com/sandiegohamclasses/Students/Home.html>



Above is the Palomar Amateur Radio Club banner in front of the communications class at the Scout Fair held on Saturday 21 April 2012. Look for an upcoming article about the radio merit badge experience at the Scout Fair.

How do you
greet a ham radio
operator?

With a short wave!



Call for Volunteers

The 3rd running of The Harding Hustle is only 20 weeks away! Maybe that sounds like a long time, but putting together a race takes a lot of early planning. Of course the biggest part of putting on a successful race is volunteers. So - I'm putting out my first call for volunteers. If you can help - please let me know. If you aren't sure yet - then let me know you are a "maybe". If you have friends or a group whom you can tell about this event, I would greatly appreciate it. The more help the better.

Some duties that I need to fill:

- Ham Radio
- Race Prep (course marking, etc)
- Aid Station workers on race day
- 4x4 drivers for transportation

Remember - volunteers get a short sleeve tech shirt + food for helping. Shift times vary. Please let me know if you are interested/available to help - and/or please help spread the word.

Thanks much!
Jessica DeLine, RD
<http://www.hardinghustle.com>

JIDX CW Contest Report

Call: W6H
Operator(s): N6KI, NN6X, N6EEG
Station: W6HCD

Class: M/S HP
QTH: CA
Operating Time (hrs): 24

Summary:

Band QSOs Mults

160:	0	0
80:	20	12
40:	299	45
20:	160	37
15:	339	43
10:	0	0

Total: 814 137 Total Score = 114,532

Club: San Diego Contest Club

Comments:

San Diego Contest Club (SDCC) used W6H Call Sign in JIDX contest this weekend as a tribute to their friend Hiro, JA1FRQ who would operate with us on his visits to San Diego. Hiro loved to come to the W6HCD portable site and help the SDCC set up our tower trailer antennas and then enjoyed operating with the SDCC team.

Hiro passed away March 5, 2012. We will miss this kind and gentle man who thoroughly enjoyed Ham Radio DXing and Contesting.

This years effort yielded our highest QSO tally but with no opening for us on 10 mtr band and 80 and 160 not yielding many QSOs we lost many mults.

40 and 15 were the money bands for us this year.

K3, ACOM 2000A, 2 El 40 Yagi at 78 ft, 3 El SteppIR at 40 ft, 80 and 160 dipoles

73, Dennis N6KI

Posted using 3830 Score Submittal Forms at:
<http://www.hornucopia.com/3830score/>

Coming Soon: New ARRL Benefits

We are excited to announce two new ARRL membership benefits that will be introduced in June 2012.

In addition to the print copy of QST, all members will have access to an online, digital edition of QST at no extra cost. You will be able to access QST from anywhere--on nearly any computer, laptop, mobile device, smartphone and tablet (including Apple iPad, iPhone, and devices using the Android operating system).

Also in June, members will gain access to archived issues of QST from December 1915 to the present (previously, only issues through 2007 were available to members). If you are familiar with the current periodicals archive (which serves images of pages), that platform will be expanded to include all of QST from December 1915 through December 2011. A second, new archive will be introduced for issues beginning January 2012, featuring enhanced functionality including full-text search.

Be Prepared!

Members must have a valid ARRL website login to access the current digital edition of QST and archived editions. For a smooth launch of these exciting new benefits, and so that you will be able to quickly access the digital version of QST as soon it becomes available, we are e-mailing you some information that will help you login to the ARRL website prior to launch.

"Longinqui contacti sunt boni." -Ken Leon



Palomar Amateur Radio Club (PARC)

Please join our **Field Day** Operation
June 23 - 24
594 Rancheros Drive, San Marcos

Chance to operate **All Bands / Modes**
Do not have to be a PARC member

W6NWX

More information at PARC Website www.palomarc.org
Or contact NN3V (Charlie) at nn3v_6@arrl.net

COME JOIN THE FUN OF FIELD DAY

Minutes

Palomar Amateur Radio Club

Board of Directors Meeting

March 14, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:50pm at the home of Ron Pollack K2RP. In attendance were:

President	Dennis Baca KD6TUJ
Vice President	Ron Pollack K2RP
Treasurer	Dave Ochs KI6LKP
Secretary	Paul Williamson KB5MU
Director #1	Don Johnson WD6FWE
Director #2	Eric Hutchins K7ELH
Membership Chairman	Al Donlevy W6GNI
Repeater Technical Chairman	Conrad Lara, KG6JEI
Visitor	Adam Cabacungan Be Ready, Inc.

Adam Cabacungan, Vice President of Operations at Be Ready, Inc., a disaster preparedness company based in Oceanside, made a presentation to the Board. They have seen a big increase in interest in amateur radio from CERT teams and other organizations, and they want to add amateur radio to their offerings. Adam is working on his own license, and plans to become a trainer and volunteer examiner. He has consulted with Steve Early, AD6VI, who recommended the club to him. Be Ready would like to host a regular hamfest and regular training at their store in Oceanside, and plans to carry amateur radio equipment from at least Kenwood and books from ARRL.

KD6TUJ invited Adam to attend the upcoming Operating Day to see what we're up to. Without objection from the Board, Be Ready was given permission to promote club activities in their newsletter.

Treasurer's Report

KI6LKP distributed copies of the Treasurer's Report. There was a discussion of the very low interest rates currently paid on CDs. The check to the State of California for the bi-annual Statement of Information filing has not cleared yet; reportedly it takes seven weeks to process. Our checking account balance is not far above the minimum required to get free checking and other freebies. Printing and mailing the Scope are big items in the budget. IRS form 990-N and CA FTB form 199N have been filed as e-postcards. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by K2RP. Motion passed unanimously.

Secretary's Report

KB5MU distributed copies of the minutes of the February board meeting, previously sent by email. Motion by KI6LKP to approve the board meeting minutes as published. Seconded by KG6JEI. Motion passed unanimously.

Upcoming General Meetings

K2RP reported the April meeting will feature Joe N6SZO and Joe KE6PHB on hidden transmitter hunting. In May Dennis N6KI will talk about phone patches to Vietnam. The June meeting will presumably be about Field Day.

Membership

W6GNI reported that the membership is 274. Four new members joined at the last meeting. Renewals via Paypal tend to be for multiple years.

Repeater Technical Report

KG6JEI reported that there had been no repeater site visits since the snow fell. A few reports were received of the signal from the 146.730 MHz repeater being low, but this is unconfirmed. K7ELH reported some difficulty getting the Echolink system to connect to another node. KD6TUJ reported that the 6m cavities were delivered to W6HCD so that N6KI could measure them for a new insulator to center the tuning stub. KG6JEI relayed a report from KD6AKT that the NET/ROM firmware in our nodes is too old

to be compatible with other local nodes, such as LOMA. The ATV system is still down due to a keying problem. A work party is tentatively scheduled for April 15.

Field Day

KD6TUJ reported that the San Marcos site is almost nailed down. Lusardi wanted minor changes to the wording on the insurance certificate. Now we just need a chairperson.

Operating Day

KD6TUJ reported that Operating Day is still on, for now, despite threatening weather. Red Cross, San Marcos CERT, Robert Todd, Skywarn, the PAPA system, and antique equipment from K2RP are all confirmed.

Sale of Donated Transceiver

K2RP asked for approval to sell a donated Yaesu FT-767GX with 2m and 440 modules to a ham in Iowa who fixes and resells those rigs. While the price won't match what we could get for a fully-working rig, the rig we have has several things wrong with it. The consensus of the Board was that the sale would still be a good deal and that K2RP should go ahead with it.

SANDARC

KD6TUJ reported on the recent meeting of the San Diego Amateur Radio Council. The Lakeside ARC has retracted their requests for funds. There will be no SANDARC booth at the San Diego County Fair, but the Lakeside ARC will have a booth for the first few days. The ARC of El Cajon has resigned from SANDARC, and their president has resigned. SANDARC has no meetings confirmed after March, because their regular meeting room is not available.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of W6GNI at 7:30pm on April 11, 2012.

Adjournment

The meeting was adjourned at 9:21 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

Field Day Planning

Greatest needs: Shelters, Generators, tables and furniture for the stations, and Volunteers to participate.

We have 3 Stations, the satellite station, and the GOTA station, spoken for!

We have 2 stations (HF, the other 2 traditional operating stations) with high probability assignment.

We also have an emergency volunteer group interested in participating.

I am looking for someone willing to work as a PARC FD Public Information Officer (PIO).

The duty for this assignment is to contact local press, public officials, and emergency organizations, and invite them to visit the site.

The PIO will also be responsible for staffing the public information table at the FD site.

I already have the press announcements, and letters of invitation for public agencies, prepared.

What I need is someone to take charge of mailing them, telephoning public officials to invite them etc.

Finally, please set aside Saturday, May 26th., and Sunday, June 9th.

Those two days are currently scheduled for PARC FD Working parties. They will be held at the PARC storage compound. Details to follow.

We need help to come out and help check the antennas, clean the connections, and inventory the Club's equipment going to FD.

For some of you, this is the perfect time to learn about the critical pieces of hardware needed on the transmitter end of a ham station. Come out and get your hands dirty with EMF!

I hope to hear you on the FD Planning Net or contact me at NN3V@arrl.net

What does Elmer do?

My sincere thanks to Elmer for all that he has done to get me started in amateur radio. I earned my Technician license in November 2011 and my General in January 2012.

I met Elmer while attending my first Palomar Amateur Radio Club meeting in February. When I was greeted by the members as a new ham, I indicated my desire for assistance in getting started. Three Elmers took my card and two made contact for meetings at my shack-in-progress. I had acquired an ICOM-728 transceiver, an MFJ-949E Versa Tuner II, an MFJ-407B Electronic Keyer, and a CW Paddle from an estate sale. I also retrieved antenna cables from the home's attic.

I began my web research to study for the exam, to learn about the equipment I now own, and was experimenting with a simple wire antenna hung over the door of my shack-in-progress. My wife had stopped coming upstairs to look at what was happening to her spare bedroom. My ignorance about antennas and my lack of knowledge about operating my equipment yielded me reception on

only a few AM radio stations. I was having poor results.

Enter Elmer, WN6K, Paul Dorey. I have known Paul for three months now; he is an outstanding mentor in all of the ways that I understand the term.

Here is what Elmer has done for me:

- assessed my ham equipment and cable connections in my shack
- provided a tutorial on antennas and helped me to fabricate a starter 10 m dipole
- demonstrated how to send and receive from his shack to mine
- helped me move the 10 m dipole from the door of my shack to the interior overhead of my garage (I live in a neighborhood with homeowner restrictions)
- assisted me in extending the garage dipole halves into a horizontal U-shape for better multi-band performance on 10, 12, 15, 17, and 20 m.
- worked with me during several visits to establish my initial contacts, explaining the details of QSO, QSL, RST, where and how to log my contact information, and where to find daily solar resource and space weather information
- helped me to fabricate and mount a 17 m dipole in inverted V at the western roof gable apex of my house



17 METER DIPOLE INVERTED VEE



- introduced me to a group of experienced (and patient) ham operators who meet daily on 17 m to test propagation across the country on multiple HF bands
- loaned me his spare Yaesu FT-990 to show the power and features of a transceiver that could hold its own in the daily Propagation Group. I now know there is a difference between his FT-990, my ICOM-728, and many other radios

All of this comes with the learning process Elmer provides. WN6K continues to mentor me on diverse ham topics, including CW and LOTW; he has introduced topics and answered questions that have accelerated my progress.

This is how amateur radio operations are propagated to newbies like me. I am grateful for WN6K's shared expertise and technical support as I develop my shack and my skills. I have miles to go, but I am enjoying the experience.

Thanks, Elmer! Thanks, PARC!

Ken Leon KJ6SJZ



STEALTHY CENTER-FED DIPOLE AT KJ6SJZ



Palomar Amateur Radio Club has a page on Facebook. If you're on Facebook, consider joining our group at

<https://www.facebook.com/groups/194674987710/>



Mobile Installation

by John WB6IQS

Here is my custom 2006 GMC Sierra truck installation for an Alinco VHF FM rig.

I made an angled floor hump mount out of some old aluminum 1/16" thick rack panel side covers. I pop riveted them together and mounted it to the floor on the center line of the truck. I had to be careful to allow the seats to go fully forward but not have the console so far forward that the rig would be blocked from view.



The external speaker is an old GE Master II mobile speaker that was specifically designed to have very good mid-range voice response.

The roof mount antenna was centered over the dome light cut out in the headliner. I drilled a 3/4" hole in the roof and fished the antenna coax to the side and down the truck's passenger side seat belt mounting column.



It was a chore to take up the carpeting and fish the wires around but it is a totally hidden installation except for the rig's power wiring. +12 V power goes to an unused 15 A fuse for an optional radio accessory that was not installed. I have a frame ground return tied to the sheet metal in the firewall. I did not trust the hump mount contacts to be low impedance or low noise.

John Kuivinen, WB6IQS, Vista



NiCd Lady Company

Grace Lloyd

N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries

• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B

Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source



April membership meeting
photographs by Don WD6FWE.

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

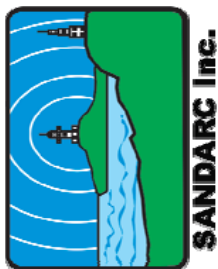
KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. – 5:30p.m.
Monday thru Saturday *Ask about our great prices*
858 560-4900
or toll free 1-800-854-6046

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!



2014 CONVENTION LOGO

Logo Contest for the 2014 Convention

Deadline: May 31, 2012

Time: 2100 Hours

**Please submit all Images to
Kc6qls@cox.net**

Open only to SANDARC Associated Club Members

Convention Theme: Disaster Preparedness

All Logos to be submitted in one of the following formats PDF, JPEG, GIF and in AI format for the printer. Six True Colors, one is to be white. Must have the words:

"ARRL Southwestern Division Convention 2014", and have the ARRL Diamond Logo in the logo.

The winner will receive one (1) Banquet Dinner Ticket, to the 2014 Convention. Convention Dates: September 12 - 14, 2014

Past Logos



Mobile Installation

by Robert N9SCD

Here are some details of my recent radio installation. Actually, the radio has been in the car for about six months now. I just finished changing the antenna. Previously, it was a mag mount. I figured it would eventually damage the paint so I fabricated a bracket to mount it directly to holes already in the luggage rack. The objective was to keep a low profile and avoid hitting the garage door. The radio is a Yaesu FT-2200. It fit nicely in a space in the center console of my '07 Murano.



RADIO INSTALLATION

I routed the power connection directly to the battery.



BATTERY CONNECTION

The antenna bracket was cut from a piece of 2" corner aluminum stock.



ANTENNA BRACKET

The antenna is a Comet B-10 with a 3D5MB cable assembly. It hasn't hit anything yet and is easy to remove for machine washing of the car. I'm still looking for a better way to secure the cable and route it inside.



ANTENNA FULL VIEW

There was an article in QST a few months ago about excessive electrical noise in many new cars. I guess I'm lucky. The radio doesn't cause any in the car and the car doesn't cause any in the radio. Everything works as intended.

Enjoy,

Robert
N9SCD

Club Membership

New Members Joining PARC: KG6WJD, AE6PU, KJ6ZAP, KJ6UMG. Fortunately we also had a number of renewals. Please welcome the new members, on the air, and in person.

Note, You can also check your membership renewal date on the web site!

The use of PayPal is working for renewals!!

Al
W6GNI

March Issue Fold & Staple Crew
March Issue Fold & Staple Crew
KB6NMK Jo WA5ACE Sonny
KB6YHZ Art & Janet W6GNI Al & Kathy

The WOUXUN 2m/440 handheld radio was won by Dave KI6LKP at the March meeting. The radio has been programmed with simplex and 42 2m repeaters, and 10 440 repeaters in San Diego County.

Field Day planning has begun!

Charlie NN3V is Field Day Chairman.

You're invited to join the Field Day planning net Wednesdays (except the first Wednesday of the month) at 8pm on the 146.730 MHz repeater.

See our Field Day page and refer to the ARRL Field Day page.

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!

scope@palomararc.org



Complete inventory for servicing amateur and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS
3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7
4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Selling HT-37 and HQ-180 as a pair for \$400. They are in perfect working condition and actively used by Brian, W0NW these last 20 years. If interested, I can forward a picture of the radios.

Bernie, N6FN
cell 760-505-6537
n6fn@niftyaccessories.com

For Sale

AMERITRON ALS-600 SOLID STATE NO TUNE FET AMPLIFIER WITH AMERITRON 50 VOLT SWITCHING POWER SUPPLY. NEW, NEVER BEEN OUT OF THE BOX \$900.00 FIRM.

ED GENEST
w6abe@arrl.net

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950 S, 10-160 M Transceiver	\$2,000.00
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 2nd of May 2012, the program will be about phone patches from Vietnam, presented by Dennis N6KI.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



www.arrl.org

We had a wonderful Field Day work party last Saturday. Started at 9:00 AM, completed at 1:30 PM, followed by adult libations and light snacks at the Oceanside brewery.

I am pleased to say that the team re-assembled all the PARC beams, cleaned and tuned them up. We did discover that the 15M CW beam, and the 6M beam, have defective parts, and WB6IQS and WD6FWE kindly volunteered to fix the parts, and complete the task of getting the antennas ready for FD.

Attached is the list of attendees at the work party. A hearty well done (and a point for each person to add to their point total for the PARC picnic raffle) to everyone. Many thanks for your participation.

**Our next workparty is Sunday June 10th.
9:00 AM to 2:00 PM.** We will inventory the

Continued on page 2

Save the Date

Club Meeting
6 June 2012

The meeting program will be about our upcoming Field Day.

Board Meeting
13 June 2012

Palomar Amateur Radio Club board meeting at 7:30pm at W6GNI QTH.

Field Day
23-24 June 2012

www.palomararc.org/fd2012.htm

www.arrl.org/field-day

Continued from page 1

station box containers of rotator, rotator control, coaxial cables, dipole antennas, etc. and test the rotators. The biggest task will be lubricating and greasing the crank up towers.

Will you volunteer to participate?

Please respond to me whether or not you will be able to participate.

73 de NN3V

During FD, the PARC FD site will be operating a **satellite station**, courtesy of KC6UQH.

Anyone interested in how satellites are operated – from the equipment through the software capabilities – are invited to be at the site for the satellite passes. The satellites and the time of their pass are as follows:

Satellite	Time
AO-27	1 and 3 PM Saturday, June 23rd
SO 50	12 Midnight June 23rd 1:30 AM June 24th
FO 29	12 Noon, 2 PM , 4 PM and 11:45 PM June 23rd
VO 52	8 AM and 10 AM Sunday, June 24th
AO 7	5 PM, June 23rd 8 AM ,10 AM Sunday June 24th

The International Space Station will be visible from 1 PM through 10 PM every hour and 30 Minutes on June 23rd. A contact is possible, but only 1 contact per station if voice repeater is operational.

HAMRADIONOW EPISODE 12A: FCC Forum at Hamvention

<http://arvideonews.com/hrn/>

This is the first of five programs coming up from the 2012 Dayton Hamvention®. It's the FCC Forum with Bill Cross W3TN and Curt Bartholomew N3GQ (and sorry, no Laura Smith this year - Bill explains that she'll be going to some other ham-fests to spread out the budget). This forum runs about 90 minutes.

Coming up next will be a special D-STAR Training Seminar with John Davis WB4QDX. I'll try to have that up by Sunday.

Then, three of our legendary "Tour" videos - one each for Friday, Saturday and Sunday. We'll visit some of the big manufacturer's booths and see what's new, and talk to some of the interesting and unusual people who make up the Hamvention. Those take a while to edit, so we'll be doling them out next week as we get them finished.

I won't send e-mail for each of them, but I will send a wrap-up when they're all out there.

For more immediate notice, you have some options:

RSS on the HamRadioNow.tv web site
YouTube subscription at www.YouTube.com/HamRadioNow
Facebook at www.Facebook.com/HamRadioNow.

Which reminds me - I have to go update the Facebook page...

Cyndi, Jeff and I sure enjoyed meeting many of you at the Hamvention! Thanks for your comments and encouragement.

73,
Gary KN4AQ

HAMRADIONOW is an online podcast from Amateur Radio//Video News. It's free to watch on the web. If you like what you see, we request your support. Just go to our web site, www.HamRadioNow.tv, and 'click the pig.' That'll take you to the support page. Whatever you think it's worth.

Thanks and 73,
Gary KN4AQ
HamRadioNow.tv
ARVN: Amateur Radio//Video News
kn4aq@arvn.tv

State of the Repeater Site May 20 2012

by Conrad KG6JEI

Two and a half hours before the start of the eclipse I pull into the site being on Palomar Mountain for another errand. This should be a quick visit I hope and then off to find a good site to view the eclipse!

The tower looks great to me and the site appears to have survived a very mild winter without much ado as I walk towards the tower and look around.

Turning around however and looking up we find the 6m J-Pole we put up before the winter (to see if it could survive and manage to make it through the snow storms without any problems) has failed catastrophically. The 6m J-Pole is bent over and is hanging upside down at a 25 degree angle from the tower ready to impale the roof of the battery building, a most distressing thought indeed. Unfortunately being only one person on the site and doing this solely as a drive by inspection, removal of the 6m antenna will need to be scheduled for an emergency work party in the very near future. Speaking of antennas, while I will need to check prior photos, that one atop the ATV building looks like it may have spun around, its pointing right into a hill and I could swear in the past it pointed towards the battery building.

Onto the battery room we find more carnage, some things can just not survive in the conditions we have on this site. The batteries appear to be in great condition, none appear to need a top up of water as they are all at mid-line. The charger cabinet is humming beautifully, I am sorry to say I don't know with just with my ears at what frequency the cabinet hums. I just know the humming means the chargers are on and we are happy at the site.

The storage shed also shows some pesky critters trying to move in, a partial colony of larvae and caretakers. This is why the site requires regular maintenance and upkeep.

Some quick dimensions of the site are then taken to determine some needs for piping to run new control lines across the site. It becomes

apparent that a full site plot would be nice, perhaps a future work party we will map out the full site especially if we lay more conduit it would be nice to have a map.

Judging by the carnage seen in the battery room and the pests in the storage shed I decide to take a look in the generator building which houses our voice repeaters. We open the door to a blistering 95-97 degrees Fahrenheit and no exhaust fan running. It appears the temperature control has somehow been adjusted to 100F!

The room is ventilated and the temperature control adjusted back to 85F. Possible causes for the resets on 730 now have doubled from charger sags to include temperature overloads on the PSU bricks.



ATV room appears a bit dirty and could use a good sweeping out but otherwise seems in good condition. Packet building is not checked however its fan is heard to run to cool the room.

Off to the eclipse I hope to see you at the next work party!

Conrad KG6JEI



Amateur Radio Classes

We're local amateur (ham) radio operators that are dedicated to helping others get their licenses and get started in ham radio.

We teach classes to help you pass your Amateur Radio Licensing Examinations. The most popular format of these classes is one day. We run the class from about 8:30 a.m. to about 5 p.m. and then examiners come in to administer the license test. You're in and out in one day, and most people pass their exams. (Our success rate is high; we're disappointed if only 90% of the attendees pass the exam on their first try.)

After you have your Technician license, we have Get On The Air (GOTA) seminars to get you over that "push-to-talk phobia" that many people share. We also offer upgrade classes to General class, and even Extra class. The classes are usually offered on an as-needed basis, as demand dictates.

You don't need to take a class to take an exam. You can study on your own and sign up for an exam session. Virtually every Saturday morning, there is a session held somewhere in San Diego County. Each session is led by a Volunteer Examiner organization. To find times and places which work best for you, visit the the exam sites for ARRL (second Saturday), and SANDARC (other Saturdays). (Both sites also have lists of local clubs.)

Scheduled Classes

02 and 09 Jun (Saturdays),
Extra class: 9am-5pm, exam: 9th 5pm-7pm.
Location: (Probably Kearny Mesa) -

Note: We need two days to cover all the questions; the exam is after the second day.

Visit our website at:

<http://web.me.com/sandiegohamclasses/Students/Home.html>

"Longinqui contacti sunt boni." -Ken Leon

Presentation of "Raffle Radio"

The raffle radio was drawn at the May meeting, at the end. The winner is Janell Cannon KJ6TOF, who was not present, but was at the meeting of Carlsbad CERT held in Room 3 at the same time. Janell found out later and sent email to PARC. Arrangements were made to come to the Operating Day. At Operating Day, Janell was presented with the Kenwood TH-K20A preprogrammed and alpha tagged. She graciously accepted the radio and told us a comment she made earlier. She told her friend Karen Benson, KJ6UWI, that if she won the radio, she would give it to her because she has a Yaesu VX-6. So, Janell presented the radio to Karen to start her into Amateur Radio.

Dennis KD6TUJ

You know you are a radio Geezer when you know how to properly tie a wire bundle using waxed string.



Call for Volunteers

The 3rd running of The Harding Hustle is only 5 weeks away! Maybe that sounds like a long time, but putting together a race takes a lot of early planning. Of course the biggest part of putting on a successful race is volunteers. So - I'm putting out my first call for volunteers. If you can help - please let me know. If you aren't sure yet - then let me know you are a "maybe". If you have friends or a group whom you can tell about this event, I would greatly appreciate it. The more help the better.

Some duties that I need to fill:

- Ham Radio
- Race Prep (course marking, etc)
- Aid Station workers on race day
- 4x4 drivers for transportation

Remember - volunteers get a short sleeve tech shirt + food for helping. Shift times vary. Please let me know if you are interested/available to help - and/or please help spread the word.

Thanks much!

Jessica DeLine, RD

<http://www.hardinghustle.com>



Below, Karen Benson KJ6UWI, presents Jenell Cannon KJ6TOF with the Raffle Radio.



CQWW WPX Contest, CW

Call: WQ6X

Operator(s): WQ6X, N6KI, VE4EA, NN6X, N6EEG, K4RB

Station: W6HCD

Class: M/S HP

QTH: CA

Operating Time (hrs): 48

Summary:

Band QSOs

160: 5

80: 34

40: 456

20: 706

15: 1150

10: 146

Total: 2497 Prefixes = 977

Total Score = 5,990,964

Club: San Diego Contest Club

Comments:

Best Contest Condx for a LONG time on 40 thru 10 Mtrs. 15 was just incredible with openings all over the world at same time at times and 10 yielded some nice mults from South America and Europe. 20 and 40 were there when we milked out 15 and we racked up over 500 mo0re QSOs and 350 more PFXs over 2011 effort !

VE4EA visiting from Manitoba joined us this year and filled in the holes in our schedule so with the usual suspects, we all had some great Runs and high rate S&Ping ! Local line and other band Noise dogged us again this year on 80 and 160, so will try to get out beverage RX antenna back up for the winter contests to improve our efforts on those bands. 73 de Dennis N6KI

Elecraft K3, ACOM 2000A, 3 El SteppIR Yagi @ 40 ft, F12 C3S @ 70 ft, Cushcraft XM-240 2 El 40 Mtr Yagi at 78 ft, 80 and 160 mtr Inv V Dipoles @70 ft Logging Software: WinTest Ver 4.91

*Below, PARC Operating Day at Fry's.
See page 10 for more!*



NiCd Lady Company

Grace Lloyd
N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B
Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source



W6NWX

WHISKEY SIX NOTHING WORKS GOOD

PALOMAR AMATEUR RADIO CLUB

FIELD DAY 2012

23 - 24 JUNE

594 Rancheros Drive, San Marcos

(Adjacent to San Marcos Sheriff's Station)



OPERATING 7 STATIONS

- 5 HF
- 20/80M CW
- 20/80M SSB
- 15/40 M CW
- 15/40 M SSB **ALL YL STATION**
- GOTA STATION
- MULTIPLE BANDS INCL 6 METERS
- SATELLITE

FD SCHEDULE

June 22

2:00 - 7:00 PM FD Set-up

June 23

6:00 - 11:00 AM Final Set-up

June 23 11:00 AM - June 24 11:00 AM

ALL STATIONS ON AIR

June 22

11:00 AM - 2:00 PM

FD Tear Down

DO NOT HAVE TO

- BE A PARC CLUB MEMBER
- BE LICENSED
- KNOW CODE

FD PICNIC

June 23 4:00 - 6:00 PM

**MORE DETAILS
ON CLUB WEBSITE**

WWW.PALOMARARC.ORG

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

KENWOOD
rf **CONCEPTS**
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. - 5:30p.m.
Monday thru Saturday
858 560-4900
or toll free 1-800-854-6046

*Ask about our
great prices*

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!

PARC at Scout Fair

by Conrad KG6JEI

On Saturday April 21st members of the Palomar Amateur radio club assisted the Boy Scouts at the Scout Fair held at Qualcomm Stadium. The Participation of PARC members was lead by Tim KJ6BW.

We brought down the Dennis KD6TUJ antenna trailer arriving at 6am. We did not get the prime location we were hoping for in front of the main entrance we did however end up with a very close second of the rear entrance of the event.

Supplies contributed included: Ez-Ups, Tower Trailer, HF and VHF antennas, HF radio, 2m/44 mobiles for voice contact in both analog FM and D-Star GMSK, a table, and chairs, generator for power, and of course human support to tie it all together.

The goal of this event was two-fold. First, to provide a classroom full of scouts the core requirements to obtain their Radio Merit Badge and second, to educate any persons passing by about amateur radio and the Radio Merit Badge.

To accomplish these goals we set up an operating right next to the entrance followed by the tower in front of the classroom and next to the pathway to draw people. Also, we had an information table containing radio information giveaways and hams speaking to any who passed by wishing more information.

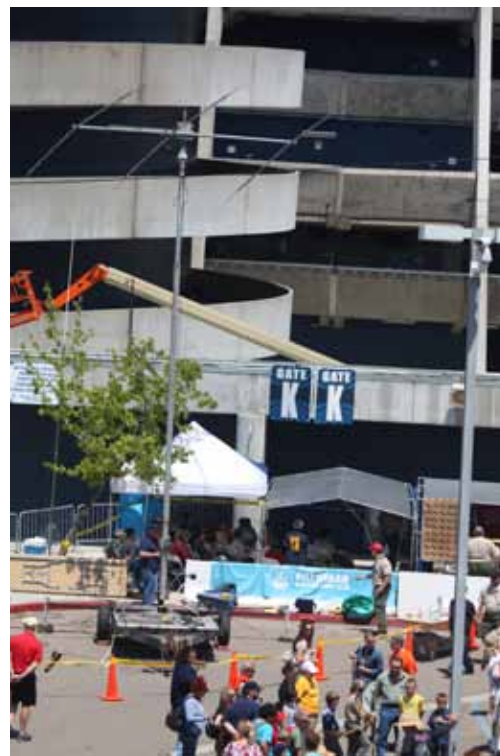
In order to meet the requirements for the Merit Badge we held the radio session having each student operate for 10 minutes on the radios holding a conversation with one of our control hams. When time permitted we also allowed the students and passerby to contact both locally on the Palomar 146.730 repeater and worldwide with the use of the Papa System D-Star repeaters. HF was also demonstrated to the students to show the differences in contacts however due to time constraints and lack of stations willing to speak with scouts HF was not a primary station. In the future we hope to arrange with another scout fair location to be on HF.

Inside the classroom tents students were educated on matters of Amateur radio including history, q signals, basic RF theory, RF safety, antennas, etc.

The radio merit badge course does have a large request as it not only filled up quickly when announced but on the day of we ended up having to turn away easily twice as many students as we took in. Plans exist to hold another Radio

Merit Badge later this year. When asked, some students did express an interest in long term possibly becoming amateur radio license holders.

Palomar Amateur Radio Club will continue to support these events.





Operating Day At Fry's

by Dennis KD6TUJ

Operating Day at Fry's Electronics in San Marcos on May 6, 2012 turned out very well. Participation included Palomar Amateur Radio Club hosting PAPA/D-star, American Red Cross, Skywarn, and San Marcos Amateur Radio Club and Robert's Solar Energy operated trailer.

The Day started for most around 7:30 AM gathering equipment and trekking to Fry's. Set up started at 8:00 AM finishing about 9:15. Brought in were two tower trailers, Dennis' and Emmett's KJ6CLP, a group of canopies, tables and chairs. 78 individuals signed the guest roster with many others missing the roster. Presented were HF communications lead by Tom KG6RCW. Red Cross showed off their new go kits for HF and VHF/UHF with digital. Their HF radio was set up with a random wire antenna from a tuner box with two ground radials. PAPA showed the D-star equipment ability to internet among other neat tricks. Skywarn was a nice surprise guest. San Marcos Amateur Radio Club offered information about their group. Robert KI6RET provided solar power to all operating equipment at the event. The quiet generation of power from the sun was aesthetically pleasing, greatly lowering the generator noise and accompanying added rf noise. Robert continues to refine his solar trailer setup. Emmett brought a recently designed and self built trailer with a 60 foot tower. This was one of it's shake out uses. Included in shake out are little items of learning to better the next trip. Emmett is looking forward to improving his trailer for the next use.

Several people including employees came from the store to see what was going on. Fry's also allowed announcements about Operating Day once per hour.

One guest who saw our signage came to us and offered his deceased father's equipment, as he was cleaning house and did not want it. Mostly telephone and teletype. The teletype was passed through to the Midway Museum for future use and display.

Radio location of the day--- Kwajalein Island

Of the 78 guests who signed in: 49 are club members, 29 were not members, 5 having no Amateur license.

Operating Day photos
by Dennis KD6TUJ and
Michelle W5NYV





Antenna work party photographs by Don KD6FWE.
Article starts on page 1, next work party June 10th!



Remote DX

by Charlie NN3V

The Dayton Hamvention is over, and a grand time was had by all. The weather was absolutely spectacular for Dayton. Lots of new toys to be seen and admired.

Some of the more innovative capabilities being presented were the plethora of opportunities the new equipment provides for internet connectivity, and remote control. From hardware finally showing up with USB ports, and WiFi, to software and firmware ready to "plug and play" (or is it plug and pray?). The possibilities seem endless.

Most intriguing to me are the opportunities for opening new venues for experimenting and operating. One particular idea motivated conversations at the official tables of the ARRL and the RSGB (Radio Society of Great Britain, the UK equivalent of the ARRL), at several of the operating events, and with small groups of hams gathered around Hara Arena. Also with some of the DXpedition crews attending Hamvention.

The intrigue is based on the opportunities now readily available for remote control of stations via the internet. The technology is quite straight forward, taking advantage of VoIP, broad bandwidth, ease of interconnectivity, etc. The idea is best illustrated by a scenario.

Take an HF station that is remotely controllable through the internet. Control is possible for the mode, frequency, etc of the HF transceiver, the antennas and rotators (if there are any), etc. Postulate that the station is properly licensed to VK5XYZ in Australia.

Now place yourself at an HF station located in the U.S. that has the capabilities of controlling the Australian station through the internet, and is also locally HF capable, and properly licensed in the U.S. Let us say that it is my station, NN3V, located in Poway.

Now suppose I take control of the Australian station via the internet, and transmit from that remotely controllable station. Say I transmit "CQ CQ de NN3V/VK5 CQ"

Now postulate that here in Poway, at my station that is controlling the remote, I hear the call on my HF radio and the answer transmitted (and picked up at the remote station but copied remotely back here in Poway) is "NN3V/VK5 de NN3V"

Question: Does that constitute a valid DX contact? There are a myriad of possible gut reaction

answers. I can tell you that the answers at the ARRL and RSGB booths, NOT OFFICIAL, after much discussion and speculating, amounted to "Hmmm, never thought about that. Interesting..."

The "experts" immediately jumped to multiple answers. Many trends of thought are possible, ie. Talking to yourself is not a contact (though it may indicate dementia!); you have to physically be at the stations making the contact for the contact to be valid, therefore it is not a valid contact; Hmmm, we may have come upon a new DXCC award type, and may have to consider it; etc.

A close reading (like a lawyer would do) of the DXCC rules does not appear to give a clear answer. The most pertinent of those rules are quoted below.

From an experimental point of view, and from the opportunity to foster innovative capabilities, and bring technological advances—including spreading them around the globe—such a perspective is delightful. Imagine carrying out a DXpedition to a rare one from the comfort of your shack?

Read the rules. What do you think?

73 de NN3V

DXCC Rules Excerpt¹

QUOTE

6. All contacts must be made with amateur stations working in the authorized amateur bands or with other stations licensed or authorized to work amateurs. Contacts made through "repeater" devices or any other power relay methods (other than satellites for Satellite DXCC) are not valid for DXCC credit.

7. Any Amateur Radio operation should take place only with the complete approval and understanding of appropriate administration officials. In countries where amateurs are licensed in the normal manner, credit may be claimed only for stations using regular government-assigned call signs or portable call signs, where reciprocal agreements exist or the host government has so authorized portable operation. Without documentation supporting the operation of an amateur station, credit will not be allowed for contacts with such stations in any country that has temporarily or permanently closed down Amateur Radio operations by special government edict or policy where amateur licenses were formerly issued in the normal manner. In any case, credit will be given for contacts where adequate evidence of authorization by appropriate authorities exists,

1 DXCC Rules Excerpt from DXCC Rules at <http://www.arrl.org/rules>

notwithstanding any such previous or subsequent edict or policy.

8. All stations contacted must be "land stations." Contacts with ships and boats, anchored or underway, and airborne aircraft, cannot be counted. For the purposes of this award, remote control operating points must also be land based. Exception: Permanently docked exhibition ships, such as the Queen Mary and other historic ships will be considered land based.

9. All stations must be contacted from the same DXCC entity. The location of any station shall be defined as the location of the transmitter. For the purposes of this award, remote operating points must be located within the same DXCC entity as the transmitter and receiver.

10. All contacts must be made using call signs issued to the same station licensee. Contacts made by an operator other than the licensee must be made from a station owned and usually operated by the licensee, and must be made in accordance with the regulations governing the license grant. Contacts may be made from other stations provided they are personally made by the licensee. The intent of this rule is to prohibit credit for contacts made for you by another operator from another location. You may combine confirmations from several call signs held for credit to one DXCC award, as long as the provisions of Rule 9 are met. Contacts made from club stations using a club call sign may not be used for credit to an individual's DXCC.

UNQUOTE

Flex Brief from Dayton

by Howard KY6LA

Clearly, the new Flex 6000 series were the hottest radios at the show.

So far KY6LA, K6BK, WA3IHV, W6VOL have already ordered 6700/6500 series flex radios. N6XT is in the process of ordering a 6700 series.

We had a discussion with Adam Farson, VA7OY, the ICOM guru. He commented that the flex 6000 series totally beat the specifications of any legacy radio system including ICOM, Yaesu, Kenwood, or K-3.

He further commented that the specifications were so spectacular that he doubted that he had test equipment good enough to be able to discern how good these radios really are.

I was particularly impressed by the thin client which means that I could run the flex 6000 series, from an iPad, iPhone, or any simple computer system. The Internet connectivity means that I could share slices of the radio with other people on the Internet while same time using the radio for myself.

We got into a lot of technical specifications of the A/D converters, got into high-power floating point gate arrays other fantastic computer processing power within the radio.



Club Membership

New Members Joining PARC: KG6WJD, AE6PU, KJ6ZAP, KJ6UMG. Fortunately we also had a number of renewals. Please welcome the new members, on the air, and in person.

Note, You can also check your membership renewal date on the web site!

The use of PayPal is working for renewals!!

Al
W6GNI

Field Day planning has begun!

Charlie NN3V is Field Day Chairman.

You're invited to join the Field Day planning net Wednesdays (except the first Wednesday of the month) at 8pm on the 146.730 MHz repeater.

See our Field Day page and refer to the ARRL Field Day page.

March Issue Fold & Staple Crew
March Issue Fold & Staple Crew
KB6NMK Jo WA5ACE Sonny
KB6YHZ Art & Janet W6GNI Al & Kathy

IMPULSE Electronics
(760) 747-5277 – (866) 747-5277
www.impulseelectronics.com
**Your Connection for
Emergency Power Solutions**

Power Products
Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products
RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!

scope@palomararc.org

**RF PARTS**
COMPANY
From Milliwatts to Kilowatts™

Complete inventory for servicing amateur and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES
Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books
3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS
3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7
4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B
Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA
760-744-0700
www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Selling HT-37 and HQ-180 as a pair for \$400. They are in perfect working condition and actively used by Brian, W0NW these last 20 years. If interested, I can forward a picture of the radios.

Bernie, N6FN
cell 760-505-6537
n6fn@niftyaccessories.com

For Sale

AMERITRON ALS-600 SOLID STATE NO TUNE FET AMPLIFIER WITH AMERITRON 50 VOLT SWITCHING POWER SUPPLY. NEW, NEVER BEEN OUT OF THE BOX \$900.00 FIRM.

ED GENEST
w6abe@arrl.net

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950 S, 10-160 M Transceiver	\$2,000.00
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

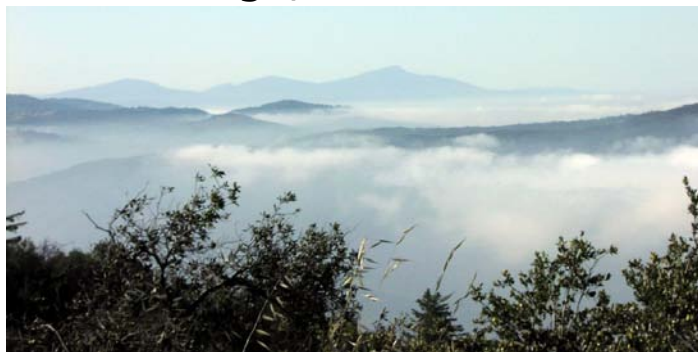
Featured Program:

At 7:30pm on the 6th of June 2012, the program will be about Field Day.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



There is no meeting on
the 4th of July.

Our meeting is
postponed to
11 July 2012 in order
to allow everyone to
celebrate the holiday.

40m On the Graveyard Shift

by Paul KB5MU

This Field Day I was only able to operate during the graveyard shift, from about 3am to 7am. This is the slowest time during the main 24 hours of Field Day, for several reasons. Propagation is generally limited to the nighttime bands, though it's certainly possible for 20m or even higher bands to be open. It's more than halfway through the event, so other operators have probably worked most of the loud stations already. The loud stations tend to be the ones with all shifts manned and CQing for the full 24 hours, so they are the easiest to find and easiest to work. Then there are the stations that simply shut down in the wee hours. You can't work 'em if they're not on the air. After the sun comes up and the Sunday morning hams turn on their rigs, things speed up again.

Continued on page 2

Save the Date

Club Meeting
11 July 2012

N6ERD Dan presents
Logbook of the World.

Board Meeting
18 June 2012

Palomar Amateur Radio
Club board meeting at
7:30pm at K2RP QTH.

Harding Hustle
7 July 2012

[http://trailrunning.
dirtyfeet.us/
hardinghustleindex.html](http://trailrunning.dirtyfeet.us/hardinghustleindex.html)
Volunteers needed!

Continued from page 1

As it happened, I spent the time on 40 meters, both phone and CW. I was mostly just listening over the shoulders of the scheduled operators, Michelle W5NYV on phone and Phil KA9Q on CW, though I took the controls briefly at both stations. I had time to listen and reflect. What I noticed was that CW was working a lot better than phone. The QSO rate was faster, and many fewer retransmissions were needed. There are sound technical reasons why CW works better when the signal to noise ratio is very poor, but usually the greater convenience and speed of spoken language mean that the phone station can make contacts faster. That's why CW contacts are worth double the points in most contests and in Field Day.

There was plenty of activity on 40m and propagation to most of the U.S. and Canada, so there was no lack of signals. Despite that, it didn't seem terribly crowded, at least not with signals that were identifiable as such. Most of the signals we tuned in were more or less in the clear, not heavily overlapped by stations on nearby frequencies. Many of the loudest ones were, of course, stations we'd already worked ("dupes"), on both phone and CW.

On CW, we were able to tune in a station, make our call, and have a reasonable expectation of being heard. On phone, most of the stations we

called couldn't hear us, which can be downright frustrating. What was the problem? Noise. Lots of noise. Horrendous noise. The high noise level meant we could only attempt to make contacts with the loud stations, and on the other end it made it harder for them to hear us. Making matters worse, this was happening for all the modest stations on 40m, so all of us were probably trying to call the same few strong stations and generating lots of interference on top of the noise.

The same noise was present in the CW portion of the band, but CW operators can use much narrower filters. Narrow filters in the IF stages of the receivers, narrow audio filters in analog or DSP, and narrow filters in the operators' brains. As a result the noise is much less crippling, and all the secondary effects of a high noise level are greatly reduced.

The club has had good success generating points on CW for many recent Field Day outings. Some years the CW score really dominates phone, even though we operate more stations on phone and have many more qualified operators available. This has puzzled me a little in the past, but now I think I have it figured out. It's the noise.

What about digital modes? Theory says they should be even better in noise. But that's another story.



*My FT-7900 in my Jeep.
Joseph Peterson K6JPE*

A First Field Day Report

by Ken Leon KJ6SJZ

PARC Field Day 2012, went down this past weekend in San Marcos. As my first FD, it was a great learning and training experience for a new ham. I received my first opportunity to handle, tune, and assemble beam antennas for the various stations at Field Day: 20/80 M SSB; 15/40 M CW; 10 M SSB; 15/40 M SSB; 20/80 M CW; Satellite; and Get On The Air (GOTA).

I was assigned to PARC 10 m SSB with Preston, W6ASP, 10 m band captain. A PARC working party assembled, tuned, and moved the beams, towers, and shelters from PARC storage to the Field Day site on Rancheros Drive in San Marcos on Friday afternoon, June 22nd. On Saturday morning at 1100 PST, PARC 10 m station commenced field day operations on mobile generator power running a Yaesu FT-950 transceiver with Voice Keyer, 80-100 watts output, connected to a Dell Laptop for contact logging. We were 5A SDG for logging purposes.

PARC 10 m band operations began slowly with

Continued on page 5

Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis

Contact RBERS@live.com for info:

1. MFJ Versa Turner II MFJ941D \$80
2. MFJ Super DSP Filter MFJ784 \$100
3. Kenwood Station Monitor SM220 \$250
4. Hustler Antennas
 - RM9 \$10
 - RM12 \$10
 - RM15, \$10
 - RM20 \$20
 - RM40 \$20
 - RM75 \$20
5. Communications Specialist TE64 External Tone Generator \$35
6. Kenwood TS130S Transciever \$350
7. Yaesu FC901 Antenna Tuner \$300
8. Heathkit Linear Amplifier SB200 \$340
9. Kenwood PS50 Power Supply \$135
10. Kenwood TS940S \$400
11. Johnson Low Pass Filter Mod 250-20 \$10
- 11a. Johnson Low Pass Filter Mod 250-20 \$10
12. Waters Dummy Load Wattmeter Mod 334A \$160
13. Kenwood TM231A 2 Metet Tranciever \$100
14. Yaesu FT11R 2 meter hand held with two FNB28 batteries, a Quick Charger, and a 12 DC car charger \$60
15. Radio Shack HTX242 2 meter transciever \$80
16. RG8/U cable \$15
17. Kantronics Packet Communicator 3 plus \$125
- 17a. MFJ-1272MYV Mike TNC \$35
18. Johnson Match Box SWR Bridge Mod 250-25 \$120
19. Swan Watt meter (Neddle Stuck) \$5
20. Drake Q-XER Mod593 \$20
22. Heathkit Line Monitor IM103 \$20
23. Palomar M827 SWR/power meter \$70
24. Triplett Absorption Freq meter Mod3256 \$10
25. Heathkit Grid Dip meter ModGD1B \$20
26. Tunnel Dipper with attachments \$15
27. Heathkit AM2 SWR meter \$5
28. SWR Power Meter Cat. No. 21-524 \$25
29. Antenna Switches \$10 ea
30. Coaxial Relay 1000 Watts type DKC-6E \$30
32. GE CB 40 Channel Tranciever Mod 3-5804F \$10
33. GE CB 40 Channel Transciever HT 3-5900 \$10
35. 2 Mag mount CB Antennas \$15 ea
36. 2 meter mag mount antenna \$15
38. Hustler HF Multi-Band 5-BTV with RM80S top \$150
39. Cushcraft Ringer Ranger ARX 2 meter \$50
40. Backer and Williamson lo pass filter mod425 \$10
41. MFJ-910 mobil antenna matcher \$15
42. Kenwood MC60A mike \$100
43. Kenwood MC60A mike \$100
44. 1968 Vibroplex presentation key \$175
45. MFJ 422-CX Key \$35
46. Navy CTE -26003A Key \$40
47. Bencher Key \$60
48. 2 Vintage J-38 keys \$35 ea.



*Advanced wrench repair,
spotted at a local swap meet.*

You know you are a radio Geezer if it's been 40 years since you got the snot shocked out of you. Congrats!



"Longinqui contacti sunt boni." -Ken Leon

Search for people, places and things

Palomar Amateur Radio Club

About Events Photos Files

Write Post Add Photo / Video Ask Question Upload File

Write something...

Robert Johnson
Did you miss it? Well now is your chance to see what happened at Field Day.

PARC Field Day 2012
www.qsl.net

Like · Comment · Follow Post · Share · 3 hours ago

Donald Johnson was at Parc Field day in san marcos CA 2012.

Unlike · Comment · Follow Post · Yesterday at 7:41am

You like this.

Paul E. Dorey One of our 'crack CW' ops at 20/80 - Rick, N6CY
Yesterday at 4:42pm · Like

Write a comment...

Palomar Amateur Radio Club has a page on Facebook. If you're on Facebook (even though Charlie NN3V isn't), consider joining our group at

<https://www.facebook.com/groups/194674987710/>

Results for hamr

Tweets Top / All

- Jerry Taylor** @kd0bik 29m
Some great special event stations on the air this weekend. Get the run down on PARP Plus myamateurradio.com/parp-plus-edit... [#hamr](#) [#parp](#) [#bf](#)
Expand
- Camb-Hams** @g3pye 2h
The Camb-Hams have registered for the [#RSGB_UK](#) VHF NFD contest which takes place over the weekend of July 7-8th. [#hamr](#)
Expand
- Jeff Davis, KE9V** @ke9v 6h
41 of 77 FD contacts made on forty. 40 meters is the best tool in the HF utility belt. [#hamr](#)
Expand
- Jeff Davis, KE9V** @ke9v 6h
W3AO - 27A. Holy smokes! I couldn't afford to pay for the gasoline for the generators for that operation! Would love to have seen it. [#hamr](#)
Expand
- Peter Goodhall** @2e0sql 8h
Awesome, both my Android ham radio apps now have over a 1000 installs each now! [#hamr](#)
Expand

Above is a sampling of the ham radio talk on twitter. Use the "hash tag" [#hamr](#) to tag your posts for other hams to find.

Call for Volunteers

The 3rd running of The Harding Hustle is 7 July 2012!

Of course the biggest part of putting on a successful race is volunteers. So - I'm putting out my first call for volunteers. If you can help - please let me know. If you aren't sure yet - then let me know you are a "maybe". If you have friends or a group whom you can tell about this event, I would greatly appreciate it. The more help the better.

Some duties that I need to fill:

- Ham Radio
- Race Prep (course marking, etc)
- Aid Station workers on race day
- 4x4 drivers for transportation

Remember - volunteers get a short sleeve tech shirt + food for helping. Shift times vary. Please let me know if you are interested/available to help - and/or please help spread the word.

Thanks much!
Jessica DeLine, RD
<http://www.hardinghustle.com>

Continued from page 2

sporadic path and few signals until late afternoon, when it swiftly improved to near pile-up conditions from 1700-2100 PST when we logged a total of 79 contacts before going quiet again. Florida, North and South Carolina, Georgia, Tennessee, Kentucky, and Alabama came alive on 10 m SSB late in the day. Sunday yielded only 2 more 10 m SSB contacts by 1100 PST when FD 2012 secured operations. Overall, PARC 10 m station worked HI, WA, OR, CA, WY, ID, UT, NV, CO, TX, OH, IN, KY, TN, GA, FL, NC, SC, AL, VA, MD, PA, CT, NY, and NH, etc.

I learned a lot by watching, listening, and operating after we set up the rigs, towers, beams, rotators, and shelters. I was able to visit, observe, and compare notes with all PARC stations in both CW and SSB operations. I now have a Wish List for my next rig as well as several antenna ideas for my restricted neighborhood! I received professional advice on my continuing CW training. And I now have a better sense of what goes on in a contest even though Field Day is not officially a contest. It was, however, challenging and FUN!

Food service and quality were very good, thanks to Jim! Coffee mess duties were mine as an Old Navy hand who enjoys strong coffee all day long. NN3V's dictum about wearing gloves and using sun screen during set-up and tear-down proved to be wise advice.

WN6K Paul, my Elmer, prepared me well for Field Day, while the actual event reinforced and clarified my earlier reading, shack configuration, and limited operating experience. Operating on mobile generator power was a first for me at FD 2012. We were fully up and operating on the generator when 10 m band captain, W6ASP Preston, gave me the operating position. As soon

as I had begun operating, our 35 amp power supply promptly fried something internally when the output power exceeded the meter maximum of 29 A. We shut down the rig immediately. While awaiting a spare power supply that was fortunately on-site, we worried over the electronic integrity of the rig and hoped that it had not also fried something internally. Thankfully, we were quickly back in operation with a new power supply (on loan); as hoped, the rig was still receiving and transmitting on spec. Our team breathed a collective and welcome sigh of relief. W6ASP introduced me to his FT-950 Voice Keyer which made life easier on our vocal cords; it proved to be a very useful feature throughout the day. We alternated between using the Voice Keyer on likely RF's, while alternating between Search-and-Pounce tactics across the lower half of 10 m. Both procedures yielded contacts.

As we settled into the first full day's operations, our 10 m SSB station became aware that we were interfering with the 15/40 M CW station which was positioned in a direct line between our station and the Northeast compass direction. Our beam antenna was also closer to their beam than any of the other stations. We wondered if there would have been merit to another field day example where all stations were positioned equidistantly in a straight line oriented 90° from the anticipated compass direction for beam antennas.

I will be processing my experience at Field Date 2012 in conversations with Elmer and in my own continued research and training. Overall, FD 2012 was focused, a bit intense at times, but Very Good Training for me, KJ6SJZ.

73,
Ken KJ6SJZ



What did you do for Field Day?

Send in your stories, successes, scores, photos, diagrams, plans, fixes, failures, and funnies to...

scope@palomararc.org



Don KD6FWE reports from the GOTA station that "my youngest was 8 years old. We had three at 11 or younger."



Freshly mowed grass made it easy to find HQ at night!



Photos by Ken Leon KJ6SJZ



HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. – 5:30p.m.
Monday thru Saturday
858 560-4900
or toll free 1-800-854-6046

*Ask about our
great prices*

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!



Minutes

Palomar Amateur Radio Club

Board of Directors Meeting
June 13, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:41pm at the home of Al Donlevy W6GNI. In attendance were:

President	Dennis Baca KD6TUJ
Vice President	Ron Pollack K2RP
Secretary	Paul Williamson KB5MU
Director #1	Don Johnson WD6FWE
Director #2	Eric Hutchins K7ELH
Membership Chairman	Al Donlevy W6GNI
Repeater Technical Chairman	Conrad Lara KG6JEI
Newsletter Editor	Michelle Thompson W5NYV

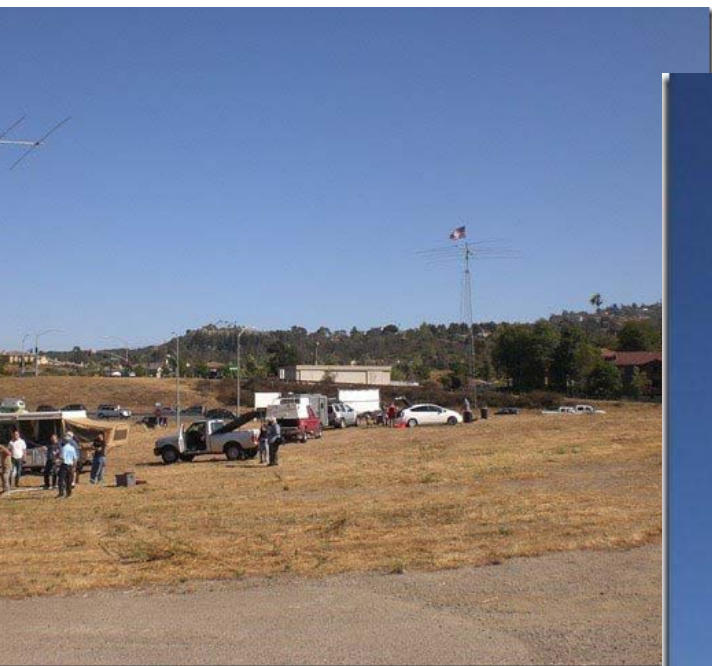
continued on page 12

Photos by Rod Johnson





Field Day panorama
by Don Johnson



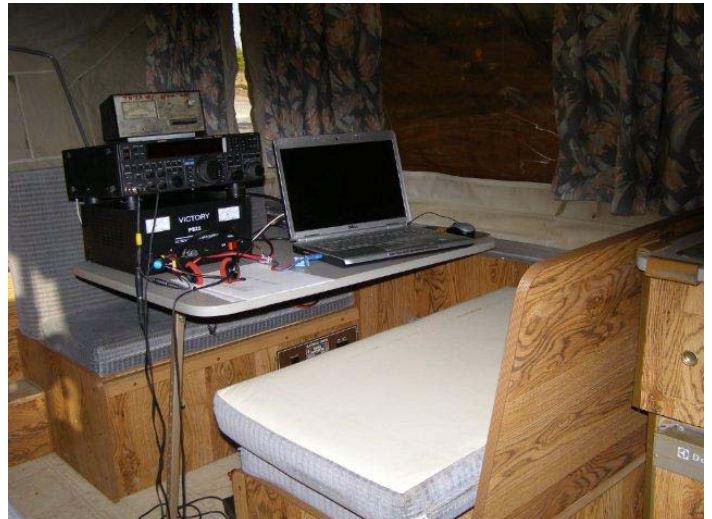


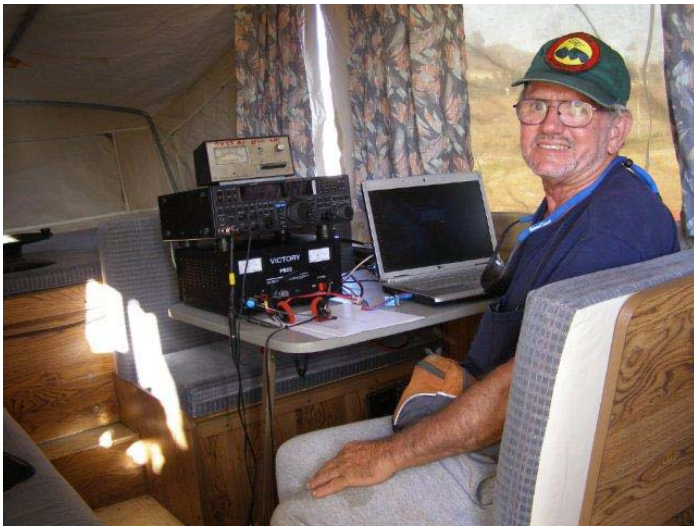
Photos by Ken Leon KJ6SJZ





Photos by Ken Leon KJ6SJZ





Photos by Ken Leon KJ6SJZ



continued from page 8

Treasurer's Report

KD6TUJ distributed copies of the Treasurer's Report. There was a question about why the telephone bill is so high; perhaps we are paying for more lines than we now need. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by WD6FWE. Motion passed unanimously.

Secretary's Report

KB5MU distributed copies of the minutes of the May board meeting, previously sent by email. Motion by K7ELH to approve the board meeting minutes as published. Seconded by W6GNI. Motion passed with KG6JEI abstaining.

Upcoming General Meetings

K2RP reported that the program for the next meeting will be presented by Dan N6ERD on Logbook of the World: beginning to end, how to get started, and how to use it.

KD6TUJ pointed out that the July meeting is on the 11th, not the 4th, but that it would be good to publish the Scope before the 4th so members find out in time.

Membership

W6GNI reported that the membership is 265. Of

the nine memberships expiring in February, two had no email address on file, and three of the email addresses bounced. In March, six memberships expired, one had no email address, and three bounced.

Repeater Technical Report

KD6TUJ reported that the temporary 6m antenna survived the winter but not the spring, and will be refurbished at a future work party. Critter invasions have been noted at the site. One building's thermostat was found inexplicably set to 100° F. The 146.73 MHz repeater has been resetting for no known reason. Echolink seems to be working now. KC6UQH reported at the club meeting that he has fixed the transmit side of the ATV repeater but the 2m intercom receiver is not working.

Picnic

Motion by K2RP to reschedule the picnic from August 26 to August 19, if the date is available at the park, to accommodate a schedule conflict for two Board members. Seconded by WD6FWE. Motion passed. KD6TUJ noted that the park reservation fee is about \$130, based on last year. Motion by KB5MU to approve up to \$150 for the park reservation fee. Seconded by WD6FWE. Motion passed. Motion by K2RP to allocate \$300 for picnic raffle prizes, to be awarded according to the usual rules. Seconded by WD6FWE. Motion passed with five ayes and two nays.

Field Day

Field Day seems to be well in hand.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on July 18, 2012.

Adjournment

The meeting was adjourned at 9:19 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary



June club meeting photos by Paul KB5MU. Program was about Field Day.

Club Membership

New Members Joining PARC:

KJ6OSG, WO5K, KJ6WVY, KJ6UWJ, KG6MDB, AND KJ6WUW.

And FIVE "old" members reinstated their membership.

Thanks to all!

And, I have been attempting to send e-mail reminders to members whose membership has "expired" in the last few months. It is amazing how many e-mails that have been provided to us have also "expired" "Bounced".

This is a short list of "Bounced e-mails". KG6KLV, WA1QMI, W0NI, AG6BM, W6TVA, KJ6HOU, KD6KZH. If you haven't renewed, Please do so!! Pretty PLEASE!!!

Al
W6GNI

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

March Issue Fold & Staple Crew

March Issue Fold & Staple Crew

KB6NMK Jo WA5ACE Sonny

KB6YHZ Art & Janet W6GNI Al & Kathy

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!
scope@palomararc.org

NiCd Lady Company

Grace Lloyd

N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries

• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B

Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source



RF PARTS™
COMPANY
From Milliwatts to Kilowatts™

Complete inventory for servicing amateur
and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

**Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books**

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS

3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7

4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950 S, 10-160 M Transceiver	\$2,000.00
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

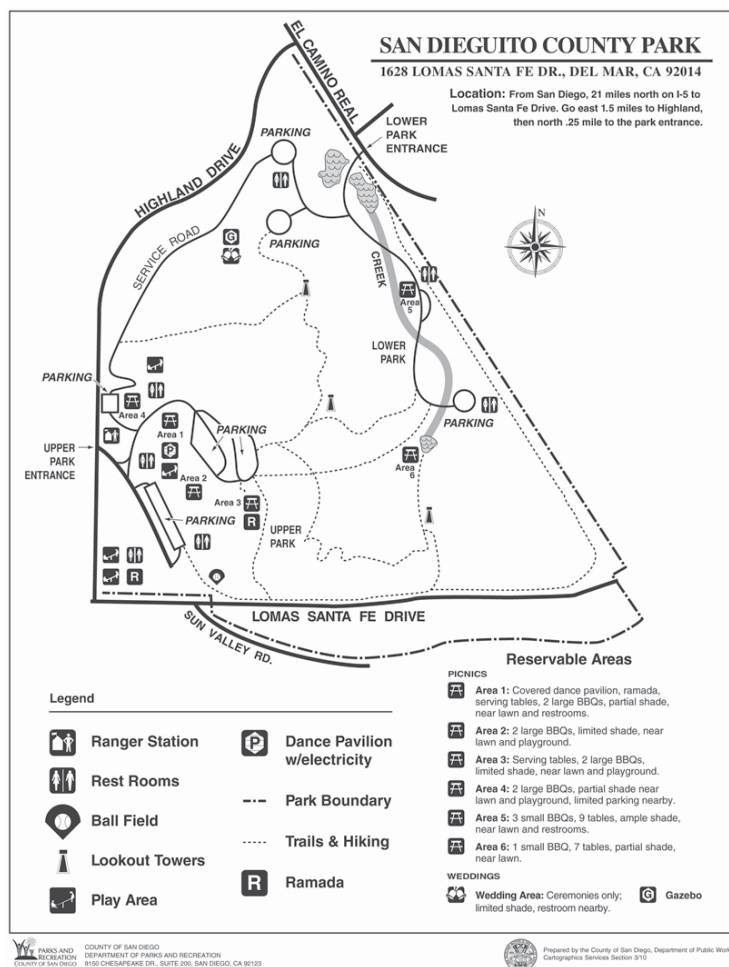
Featured Program:

At 7:30pm on the 11th of July 2012 the program will be presented by Dan N6ERD. It will be on Logbook of the World. "Beginning to end, how to get started and how to use it."

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Picnic Plans

The Palomar Amateur Radio Club annual picnic will be held at San Dieguito County Park area 4.

This will be on August 19, 2012 from 9:30 AM to 5:30PM.

Gina has offered to prepare the main items, to be complemented by pot luck items brought by club members. Joe N6SZO, of the Joe and Joe t-hunt show has offered to have a t-hunt for beginners and medium level. The tower trailer and HF radio will be there for all to use. We will see what Ron brings from the transmitter archives. This is the time to redeem your participation points from the past year. We will also have a one day raffle with a choice of either Powerwerx 30 amp desktop switching power supply with powerpoles, a Wousan UV3D preprogrammed radio, or a Rigrunner 4000U with crimpers and starter set of power pole connectors.

Save the Date

Club Meeting
1 August 2012

Fred W6HPH, on his noise cancelling amplifier featured in the January 2012 issue of QEX.

Board Meeting
8 August 2012

Palomar Amateur Radio Club board meeting at 7:30pm at K2RP QTH.

Club Picnic
19 August 2012

Potluck! Bring a snack, appetizer, tall tales, side dish, or dessert to share. Excuses will be grilled.

Field Day Organizer's Musings

by Charlie NN3V

Well, Field Day is over and I am sure everyone who participated had a wonderful time. Elsewhere in this month's Scope you will see pictures and notes about our FD. All in all it was a fun and enjoyable weekend for all.

As I did what had to be done to organize the FD event, I kept a short diary of happenings and reactions to what was happening. I thought I should use it to compile my observations about the actions involved in any volunteer effort.

Here goes.

April 4th. PARC Club meeting. Gee, it must be April Fool month. They asked me to organize PARC's 2012 FD event....Oh my God, they really meant it. Now I have to get busy. Well, the first thing is to find some folks to volunteer to help. I'll ask those interested to give me their email addresses and start an email distribution list. Next is to set-up a FD net on the repeater. That way people listening will be alerted to something they may have forgotten: Field Day is coming.

Note to self: whenever possible, talk about FD on the repeater. It "spreads the word". Hmmm: why do some of these hams not have a call sign email address? Sure makes it difficult to track emails. Somehow diddly-bopper@funkmail.com just doesn't cut it! It's hard to keep track of who is who with similar names. Call signs are so distinctive!

April 11th. First FD planning net. Wonder who will show up? Hey, good net. 6 attendees. Shame a jammer showed also. Note to self: make QSY note in next FD planning net email to volunteers. Good input from several. Good catch on getting workparty scheduled and planned. Should be easy with the email distribution list. That way I'll know who is going to help us.....after several days waiting; only 6 volunteered for workparty...best check the email addresses.

April 23rd. Frustration. Email sent out ...no responses...not even an acknowledgement from those who said they were interested..... have to call people on

phone for response. Hmmm...no one reads email, and several fail to answer texts. Fantastic! A shelter offered and I happily accept! Never, ever turn a shelter down...planning list distributed to all...must add U.S. Flags to next distribution of planning list.

April 30th. WOW! Look at what was volunteered this week. What a trailer and tower arrangement. That is really something. Will be nice to have it. Now we have 5 towers, and a good set-up for the site. Hmmm...I wonder why so many hams fail to get an email address with their call sign? Maybe I should send a note to the distribution list...FD planning net is getting busy. Lots of ideas for the workparties.

May 10th. Well, I am back from an outside of town trip. Wonder how things went last week at Club Meeting....Hmmm no responses to my workparty email... only those who volunteered earlier. No negatives, no positives, NUTIN!...hmmm...wonder why people sign up for an event, and don't bother to answer simple event requests... or even send note acknowledging receipt...oh yeah! They don't read their email.

May 12th. Fantastic....we now have all the band captains assigned, and they are taking charge of their stations. Nice group of band captains. All agree that we need to get new operators to not be afraid of HF! FD is NOT a contest....OH OH...do we really qualify for FOXTROT? Is the site an EOC? Best check.

May 15th. Great net tonight. Finally have the generators lined up....someone reminds us to get "quiet generators."....once upon a time the nice noise of the generators kept us awake at night. That was how we OPERATED 24 hours without sleep!!...note to self: make darn sure we have coffee all Saturday night!! May not be able to pull off another 24 hour op like last year without coffee!!

May 16th. Hi-HO HI-HO, To Dayton we go!

May 23rd. Gads that was fun. Wonder how the workparty is set for this weekend? OOOOPS....no new responses to email. Good group of volunteers, but lots of silence from the rest who said they wanted to participate, and should be added to distribution list. I'd better start calling people on the telephone. Maybe use snail mail?....NAH, the snail mail would get mixed with the junk mail and thrown out. How will

people communicate in the future? Oh yes, via SDR radios. They will be telepathic...chuckle, chuckle.

May 26th. Fantastic workparty. Well, the volunteers who responded outdid themselves. Nice to see some new faces, and new hams getting their hands dirty. Pleased to see a new YL in the club take this seriously. Good addition to the ranks. Got all the beams restored, tuned, and two broken ones identified with volunteers taking ownership to repair them...HM-MMM....good brew and lunch after the workparty.

May 30th. Nice net tonight. Couple of new check-ins. Got a generator issue to resolve. No news on shelters...is it possible that no one knows someone with a shelter who will loan it to use?...note to self...email note to distribution suggesting those who have not responded to anything that they check for a shelter...but then if no one reads email....oh well, BTFO!

June 6th. DUH...I am the speaker/presenter for the Club's meeting tomorrow night?...glad to hear it now. OK. We got the goods. Flyer, good videos of past events, and lots of schmooze. Maybe I can rustle up the two missing shelters with some sleight of hand....why don't hams have call sign emails? Tracking these offers and questions is awful difficult when you don't know who diddlybum@myfavorite.net is....especially when they think you can read their minds....

June 10th. Fantastic workparty today! Got a bunch of new hams who were able to come to this one as they stated. All the antennas – but one – are ready to go. That gamma match sure is beautiful. Looks better than the antenna itself! All the station control gear inventoried, and accounted for....and I saw the fabled coffee pot for Saturday night coffee delivered to the coffee chef! We are set! And, miracle of miracles, the generator issue, and the missing shelter are accounted for. Moral of the story...note to self....talk up FD on the repeater...you never know who is listening out there....and another great idea for raising the towers came from a “newbie” to the club. FANTASTIC!

June 17th Getting down to near “show time”!...planning list seems complete...well, visiting San Marcos sheriffs and fire fighters shows no knowledge of PARC. Best change the class designator from FOX-TROT to ALFA....good to see funds for food got to

Psychokitchen chef...no hunger at this FD!...last planning list distributed...looks like a go.

June 20th Last FD planning net...nice turn out...no surprises but we do have two volunteers now for the large towing capability...seems all are arranged for workparties at storage facility, and then at FD site...some indication that we will have city officials visiting FD, and that is nice...rats! Press announcements are all screwed up! Some printed, others promised and didn't. Oh well, at least some worked...”new” tower raising procedure with winch assist should be interesting

June 22nd My shelter is loaded....lots of repeater chatter this morning. The PARC troops are massing...storage workparty is there already and headed for FD site early! WOW! What a great number of FD site volunteers...set-up should be pretty smooth...there comes that 50Ft tower...beams are assembled with no missing parts...Need someone to shinny-up a tower...OK. Safety harness is there...generators are all distributed...hmmm...one surprise shelter shows up so the pop-up tent will not be needed...and another shelter. OH NO! Propagation forecast is AWFUL.Oooops...what was that horrific noise at a tower? Did something fail?...Well! Another first! 1730 and all towers and antennas are up and set. And YL station will indeed be TOTALLY solar powered. That is great! Someone said we could not have all in place this early. HAR!!...time to plan a restful dinner...Lost Abbey brewery and Phil's sounds good.

June 23rd 0530...Ahhh... coffee at the FD site from my own brew pot...never had a shelter with full kitchen before...nice to have friends...I see the troops are arriving...Psychokitchen is in place for later today...inverted V dipoles need to be tested and tuned...oooops...20 SSB says their beam is not tuning...we'll go see when there is time...generators are powered...nice and quiet throughout...bands sound horrible but we won't know until 11:00...5 minutes to go. Time to QST the band captains on the FD site frequency. It is almost show time!...20 SSB station was trying to use antenna analyzer while stations were tuning up. SWR bouncing all over was just analyzer responding to induced current. NO PROBLEMS...Coffee chef has the big pot brewing...Psychokitchen is up and running...and the bands are DEAD! 20M is OK...but the rest are just awful...telescope at infor-

mation desk shows ZIP sun spots. The forecast was correct... WOW...the FD site looks fantastic. Everyone commenting on how nice the flags look at top of towers...good slow down on 78 as the lookie loos watch...the sign must be attracting attention!...great group of people at the site...and BY GEORGE! Here comes the KUSI news team...we are on TV...news at 6:00 folks...don' miss it. ...yep, Oceanside City Councilman Gary Felien is here. It is nice to see a political ham friend take interest. Good for us and good for him...10 SSB is rightfully frustrated...15 M CW is rightfully frustrated with 10 SSB calling CQ...note to self: PARC needs to get some decent RF filters... maybe switch to 40M is worth it instead of staying on 15M...CW and SSB report 40M is OK...during daylight even! Propagation really is bizarre...GOTA is finally up and running...good crowd around GOTA and Psycokitchen. What is better? Food or Packet?...satellite station is attracting interest...dinner time and the Tri Tip is simply DELICIOUS! Best FD food west of the Mississippi!...time for me to take my turn at 20 CW...never done this before in a major ham radio event (FD is NOT a contest)...QSO rate on 20 CW will go down a bit...band is closing so time to switch to 80 CW...Nice!

June 24th 4:00 AM and it is time for more fun. My second turn at the radio...80 M CW is hopping... and I manage to get the last cup of coffee out of the PARC FD kitchen...kudos to the coffee chef...he managed to keep us supplied for the whole night!... WOW...the bands are opening again. 20M and 15M report fantastic openings...Old Sol must have decided to cooperate after all...great breakfast...nothing like FD Kitchen bacon sausage and eggs with some good hot coffee...time to take the dipoles down...YL station shows that the solar system kept the batteries fully charge during the day, and this morning they are at 1/3 charge and recharging now that the sun is out...telescope shows some sun spots this morning. Now we know why the bands reopened?...even 10 M reports good contacts...yawn ... not enough sleep... body is complaining...time to discuss tear down strategy...towers down to nest height, then beam removal and disassembly...then towers taken down...don' forget to stow the antennas for proper lowering...tilt plates sure make the job easier...and now the EASY one. That 50Ft tower comes down at the touch of a button...all the gear stowed nicely...and we even have volunteers to go up to the storage facility...all I have left is to compile the ARRL summary. What a fantastic FD. ...Next year will be fun again. FD is not a contest!

The San Diego County Park System has a free Senior/Disabled parking pass available to county residents. I was unable to find the criteria for being a senior, but when I got mine a few years back, I just asked for it and they didn't ask questions! Maybe I'm obviously old! So, when you arrive at the park and are asked for the parking pass, even if you just look like a geezer, ask for your pass, which is permanent and valid throughout the county park system.

<h1 style="text-align: center;">HAM RADIO OUTLET</h1> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> Jose XE2SJB Jerry N5MCJ Joe N6SIX </div> <div style="border: 1px solid black; padding: 2px; width: 30px; text-align: center; margin: 10px auto;"> H R O </div>	KENWOOD rf CONCEPTS DIAMOND US TOWERS KANTRONICS YAESU, MFJ, ICOM BENCHER, Inc. HUSTLER COMET AMERITRON	Astron, AEA, OUTBACKER Larsen Antennas TEN-TEC Hy-gain, Tri-EX, Cushcraft And Others too Numerous to Mention!	Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.
Open: 10a.m. – 5:30p.m. Monday thru Saturday 858 560-4900 or toll free 1-800-854-6046 <i>Ask about our great prices</i>	Directions: On 163, take Clairemont Mesa Blvd. off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on real antennas!		

Great presentation of a 1972 Navasa Island Dx-pedition.

Make sure you play the video of the presentation at the end of the slide show.

<http://www.kc4dx.com/>

Friedrichshafen movie from Howard:

<http://www.youtube.com/watch?v=5W2XSZcFYcU>

Here's a link to the Field Day segment from KUSI.

<http://www.kusi.com/video?clipId=7439484&auto start=true>

73 de NN3V

Thought this Contesting Info would be of interest to aspiring contesters and a refresher course for those of us experienced contesters who experience "Senior Moments", now and then !

<http://k9jy.com/blog/2007/10/10/30-days-30-ham-radio-contesting-tips/>

At the end of some of the topics pages you will find more helpful hint topics like

Related posts:

30 Ham Radio Contest Tips — Do an After Action Review

30 Ham Radio Contest Tips — Review Newsletter for Contest DXpeditions

30 Ham Radio Contest Tips — Create a contest goal

30 Ham Radio Contest Tips — Work a contest one month before the real contest

30 Ham Radio Contest Tips — Send in your log

Simplex Emergency Exercise

by Cecil WD6FZA

To evaluate amateur radio emergency communications in Southern California the PAPA System is holding an exercise on Sunday August 5th, 9am to 2pm. All radio amateurs are invited to warm up their VHF and UHF analog AND D-Star gear, and get on the air using Simplex! Operate from your "shack", mobile, or better yet from a hill top.

Normally, we operate through repeaters, but get on the air simplex and find out just how far you can communicate. This is a great exercise for disaster preparedness. In the event of a disaster your local repeater may be off the air.

During the exercise there will be stations on the air from San Diego, the San Gabriel mountains, the Verdugo mountains, the Santa Monica mountains and beyond. You can operate from anyplace you like, but remember, elevation is king.

We would like to have stations first make contact with net control. We are planning on having net control stations in both the Western Los Angeles and North County San Diego areas.

After making contact with a net control station, net control will ask if other stations can copy you. All stations that net control acknowledges will have the opportunity to talk to you. Please monitor the frequency for a few minutes and make sure the frequency is not in use before you put a call out for net control.

Stations will be working both analog and D-Star simplex.

FM VHF: 144.450 MHz (primary), and 144.460 MHz (secondary)

FM UHF: 446.000 MHz

D-STAR VHF: 145.615 MHz

D-STAR UHF: 446.500 MHz

Be sure and spread the word, this exciting day of Amateur Radio is open to all operators, not just PAPA members and guests. If you belong to other clubs, please let them know, we want to flood the SoCal airwaves with amateur radio.

Get on the air, get RADIO ACTIVE!

73'

Cecil WD6FZA and YOUR PAPA System

YL Field Day

by Rusty AF6WF, Dick K6KAL and Gayle K6GO

This year the Palomar Amateur Radio Club had one very unique station. It was unique for two reasons: it was operated 100% by YL's, and it was run on 100% solar power. The all YL station was set up and worked out of Bob's KJ6RET Solar Shelter. He was right on top of monitoring and maintaining solar/battery power for us throughout the entire 24 hours.

Tom KG6RCW lent us his Kenwood TS 2000 radio setup. Dick K6KAL set up the computer from Nash W6HCD and N1MM logging system along with borrowed N6KI voice keyer. They also helped with set up and break down (minus Dennis who was on-air in Northern Ca.).

Georgia KI6LAV, Gayle K6GO, Teri W6TBR, Jo KB6MNK, Linda KD6HYN and Rusty AF6WF (Band Captain) helped with set-up and tear down. Michelle W5NYV single handled, manned the early shift.

Most of the YL's worked 4 hour shifts. Linda and Jo took the Saturday morning shift which started out really slow but got better. Band conditions were reported as bad for all the PARC stations. Jo and Linda honed in on their CQing skills during their shift. When 15 meter was dead the operators jumped onto 40 meters which finally picked up after about an hour or so. Because it was so slow on her initial shift, and she was just starting to have fun, Linda stayed on for the next shift. Talk about persistence.

Linda and Gayle picked up the next shift. 40 meters kicked in and the pile ups began to become more frequent. When it started to slow down they jumped back onto 15 meter and kept going strong. Rusty then took over and ran 15 meters until 40 picked up. Teri got to run the midnight special and Michelle relieved her for the early shift. Of course, Rusty got the privilege of running the Sunday morning shift again.

There were a lucky few who had loggers but most were on the YL's were on their own, calling, talking and logging. There many visitors to the station, most did not want to work, but a few put on the headset in the loggers chair, and were able to copy the call signs and exchange. As a note, we were contacted by one

club W0NT out east that was running 14 E, that is 14 stations. The operator had to ask for the exchange twice. Talk about a club effort.

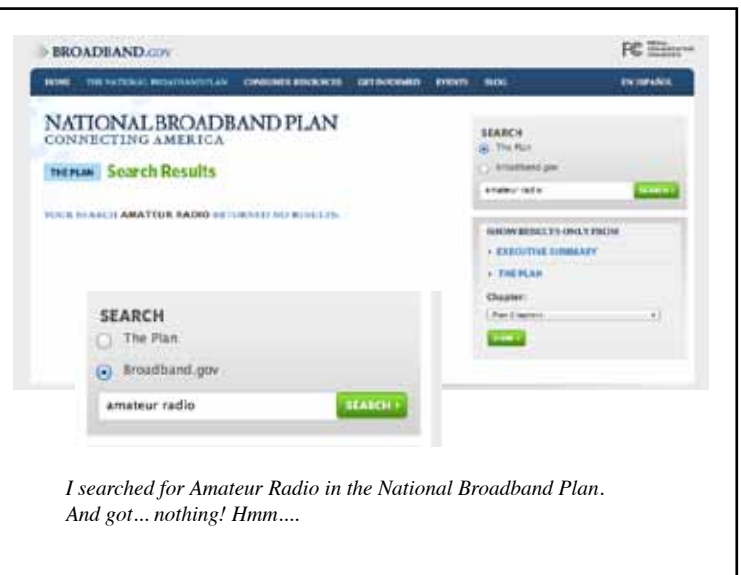
We ended up with 664 contacts, and very few dupes. We figure it was so much fun for some of the fellows that had to come back for more. There was a little bit of QRM (feed back) from the CW stations in the evening, but we were able to work through.

In closing, Kudos to all the YL's and all the support who helped make it happen. Many thanks to our young man who made the coffee runs for many of the YL's. So you see when several YLs agree to sponsor a band/station they did it with class and style.

SO, if you are a YL and interested in a fun event ARRL Field Day (not a contest), please contact PARC now and express your interest for a chance to operate next year.

Operators are standing by... hi hi
de AF6WF

73



*I searched for Amateur Radio in the National Broadband Plan.
And got... nothing! Hmm....*

FOR SALE:

Our Club has received a large donation from a local estate.

We're still cataloging and checking some of the items, but needed to provide preliminary list to meet deadline for this month's scope:

Palomar ARC members receive "first dibs" AND 15% DISCOUNT off prices.

Kenwood TS850SAT Std and 1.8KHz filters: Sale Pending

ICOM 718 w/DSP: \$475

ICOM 718 w/o DSP: \$400 Also have DSP unit for this one if desired for \$75 additional)

2 Kenwood 430S: \$300 ea

Ameritron AL-811H plus spare tubes \$600 (sale

pending)

LDG AT-1000 Autotuner \$300

Kenwood AT 250 autotuner for above and some other Kenwood units: \$175 Prefer to sell this with a 430S, but will separate if 430 buyers decline Astron RS-35A Power supply \$75. Will sell first to transceiver buyers if desired.

Ameritron AW-30 cross needle SWR meter: \$75

Nye Viking RFM-005 Power meter \$250

Also various accessories, coax, and miscellaneous detritus.

Please act quickly if interested. Items will be advertised to public after August PARC meeting. If this stuff not out of garage, XYL says I'll be moving out there too.

Call Ron K2RP (K2RP@ARRL.NET) for details, accessories, condition on all above.

EPIC FAIL:

This is what the 6 meter antenna looks like after a winter on Palomar Mountain. The antenna itself did not break, but the base to mount it folded over from accumulated weight of winter. The antenna was brought down on Sunday July 15, and checked. The base was unsoldered and the base mount flipped around and resoldered. It is stored in the blue shed until the next trip when we will bring a piece of round wood to insert into the tube to reinforce the antenna. Hopefully by then, the modification to the 6 meter duplexer to keep the tuning rods in place will be done.

The winter ice and snow may not have been the culprit. Instead, it is quite possible that the high winds did the damage.



Flip bracket

submitted by Dennis N6KI

1/4" thick Steel plate with 1 welded section and a large cheap strong hinge



Above, Ten Tec Model 1225 Wattmeter Kit. Review at [rig](#)



Product Review

Ten Tec Model 1225 Wattmeter Kit

Jim Keller W6YXY

I had been looking for a Peak/Average reading wattmeter for some time to replace the SWAN model FS-301 wattmeter that I've had ever since I worked there. Looking at various reviews on eHam, nothing seemed to stand out as the perfect choice. Recently I found out about the Ten Tec 1225 Wattmeter kit. It had excellent reviews on both performance and the kit building experience. Price is \$159 plus shipping so I decided, why not. Ordered it online and the box arrived a few days later via UPS ground. I was a bit apprehensive about building a kit. I was aware that most of the circuitry was on two through hole type circuit boards. The last time I built a kit which utilized circuit boards was in the early 70s when I built a Heathkit solid state crystal controlled 2 meter transceiver. The concern I had was based on the knowledge that my eyes had changed quite a bit since then. I had laser surgery to correct severe near-sightedness in 1996 thus giving me great vision at a distance but pretty lousy vision up close. More on how I dealt with that later.

I used a card table to build the wattmeter spreading all the components and hardware so they could be easily found when needed. For soldering I used a 40 watt Weller variable temperature pencil type iron. The tip on the iron was 2.4 mm wide with the bottom resembling the edge of a flat screwdriver. In retrospect I probably should have used something a bit smaller but during my final inspection I didn't find any solder bridges. I used .032 inch size solder.

The instructions are very clear, for most steps. Assembly involves 27 capacitors, 2 8 pin ICs, a flat regulator, 2 diodes, 3 chokes, a meter and 29 resistors both fixed and variable.

There are two circuit cards for the SWR bridge and wattmeter assemblies. You build the SWR bridge assembly first, set it aside, and then build the wattmeter board assembly. The actual assembly on the boards is very simple. I took my time as I installed each component to make sure they went into the proper location on the board. The boards are clearly marked as to which component is required. I decided before I started that I wouldn't rush through the assembly. I did make one major mistake when I assembled the board which was very easy to catch. I put the meter on the wrong side of the wattmeter board. It was easy to do as the 4 contacts are not keyed to prevent an improper installation and there are solder pads on each side of the board. When I went to install the wattmeter assembly onto the chassis I couldn't understand why things were not lining up. Once I realized what I did, with the help of a solder sucker, I unsoldered the meter and then installed it onto the correct side of the board.

Regarding the eyesight issue that I identified previously. Even with my reading glasses I wasn't comfortable inserting the components, soldering, and then checking the results of the soldering. I got around that by using the reading glasses to review the instructions, then replacing them with a magnifying visor for the component installation, soldering and soldering inspection. It was a bit of a hassle to do it that way but I finished the project with no assembly problems other than the meter issue.

The actual assembly took me about 7 or 8 hours. The alignment took me another hour or so as I did it twice. The manual says you should plan on 10 hours total start to finish.

You can align the 1225 by using another wattmeter assuming it's accurate or you can follow the instructions and calibrate it using an accurate digital volt meter which is what I did. You need something better than a free Harbor Freight digital meter. Once you understand what needs to be done you can probably complete the alignment in 15 minutes or less. You essentially have to set 6 variable resistors. Once alignment is complete you just need to set the meter backlight to a color that you desire. Various shades of green to blue to red to purple are available. Once that is done you simply install the cover using 8 screws and you are ready to use it.

The meter has 3 ranges. 20 watt, 200 watt and 2 kW reading both forward and reflected power in either the peak or average modes. Its powered via a supplied wall wart.

Even though my ability to concentrate and my eyesight have changed quite a bit since I built that 2 meter radio, I enjoyed this experience and am pleased to say that it worked the first time.

I would recommend this kit to anyone who needs a wattmeter and would like to have a Heathkit like kit building experience.



Field Day Report

by Charlie NN3V

Field Day was a tremendous success. This is a summary of our operation, as reported to ARRL.

Contacts for which PARC Claimed credit:

BAND	MODE	QSOs	POINTS
3.5	CW	214	428
3.5	LSB	51	51
7	CW	409	818
7	LSB	316	316
14	CW	761	1522
14	USB	516	516
21	CW	504	1008
21	USB	346	346
28	USB	81	81

In addition, there were 4 Satellite QSOs, and the Get On The Air (GOTA) station contributed 86 QSOs.

The Club claimed the following bonus points as allowed by the ARRL Field Day rules:

BONUS CATEGORY	CLAIMED POINTS
100% EMERGENCY POWER	500
MEDIA PUBLICITY	100
SET-UP IN A PUBLIC SPACE	100
INFORMATION BOOTH	100
NTS MESSAGE TO ARRL SM/SEC	100
WIAW FIELD DAY MESSAG	100
FORMAL NTS MESSAGES HANDLED (10)	100
SATELLITE QSOs COMPLETED	100
NATURAL POWER QSOs	100
SITE VISIT BY ELECTED OFFICIAL	100
SITE VISIT BY SERVED AGENCY OFFICIAL	100
GOTA BONUS	80
REPORT SUBMITTED VIA THE WEB	50
EDUCATIONAL ACTIVITY	100

In accordance with the ARRL Field Day rules, all the above data leads to a claimed score of 12082 points.

PARC approached this Field Day in the true spirit of Ham Radio.

GET OUT THERE AND HAVE SOME FUN!

Leading up to Field Day we had two very well attended workparties where several new hams were able to get their hands "dirty", assembling beam antennas, learning about antenna matching circuits, antenna tuning, and the many little details about planning a Field operation. Needless to say, those experiences are valuable in general, and in getting ready to march out and operate in an emergency situation.

We had a a great turn out of volunteers to help set-up and tear-dwon the FD site, a nice turn out of operators (more than in many past years) who had scheduled times in the FD stations, we enjoyed operating a 100% YL station, and we had a great BBQ tri tip dinner and Sunday morning breakfast repast! We even managed to snare the attention of KUSI Channel 9, appearing on their 6:00 PM and 11:00 PM news on June 23rd.

What more can you ask for?

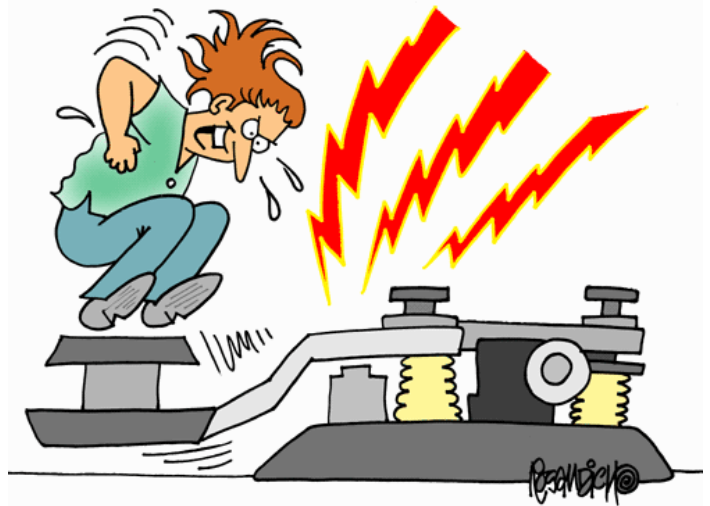
Oh yes! We even had coffee all Saturday and Sunday! (The significance of this note will be known by all who participated. If you do not know, then come out to PARC FD in 2013!)

My experience in past efforts like Field Day has always demonstrated that the key to a successful event is the participation by enthusiastic, involved volunteers. It is a team effort.

Thanking individuals invariably risks inadvertently leaving someone out of the list. So I will only say to all who participated: thank you for making PARC 2012 such a pleasure to organize.

73 de NN3V

(P.S.: FD is NOT a contest. But 12082 points would have placed PARC as No. 5 on the list of 5A participants in the 2011 FD. But who is counting :=)) :=))



Friends don't let friends operate angry.



KD6AKT Ted at packet



KI6RET Robert at solar telescope brought by AE6IC Fred and KJ6JUS Eric.



KF6WTN Mark and guests

photo from e/b offramp at Barham



Field Day photos by Dennis KD6TUJ

IARU 2012 - NX6T (@W6HCD) - MS - HP

IARU HF World Championship 2012

Call: NX6T

Operator(s): WQ6X, KI6RRQ, K4RB, K6GO, N6OHS, N6KI, AF6WF, K6KAL, NN6X, N6EEG

Station: W6HCD

Class: M/S HP

QTH: CA

Operating Time (hrs): 23.6

Summary:

Band CW Qs Ph Qs Zones HQ Mults

160:	0	0	0	0
80:	7	51	10	3
40:	79	251	21	9
20:	273	319	33	13
15:	193	325	36	25
10:	50	62	15	8

Total: 602 972 115 58 Total Score = 902,368

Club: San Diego Contest Club

Comments:

This was the best effort so far since 2004 for the San Diego Contest Ops and we found condition were OK considering the solar activity event. We were antenna challenged this year as we did not have the N6OX borrowed Tower Trailer at the peak of our 900 ft hill and used only the K6QK 40 ft tower trailer about 40 feet below the peak in front yard. We found 10 meters to be sparse but better than the past years. 20 and 15 provided the most QSOs and Mults. 40 and yielded a good amount of CW QSOs but 40 SSB QSOs was way down. Putting up a higher 80 meter dipole on Saturday afternoon to augment our low 80 mtr dipole definitely help us out on 80 CW and we did not have a 160 mtr antenna so don't know if we missed much there. We had some very good JA runs on 20 and 15 mtrs and worked a few on 10 mtr band opening Saturday late afternoon. EU could hear us fine on 20 and 40 but

receive signals from EU seem weak and we had to work to pull the EU stations thru. We wondered if the solar event was absorbing in our direction. We put Newbie Op Rich, KI6RRQ in the hot seat, and Rich, did very well on SSB with decent rate when running. We look forward to better condx in 2013/2014 !

Rigs - K3 - ACOM 2000A - 3 El SteppIR on 20/15/10, 2 El Shorty 40 above the SteppIR and 2 80 mtr inverted Vees in 2 directions at peak of roof on top of hill and other at 40 ft off of K6QK trailer. 73 de N6KI

Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis

Need to borrow / buy?

HP 182T working mainframe or compatible plug in (8558B, etc.) extension cable for testing. Have a HP 182T with 8558B spectrum analyzer module but system has multiple problems. CRT has good trace in "finder" mode but sweep is off scale during normal operation. Need a working 182T mainframe to test my 8558B plug in. Does anyone have extension tester cables for 8558B module? Contact WB6IQS@att.net Vista, CA.

Contact RBERS@live.com for info:

1. MFJ Versa Turner II MFJ941D \$80
2. MFJ Super DSP Filter MFJ784 \$100
3. Kenwood Station Monitor SM220 \$250
4. Hustler Antennas
 - RM9 \$10
 - RM12 \$10
 - RM15, \$10
 - RM20 \$20
 - RM40 \$20
 - RM75 \$20
5. Communications Specialist TE64 External Tone Generator \$35
6. Kenwood TS130S Transciever \$350
7. Yaesu FC901 Antenna Tuner \$300
8. Heathkit Linear Amplifier SB200 \$340
9. Kenwood PS50 Power Supply \$135
10. Kenwood TS940S \$400
11. Johnson Low Pass Filter Mod 250-20 \$10
- 11a. Johnson Low Pass Filter Mod 250-20 \$10
12. Waters Dummy Load Wattmeter Mod 334A \$160
13. Kenwood TM231A 2 Metet Tranciever \$100
14. Yaesu FT11R 2 meter hand held with two FNB28 batteries, a Quick Charger, and a 12 DC car charger \$60
15. Radio Shack HTX242 2 meter transciever \$80
16. RG8/U cable \$15
17. Kantronics Packet Communicator 3 plus \$125
- 17a. MFJ-1272MYV Mike TNC \$35
18. Johnson Match Box SWR Bridge Mod 250-25 \$120
19. Swan Watt meter (Neddle Stuck) \$5
20. Drake Q-XER Mod593 \$20
22. Heathkit Line Monitor IM103 \$20
23. Palomar M827 SWR/power meter \$70
24. Triplett Absorption Freq meter Mod3256 \$10
25. Heathkit Grid Dip meter ModGD1B \$20
26. Tunnel Dipper with attachments \$15
27. Heathkit AM2 SWR meter \$5
28. SWR Power Meter Cat. No. 21-524 \$25
29. Antenna Switches \$10 ea
30. Coaxial Relay 1000 Watts type DKC-6E \$30
32. GE CB 40 Channel Tranciever Mod 3-5804F \$10
33. GE CB 40 Channel Transciever HT 3-5900 \$10
35. 2 Mag mount CB Antennas \$15 ea
36. 2 meter mag mount antenna \$15
38. Hustler HF Multi-Band 5-BTV with RM80S top \$150
39. Cushcraft Ringer Ranger ARX 2 meter \$50
40. Backer and Williamson lo pass filter mod425 \$10
41. MFJ-910 mobil antenna matcher \$15
42. Kenwood MC60A mike \$100
43. Kenwood MC60A mike \$100
44. 1968 Vibroplex presentation key \$175
45. MFJ 422-CX Key \$35
46. Navy CTE -26003A Key \$40
47. Bencher Key \$60
48. 2 Vintage J-38 keys \$35 ea.

Club Membership for August Edition

New Members joining PARK.. KJ6VXW, KF7LPJ, KJ6WKB, KG6SXU, and Sherry Hughes, (No call yet)
And, 5 reinstatements, one all the way back to 1997!

All are welcome!!

AI
W6GNI

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

March Issue Fold & Staple Crew
March Issue Fold & Staple Crew
KB6NMK Jo WA5ACE Sonny
KB6YHZ Art & Janet

W6GNI AI & Kathy

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!
scope@palomararc.org

NiCd Lady Company

Grace Lloyd
N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B
Riverside, CA 92508
800/906-6423
951/653-8868
Fax 951/653-5189

Your Complete Battery Source



RF PARTS[™]
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur
and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS

3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7

4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Hallicrafter SX11 with matching speaker, good condition, works great. \$150 KK6GO@cox.net or 619-224-8948

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950SD, 10-160 M Transceiver	CALL
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Return service requested

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 1st of August, the program will be presented by Fred W6HPH

If you live in an urban environment you probably have man-made noise from computers, TV's, power leaks, neon signs, and a myriad of other sources. The Noise Canceller can eliminate these noises from your receiver.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Picnic Report

The Palomar Amateur Radio Club annual picnic was held at San Dieguito County Park area 4 August 19, 2012 from 9:30 AM to 5:30PM. See pages 6 and 7 for more picnic photos.



Save the Date

Club Meeting

4 September 2012

7:30pm John Kuivinen, WB6IQS, will tell us how to solve the RFI problems that are so common.

Board Meeting

11 September 2012

Palomar Amateur Radio Club board meeting at 7:30pm at K2RP QTH.

Club Event?

September 2012

Check the website!

Friedrichshafen

Ham Radio Convention Report

by Howard KY6LA

I am writing this on the train to Gstaad.

I came to Friedrichshafen Hamfest (Ham Radio Convention) 2012 to scout the place as a possible destination for the Dayton Express 2013 group and to make connections for a DXpedition to Mauritius for the WI6I Ultra Contest Club. (Dayton Ohio is the location of the worlds largest Ham Radio Convention)

Since I had already been in Europe since June 1, I took the train from Auxerre, France where we had been backpacking through Burgundy to Friedrichshafen. My hotel, which was not great, had the major advantage of being a two minute walk from the train station.

Friedrichshafen is a very pretty town located on the banks of a lake called Bodensee. It is full of bars, restaurants and outdoor cafes. I arrived at 3pm Friday, dropped my bags at the hotel and grabbed a cab to the Hamfest at the Freidrichshafen Messe. On my way over, I could already see the differences with Dayton.. The highways were plastered with posters and billboards announcing the Hamfest. The 3 day pass to the Hamfest is €20 at the door.

If anyone has been to Dayton, (I have gone 25-30 times since 1961), you are used to a dirty, filthy, smelly, dark, dingy, crowded, confused place with huge bathroom lines and sewage.

So imagine my surprise to see that the Friedrichshafen Messe (Convention Center) was an ultramodern convention center. Bright, airy, CLEAN, working toilets, CLEAN.

Who knew that ham radio operators could be clean? Vendors and exhibitors had to use formal professional-grade exhibits worthy of any professional convention. There is one major hall for vendors, a huge bandstand area for talks, 2 large indoor halls for the flea market where vendors place their wares neatly on provided tables.

Dayton does not compare well. Interestingly enough I ran into a couple of the Dayton Hamfest organizers

who were visiting to get ideas. Several of us jumped them about how dirty and outdated the Dayton facilities were. Their only defense was that they did it with volunteers and there was no where else in Dayton to hold it. Perhaps they would move it? Like Visalia International DX Convention did?

Size: Friedrichshafen gets about 18,000 visitors to Dayton's 24,000. It seems to have about 2/3 as many vendors and the flea market is perhaps 1/4 the size of Dayton. However It seems that Every national radio society has a booth including ARRL. But, more on that later.

Most of the usual vendors were present but there were a lot of vendors we never see. Many more VHF and UHF antennas and amps for sale. I was expecting to see the Optibeam all over the place, but instead there was only one at the Wilmo dealership. Hygain, Cushcraft and Force 12 were nowhere to be seen.

However SteppIR's were everywhere. It seems that every national dealer was selling them including Wilmo. They confirmed to me that SteppIR outsells all other HF antennas combined even in Germany, the home of the Optibeam. Most DXers and. Contestors I talked to at the show had SteppIR's.

Interestingly there were two Italian Made SteppIR clones, Ultrabeam and Antennadinamica. Neither would ship to the USA as they admitted that they were violating SteppIR's US patents. Ultrabeam indicated in murky Italian that they had a shipment stopped by US Customs. Ultrabeam is an EXACT copy of SteppIR. Antennadinamica seems to be an improvement on Ultrabeam. Because I was proudly wearing my SteppIR cap, neither vendor was particularly happy when I took pictures of their product.

Flexradio had a booth and their President Gerald Youngblood K5SDR gave a talk on he new 6000 series to an overflow crowd of 400+. In Europe Flex sells through dealers so there were Flex radios on display everywhere. Gerald told me that there was going to be a major DXpedition using the 6000 series. Interesting due to the networking of the 6000 the 5 transmitters will all be on one side of the island and the 40 receiver slices will be on the other side. I asked to be added to the list.

Since my hiking pack was too large, I bought a small backpack in the Flea market to carry stuff. I took the free shuttle bus back to the Hotel on Friday. It was an experience. Maybe 200+ hams packed like sardines. It was FREE.

Friday night, I wandered the lakefront where I was adopted by a group of Danish Hams. Dinner was schnitzel, Fries, and 3 or 4 -1/2 liter beers. I lost count as the Danes were buying and could easily drink me under the table.

Saturday AM, after a huge German breakfast I took the shuttle bus back to the show.

My host for Saturday was Ben Pyfer W6MUF, who lives in Escondido and Germany. We wandered the show and saw lots of different stuff. Ben was a great host, albeit he got me drinking about 930 in the morning.

Hiberling had a huge booth to show off their \$17,000 radio. But, frankly, it was not a big draw as most inexpensive SDRs have better specs for a heck of a lot less money. K3 was mobbed as were most Flex dealers. Unlike Dayton there is still a lot of interest in the old style radios made in Japan. Luso was there with a sold 100' tower. Saw an interesting SDR made in Russia as well WOODBOX from the UK and Perseus. SDRs were clearly becoming the dominant radio with every country EXCEPT Japan getting into SDRs.

One visible difference was that European vendors seemed to fill their booths with beautiful girls to help show off their products. The girls definitely got your attention. Ben took plenty of pictures of me with the girls.

Another major difference is the attitude towards alcohol. The USA unfortunately suffers from a legacy of Puritanism. By contrast most national amateur radio societies except for the ARRL and the Arabs had barrels of wine or other forms of alcohol to provide hospitality for visitors who visited their booths. We had wine from Austria, Vodka from the Russians, cold Prosecco and Parmesan cheese from Italy, wine from Hungary, wine from Switzerland, uzuo from Greece, wine from Israel. Basically everyone plied you with lots of free alcohol.

By far, the most spectacular was the Russian Federation Amateur Radio Society booth. It was staffed by pretty girls who were just giving away vodka and caviar to anyone who came up to the booth. Never saw a Russian ham there only pretty girls in short skirts. Ironically it was next to the Kuwati booth. They had a hard time averting their eyes.

Lunch was delicious sausages and beer. The Finns started buying us beer, so lunch ended up lasting about 4 hours outside in the German beer garden in the center of the convention center. Dayton should copy that idea!

In the afternoon we drank a bottle of wine at Swiss National Society booth and worked out preliminary details on Mauritius DXpedition. Ron WA3IHV suggested that we skip Dayton 2013 and Just go to Friedrichshafen, but in spite of the lower quality hospitality and facilities, Dayton still has more vendors to see and should not be missed. Right now, I plan to do both. For 2013



Editorial Comment

This year has seen an increase in the number of events foregoing or reconsidering “Booth Babes” due to negative feedback. The general idea is that “Booth Babes” make it more difficult for women to be taken seriously as participants at events that hire (non-participant, non-technical) women as decorations. While most men are intelligent enough (yes, even Howard) to tell the difference between “Booth Babe” and fellow hobbyist, it’s worth considering the context of the bodies being shown off, and what message it sends. Is the practice harmless, or hostile, or both?



HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

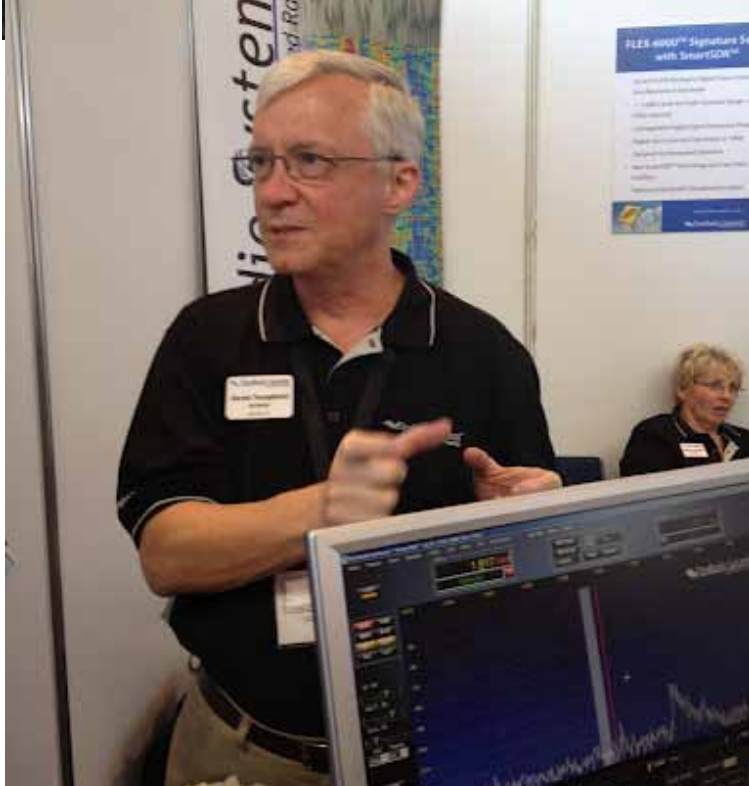
Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. – 5:30p.m.
Monday thru Saturday
858 560-4900
or toll free 1-800-854-6046

Ask about our
great prices

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!







Picnic Photos by Paul KB5MU



"LOOK MA, NO CAVITIES!"

An HF/VHF/UHF Mobile installation with no holes drilled.

By Ron Pollack, K2RP

Although I have been active on HF for decades, I never, until recently, had the occasion to operate mobile on those bands. One important reason was that I was reluctant to drill holes in my car. My wife was even more reluctant to drill holes in hers!

For the past several years, I have been involved, (some say obsessed) with the county hunter award program. The basis of this activity is HF mobiles, mostly on 20 meter frequencies (14056.5 and 14336.) Since so many mobile operators had provided me thousands of contacts in counties which otherwise would have been difficult or impossible to work, when a change in circumstance afforded us more time for extensive road trips, fairness dictated that I do my share and "run" some counties mobile for others.

The first stop, of course was at the Kearny Mesa "Toy Store." Their advice was to use a mobile mount from Diamond that was cleverly designed to mount on a trunk lip or tailgate held in place by setscrews and adjustable for trunk or tailgate orientation. There is a very thin run of coax, just long enough to reach inside the vehicle by just closing the cable in the weather stripping. Then, it's a simple matter of using a "barrel" connector to attach the supplied PL259 to an extension of regular coax to the transceiver.

There are various antennas that can be mounted with this system. After speaking with other, more experienced mobilers, and some experimentation, I settled on Hamsticks, which are very inexpensive and made by several manufacturers. Photos 1 & 2 show the antenna installation. Photo 1 shows the tailgate open, in the horizontal position.

My transceiver of choice is the Yaesu FT 100, but this installation is applicable to many others with detachable faceplates. The radio is mounted beneath the driver seat, and is not attached except by a short grounding strap to a bolt inserted into an existing hole in the seat support mechanism. There are two antenna "pigtails," one for HF and one for VHF/UHF. The VHF/UHF antenna (not shown) is merely a magmount dual band with the antenna lead passed through the door window weather stripping. Key, Microphone, Control Head and External speaker wiring, as well as DC power from the battery, are routed to the front seat area.

My Jeep has a small compartment on the panel about 1½ inches high and 6 inches wide. I used 2 inch angle brackets available from any hardware store and bolted the faceplate mounting bracket to the angle brackets. Then, using short wood screws, I attached the horizontal part of the angle brackets to a piece of 3" by 4" half inch plywood. I cut two more pieces of plywood the same size. All that was left was to stack the plywood and slide the stack, faced by the faceplate bracket into the dashboard opening, where it fits snugly. (See photo 3) If your car doesn't have such a compartment (which is useless because there is no cover and anything put in it slides out!), there are mounts available that fit the cupholders that are in most consoles with provision to mount faceplates. The mike and key are on the console within easy reach. See photo 4. There is a fused cable running from the battery through a grommetted existing hole in the firewall, terminated in Power Pole connectors to match the radio.

There is even a hole in the headrest that fits the Yaesu mobile speaker snugly! See photo 5.

Besides not having to drill holes, the whole installation can be removed or reinstalled in just a few minutes.

But does it work? We recently returned from an 8 week, 8700 mile trip. I ran 156 counties in 21 states, making 2,491 contacts, including many in various European countries, Japan, Australia, and South America. Most were on 20 and split about evenly between CW and SSB.

If you ever wanted to try mobile, you no longer have an excuse!

PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



PHOTO 5



North American QSO Party, SSB - August

Call: N6KI
Operator(s): N6KI
Station: W6HCD

Class: Single Op LP
QTH: CA
Operating Time (hrs): 10

Summary:
Band QSOs Mults

160:	0	0
80:	97	22
40:	210	47
20:	175	52
15:	109	31
10:	3	3

Total: 594 155 Total Score = 92,070

Club: Southern California Contest Club

Team: SCCC #1

Comments:

This was the contest that almost didn't happen ! I was feeling pretty run down the 2 weeks before this and cancelled a Multi 2 operation for NAQP SSB we had planned for San Diego Contest Club NX6T - I got to portable W6HCD hill-top site 2 hours late and still feeling like a under charged Ni-Cad. Just as I am starting to set up the rig and computer, I get word that the water pump has failed and house full of people without water (need those showers and toilets etc - ya know)

So it's now after 5 PM Friday eve and plenty daylight so I go check pump system - - an hour later - figure out pump motor control unit has gone Tango Uniform - call the family's favorite ranch water pump guys - no response - I wire around controller so I can get pump to pump some water into house manually and my helper standing next to me doing light duty slumps over sideways and says he doesn't feel well - HMMM...turns out to he has history heart trouble - ...call 911...ambulance can't find us - I have to go find ambulance and lead them the in to site. Now it's 8 PM and I get to start on rig/computer again - decide at 8:30 pm I gotta get some chow and food supplies for weekend before the market closes - head down hill - whoops - cel phone rings - XYL of fellow with stroke is stranded at hospital 10 miles away (luckily her OM is OK but they want to keep him over-night for observation !) - OK turn around and go get her - whoops - she has not eaten for 6 hours now so we have to get a quick run to Mickey Dees. Finally back at site now 10:30 pm - finish setting up by 1 AM - got to get some ZZZZZss and be in shack early for some final tweaks and contest start - Dang - 10 is deader than a door nail - 15 is punk and work it for a bit then give up and go to 20 -> Condx really punk - try to move guys to 10 or 15 from 20 - 10 is still DOA - 15 anemic - gotta milk 20 as way too early for 40 ! Anyway by evening my goal was reduced from 800 Qs and 200 mults to 600 Qs and 150 mults - things got better on 40 and 80 the later it got - Dang - never got up the 160 ant and NOTHING will load so can't even get 1 lousy mult for CA on 160 well almost made the 600s Qs as had a good run on 40 the last 10 minutes - maybe staywed oin 80 too long but had a steady rate of 60 to 70 per hour so maybe not - Will this crappy sunspot cycle ever get better?!

Need to borrow / buy?

HP 182T working mainframe or compatible plug in (8558B, etc.) extension cable for testing. Have a HP 182T with 8558B spectrum analyzer module but system has mutiple problems. CRT has good trace in "finder" mode but sweep is off scale during normal operation. Need a working 182T mainframe to test my 8558B plug in. Does anyone have extension tester cables for 8558B module? Contact WB6IQS@att.net Vista, CA.

Minutes

Palomar Amateur Radio Club
Board of Directors Meeting
June 13, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:41pm at the home of Al Donlevy W6GNI. In attendance were:

President	Dennis Baca KD6TUJ
Vice President	Ron Pollack K2RP
Secretary	Paul Williamson KB5MU
Director #1	Don Johnson WD6FWE
Director #2	Eric Hutchins K7ELH
Membership Chairman	Al Donlevy W6GNI
Repeater Technical Chairman	Conrad Lara KG6JEI
Newsletter Editor	Michelle Thompson W5NYV

Treasurer's Report

KD6TUJ distributed copies of the Treasurer's Report. There was a question about why the telephone bill is so high; perhaps we are paying for more lines than we now need. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by WD6FWE. Motion passed unanimously.

Secretary's Report

KB5MU distributed copies of the minutes of the May board meeting, previously sent by email. Motion by K7ELH to approve the board meeting minutes as published. Seconded by W6GNI. Motion passed with KG6JEI abstaining.

Upcoming General Meetings

K2RP reported that the program for the next meeting will be presented by Dan N6ERD on Logbook of the World: beginning to end, how to get started, and how to use it. KD6TUJ pointed out that the July meeting is on the 11th, not the 4th, but that it would be good to publish the Scope before the 4th so members find out in time.

Membership

W6GNI reported that the membership is 265. Of the nine memberships expiring in February, two had no email address on file, and three of the email addresses bounced. In March, six memberships expired, one had no email address, and three bounced.

Repeater Technical Report

KD6TUJ reported that the temporary 6m antenna survived the winter but not the spring, and will be refurbished at a future work party. Critter invasions have been noted at the site. One building's thermostat was found inexplicably set to 100° F. The 146.73 MHz repeater has been resetting for no known reason. Echolink seems to be working now. KC6UQH reported at the club meeting that he has fixed the transmit side of the ATV repeater but the 2m intercom receiver is not working.

Picnic

Motion by K2RP to reschedule the picnic from August 26 to August 19, if the date is available at the park, to accommodate a schedule conflict for two Board members. Seconded by WD6FWE. Motion passed. KD6TUJ noted that the park reservation fee is about \$130, based on last year. Motion by KB5MU to approve up to \$150 for the park reservation fee. Seconded by WD6FWE. Motion passed. Motion by K2RP to allocate \$300 for picnic raffle prizes, to be awarded according to the usual rules. Seconded by WD6FWE. Motion passed with five ayes and two nays.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on July 18, 2012.

Adjournment

The meeting was adjourned at 9:19 pm.

Respectfully submitted,

Paul Williamson KB5MU, tSecretary

From: "STEPHEN RUSSELL" <wa1hud@yahoo.com>

Date: Aug 6, 2012 9:55 PM

The Nantucket Lightship is now owned by the United States Lightship Museum (IRS 501 C 3) and is under full restoration. The desire is to restore the ship to what it was before it was decommissioned as an operational museum located in Boston where she is docked at this time. The ship just came from dry dock and the hull is again seaworthy, she looks beautiful. A lot of work remains and I have been asked to restore the radio room to operation, but here lies a problem.

Where is the radio equipment?

Can anyone help me identify what might have been on the ship? We have some blueprints and one or two snapshots but they are rather vague. Even equipment types that may be just similar and just represent communications from a 1950's to 1960's time period would be helpful so we could go searching for it. The only thing that remains are 2 beacon xmtrs with all of the xtals missing. If anyone out there could help in the restoration of a piece of history it would be appreciated.

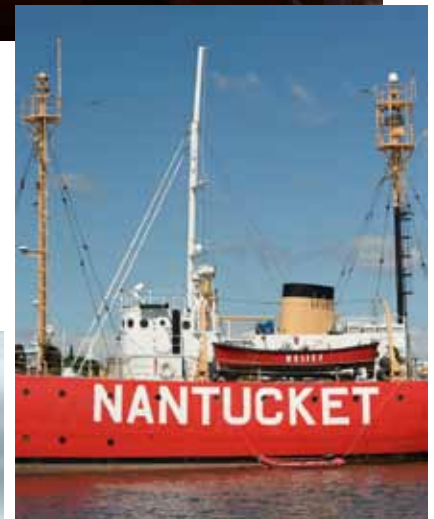
Thank you

Steve Russell

WA1HUD

WNE Coast Radio

WA1HUD@yahoo.com



Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis

FOR SALE:

Our Club has received a large donation from a local estate.

We're still cataloging and checking some of the items, but needed to provide preliminary list to meet deadline for this month's scope:

Palomar ARC members receive "first dibs" AND 15% DISCOUNT off prices.

LDG AT-1000 Autotuner \$300 **Nye Viking RFM-005 Power meter \$250**

Please act quickly if interested. Items will be advertised to public after August PARC meeting. If this stuff not out of garage, XYL says I'll be moving out there too.

Call Ron K2RP (K2RP@ARRL.NET) for details, accessories, condition on all above.

Contact RBERS@live.com for info:

1. MFJ Versa Turner II MFJ941D \$80
2. MFJ Super DSP Filter MFJ784 \$100
3. Kenwood Station Monitor SM220 \$250
4. Hustler Antennas
 - RM9 \$10
 - RM12 \$10
 - RM15, \$10
 - RM20 \$20
 - RM40 \$20
 - RM75 \$20
5. Communications Specialist TE64 External Tone Generator \$35
6. Kenwood TS130S Transciever \$350
7. Yaesu FC901 Antenna Tuner \$300
8. Heathkit Linear Amplifier SB200 \$340
9. Kenwood PS50 Power Supply \$135
10. Kenwood TS940S \$400
11. Johnson Low Pass Filter Mod 250-20 \$10
- 11a. Johnson Low Pass Filter Mod 250-20 \$10
12. Waters Dummy Load Wattmeter Mod 334A \$160
13. Kenwood TM231A 2 Metet Tranciever \$100
14. Yaesu FT11R 2 meter hand held with two FNB28 batteries, a Quick Charger, and a 12 DC car charger \$60
15. Radio Shack HTX242 2 meter transciever \$80
16. RG8/U cable \$15
17. Kantronics Packet Communicator 3 plus \$125
- 17a. MFJ-1272MYV Mike TNC \$35
18. Johnson Match Box SWR Bridge Mod 250-25 \$120
19. Swan Watt meter (Neddle Stuck) \$5
20. Drake Q-XER Mod593 \$20
22. Heathkit Line Monitor IM103 \$20
23. Palomar M827 SWR/power meter \$70
24. Triplett Absorption Freq meter Mod3256 \$10
25. Heathkit Grid Dip meter ModGD1B \$20
26. Tunnel Dipper with attachments \$15
27. Heathkit AM2 SWR meter \$5
28. SWR Power Meter Cat. No. 21-524 \$25
29. Antenna Switches \$10 ea
30. Coaxial Relay 1000 Watts type DKC-6E \$30
32. GE CB 40 Channel Tranciever Mod 3-5804F \$10
33. GE CB 40 Channel Transciever HT 3-5900 \$10
35. 2 Mag mount CB Antennas \$15 ea
36. 2 meter mag mount antenna \$15
38. Hustler HF Multi-Band 5-BTV with RM80S top \$150
39. Cushcraft Ringer Ranger ARX 2 meter \$50
40. Backer and Williamson lo pass filter mod425 \$10
41. MFJ-910 mobil antenna matcher \$15
42. Kenwood MC60A mike \$100
43. Kenwood MC60A mike \$100
44. 1968 Vibroplex presentation key \$175
45. MFJ 422-CX Key \$35
46. Navy CTE -26003A Key \$40
47. Bencher Key \$60
48. 2 Vintage J-38 keys \$35 ea.

Club Membership for August Edition

New Members joining PARK.. KJ6VXW, KF7LPJ, KJ6WKB, KG6SXU, and Sherry Hughes, (No call yet)
And, 5 reinstatements, one all the way back to 1997!

All are welcome!!

AI
W6GNI

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

August Fold and Staple Crew:

W6GNI AI and Kathy, W6EPM Roni, KG6NMK Jo, Tyler Brewer, Mathew Brewer, KB6YHZ Art, and Janet
Truly a great gang of workers!!

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!
scope@palomararc.org

NiCd Lady Company

Grace Lloyd
N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B
Riverside, CA 92508
800/906-6423
951/653-8868
Fax 951/653-5189

Your Complete Battery Source



RF PARTS[™]
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur
and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS

3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7

4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Icom IC-2820H with the UT123 DSTAR/GPS module installed. Includes Nifty Guide to Dstar and the Nifty manual for the IC-2820H. Missing the mobile mount. Includes original box. For PARC members \$650.00 including local San Diego County shipping. Contact Gary Kent W6GDK at W6GDK@arrl.net or 858-679-0578. Prefer cash, postal money order, or personal check (but delivery withheld until check clears).

73 de W6GDK
Gary Kent

For Sale

Hallicrafter SX11 with matching speaker, good condition, works great. \$150 KK6GO@cox.net or 619-224-8948

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950SD, 10-160 M Transceiver	CALL
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 4th of September 2012 there will be a membership meeting and program presented by John Kuivinen, WB6IQS. He will tell us how to solve the RFI problems that are so common. Included is a discussion and display of toroids and ferrite beads and how to use them most effectively.

Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



Minutes

Palomar Amateur Radio Club

Board of Directors Meeting
July 18, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:49pm at the home of Ron Pollack K2RP. In attendance were:

President Dennis Baca KD6TUJ
Vice President Ron Pollack K2RP
Secretary Paul Williamson, KB5MU
Treasurer David Ochs, KI6LKP
Director #1 Don Johnson, WD6FWE
Membership Chairman Al Donlevy W6GNI
Repeater Technical Chairman Conrad Lara, KG6JEI

Treasurer's Report

KI6LKP distributed copies of the Treasurer's

Report. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by K2RP. Motion passed unanimously. The phone bill still shows two lines. One of these is for the BBS, which has been down "forever". KI6LKP agreed to cancel service on that phone line.

Secretary's Report

KB5MU distributed copies of the minutes of the June board meeting, previously sent by email. KG6JEI noted that he gave the Repeater Technical Report, not KD6TUJ. Motion by KG6JEI to approve the board meeting minutes as corrected. Seconded by K2RP. Motion passed with KI6LKP abstaining.

Upcoming General Meetings

K2RP reported that the August meeting is scheduled to be presented by Fred Brown on his noise canceler, featured on the cover of QEX. September and November meeting programs are TBD. October is the auction.

Save the Date

Club Meeting

3 October 2012

Annual Club Auction

Board Meeting

10 October 2012

Palomar Amateur Radio
Club board meeting at
7:30pm at KB5MU QTH.

Club Event

November 12 2012

Operating Day at Fry's in
San Marcos

Membership

W6GNI reported that the membership is 270, up five. Thirteen memberships are expiring this month. KD6TUJ reported that Joe N6JO is recruiting new members in Oceanside. Should we offer free memberships for new hams? Or at least issue them a special invitation to join. Costs and benefits?

Repeater Technical Report

KG6JEI reported that the thermostat was again found inexplicably cranked up. Excessive temperatures might (or might not) explain the rash of controller resets. The repeater site was mapped out. The 6m antenna was examined and partially repaired. Gopher holes were spotted near the entrance to the generator building. The power system has been converted to DC, but the ventilation system is still powered by AC and needs to be converted. How much power does this require?

MS Bike Ride

Operators are needed for a bike ride in October to benefit Multiple Sclerosis. We'll ask them to provide a blurb to publish in the Scope.

Newly Licensed Marine

We've received a request from another club to assist a Marine who recently moved from their area to ours. WD6FWE and KD6TUJ both reported that they contacted him with offers of assistance.

D-STAR Operating Day

The PAPA system is sponsoring a D-STAR simplex operating day. The information has been forwarded for publication in the Scope.

PARC Operating Day

We'd like to reschedule the rained-out Operating Day at Fry's for sometime in November before Thanksgiving. KD6TUJ is talking with the managers at Fry's.

Club Picnic

KD6TUJ has reserved the picnic site at San Dieguito County Park. KI6LKP's wife has obtained the gift certificates for drawing prizes. Joe and Joe have agreed to run a simple transmitter hunt at the picnic. Gina has agreed to cook. Motion by K2RP to approved up to \$125 for food for the picnic. Seconded by WD6FWE. Motion passed unanimously.

Field Day Expenses

KI6LKP reported that Gina has not billed the club for Field Day expenses, but is believed to have spent more than expected. The club would like to reimburse these expenses.

501(c)(3) Status

K2RP reported that he consulted with his wife about obtaining 501(c)(3) non-profit status for the club. There is a filing fee of \$400, plus \$20 each year and a required tax return. Club finances would have to split into two separate accounts, one for charitable purposes and the other for routine operating costs. KB5MU stated that the Board should review any completed forms before they are filed.

Donated Estate Equipment

K2RP reported that a silent key's estate worth \$1500 to \$2000 was donated to the club. He'd like to give club members first dibs on the equipment, and/or a slight discount. The Board discussed various ways to handle donated gear.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on August 8, 2012.

Adjournment

The meeting was adjourned at 9:37 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

PARC Members Rank High 2011 CQP World Wide SSB Expedition Results

World Single Operator
8Q7DV (Opr.: Vadim Ovsyannikov, R9DX)
Donor: National Capitol DX Assn.
Stuart Meyer, W2GHK Memorial

World Multi-Single
TX5A (Oprs.: RK7A, R3FA, UR5MID, US7UX,
UT5UY, UU4JMG, UXØLL, USØKW, UA7A, RM2U)
Donor: Gail Sheehan, K2RED

World Multi-Multi
E51Z (Oprs.: AB6BH, N6AA, N6UWW, N6VI,
VK4UC, W5NYV, W6NV, W6XD, WB6BFG)
Donor: CQ magazine

Guess Who? (Photo circa 1963-4)



PARC Meeting List 2006 - Present

DATE	SUBJECT	PRESENTER	CALL	ROOM	ATTEND	
0106	SOFTWARE DEFINED RADIOS	BRIAN	KF6C	1.2		
0206	PARC 70 TH ANIVERSARY			1.2		
0306	I'VE GOT MY RADIO	VARIOUS		1.2		
0406	RESTORING OLD RADIOS	PAT	W6MHZ	1.2		
0506	6 M Dxing	ROD	AC6V	1.2		
0606	FIELD DAY			1.2		
0706	PARC REPEATER SITE	JOHN	W6IQS	1.2		
0806	Dxing 101	HARRY	W6YOO	1.2		
0906	R F SAFETY	TOM	KI6DER	1.2		
1006	AUCTION	ART	KC6UQH	1.2		
1106	T A P R	MARK		KF6WTN	1.2	
1206	ELECTIONS			W6NWW	1.2	
0107	PETER THE FIRST DXPEDITION	HARRY		W6YOO	1.2	
0207	AMATUER RADIO ASTRONOMY	SHAD			1.2	66
0307	GETTING THE MOST OF YOUR HTs	JERRY		AK6QJ	1.2	73
0407	STEPPIR ANTENNA	HOWARD		KY6LA	1.2	72
0507	GORDON WEST PRESENTS	GORDON		WB6NOA	3	114
0607	FLIP BRACKETS	HARV		K6QK	1.2	87
0707	HANDY HAMS	MARSHA		KI6FIX	1.2	
0807	T HUNTING	TOM		K6VCR	1.2	60
0907	PSK 31	RALPH		AE6SV	1.2	79
1007	AUCTION	ART		KC6UQH	OUTSIDE	MANY
1107	D STAR	CECIL			1.2	72
1207	ELECTIONS			W6NWW	1.2	43
0108	S D G ARES	JIM		KG6R	1.2	39
0208	FUN WITH LEDs	KERRY		N6IZW	1.2	72
0308	I'M FROM THE PLANNING DEPT...	JONATHON		W6JLK	1.2	
0408	VACCUUM TUBES TO SOLID STATE	ART/ROD		KC6UQH	1.2	55
0508	INEXPENSIVE WIRE ANTENNAS	LOREN		AD6ZJ	3	83
0608	WRITE LOG / FIELD DAY	PAUL		WN6K	3	47
0708	DIGITAL TECHIQUES FOR EMCOM	ANDRE		K6AH	1,2	51
0808	RADIO MOBILE	JERRY		AK6QJ	1.2	57
0908	D STAR UPDATE	KEN		KI6HRH	1.2	64
1008	AUCTION	ART		KC6UQH	2.3	
1108	LESSON FROM HURRICANE CHARLIE	WAYNE		KB6UJW	3	59
1208	ELECTIONS			W6NWW	1,2	43

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. – 5:30p.m.
Monday thru Saturday
858 560-4900
or toll free 1-800-854-6046

*Ask about our
great prices*

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!

DATE	SUBJECT	PRESENTER	CALL	ROOM	ATTEND
0109	HAM RADIO FROM THE 1950'S	RON	K2RP	1,2	65
0209	IN THE WAKE OF THE BOUNTY	HARRY	W6YOO	1,2	58
0309	DIFFERENT GROUPS OF HAMS IN EMERGENCIES	TERRY	K3PXX	1,2	62
0409	PACKET BASED COMPUTERIZED RUNNER TRACKING	ANDRE	K6AH	1,2	55
0509	FIELD DAY	VARIOUS		3	49
0609	LOST ISLANDS DXPEDITION	VIDEO	W6YOO	1,2	48
0709	QUIZ NIGHT	STEPHEN	W6TAN	1,2	40
0809	MY FIRST DXPEDITION	WILD BILL	WB6BFG	1,2	44
0909	SATTELITE COMMUNICATIONS	ART	KC6UQH	1,2	49
1009	AUCTION	ART	KC6UQH	M O N - ROE	67
1109	VERTICLE PHASED ARRAY ANTENNAS	LOREN	AD6ZJ	1,2	43
1209	ELECTIONS / SOCIAL		W6NWW	1,2	43
0110		MONICA	ZECH	1,2	58
0210	TRIP TO JERSEY ISLE	WILD BILL	WB6BFG	1,2	62
0310	RADIO TELESCOPE IN EUROPE W0SDR	ROBERT	PAORYL	1,2	68
0410	INTRODUCTION TO CONTESTING	DENNIS	N6KI	1,2	67
0510	AMATEUR RADIO REPEATERS	ART	KC6UQH	3	54
0610	FIELD DAY	RON	K2RP	1,2	37
0710	OVERCOMING OPERATING CHALLENGES IN THE GAMBIA	MARTY	N6VI	1,2	49
0810	COLLECTING AND USING MILITARY RADIOS	ED	KG6UTS	1,2	52
0910	SOLAR ENERGY AND EMERGENCY PREPAREDNESS (SLEEP)	BOB	KJ6RET	1,2	76
1010	AUCTION	ART	KC6UQH	M O N - ROE	63
1110	160 METER PORTABLE ANTENNA	GAYLE	K6GO	1,2	58
1210	ELECTIONS / SOCIAL	PARC	W6NWW	1,2	36
0111	ANTENNA MODELING	MICHELLE	W5NYV	1,2	63
0211	PARC 75 TH ANNIVERSARY			1,2	93
0311	OPERATING IN THE EASTERN HEMISPHERE	BOB	K4RP	1,2	67
0411	NVIS NEAR VERTICLE INCIDENCE ANTENNAS	DAVID	KC6YSO	1,2	69
0511	THE DAYTON EXPERIENCE	PAT	WA6MHZ	3	54
0611	FIELD DAY	GREG	KI6RXX	1,2	48
0711	ARISS CONTACT WITH ADOBE BLUFFS SCHOOL	JIM	KI6ZUM	1,2	57
0811	YL DXPEDITION TO CURACAO	MICHELLE	W5NYV	1,2	55
0911	NWS SKYWARN	ALEX	TARDY	1,2	58
1011	AUCTION	ART	W6NWW	1,2	62
1111	AMATEUR RADIO OPERATOR PREPAREDNESS	KEN	KI6HRH	1,2	55
1211	ELECTIONS / SOCIAL	PARC	W6NWW	1,2	50

0112	LITHION ION BATTERIES, HOW THEY WORK AND WHY THEY FAIL	MICHELLE	W5NYV	1,2	62
0212	APRS AUTOMATIC PACKET REPORTING SYSTEM	PAUL	KB5MU	1,2	85
0312	SOUTH ORKNEY DXPEDITION VIDEO	HARRY	W6YOO	1,2	55
0412	T HUNTING KE6PHB	JOE & JOE	N6SZO	1,2	53
0512	MARS CALLING THE WORLD FROM VIET NAM	DENNIS	N6KI	1,2	72
0612	FIELD DAY	CHARLIE	NN3V	1,2	66
0712	LOGBOOK OF THE WORLD	DAN	N6ERD	1,2	
0812					
0912					
1012	AUCTION	ART	KC6UQH		
1112					
1212	ELECTIONS / SOCIAL	PARC	W6NWW		



Meeting
Photos

Photos by Don WD6FWE





Annual Club Auction

by Michelle W5NYV

It's almost October, and that means it's auction time. Come to the General Meeting on October 3rd and join the fun!

Where: The Safety Center

Any radio item new or used, working or not (boat-anchors included) will be tagged with the seller's information. Both buyers and sellers will register prior to the meeting. Please plan on arriving early to get a look at the auction items. Hams interested in bidding on items will be given a numbered card to hold up on items they would like to place a bid on. Any further questions can be directed to: board@palomararc.org

A suggestion heard at the September 2005 meeting: put those address labels you get in the mail to good use by bringing them to the auction. Instead of writing your name over and over, use the stickers instead.

If you have a wagon or other wheeled cart, please consider bringing it in order to transport items more easily into the building. The club will provide one wheeled cart for transporting equipment in and out of the building.

Art KC6UQH will be the auctioneer for the evening. Start planning now for the treasures you'll want to bring and the treasures you'll be sure to find.

Room set-up starts at 5:30pm. As soon as the room is set up, sellers sign in and tag equipment. Bring your stuff early! 6:30 to 7:00pm buyers are registered (required!) and may view the offered equipment.

If you have questions about an item, this is the time to ask it. Inspect equipment before the auction so you know what you are bidding on (write its auction number down!) Auction begins at 7:00pm.

PARC receives 10% of the sale price and there is no other fee for buyers and sellers. Donations to PARC are accepted. All monies are paid to PARC. Seller(s) may set a written minimum bid on their items. Seller is responsible for removing any item(s) not sold. PARC does not guarantee the condition of any item sold.

PARC Auction Schedule

Room Setup	5:30pm
Sellers Allowed In	6:00pm
Buyers Allowed In	6:30pm
Auction Starts	7:00pm
Auction Ends	9:00pm

You don't have to be a PARC member to participate in the auction, so invite your friends to join in on the fun. Sellers will not be paid their money until all monies have been collected that evening, so bring a Self Addressed Stamped Envelope if you want the check mailed to you the next day, or pick it up at the next club meeting.

In previous years, the auction has been held outdoors (in a surprise move due to a conflict in room reservation), in the smaller EOC meeting room, and in the larger EOC meeting room, and offsite at other nearby locations.



Palomar Amateur Radio Club is looking for help to provide for the coffee goods table. The individual(s) would maintain the coffee service items for the Club. Jim W6SST has provided these services for the past few years, and has been very appreciated. Due to changes in his personal schedule he will not be able to continue. We all wish him well in his adventures and look to hear him on the radio. Individuals willing to assist the club with coffee service should contact a Board Member.

Dennis

Lunch Bunch Special Edition

Article coming soon

Photos by AG6EK Jim Tomcik



CABLE MANAGEMENT



WHAT A CROWD!



MEETING IN PROGRESS



PRESENTATION



OPERATING LOCATION

KJ6SJZ Visit to I0ZQB

by Ken KJ6SJZ

In August, 2012 I visited my expatriate cousin in the ancient, but well-preserved community of Paciano in Umbria region of central Italy. While there, I met and came to know I0ZQB, Giampaolo Fagiolari of Missiano, Umbria, Italy.

I had observed a radio tower and beam antenna from a distance while visiting my cousin's friends in the town of Missiano. I looked him up by licensed operator/geographic location on www.qrz.com and then again by coordinates on Google Earth. 'Paolo was the only amateur radio operator listed in Missiano. The same tower and antennae were visible in Google Earth photos. I sent him an email and asked to visit; he invited me. It was very interesting!

I had quite an experience in dissimilar language communications while trying to absorb the sheer range and numbers of his equipment and rig. Thankfully I had prepared a list of amateur radio Q & A in English/Italian using Google Translator. We shared the common amateur radio (aka "radioamatore") language to communicate in basic terms.

'Paolo says every piece of equipment in his radio room is functional. Over the years, he has obtained items in Europe at swap meets, radio open markets, and online. He has a large supply of spare parts, many vacuum tubes, capacitors, and other stuff. He does his own work to repair and modify the various rigs. The large green box in the shack houses his home-made amplifier. He also fabricated the exterior (usually covered) capacitance tuner (40/80/160 m) outside the shack and connected to the beam. He proudly showed me that piece when I asked him about achieving resonance across bands.

The rural town of Missiano is small, and very quiet; everyone knows everyone. His radio room looks like a personal museum on display. I thoroughly enjoyed the experience. Coffee was good and strong!

I have invited 'Paolo to visit San Diego and attend a PARC meeting.

73,
Ken, KJ6SJZ





Hello Steve,

Your email requesting information on the original radio equipment for the Nantucket Lightship was just published in the Palomar Amateur Radio Club "Scope" newsletter. See: <http://www.palomararc.org/Scope/sep12scope.pdf>.

Looks like a fun, but BIG, project!

I put out a request to the Coast Guard Amateur Radio Club (www.w5cgc.org) on our Facebook page and received a couple of responses.

"Rec on Matagorda and Gresham 1959 were RBA, RBB, RBC s. They were replaced by R-390 and R-389s."

"The lightships had an URC-7 chrystal controlled xcvr used mainly on the old 2MHZ marine band. 2182, 2670 and the local district working freqs, (2686 CCGD3)"

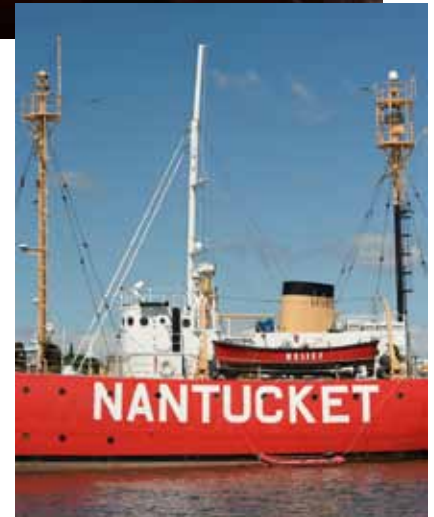
So the equipment would have included one or two URC-7 AM transceivers and likely some remote controls for them. In fact, a Google search for the URC-7 itself wound up here:

<http://www.lightship116-538.org/itemspartsneeded.htm> which looks like it would be very useful to you folks.

By now you may already know all this, but thought we'd send it along.

Good Luck with the project and 73,

Roger Gagos, K6EQ
USCG 1966 - 1970



1. SCOPE 2. 0765-30 3. 09/26/12
 4. MONTHLY 5. 12 6. \$3
 7. PALOMAR AMATEUR RADIO CLUB
 8. A. L. DONLEVY 1651 MESA VERDE DR.
 VISTA, CA 92084-5324
 9. A. L. DONLEVY
 P.O. Box 73 VISTA, CA 92085
 EDITOR MICHELLE THOMPSON
 5379 CARMEL KNOLLS DRIVE
 SAN DIEGO, CA 92130
 10. PALOMAR AMATEUR RADIO CLUB NOTES
 A. 167. 177 PRINTED
 B. 2 3 P OUT OF COUNTY
 B2. 159 162 PD IN COOUNY
 B3. 0 0
 B4. 2 2 OTHER MAILED
 C 174 177
 D1 0 0 FREE OUT OF Co (3541)
 D2 4 4 FREE IN Co
 D3 0 0 OTHER CLASS MAILED
 D4 8 8 1ST CLASS PAID
 E. 12 12 SUM 15D 1-4
 F. 158 175
 G 2 2 PUBLISHER COPIES
 H. 160 177 SUM 15F + G
 I% 192.63 192.61

PRINTED OCTOBER 2012 ISSUE OF SCOPE
 MAILED SEPT 19 2012

FOR SALE:

Our Club has received a large donation from a local estate.

We're still cataloging and checking some of the items, but needed to provide preliminary list to meet deadline for this month's scope:

Palomar ARC members receive "first dibs" AND 15% DISCOUNT off prices.

LDG AT-1000 Autotuner \$300
Nye Viking RFM-005 Power meter \$250

Please act quickly if interested. Items will be advertised to public after August PARC meeting. If this stuff not out of garage, XYL says I'll be moving out there too.

Call Ron K2RP (K2RP@ARRL.NET) for details, accessories, condition on all above.

Contact RBERS@live.com for info:

1. MFJ Versa Turner II MFJ941D \$70
2. MFJ Super DSP Filter MFJ784 \$80
3. Communications Specialist TE64 External Tone Generator \$20
4. Kenwood TS130S Transciever \$275
5. Johnson Low Pass Filter Mod 250-20 \$5
- 5a. Johnson Low Pass Filter Mod 250-20 \$5
6. Waters Dummy Load Wattmenter Mod 334A \$100
7. Kenwood TM231A 2 Metet Tranciever \$80
8. Radio Shack HTX242 2 meter transciever \$50
9. RG8/U cable \$15
10. Kantronics Packet Communicator 3 plus \$110
- 10a. MFJ-1272MYV Mike TNC \$20
11. Johnson Match Box SWR Bridge Mod 250-25 \$90
12. Drake Q-XER Mod593 \$15
13. Heathkit Line Monitor IM103 \$20
14. Palomar M827 SWR/power meter \$60
15. Triplett Absorption Freq meter Mod3256 \$10
16. Heathkit Grid Dip meter ModGD1B \$15
17. Heathkit AM2 SWR meter \$5
18. SWR Power Meter Cat. No. 21-524 \$15
19. Antenna Switches \$5 ea
20. GE CB 40 Channel Tranciever Mod 3-5804F \$10
21. GE CB 40 Channel Transciever HT 3-5900 \$10
22. Mag mount CB Antenna \$15
23. Hustler HF Multi-Band 5-BTV with RM80S top \$100
24. Cushcraft Ringer Ranger ARX 2 meter \$40
25. Backer & Williamson low-pass filter mod425 \$5
26. Kenwood MC60A mike \$75
27. Kenwood MC60A mike \$75
28. Navy CTE -26003A Key \$30
29. 2 Vintage J-38 keys \$20 ea.
30. GLA Systems Bug catcher Coil \$75
31. Triplett 66R Multimeter \$20
32. Heathkit V-4A Vacuum Tube Voltmeter \$10
33. Heathkit VTVM 1M-18 \$10
34. Yaesu YH55 Headset \$20
35. Vintage Brandes Headset \$20
36. ANB-41 Headset \$10
37. Archer Headphone \$20
38. Sure 444D Mike \$40
39. Sure 440SL Mike \$50

Club Membership for August Edition

New Members joining PARK.. KJ6VXW, KF7LPJ, KJ6WKB, KG6SXU, and Sherry Hughes, (No call yet)
And, 5 reinstatements, one all the way back to 1997!

All are welcome!!

AI
W6GNI

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

September Fold and Staple Crew:

W6GNI AI& Kathy, KB6YHZ Art& Janet, WA5ACE Sonny, KB6NMK Jo, W6EPM Roni

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!
scope@palomararc.org

NiCd Lady Company

Grace Lloyd

N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries

• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B

Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source



RF PARTS[™]
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur
and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS

3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7

4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Icom IC-2820H with the UT123 DSTAR/GPS module installed. Includes Nifty Guide to Dstar and the Nifty manual for the IC-2820H. Missing the mobile mount. Includes original box. For PARC members \$650.00 including local San Diego County shipping. Contact Gary Kent W6GDK at W6GDK@arrl.net or 858-679-0578. Prefer cash, postal money order, or personal check (but delivery withheld until check clears).

73 de W6GDK
Gary Kent

For Sale

Hallicrafter SX11 with matching speaker, good condition, works great. \$150 KK6GO@cox.net or 619-224-8948

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950SD, 10-160 M Transceiver	CALL
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:00pm on the 3rd of October 2012, Palomar Amateur Radio Club will have our annual auction. Set up at 5:30pm, sellers allowed in 6:00pm, buyers allowed in at 6:30pm, auction starts at 7:00pm.

We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

A newsletter by and for the
Palomar Amateur Radio Club
of San Diego, California.



November Program: Amateur Radio Astronomy for Hams

Amateur Radio Astronomy: is it "Amateur Radio" astronomy or amateur "Radio Astronomy?" It turns out to be a little of both. If you think picking up that DX signal from around the world is tough, in radio astronomy, a strong signal is equivalent to the signal you would pick up from a cell phone on the moon! As beautiful as the pictures from the Hubble telescope are, most of the current knowledge of the universe comes from radio, not optical, astronomy. A powerful radio telescope is well within the skill set (and budget) of a ham. This is the perfect area for those with an interest in both amateur radio and astronomy.

This presentation will discuss radio astronomy from an amateur radio perspective and will include a discussion and demonstration of a total-power radio telescope operating within television's so-called channel 37 band (608 – 614 MHz). By taking advantage of the efficiencies available by piggy-backing off of commercially available UHF television antennas and pre-amps, as well as common ham radio receivers, such a telescope can be built for about \$500. The telescope has reasonably good performance (~123 dBm of gain) and is very nearly a turn-key system that would work well for beginning as well as more sophisticated amateur radio astronomers. Details of the telescope, including a comparison of its stacked array antenna with other antenna types and a comparison of a standard ham receiver with a software defined receiver running on a laptop, practical challenges (many of which will be very familiar to hams!), data obtained by the telescope as well as

continued page 2

Save the Date

Club Meeting

7 November 2012

Amateur Astronomy!
Meet and greet at
7:00pm, program at
7:30pm. Article above.

Board Meeting

14 November 2012

Palomar Amateur Radio
Club board meeting at
7:30pm at W6GNI QTH.

Club Event

18 November 2012

Operating Day at Fry's in
San Marcos

continued from page 1

further possible uses of the telescope (e.g., interferometry) will be presented.

Curt Kinghorn is a ham and a member of the Society of Amateur Radio Astronomers (SARA), an international society of dedicated enthusiasts who teach, learn, trade technical information and do their own observations of the radio sky. SARA is a scientific, non-profit group founded for the sole purpose of supporting amateur radio astronomy. Most of SARA's members are hams. Mr. Kinghorn, a patent attorney, holds a bachelor's degree in physics from the University of Utah. Mr. Kinghorn is also a former lecturer at the Hansen Planetarium in Salt Lake City, Utah and the Buehler Planetarium in Ft. Lauderdale, Florida.

Minutes

Palomar Amateur Radio Club Board of Directors Meeting August 8, 2012

(Minutes based on notes by K2RP.)

The meeting was called to order by President Dennis Baca KD6TUJ at 7:30pm at the home of Ron Pollack K2RP. In attendance were:

President Dennis Baca KD6TUJ
Vice President Ron Pollack K2RP Treasurer
David Ochs, KI6LKP
Director #1 Don Johnson, WD6FWE
Director #2 Eric Hutchins, K7ELH Membership
Chairman Al Donlevy W6GNI
Repeater Technical Chairman Conrad Lara,
KG6JEI

Treasurer's Report

KI6LKP distributed copies of the Treasurer's Report. Motion by K2RP to approve the Treasurer's Report as published. Seconded by WD6FWE. Motion passed unanimously.

Secretary's Report

No Secretary's report was available.

Membership

W6GNI reported that the membership is 279, up from 270.

Repeater Technical Report

KG6JEI reported that the 6m repeater antenna is still broken, but usable. Reports have been received of break-ins and thefts at other repeater sites. K2RP agreed to investigate equipment insurance through ARRL's new carrier.

PARC Operating Day

Operating Day at Fry's has been rescheduled for November 18.

MS Bike Ride

A bike ride October 20-21 to benefit Multiple Sclerosis will be using the repeaters.

Club Picnic

KD6TUJ reported that the picnic is August 19. Motion by K2RP to increase the picnic food budget to \$200. Seconded by WD6FWE. Motion passed.

Rotator Connectors

KD6TUJ reported that John Kuivinen is ordering about \$50 worth of connectors for Field Day antenna rotators.

Repeater Events

KG6JEI requested use of the 146.73 MHz repeater with the 147.075 MHz repeater as backup for communications support for Cycle for Life on September 8 and a Cystic Fibrosis Foundation event on October 6. Motion by K7ELH to approved these events. Seconded by WD6FWE. Motion passed. KG6JEI suggested that the net preamble scripts for groups using the repeaters be rewritten.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of K2RP at 7:30pm on September 12, 2012.

Adjournment

The meeting was adjourned at 9:00 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

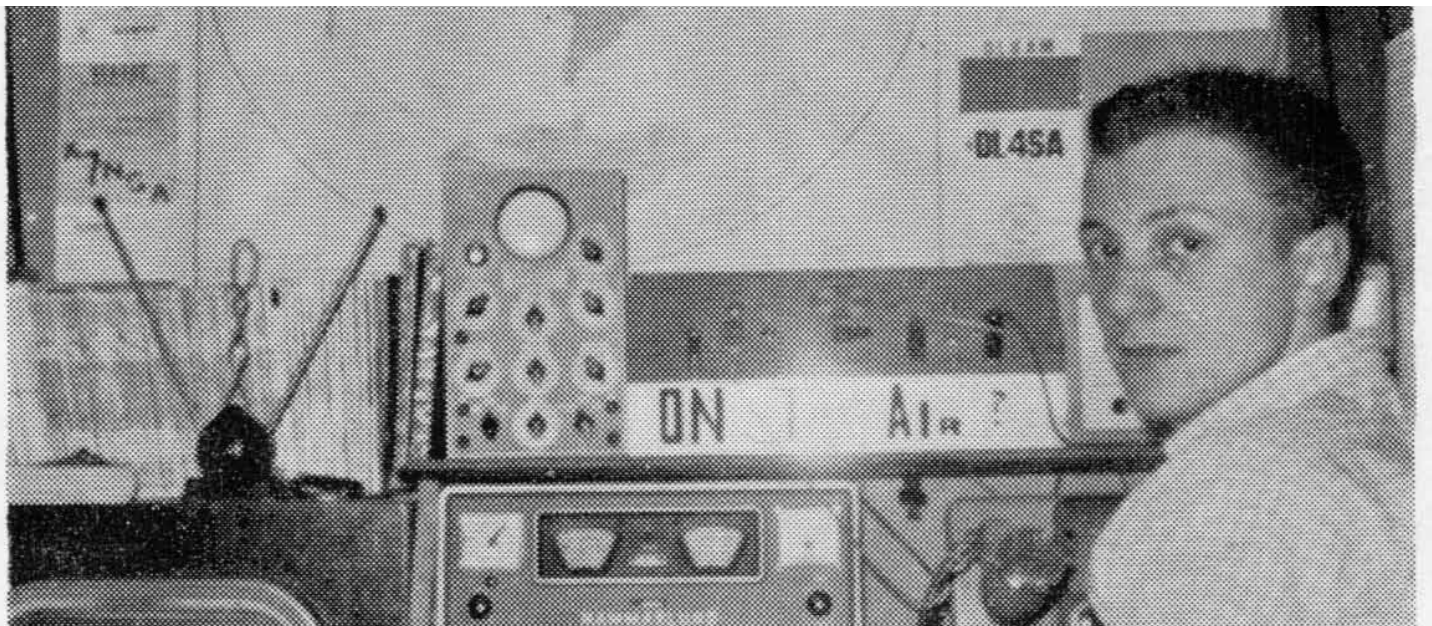
Minutes

Palomar Amateur Radio Club Board of Directors Meeting September 12, 2012

The meeting was called to order by President Dennis Baca KD6TUJ at 7:37pm at the home of Ron Pollack K2RP. In attendance were:

President Dennis Baca KD6TUJ
Vice President Ron Pollack K2RP
Secretary Paul Williamson, KB5MU
Treasurer David Ochs, KI6LKP
Director #1 Don Johnson, WD6FWE

Guess Who? (Photo circa 1963-4) N6KI!



Treasurer's Report

KI6LKP distributed copies of the Treasurer's Report. Motion by KB5MU to approve the Treasurer's Report as published. Seconded by WD6FWE. Motion passed unanimously.

KI6LKP reported that Paypal limits withdrawals from new accounts like ours to \$500 per month, and we currently have \$626.47 in that account. KB5MU stated that he is working on getting the limit removed.

Kudos to K2RP for disposing of donated equipment from the Warren Bailey estate and raising \$2662.49 for the club. K2RP spoke of an LDG automatic antenna tuner from the estate which turned up fried after visiting a local repair technician and being shipped to a buyer, then returned for a refund. LDG says this kind of circuit board damage is not worth repairing, but WD6FWE believes he might be able to repair it anyway. K2RP stated that he still has a 4BTV antenna from the estate, but all the rest of the salable items have been sold.

KI6LKP reported that Georgia Smith KI6LAV has agreed to help out with treasurer's duties at the October auction.

Secretary's Report

KB5MU distributed copies of the minutes of the July board meeting, previously sent by email. Motion by KI6LKP to approve the board meeting minutes as corrected. Seconded by WD6FWE. Motion passed unanimously. KD6TUJ and K2RP both agreed to send their notes from the August

meeting to the Secretary.

Upcoming General Meetings

K2RP reported that the October meeting will be the auction. For the November meeting, he has a lead on a program on amateur radio astronomy. The December meeting will be the usual holiday social and elections.

KD6TUJ reported that Art McBride KC6UQH has agreed to serve as auctioneer in October, and Jo Ashley KB6NMK has agreed to help at the back table. The usual schedule will apply: setup at 5:30pm, sellers at 6:00pm, buyers at 6:30pm, auction to begin at 7:00pm.

Membership

No membership report was available.

Repeater Technical Report

KD6TUJ reported that the stabilizers have been installed in the 6m cavities. The cavities will go to KC6UQH next for tuning.

WD6FWE reported a mention at the membership meeting that the repeater controller was heard to beep "P" for processor reset, and later the repeater IDs stopped coming out. He suggests changing the repeater control codes.

PARC Operating Day

KD6TUJ reported that he had all approvals to hold an Operating Day in the Fry's parking lot in San Marcos on November 18, the Sunday before

continued on page 11

PARC Members Visit San Diego Yacht Club

September 21, 2012

By: Tom Ellett – W0NI

PARC members and the Coronado Emergency Radio Operators (CERO) Board of Directors were guests at the San Diego Yacht Club (SDYC) last month. Our host was the SDYC Area Amateur Radio Group (ARG) and Mr. Bob Vincent N6EZV. Bob delivered an excellent presentation on the Communications Center he and his organization have assembled. The radio communications center was organized to:

- Encourage interest in amateur radio
- Serve the yacht club with communications for races and other activities
- Maintain a radio room and equipment
- Offer amateur radio classes and licensing
- Perform public service and support during any emergency

Following the presentation, we were given a tour of the radio room and antenna site. I'll let the photos taken by Jim Tomcik AG6EK tell the story.



Pictured above in the front row and left to right is Rod McLennan W6MWB, S/C Woody Hunt AE6ET, Ed Huggin KK6GO and Sue Huggin KO6DV. Our group filled the Jessop room at the SDYC.

As you enter the Comm Center radio room the first station on the right is an ICom IC-718 HF radio which hosts the W6IM Winlink Station is located. Winlink allows all Amateur Radio users the ability to send and receive email text messages, weather text messages and weather grib (graphic weather data images). The station's geographic location makes it the Southwestern most Winlink Station in the continental U.S. Users cruising Mexico, the Sea of Cortez and the South Pacific use the station's 24/7 capability.



The radio room was designed to be neat and efficient with HF, UHF/VHF and WinLink operating positions. Desks and paneling were selected to match and cable runs were concealed.



Under the North window, is a Marine Communication Station consisting of an ICom IC-M710 HF (1.8 MHz - 30 MHz) Marine Single Side Band (SSB) radio and an ICom IC-M59 Marine VHF (156.00 MHz - 163 MHz).

Below a 24 hour clock, is an ICom IC-756 HF/VHF (1.8 MHz - 30 MHz, 50 - 54 MHz)radio and an Alinco DR-112 VHF (144 - 148 MHz) 2 Meter “packet” radio. The station also includes an ICom IC-706MKIIG HF/VHF/UHF (1.8 MHz - 29.7 MHz, 50 - 54 MHz, 144 - 148 MHz and 420 MHz - 450 MHz) radio.



The VHF/UHF station includes a Kenwood TM-221A (144 MHz - 148 MHz) 2 Meter VHF radio. In the center is an Alinco DR-235 (222 MHz - 225 MHz) 1.25 Meter VHF radio. Also included is a Yaesu FT-7900R multi-band VHF/UHF radio for 2 meters and 70 centimeters.



N6EZV thanks J Goldberg AF6GM for his ongoing San Diego Ham Class training and licensing program that has been responsible for getting several hundred Amateur Radio operators licensed over the past 2 years in the San Diego area including several SDYC adult and junior members.



A test complete test bench is also maintained where a radio brought in by a sailor can be checked out.

Finally, I want to say a word about our long running Friday lunch group. The “Lunch Bunch” started over 25 years ago as a small group of PARC members who meet on the 146.730 repeater and decided on a place to meet for lunch on Fridays. As time passed and the internet became widely used, I decided to create a web site where hams could add there call to a lunch list. On Wednesdays, I send out invitations to about 80 hams and the group assembles at one of eight restaurants. Attendance varies with an average of 10-15. However, groups can be as large as 25 depending on the occasion. Many of our regular lunch goers have been hams for 30 years or more. The lunches offer a great opportunity to get some good advise on ham gear and enjoy the company of others who share a passion for amateur radio. You can sign up for the Friday lunch email at <http://www.w0ni.com/>

More Information Links:

SDYC Amateur Radio Group - http://www.sdyc.org/fleets/arg_about

Coronado Emergency Radio Operators - <http://www.arrrl.org/Groups/view/coronado-emergency-radio-operators/type:club>

W0NI's Friday Lunch Bunch – <http://www.w0ni.com/>

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

H
R
O

KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU, MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Open: 10a.m. – 5:30p.m.
Monday thru Saturday *Ask about our great prices*
858 560-4900
or toll free 1-800-854-6046

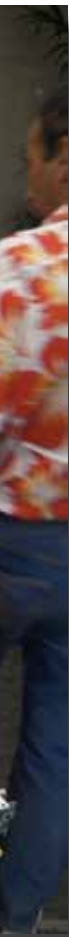
Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!



Annual Auction Photos

Photos by Don WD6FWE







From N6KI:

Great job!

See above certificate

First Place ARRL Sweepstakes SSB SW Division - Plaque to arrive soon !

Lets do it again this year - 3rd weekend in November
and see if we can also improve our national standing
from 6th place overall for Multi-Single Low Power Category
(SS CW crew took First Place SW Division 2nd place overall just behind Puerto Rico Section)

73, Dennis N6KI

CONTACT DENNIS TO OPERATE SSB SWEEPSTAKES!
Dennis Vernacchia <n6ki73@gmail.com>

**HAMRADIONOW EPISODE 28 and 29:
The Transformer Guy;
The Huntsville Hamfest Guy
are Online Now**

28: Peter Eggiman builds transformers. Little ones, big ones, and really big ones, for business and for hams. Jeff AC4ZO talks to Peter about the technology, after Gary does a "pledge drive" and a short visit from The Bear.

29: Charlie Emerson N4OKL is the benevolent dictator of the Huntsville Hamfest. Charlie's now saying, "Wait... is THAT what they got out of the interview?" Not really. But Huntsville isn't like most hamfests, and Charlie explains why. Then he confuses HamRadioNow with Ham Nation. And finally, the Mouse visits Gary as he wraps up the episode. So don't tune out early.

HAMRADIONOW is an online podcast from Amateur Radio//Video News. It's free to watch on the web. If you like what you see, we request your support. Just go to our web site, www.HamRadioNow.tv, and 'click the pig.' That'll take you to the support page. Whatever you think it's worth.

Thanks and 73,
Gary KN4AQ
HamRadioNow.TV
Gary Pearce KN4AQ
508 Spencer Crest Ct.
Cary, NC 27513
kn4aq@arvn.tv
919-380-9944

HamRadioNow.tv
ARVN: Amateur Radio//Video News
Gary Pearce KN4AQ
508 Spencer Crest Ct.
Cary, NC 27513
kn4aq@arvn.tv
919-380-9944
www.ARVN.TV
www.HamRadioNow.TV

continued from page 3
Thanksgiving.

MS Bike Ride

KD6TUJ noted that the organizers of the MS bike ride were at the membership meeting looking for operators to work the ride on October 20-21.

501(c)(3) Status

K2RP reported that he had identified the CPA in the Escondido Amateur Radio Society who prepared their filing for 501(c)(3) status, and hopes to get a copy of their filing.

SANDARC

KD6TUJ reported a new omnibus amendment to the San Diego Amateur Radio Council (SANDARC) bylaws is being proposed. Some unspecified subset of these changes are said be required to comply with current state guidelines. KD6TUJ was heard to remark, "Those guys are being stupid again."

New Repeater on 147.12 MHz

KD6TUJ reported that TASMA has apparently coordinated a new repeater on Contractor's Point on 147.12 MHz. Unsurprisingly, this is causing substantial interference to our 147.13 MHz repeater near the coast.

Nominating Committee

KD6TUJ reported that he is working on appointing a nominating committee, to be announced at the October meeting as required by the Bylaws.

Next Board Meeting Location

It was agreed that the next Board meeting would be held at the home of KB5MU at 7:30pm on October 10, 2012.

Adjournment

The meeting was adjourned at 8:38 pm.

Respectfully submitted,
Paul Williamson KB5MU
Secretary

County Hunting it will pull you in!

Ron Pollack K2RP

CAUTION: The activities described in the following article have been known to become addicting and all consuming! Proceed with caution!

In 1961, CQ Magazine introduced the USA-CA program, with the "CA" designating "County Award." Many states offered "Worked All" awards for working and confirming certain numbers, or all, of the counties in that state. CQ built on that premise, and launched an award program for working counties in all the states, with 500 counties as the entry level award. Endorsements are offered for each additional 500 counties worked, until all the counties in the US are completed. Currently, there are 3077 counties required for the USA-CA All Counties award. (There have been several new counties formed, and some combined over the years, with the latest being a newly created county in Colorado a few years ago.) It would seem to be easy to determine where a station is located, but there is some ambiguity that is covered in the rules. For example, only 48 of the 50 states have county designations. Louisiana calls its counties "parishes," and those are counted as if they were counties. Alaska lacks counties, so the four "Judicial Districts" are used instead. Of course, the number of counties in each state varies, from a high of 254 in Texas, to a low of 3 in Delaware. (Or as some say, 3 at low tide, 2 at high tide!) Virginia and Nevada have a number of independent cities that are not in any county. There is a list of what counties can be claimed for a contact from those cities. The details can become intricate, but not overwhelming!

So, how does one go about working all those stations? First of all, the rules are quite liberal. Any contact, made on any date, from any location, any band or mode, using any call are all eligible. The award is to the person, not the call sign.

The vast majority of the contacts made now are with mobiles. Many counties have few or no resident active hams, so mobiles are the easiest, and often the only way to confirm those contacts. The mobile operators range from truck drivers to full time RV-ers to a cadre of hams who make trips specifically to "put out counties." Another source is the many state and regional QSO parties, with many mobiles travelling from county to county during the event. There is even a live website, www.w6rk.com/ch where mobiles are posted as they are running. There's even a way for the system to send you a message when a needed county is posted.

For the initial award from CQ, confirmations are required. To make it easy, there is a QSL bureau, with special cards with room to list several contacts with the same mobile in different counties.

This "subculture" of our hobby has developed great resources in addition to the QSL bureau. An organization, Mobile Amateur Radio Award Club (MARAC) was formed years ago to facilitate county hunting. There are nets every day to facilitate these contacts. The most popular are on 14336 and 14056.5. Spend a few minutes listening to the net and you'll quickly get the protocol. I suggest you listen carefully, as some of the net controls get "cranky" when people don't follow the system!

After the CQ award is earned for all counties, MARAC sponsors various specialty awards, such as second, third, or more times,

all CW, all SSB, all one band, and literally dozens more. Most of these are quite difficult to obtain.

Even the basic award is an achievement. In the over 50 years that the program has run, the latest number is only 1232. My award was issued about 5 years ago, and is number 1159, so only about 15 a year are currently being earned. The last one for all CW was only number 130! Incidentally, that one went to K1TKL, who lives in Escondido. I'm about 400 away from the all CW "whole ball of wax," as it's called.

Until the last couple of years, I had never operated HF mobile, but that bug has really bitten. After a few short trips, during which I ran some counties, we took a bit longer trip a year ago, visiting and running counties in Arizona, Utah, New Mexico and Colorado. I was hooked!

This spring, my XYL Rinkie and I took an 8 week road trip, culminating in a visit to the Dayton Hamvention. We ran counties all the way. The statistics were:

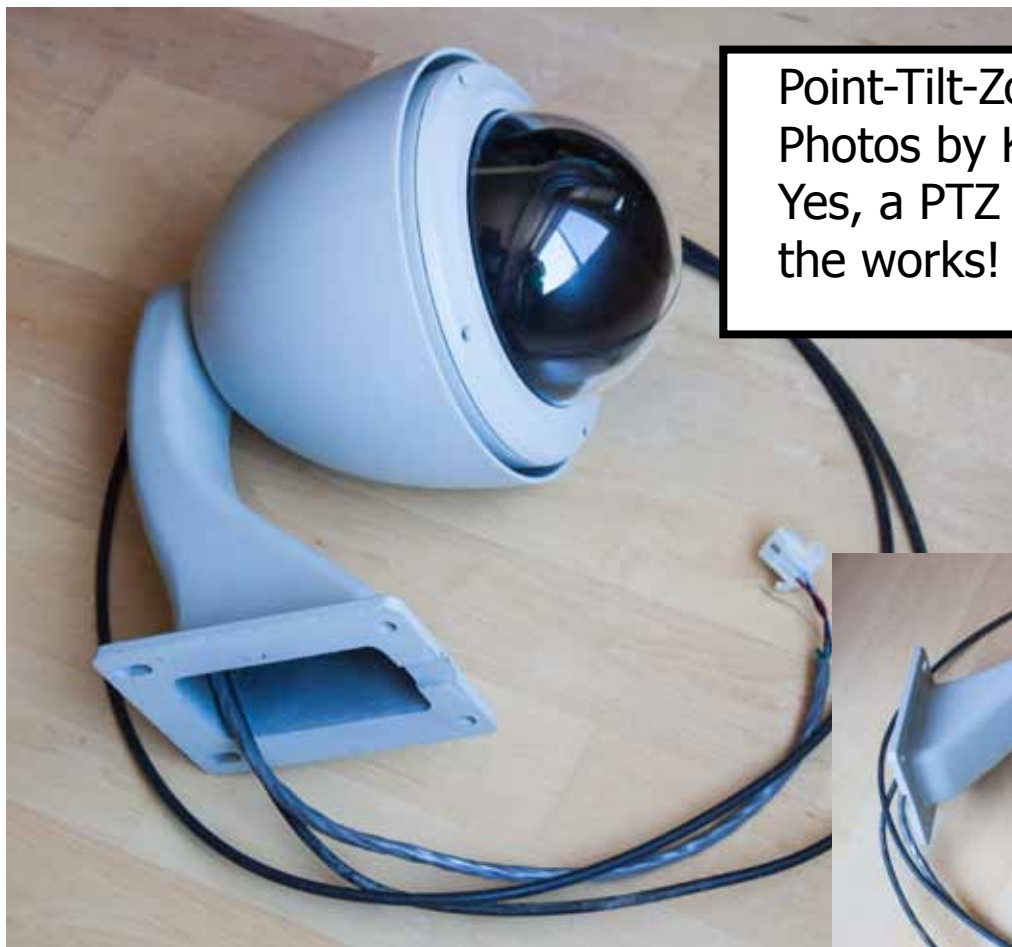
8700 Miles, 21 States, 2492 Contacts (50% CW, 50% SSB), 156 Counties Run

We used an old Yaesu FT100 and hamsticks, mostly on 20 meters. (Rinkie would not let me run CW while driving. Luckily, she likes to drive!)

This part of our hobby has developed a culture and language all its own, far too detailed for this article. I commend you to www.MARAC.ORG and www.countyhunter.com for more details, or I'd be happy to help you get started.

Attached is a photo of us operating on a "county line," which counts for both counties.





Point-Tilt-Zoom (PTZ) Camera
Photos by KB5MU.
Yes, a PTZ camera project is in
the works!



Shown here is the Aegis Mechtronics color security camera we're working on installing at the repeater site. The camera is equipped to pan, tilt, and zoom. As you can see, it's in a very robust metal housing. The controller shown is the standard console for local control. For the repeater site, we are planning to control the camera remotely over the air with DTMF tones. The video will be transmitted over the ATV repeater output.

See the article on page 14 of the November 2011 Scope for more details on this project.

Paul KB5MU

Club Membership for August Edition

New Members joining PARK.. KJ6VXW, KF7LPJ, KJ6WKB, KG6SXU, and Sherry Hughes, (No call yet)
And, 5 reinstatements, one all the way back to 1997!

All are welcome!!

AI
W6GNI

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

Fold & Staple that did October Scope
AI Donlevy W6GNI Kathy Donlevy
Jo Ashley KB6NMK Sonny Stires WA5ACE
Art Nye KB6THZ Janet Meyer

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!
scope@palomararc.org

NiCd Lady Company

Grace Lloyd
N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries
• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B
Riverside, CA 92508
800/906-6423
951/653-8868
Fax 951/653-5189

Your Complete Battery Source



RF PARTS™
COMPANY
From Milliwatts to Kilowatts™

Complete inventory for servicing amateur
and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS

3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7

4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale

Icom IC-2820H with the UT123 DSTAR/GPS module installed. Includes Nifty Guide to Dstar and the Nifty manual for the IC-2820H. Missing the mobile mount. Includes original box. For PARC members \$650.00 including local San Diego County shipping. Contact Gary Kent W6GDK at W6GDK@arrl.net or 858-679-0578. Prefer cash, postal money order, or personal check (but delivery withheld until check clears).

73 de W6GDK
Gary Kent

For Sale

Hallicrafter SX11 with matching speaker, good condition, works great. \$150 KK6GO@cox.net or 619-224-8948

For Sale

Hammarlund HQ 129X receiver (vintage 1946) in great working condition (New Filter Caps) and above average appearance. \$150. K2RP@ARRL.NET or 760-436 -8109

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950SD, 10-160 M Transceiver	CALL
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on the 7th of November 2012, Palomar Amateur Radio Club presents Curt Kinghorn's talk on Amateur (Radio) Astronomy. Come at 7:00 for meet and greet and catch up with your radio friends.

We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.

SCOPE

THE PALOMAR AMATEUR RADIO CLUB NEWSLETTER



Save the Date

Club Meeting

5 December 2012

Potluck celebration! Come party with the hams!

Board Meeting

12 December 2012

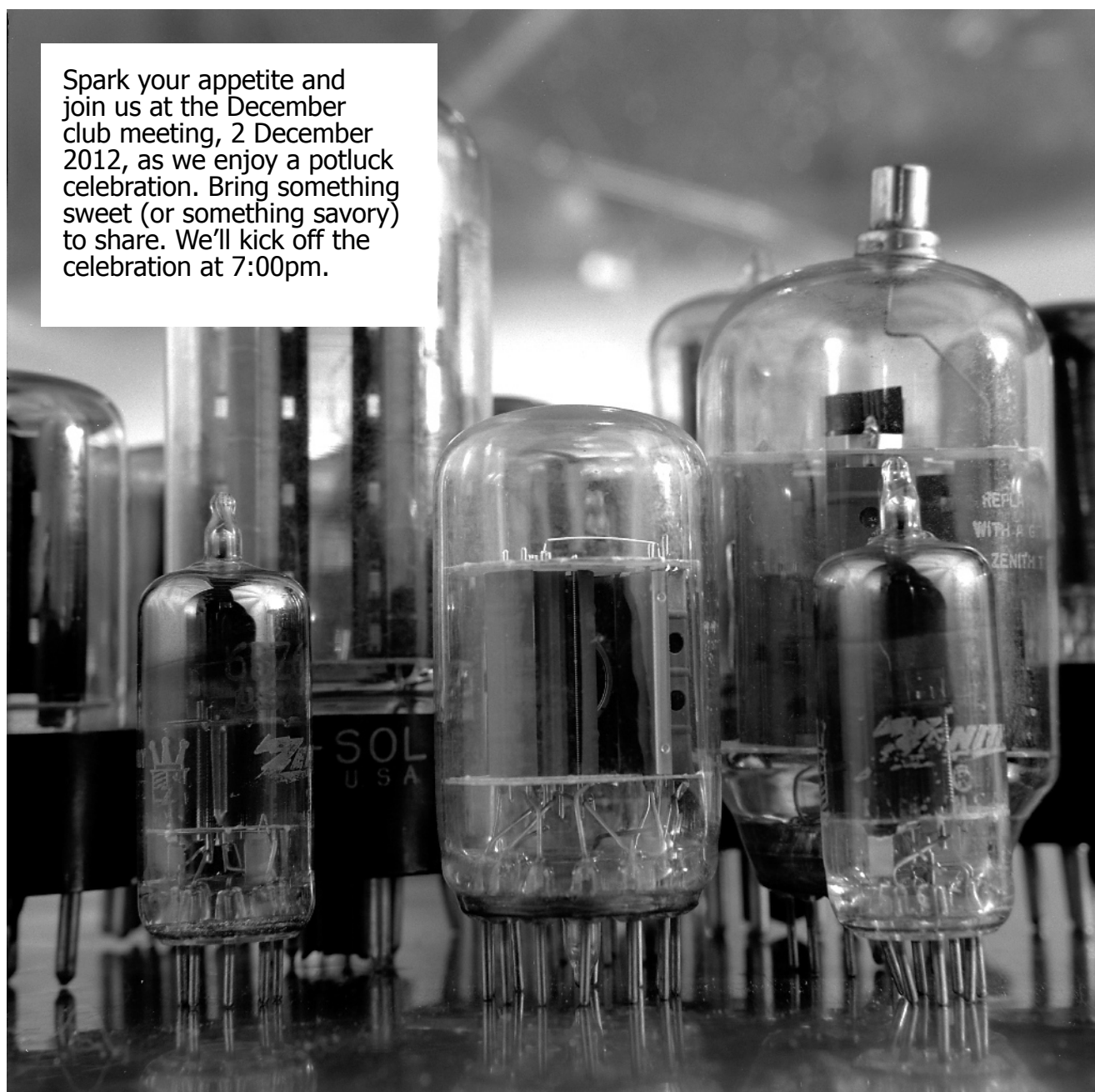
Palomar Amateur Radio Club board meeting at 7:30pm at K2RP QTH.

Club Event

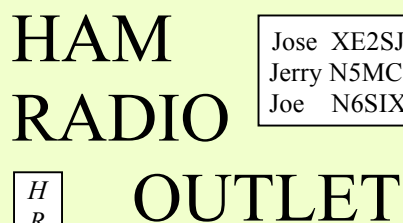
21 December 2012

N0D special event station on the air. See Page 5! Now! Before it all ends!

Spark your appetite and join us at the December club meeting, 2 December 2012, as we enjoy a potluck celebration. Bring something sweet (or something savory) to share. We'll kick off the celebration at 7:00pm.



ERIK S. N6NWW 4-17-11



Open: 10a.m. – 5:30p.m.
Monday thru Saturday *Ask about our
great prices*
858 560-4900
or toll free 1-800-854-6046

**Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
Hy-gain, Tri-EX,
Cushcraft And Others
too
Numerous to
Mention!**

Drop in to see our display of working equipment. Find out about Pkt location determining equipment (APRS). Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of Goodies listed.

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stoplight. As you are turning right you can see our beams in this shopping center. Travel 100 yds. On Kearny Villa Rd. and U-turn back to shopping area and HRO sign. Be sure to see our equipment in action on **real** antennas!



N0D: A Special Event Station Celebrating the End of the World

That's right! The end is finally near. According to one of the three Mayan Calendars, the End of the world will occur on December 21, 2012. To celebrate this—literally—once in a lifetime event, Special Event Station N0D (Now Zero Days) will be activated for three days during and possibly after the end of the world. December 20; is a celebration of the end of the world. December 21, the day of destruction, we will be on the air as long as possible. December 22... that is a little iffy right now.

Amateur radio stations around the crumbling globe are invited to contact N0D, who will be operating from a secret undisclosed location. QSL with SASE to the address in QRZ. If Doomsday actually does happen, we regret that a QSL will not be possible so hold on to your SASE until the 22nd at least.

You can celebrate Doomsday by contacting N0D directly on the air. Amateurs can also become an official Doomsday station by registering on our website. You will be given a registration number and the authority to identify yourself as an Official Doomsday Station. followed by your Doomsday number.



Santa On The Air

Once again this year, Santa Claus will be appearing on the 3.916 Nets and he's looking forward to talking to all the good boys and girls. Pass the word that 3.916 will be THE PLACE to talk to Santa again this year!

Here's a schedule of when Santa will be on the air: (All Times Central)

Friday, November 30th at 8:30 PM
Tuesday, December 4th at 8:30 PM
Thursday, December 6th at 8:30 PM
Tuesday, December 11th at 8:30 PM
Friday, December 14th at 8:30 PM
Monday, December 17th at 8:30 PM
Wednesday, December 19th at 8:30 PM
Friday, December 21st at 8:30 PM
Saturday, December 23rd at 8:30 PM
Sunday, December 24th at 8:30 PM

Third party rules and regulations will apply. For more information on The 3916 Santa Net, email ke5ggy@gmail.com (Pete Thomson/KE5GGY)

November Club Meeting Fry's Operating Day photo



and
otos by Don WD6FWE







Membership for December SCOPE

New Members the last month or two.

KG6TUL, WA6L, KJ6NT, KJ6LLU, KJ6ZQB, N6JAI, and N5KKW

And some Reinstatements too!

Way to go!!

**AI
W6GNI**

IMPULSE Electronics

(760) 747-5277 – (866) 747-5277

www.impulseelectronics.com

***Your Connection for
Emergency Power Solutions***

Power Products

Power Pole Connectors – Power Cables – Tools
AGM Batteries – Red/Black Zip Cord 14 – 8 GA

West Mountain Products

RIGrunner – RIGblaster – Accessories
PWRgates – Computerized Battery Analyzer
Coax Cable – Coax Assemblies – Adapters
Terminals – Coax Connectors – Battery
Chargers – Battery Accessories
Email sales@impulseelectronics.com

Fold & Staple that did November Scope

AI Donlevy W6GNI Kathy Donlevy

Jo Ashley KB6NMK Sonny Stires WA5ACE

Dave Ochs KI6LKP Janet Meyer and Roni Elsberry W6UPM

Do you have a mobile installation? Do you want to have a mobile installation, and need some motivation?

We're looking for a few good mobile installations - whether they're completed, on the drawing board, or half-way done and tripping you and your passengers every time you get in and out of the vehicle - to be featured in the Scope. We'd love to show your installation.

Tips, narratives, explanations, techniques, problems encountered and solved (or encountered and evaded) are what we're looking for. Send them in!
scope@palomararc.org

NiCd Lady Company

Grace Lloyd

N6WPA

grace@nicdlady.com

www.nicdlady.com

Custom Assembly • Rebuilds • Batteries

• Lead Acids • Replacement Packs

20585 Camino Del Sol • Unit B

Riverside, CA 92508

800/906-6423

951/653-8868

Fax 951/653-5189

Your Complete Battery Source



RF PARTS[™]
COMPANY
From Milliwatts to Kilowatts[™]

Complete inventory for servicing amateur
and commercial communications equipment

RF POWER TRANSISTORS — TUBES — POWER MODULES

**Diodes • Relays • Trimmers • Capacitors • Heatsinks
Transformers • Chokes • Combiners • Wattmeters • Books**

3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS

3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7

4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B

Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA

760-744-0700

www.rfparts.com • orders@rfparts.com



Advertisements are free for members

Have items that need to find a new home? Advertise here! Send your ads to scope@palomararc.org

For Sale **NEW PRICE**

Hallicrafter SX11 with matching speaker, good condition, works great. \$100 OBO
KK6GO@cox.net or 619-224-8948

For Sale

Hello:

My 93 year old neighbor (Richard Krist) has requested my assistance with re-listing his radio gear (as he is going deaf).

For Sale (BEST OFFER)

Cushcraft Ringo Ranger, Model ARX1, Vertical 2M	\$30.00
YAESU FT-1000D Transceiver	\$2,000.00
Kenwood TS-950SD, 10-160 M Transceiver	CALL
Heathkit Phone Patch, Model HD 15	\$30.00
Remote Motor driven, 6 Pos Coax SW with Control Box	\$100.00
YAESU FT 2500 M, with Astro PS 12 A	\$300.00
Kenwood TR-7330 2 M, with Astro PS7A	\$150.00
Ten-Tec Titan amp 1kw, 10 to 160 M	\$2,000.00

Contact: R. F. Krist, W6KTE, (760) 724-2786

Buyers are welcome to contact me with their offers via email or on my cell phone so that I can present them to Richard. I can send photos if that will help. Thanks for your assistance in this matter.

Regards, A good neighbor

Dennis S. Stizza
Home: 760.724.2786
Mobile: 760.717.2214
dstizza@pacbell.net

SCOPE
P.O. Box 73
Vista, CA 92085-0073

Return service requested

PERIODICALS
POSTAGE PAID
AT VISTA CA
92085-9998

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. POSTMASTER: Send address changes to SCOPE, P.O. Box 73, Vista, CA 92085. Periodicals postage paid at Vista, CA 92084. Dues are \$20 per year or \$35 per year for a family. Dues include a subscription to Scope.

You can join or renew your membership on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:00pm on the 2nd of December 2012, Palomar Amateur Radio Club will have a potluck party to celebrate the Holiday Season.

Coming up in January: Ham Radio Homebrew. Back in the early days of Ham Radio, most of the equipment Hams used was homebrew. There were very few commercial companies making gear that was affordable, so Hams learned to make their own. Often, you can not buy what you need in an application, so the only way to get it is to BUILD it!

We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.