

SCOPE

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

Palomar Amateur Radio Club will celebrate its 75th anniversary in February of 2011. Please send in stories and pictures (with description and names if possible) for inclusion in the SCOPE. Old-timers please help, newer members send in things also.



September Meeting

The September meeting presentation will be on Solar Power & Emergency Preparedness by Bob, KJ6RET. The presentation will include a practical explanation of how to use solar energy for off-grid mobile and portable applications and the use of modeling software to design critical emergency systems. It will overview a real life experiment to prove concept for the usage of solar energy for emergency communications and everything else in short term or long term disaster scenarios. It will include a hands-on demonstration of a portable solar power station and the open house of a mobile solar power off-grid trailer system.

<http://www.earsclub.org/>
<http://roars.net/>
<http://www.wa6bgs.org/>
<http://n6six.50megs.com/>

Radio Club Resources

Check out these great local radio clubs on the web at the following addresses.
<http://www.fallbrookarc.org/>
<http://www.sddxc.org/>



YL DXpedition

At the August 2010 PARC meeting, Gayle K6GO announced a YL DXpedition to Curacao, planned for a March 9-21 window during 2011. There are about a half dozen participants so far (some of us are pictured at left) and we are welcoming more! If you are a YL and would love to come to Curacao, please contact Gayle at gayle_olson@sbcglobal.net.

Save the Date

Club Meeting

1 September 2010

Program at 7:30pm
 Bob Todd will talk about his mobile solar-powered station seen at Field Day.

Board Meeting

8 September 2010

Palomar Amateur Radio Club board meeting at 7:00pm at KB5MU QTH

Club Event

18-19 Sept. 2010

Second weekend of the 10GHz and Up contest.

www.arrl.org/10-ghz-up

Club Membership for September Edition

New Members Joining PARC: Eric Sprunk (No call yet) K4RB, N6TZQ, and N6TFL.

And one member sent a 10 year renewal, and we also received a 5 year renewal!!

6 members reinstated their membership, thank you!

Here is the list of members receiving the SCOPE on the web, that "expired" in the last month or so. Please check this list, and get your renewal checks in the mail!

Pretty PLEASE!!! N2DKO, KG6ETI, KI6GD, KI6ZLG, KI6THI, AD6Y, K6DRH, KD6FY, K6MHG, WB6MEI and W6CDU.

We sent out nearly 100 postcards to past members that let their membership run out last year (2009). A common response was that their failure to renew was an oversight, and quite a few sent in more than one year's renewal! Welcome back!

Al

PALOMAR ENGINEERS

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Palomar stocks a wide variety of cores and beads. Our RFI Tip Sheet is free on request.

Our RFI kit keeps RF out of your telephones, TVs, stereo, etc. **Model RFI-4 \$35 +tax+\$8 to ship.**

BALUN KITS

Ferrites slip over coax. Shrink tubing holds them in place. Works from 3.5-60 MHz (Use two kits for 160m).

Model BA-58 (for RG58, RG8X & similar cables up to 1/4" dia.) \$8.50+tax+\$8 S&H/order

Model BA-8 (for RG-8, RG-213, 9913 and similar cables up to 1/2" dia.) \$16.50+tax+\$8 S&H/order.

See catalog at www.Palomar-Engineers.com

Please check our complete ads in **QST**, **CQ**, and **WorldRadio** magazines.

Upcoming General Meeting Topics

October - Annual Club Auction - bring your cash!

November - Michelle W5NYV "Antenna Modeling"

December - Social

July Fold & Staple Crew

W6GNI Al & Kathy

WA5ACE Sonny

KB6YHZ Art & Janet

KB6NMK Jo & Toby



2010 ARRL Southwestern Division Convention

September 17, 18 & 19, 2010

San Diego, California

Four Points Hotel Sheraton, San Diego

It's time for one of the best ARRL Conventions on the West Coast! Come see the Ham Gear and take in the sights of Sunny San Diego!

For up to date information about the Convention, please visit us at the website: www.sandarc.org/Click on Convention Button.

Contact Person: Paul KC6QLS at (619) 593-9445 or Email at kc6qls@cox.net

See you at the Convention!

HAM RADIO OUTLET

Jose XE2SJB
Jerry N5MCJ
Joe N6SIX

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TEN-TEC
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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!

Advertisements are free for members.

For Sale

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

For Sale

Item	Price
YAESU FT-1000	\$2,500.00
Kenwood TS-950 S	2,500.00
FT-2500 M	350.00
Kenwood SWR/PWR Meter, Model SW-2000	50.00
TR-7330 2 M	150.00
Astro PS7 A	25.00
Cubic Astro -150 A-10-80M Transceiver	250.00
Ten-Tec Centurion amp 1kw	1,500.00
Ten-Tec Titan amp 1kw	2,500.00
FLUKE Meter Model 77	65.00
SHURE Microphone Push to talk Model 444	30.00
3-500 tubes	100.00 ea.

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

For Sale

Crank-up tower, 4 sections (collapsed length=12' 9"), triangular- 18" bottom to 10" top. 3' top bolt on tapered section with rotor head and thrust bearing installed + 6' of pipe above the taper. Base plate 22" x 22" with 3 studs to set tower on. Lifting winch had a motor at one time but now gone, leaving a spline shaft sticking out of the worn gear box to which a handle or motor can be grafted. Located in Poway, weight 400+/- lbs for tower alone and 150+/- lbs for the top piece, base plate and winch - \$250. Gary 858-748-6076 wb6gsn@gmail.com

For Sale: HUSTLER 6BTV High Performance HF Vertical Antenna system, 80/75/40/30/20/15/10 m, complete with 250ft spool 14 ga wire and all precut radials, SS Tilt base and SS Radial plate. Used one year. Bought new at \$400, will sell for \$200. contact: Rich Ortloff KE6DUG 760-861-1406

For Sale: 6BTV Vertical Antenna. Crank up Tower with rotor and 3 El Yagi. Must be taken down and removed. Call Lee, (760) 726-1097

Annual Club Auction

by Michelle W5NYV

It's almost October, and that means it's auction time. Come to the General Meeting on October 6th and join the fun!

Where: 3096 Harding Street, Carlsbad CA

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.

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.

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

Education

There has been interest expressed in classes for the following:

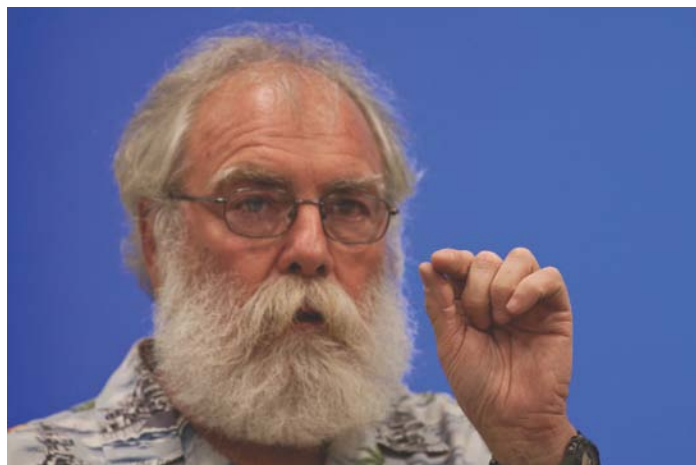
Initial (Tech) licensing classes
General and Extra upgrade classes

Advanced instruction (Not just exam prep)
Getting on the air
Programming radios

We'd like to get an idea of interest in these, both from potential students and potential instructors. Please email Ron K2RP at K2RP@ARRL.net and let me know of your interest.

Learn Morse Code While Driving

Burn it to a CD and listen to it in the car, etc. Here's the link: www.tinyurl.com/morsemusic



Military Radio Redux

August membership meeting report

by Michelle W5NYV

Ed KG6UTS presented on military radios. Several members commented on how enjoyable and informative the program was. Ed collects and uses military radios from World War II through the 1950s. His motivation is threefold. First, in order to learn about history. Second, out of a technical interest. And finally, because the radios are fun to play with. Ed described the military collector community as a genuinely nice, social, and active collection of people that has swap meets, conventions, and ham fests. The community that Ed described is much less hierarchical than some other ham radio groups.

His Field Wireless photograph was excellent, and an early comment in the evening about the propensity for hams to bring loads of radio gear home from swap meets was met with a statement that none of us were "as bad as the guy who brought home eight halftracks."

The living history aspect of military radio collection was vividly shown in the first anecdote of the program. Ed assisted in restoring a radio room in a ship back to the way it looked on 6 June 1944. Unlike many restorations of radio rooms, this radio room was restored to working condition.

For those of us in the audience that have little exposure to this vintage of radio, the evening was quite the education. LOPS, RCA RBC, R390a, TDE and RAS - all introduced with excellent photographs from Ed's slide show. 130 watt CW, 30 watt phone radios for ship-to-ship, and very early HROs were next. No, not the store - HRO here means "Hell of a rush order." The TBL and TDE were very large, with the TDE weighing 800 lbs.

Aircraft Radio Corporation (ARC-5s, etc) were discussed, with the very active collector market described in compelling detail. World War II sea-plane radios were talked about next, with a comment from the audience of "It was used as the anchor when landing."

Ed showed photographs of people using heliographs (used from 1860s until 1970s). Next, he talked about a type of Vietnam-era special forces field radio, a 15W one-time-pad burst-mode radio. After keying in your message, you wound up the radio with a mechanical movement and it sent your coded message at 300 words per minute. Ed described this GRA-71 as "the Mack truck QRP set". Thank you Ed for a great program!



Above, Ed KG6UTS points to the hard-to-find dynamotor on the ARC-5.
Below, military radios brought for demonstration. Photos by KB5MU.



Below, Ed KG6UTS points to a detail during his presentation on military radios. Photo by KB5MU.



Minutes

Palomar Amateur Radio Club Board of Directors
July 14, 2010

The meeting was called to order at 7:19 PM by President Dennis Baca KD6TUJ. The meeting was held at the home of Al Donlevy W6GNI. Present at the meeting were:

President Dennis Baca KD6TUJ
Treasurer Georgia Smith KI6LAV
Secretary Gary Kent W6GDK
Director #1 Paul Williamson KB5MU
Director #2 Conrad Lara KG6JEI
Membership Al Donlevy W6GNI
Don Johnson WD6FWE
Greg Gibbs KI6RXX
Scope Editor Michelle Thompson W5NYV

Treasurer's Report The treasurer's report for June and July presented by KI6LAV. Total assets as of 6/30/2010 are \$13,554.89. Motion to approve both reports by W6GDK, second by KB5MU. Approved

Secretary's Report- Minutes of the May meeting were presented by W6GDK. There was no meeting in June due to lack of quorum. Motion to approve by KB5MU, second by KG6JEI. Approved

General Meeting: August meeting will be by Ed Zeranski KG6UTS on Military Radios. September is Robert Todd KJ6RET on his solar station. October is the annual auction at the Harding Community Center in Carlsbad.

Membership Report: Current membership is 291.
Repeater Site/Technical Report: The 147.075 was reported to be off the air, but it mysteriously healed itself. We still need a PA. Loren Hunt AD6ZJ is resigning as Technical Chairman due to extensive overseas travel for work. Some antennas have bent elements. There will be a work party on August 15. Meet at Mother's Kitchen.

Field Day – planning is progressing on our Field Day for 2011. Greg Gibbs KI6RXX has volunteered to be the FD chair. Discussion regarding two potential sites was held. One site is in Oceanside, and would require the City of Oceanside to be an additional insured if we choose the Mesa and College site.

NEW business:

Annual picnic is scheduled for August 29, at 9:30 AM. Motion by W6GDK to reimburse Conrad Lara, KG6JEI \$180.00 for the picnic reservation. Second by W5NYV Approved

After tedious discussion and aborted motions, it was moved by W6GDK that we approve payment to Roberts and Roberts Engineering Services \$223.61 for Field Day food. Second by W5NYV. Approved.

Don Johnson WD6FWE proposed making some coaxial stub filters for the antennas for Field Day. He will demo a 20 meter version at the picnic.

Motion to adjourn at 9:12 PM by W6GDK, second by W6GNI. Approved. Next meeting will be at home of Al Donlevy W6GNI on August 11, 2010 to start at 7PM. Submitted by Gary Kent W6GDK

Below, concrete around footing is chipped out for bolt inspection. Photo by KB5MU.



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A Letter From Tom Dailey W0EAJ

What fun to find this site. I just finished a story about my first rig, bought from WESTERN RADIO, back in 1963... a Heathkit "Twoer" (Lunch box)... and was musing about, then found this page.

I spent many years in Uncle Samuel's Canoe Club, stationed there in San Diego, and LOVED IT. Even lived on Pacific Beach for a while, but that's another story HI HI HI.

I wonder if anybody has any photos of the OLD Western Radio? I'd love to see one again. They sold me the "slightly used" (boy, was THAT an understatement) radio, and after removing the extra pounds of solder from it, I actually got it working. I knew a bunch of guys from National City, who were connected with the old CD (now ARES) station of WA6UUO. It was under a set of concrete bleachers in a park, and like the other stations of its genre, they had a Johnson Viking II, some manner of receiver I can't recall, and a WHOLE BUNCH of surplused Hallicrafters "Littlephone" FM rigs, converted to 2m. Doug Decker - WA6TAD (SK), and WB6BOX (now N6FM) were the two guys I knew best, and I still vividly recall the day that Doug used a "nibbling tool" on the roof of my pretty '60 Chevy Impala for the quarter-wave 2m whip I'd bought... he got tired of me whining about not bugging up the car, so the next thing I knew, there was a drill bit sticking out of my roof. That fixed that.

I and 5 other guys got the club station at the Fleet Anti-Submarine Warfare Center going (again). It was W6DCM (Donuts, Coffee, & Milk..... or Dis

Carded Merchandise); that was in 1965, and in 1997, I ran into Bob Wagner - N6DUR (he lives in Clairemont) on 20m, and discovered we'd BOTH used the same equipment, only 8 years apart!. I was stationed there with COMTRAPAC, as a Staff Radioman.

I shall never forget the hams of the San Diego area. They always made me feel welcome, and provided friendships that were a pleasant difference to a young sailor, far from home. Many of the fellas I knew, are no doubt Silent Keys now, but the fun times, fox hunts, picnics, and "tech-support" they gave, was NOT wasted.

My heartiest 73 to all of you. It's been a long time since I drove up to Cabrillo Monument or Mount Helix, so I could "maybe" work DX on the "twoer", or using slope-tuning, maybe hear that NEW "repeater" they'd installed in Los Angeles. Some of the other stations that were around at the same time..... WA6NKC was over at the Naval Training Center, and WA6TBY was at North Island NAS.... can't recall what the others were, but of course.... all the callsigns are gone, save for W6DCM.... a very strange cat ended up with that one..

Warmest 73
Tom Dailey - W0EAJ*

*WA0EAJ "Electric Apple Juice" back then

Below, the bolt is exposed for inspection. Photo by KB5MU.

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San Diego Microwave 10GHz and Up Contest Prep

The focus of the San Diego Microwave Group meeting for August was all about the "10 GHz and Up" Microwave Contests on August 21/22 and September 18/19.

This contest is like no other. You can work the same other station multiple times as long as one of you has moved at least 10 miles from any former location. The score is made up of the kilometers separating you from the other station, and it is cumulative over the two operating periods. You get 100 points for the first time you work the other station on each band above 10 GHz.

At our meeting we provided all kinds of information especially for all the new members who haven't been involved in these contests, as well as to update the old-timers on any changes they may not be aware of. Places to go, where to aim your antennas, and how to use the 440 MHz Cactus system for liaison, etc.

73s from Ed Munn, W6OYJ
remunn@earthlink.net



Above, Ed Munn W6OYJ at the range party. Top of page left, a group photo of range party participants. Photos by KB5MU.

SDMG is happy to announce that we sponsored five new operators during this contest- in addition we had two 'old salts' that returned to 10GHz after being absent for a few years.

Greg
K6QPV



PARC Members Participate In 10GHz and Up Contest

Several Palomar Amateur Radio Club members successfully participated in the first weekend of the 10GHz and Up contest. On Saturday, 21 August, a group comprising 9 stations formed a caravan and ascended San Miguel. Stations were set up a short walk from one of the parking lots, with plenty of sun shades providing protection against the midday warmth. Activity began at about 10am. Stations were struck and packed up for departure when the wind began to tear down the pitched and tied tarps after 2pm.

On Sunday, 22 August 2010, most of the Saturday group assembled again to tackle Mt. Laguna. After some reconnoitering and some strategizing, the group was set up along a dirt road with a commanding view of the horizon that included Arizona. Conditions changed throughout the day, but there were several impressive contacts made.





Microwave contesting has some significant differences from HF contesting. An HF contester usually sits indoors, at a traditional ham station, and doesn't usually move around during the contest. The antenna at an HF station is normally up above the house on a tower. The antenna is usually a Yagi, and (in general) is rotated towards the direction the desired station or stations. A microwave contester usually goes out to a location on top of a mountain or hill in person, and may move several times during the contest. The rules

for 10GHz and Up reward distance, with points given for unit distance between the two stations in a QSO. Making arrangements for contact attempts is encouraged. This is not the case in HF contesting, where virtually all contacts are supposed to be made without outside assistance or prior arrangement. Repeated contacts on the same band can be made in the 10GHz and Up contest, as long as one of the stations has moved at least 10 miles. The range for microwave contesting is different than the range for HF contesting. It's an achievement for a Southern California station to contact a station in Arizona, while HF contacts can be worldwide.

First Contest for "Hello Giggy"

I had such a great time during the 10GHz contest!

I got several questions during the contest about the head covering I wear during hot weather. It's called a tagelmust, and is generally worn only by Tuareg men. I borrowed the practice after spending some time in Anza Borrego and the Black Rock desert. I learned the hard way that when the temperature is warmish (85+) and the air dry, that a tagelmust (<http://en.wikipedia.org/wiki/Tagelmust>) is the way to go. It's nonintuitive to cover up the head when it's hot, but after working side by side with various groups, at various times, at various places, I have learned that those that leave their skin exposed to the heat end up less comfortable, more dehydrated, and more fatigued by the end of the day. Especially in cases where it's windy and dusty, there is simply no comparison for cotton cloth.

Paul KB5MU snapped this photo of me taking a photo of him taking photos of the group on Mt. Laguna. After the 10GHz rig failed (more on that next month), we did several hours of photography at the soon-to-be-demolished abandoned radar site.



The 2010 Laguna group: (Front row R to L) Paul KB5MU, Michelle W5NYV, Joe K6PHB, (Second Row) Tom K6VCR, Dan K6NKC, Ed W6OYJ, Lee KD0IF, Dave (our host for the day) WB6TFC, Rod N6JND, Art KC6UQH, Greg K6QPV. Photo taken by Random Guy At Laguna Lodge.



Work Party Report

by Dennis KD6TUJ

Some of the gang went to the repeater site on Palomar Mountain on Sunday, August 15, 2010. Planned was a general maintenance of the property, check of power output and SWR on the repeaters, a check of the 6 meter antenna, and a check of the tower base bolts by sampling one footing. Things seemed to go well starting with cutting a downed branch. Al Donlevy was very busy with yardwork. Pete, Michelle, and Dave got the generator started after it sat unchecked for quite a while. Al discovered the air/fuel needle was used to shut off the gas instead of using the fuel shut off. Bob, Cynthia, and Pete came for general help and a tour of the site. Batteries were checked for water level, and all batteries looked good.

Dennis did the power checks with the aid of Paul. Bob, Michelle, Paul, Pete, and Dave laid the 6 meter tower down to inspect the antenna. It had only has one ground radial of the three that were there at one time. We first checked the SWR on the 6m antenna and feedline and found it to be low. We suspected it was low due to loss in the coax. In order to test that theory, we disconnected the coax from the antenna and measured power out to the feedline with no antenna connected at 2W. We then measured power at the antenna end of the feedline, which was 1W. This is a reasonable amount of loss for this length and type of feedline. About this time the meter started reading zero for all measurements, and had to be swapped out with another meter.

The 146.700 packet repeater was found to have some serious antenna problem with 12W out and 10W reflected. To prevent damage to the repeater we turned it off until we can go check the coax and antenna with a time domain reflectometer.

Bob decided to check and note the DC current consumed when each repeater was in use. 6m consumption was about 1A during transmit,

which was consistent with the low output power that has been observed. The 447 repeater went from 1.5A standby to 5A transmit, the 075 machine went from 1.5A standby to about 4A transmit, and the 730 and 130 both had about 2A in standby and both pulled about 3.5A in transmit.

The 1.5A standby current was the total for the whole site, and not a standby current for each repeater. These currents were measured at about 55 volts (48 volts nominal).

Don, Cynthia and several others chipped out the tower leg for the visual check of the leg mount bolts. The bolt legs had a light coat of surface rust. Not bad for a tower sitting on a base set by Stan in 1984. Paul read the directions and sprayed galvanizing on the bolts. Dennis then sealed the legs back into concrete.

Don helped to find the problem with the temperature-activated cooling fan in the generator building. After not being able to trace power through the walls, it was diagnosed from the connection box outward in both directions. We could not find the temperature switch, so off we went checking the housing of the fan, and it was not there. Where did the power come from? We checked the light switches (who knows after so many years and changes of members) for an extra lead. Then right in front of us, there it was next to the breaker box. The best place to hide something is right in front of us. Worked very well. After finding the sensor switch we noted it was set for 110 degrees, the cause of our problems. Resetting to 85 degrees turned on the fan for this very hot room.

Michelle made written notes for the record, while Don, Michelle, and Paul made photo records to go along. Before leaving, Conrad

did a final check of the site for loose/soft dirt spots. He decided to park in the softest spot possible. Dennis came over to try and get the truck out. Tried to rock it by going forward a ways, then powering out in reverse. Tried it a couple of times. Worked great, if you like digging ruts and blowing dust to impair everyone's vision. Finally decided to go forward, either making it out or getting stuck even better. Aren't hams great at making things better. Making the plan to go in and



make or bury it trying, it was noted that there are a few stumps spaced just right to slide through with an inch or so left. Using the human markers of Don and Conrad on the stumps, Bob help guide Dennis through the course. Driving in by Don the first stump was



- The 6m antenna needs replacing.
- 730 repeater needs to have the capacitors replaced.
- Our ATV system is being refurbished, but we don't know if the fellow that volunteered needs help or additional resources. We need to check and see how it's going.



felt just barely, but continued, going through the course to make a hard right to slide by the generator building, and making it out. We will now have a no parking area on the entrance lane. Additional help was given by Art through

advice and equipment loan. The day was beautiful with moderate temperatures, sunshine, and gentle breezes.

Here is the to-do list generated at the work party. The list has items that are related to the repeater site but also includes other tasks and jobs that club members are interested in doing or getting help with.

- Don Johnson will be writing a filter article.
- Pete from Oceanside had a handout about the antenna ordinance.
- Dig out concrete at base of tower and inspect tower supports.
- Check SWR and rated power for all repeaters.
- Power Puck Project: Rig remote control power system. We have the hardware, need work.
- Design and build a battery monitoring system.
- Improve the 075 machine power amplifier. We have the hardware, we need work.
- Spectral purity check. We need a spectrum analyzer to do this.
- Control receiver antennas are all bent to heck and need to be fixed. This requires tower climbing.
- ATV antennas include a BBQ-style dish, a box, and a vertical. The vertical has missing elements.



- Webcam on tower!

Conrad KG6JEI and Dennis KD6TUJ went up to the repeaters on Sunday, August 22 to check on the 73 machine, and sent in the following report.

"We found that the power lead to the preamp came loose. We tried to connect it but the lead would not stay as we are trying to set the lead to a small nub.

We then decided to bring the pre-amp down to check and also check the BNC connector. All was not lost as we found both ground plane elements for the six meter antenna, so we put them back on. Imagine, a 5/8 wave 6 meter antenna with all three ground radials on the hill.

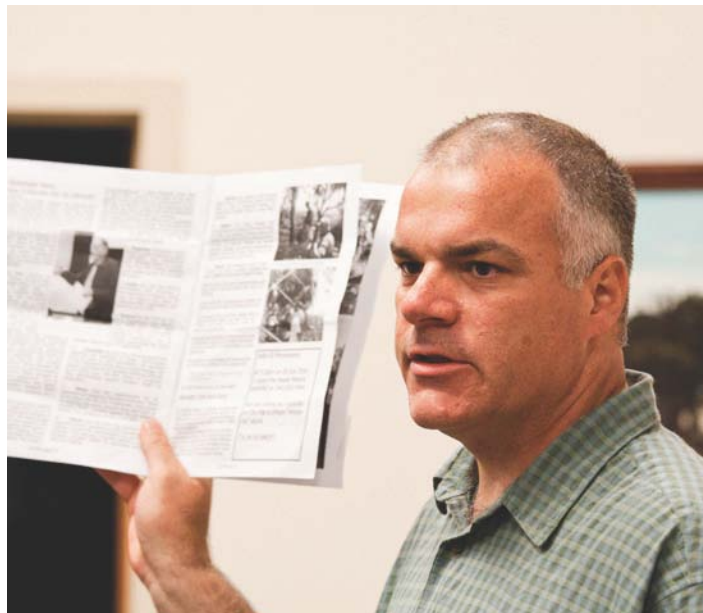
Conrad also noticed that a hardline was disconnected to the sunken building. After all of us walking right by the connector box last Sunday and no one noticing, it was good to find. This may be why the 146.700 packet repeater was with a high SWR.

We reset the connector on the hardline and Conrad will test it later. We weren't planning on finding the SWR problem today, so we did not take any watt meters."

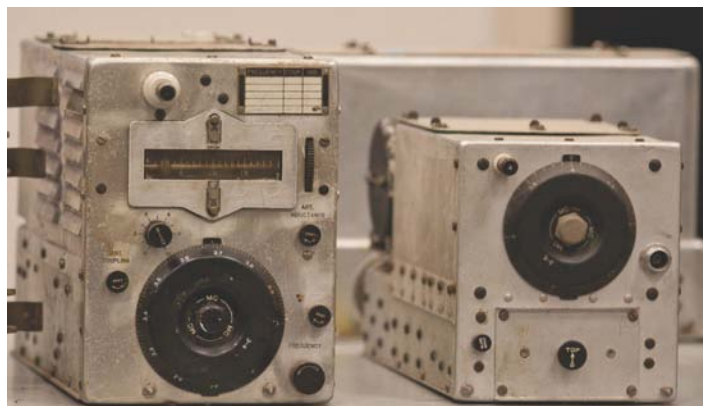
Thank you to everyone that has helped with the repeaters this August. The site looks better and a lot of progress was made towards improvements.



Above, Gayle KG6O expertly upsells books for a good cause. *Ham Radio For Dummies* - buy one to help out the utes! Below, Wild Bill WB6BFG announces the roving station for the VHF/UHF contest. We're hoping to get a full report for inclusion in a future *Scope*. Photos by Paul KB5MU.

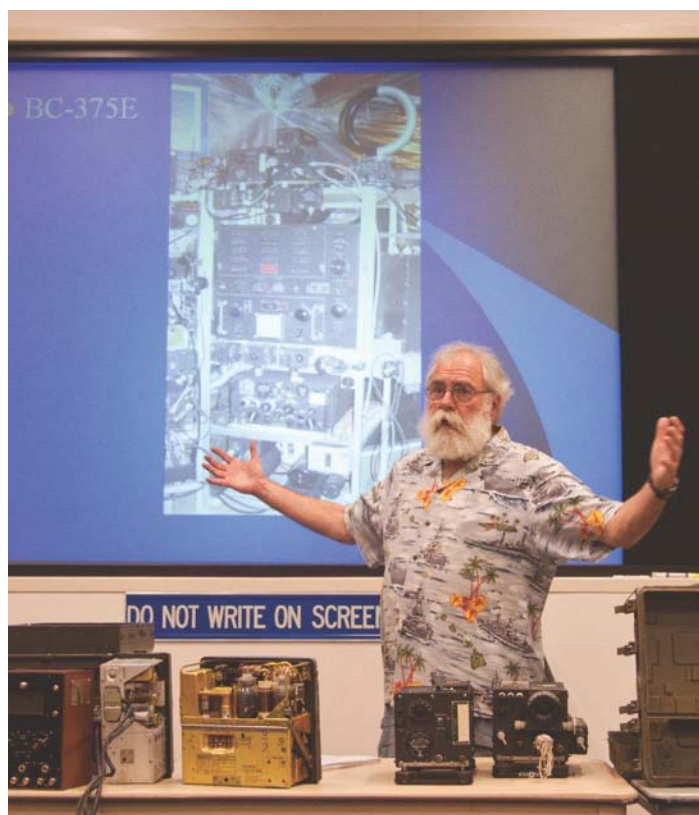
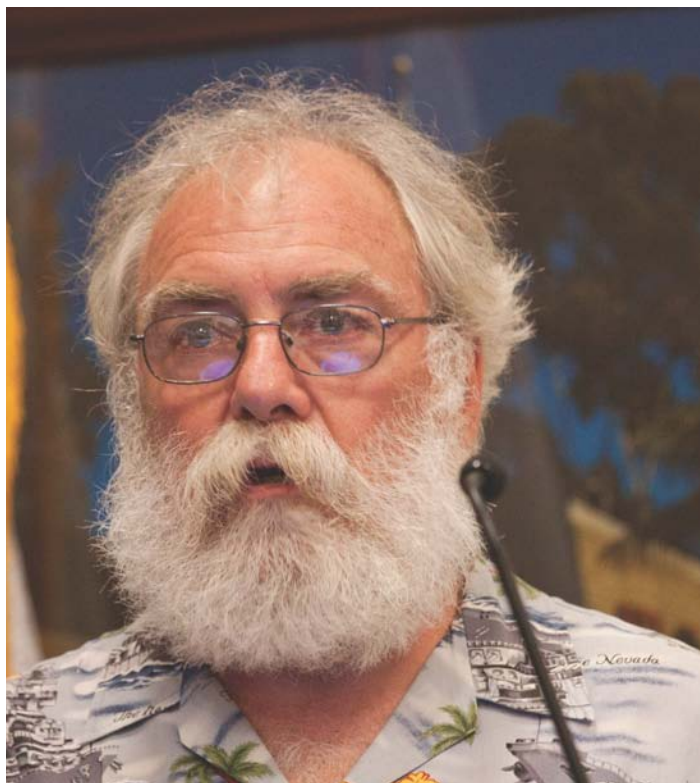


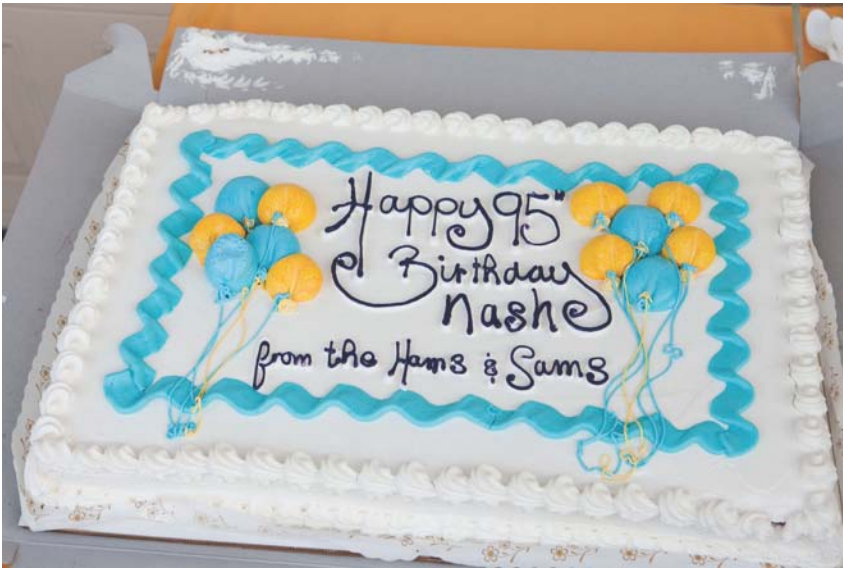
Above, Fred Atchley's son brings everyone up to speed on the latest plans for influencing Oceanside's proposed antenna ordinance. This is a critically important issue to amateur radio in San Diego. Help is needed with the effort to make sure that amateur radio antennas are treated fairly under the laws of all communities in San Diego County. Below, military radios demonstrated at the August PARC meeting. Photos by Paul KB5MU.





Above, Dennis N6KI poses with a piece of test equipment that W5NYV brought home. The rest of the photographs on this page are from Ed KG6UTS program on military radios. Photos by Paul KB5MU.





Above, Stan Rohrer W9FQN (recently accorded "legend" status in PARC from none other than Nash) talks with another well-known local ham, none other than Ed Ross N6GZI. Photos by KB5MU.





Nash W6HCD at 95! Here are some photographs from the celebration.



"That must be the secret to Nash's longevity!" -Some Guy at Nash's Party (We think it was Dick K6KAL) Photo by KB5MU.



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Featured Program:

At 7:30pm, Palomar Amateur Radio Club will host a program at the monthly membership meeting on 1 September 2010. The presentation will be on SoLar Power & Emergency Preparedness by Bob, KJ6RET. The presentation will include a practical explanation of how to use Solar Energy for Off-Grid Mobile and Portable applications and the use of Modeling Software to design Critical Emergency Systems. It will overview a real life experiment to prove concept for the usage of Solar Energy for Emergency Communications and Everything Else in short term or long term disaster scenarios. It will include a hands-on demonstration of a Portable Solar Power Station and the open house of a Mobile Solar Power Off-Grid Trailer System. Arrive at 7:00pm to socialize. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.