

JULY 2013

SCOPE

THE PALOMAR AMATEUR RADIO CLUB NEWSLETTER



Save the Date

Club Meeting 3 July 2013

The 7:30pm program is about Digital EME (Earth Moon Earth)

Board Meeting 10 July 2013

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

IARU Worlds! 13-14 July

Contact as many other amateurs around the world as possible using 160, 80, 40, 20, 15, 10m

Fold & Staple for JULY SCOPE 2013

Al W6GNI And Kathy
Jo KB6NMK And Toby Ashley
Dave KI6LKP And Janet Meyer

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

I have for sale an MFJ-1786 Super-Hi Q loop antenna for 10-30 mHz. In excellent condition and handles 150 watts. Can be mounted horiz or vert. \$300 and pick-up in Vista.

Marsh 760-536-3220

For Sale

Four rolls of Mil-C-18/ UG218. The rolls are about 140 feet long with N connectors.

Insertion loss is .9 dBa per 100 feet at 150 mHz. \$250.00 per roll or \$800.00 for all of them.

Glenn
N6JAI
619 654 1402

For Sale

Swan Mark II linear amplifier. Clean, working well \$650.

Heathkit HP23B Power Supply with 11-pin cable. Looks and works very well. \$70.
Ron K2RP@arrl.net (760) 436-8109

For Sale

The Alinco DJ-580 illuminated keypad button does not work.....No Backlighting of keypad, Transmit coverage is: 130-173.995 and 400-519.0995 with Mars/Cap Mods completed, Radio has no worn pads and all LCD display functions work as new, case looks like new, this radio comes with (1) EBP-20X 7.2 volt 1650Mah battery used only a few time before put away, (1) EBP-20N 7.2v 700Mah pack (not sure how long it will last) (2) EDH-11 dry cell pack (1) Yaesu dual band antenna and (2) Alinco EDC-24 Slow chargers and (1) DJ-580. I have checked this radio on simplex and our local repeater and it sounds fine, you would be hard pressed to find a radio in better condition than this one. excellent condition, As with all electronics this radio is sold AS IS, It will not be DOA, asking \$100 OBO, James 760-722-2797.

CQ Field Day... CQ Field Day...

I keep calling CQ Field Day but no one is responding! Oh wait, that ended at 11:00 AM this morning.

First of all, I would like to send out a MANY THANKS to all those who helped out in any way with the planning, setup, operating, and tear down of this years Palomar Amateur Radio Club Field Day. Although the points have not been fully collected or scored, I can tell you with great confidence that this years Field Day was a success. Why? Not because we are going to score First Place, although that is surely my hope, but because we had FUN!

The key, going into an event like this, is to start planning early so that when we get to the actual operation of the event, everything runs much more smoothly. This year was no different and we wasted no time getting ready. In January as soon as the new board took office, I was named Field Day chair almost immediately. Charlie NN3V announced that we would hold a series of work parties to do a complete inspection of the clubs various equipment for Field Day. And boy, he sure wasn't kidding! We held at least SIX work parties. During this time we removed, inspected, and replaced all the winch cables on the club towers as well as replacing most of the winches. Every tower was fully raised and lowered to ensure smooth operation and we also tested SWR on the 5 Yagi antennas. In addition, we checked the rotors and control boxes, station boxes, and even rotated some of the tower bases for better transportation.

Field Day is a public demonstration of the emergency response capabilities of Ham Radio and unfortunately that means that every year Mr. Murphy gets a special invitation to our event. This year Dennis KD6TUI, Richard KJ6WUY, John WB6IQS, Danny KK6AOZ, his XYL Kim KK6APA, Conrad KG6JEI, and myself met at 9AM at ToWizard to start loading the equipment for transport to our site in San Marcos. This year, as Dennis had to work through the weekend and left us early so we where mostly on our own. OK, Loading of the equipment went fine. We had more than enough transport room and didn't even use John for transport. It was when we started driving off that we realized that the tires on the trailer of towers were

low. Considering we where at a tow yard, this should have not been a problem. There was plenty of air on site. Of course two of the tires had to become unseated from the rim! #\$\$%^&%\$#... A quick call to Dennis reminded us that we had this same problem two years ago and that a ratcheting tie-strap wrapped tight around the tread would help the tire re-seat as we filled it. 15 minutes later and we were on our way. We made it. We arrived on site around 11:30 AM and began setup only 30 minutes behind schedule. On site we were also met



with our fair share of problems. Although we had done all that planning we where somehow missing 3 rotator pipes, a rotator control cable, and also managed to somehow mix up all the station boxes we had spent so much time organizing. Of course we realized this after we sent them to opposite corners of the field. We spent the whole day walking back and forth between the station spots looking for missing items. Not one single station box was set up correctly and had everything it needed. John WB6IQS was nice enough to run to Home Depot and grab some fence pipe. This solved our rotator pipe issue, however when we installed the pipe on my station first it was too long. We didn't realize this until we raised the tower in the air and the antenna wouldn't fall flat. Not a huge issue, only that we made the mistake on the heaviest tower there. We attempted to use the winch on K6JPE's Jeep to assist in lowering it, but didn't plan on enough people to take the weight in case our winch plan failed. It did! The winch cable slipped loose and the tower was too heavy for the people at the lowering end. It came crashing down and one of the elements broke and had to be repaired. Charlie's station also had a number of issues that had to be solved during raising of Emmett's Tower including a winch failure. Thankfully, many great minds pulled together and all the issues were solved. Saturday morning, Don picked up

the missing rotator cable and we raised the last tower. No other major issues were experienced during the remainder of the event. Murphy must have been too pooped to poop by the end of Friday and gone home.

11:00am Saturday morning and all stations were on air calling CQ Field Day. Although there were some issues with interference between the stations, GOTA was the only station that was majorly affected. Switching bands and antennas to a 40m inverted V lessened the issue. The Boy Scouts started showing up around 12:30pm and Fred AE6IC started organizing the Radio Merit Badge Class. Like their motto, they were well prepared. They had a large tent where they held the class and showed up with 11 canopies and enough chairs to go around. We had 29 Boy Scouts attend the class and they completed their on the air requirement operating QRP on the WARC Bands. Thankfully this caused no interference to the other stations on site. The Young Ma-

rines Group were also in attendance and assisted with various activities during Field Day and got to operate on GOTA.

Around 12:45pm, the Mayor of Oceanside, Jim Wood showed up (photo below). I walked around with him and gave him a tour of all the various stations and



activities. He seemed to thoroughly enjoy his visit with us and was a pleasure to talk with. He even got to say the Pledge of Allegiance with the Boy Scouts and gave them a short speech. Mayor Wood posed for many photos and, during his tour with me, presented me with a Challenge Coin for Oceanside. Challenge coins have long been a part of US military tradition. Legend has it they got their start during

<p>HAM RADIO OUTLET</p> <p>Jose XE2SJB Jerry N5MCJ Joe N6SIX</p> <p>H R O</p>	<p>KENWOOD rf CONCEPTS DIAMOND US TOWERS KANTRONICS YAESU, MFJ, ICOM BENCHER, Inc. HUSTLER COMET AMERITRON</p>	<p>Astron, AEA, OUTBACKER Larsen Antennas TEN-TEC Hy-gain, Tri-EX, Cushcraft And Others too Numerous to Mention!</p>	<p>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.</p>
<p>Open: 10a.m. – 5:30p.m. Monday thru Saturday <i>Ask about our great prices</i> 858 560-4900 or toll free 1-800-854-6046</p>	<p>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!</p>		

WWI when an allied pilot was shot down behind enemy lines and had to rely on his squadron specific coin to ensure safe passage back to his base. Since then, the coins have found their way into other professions. Today, these highly collectable trinkets are widely distributed by members of law enforcement, fire fighting and paramedics.



During the event on Saturday we also had visits from Joe N6SIX (Chairman of SANDARC, pictured below), Steve Early AD6VI (ARRL Section Manager San Diego), and Arnie Lewin W7BIA (Southern Region ACS Officer Cali-



fornia Emergency Management Agency). SANDARC Testing was held on site with coordination from Harry W6YOO and Jo KB6NMK. Testing was a success. We had two people pass exams. One was the same Pilot who flew over us with a chopper earlier in the day who passed the Technician Exam. The other was an upgrade to General. Food was Delicious as usual and provided by Gina N10W and her Psycho Kitchen. We had Hot Dogs for the Boy Scouts for Lunch and Tri-Tip for Dinner.

Midnight came very quickly and I started my three hour shift on my station. 20m was still wide open. Calling CQ, I had many pileups and worked many different stations. Around 3:00am, Loren AD6ZJ, took over and switched to 80m. 20m was finally dying. Overall my station made 948 total QSOs with 117 on 80m and 831 on 20m.

Tear down on Sunday was a breeze. Everything came apart easily and we left the site around 2:30pm.

I sincerely hope that everyone had a great time this year and thoroughly enjoyed themselves. Along with a greater public exposure, our main goal this year was to have FUN. I think we far surpassed that. For those new Hams, or new Hams to Field Day, it was a great experience to see how all the equipment goes together and what is involved in setting up for an event like this. I hope it sparks your interest to become more involved with the efforts of next years Field Day and with the efforts of the club in general.

I haven't decided weather or not I will volunteer for the position again next year. I am too worn out to decide right now and want to give someone else a chance to take it. This year's efforts have sparked a lot of interest and ambition in me to press on forward with next years efforts however, Ambition is a poor excuse for not having sense enough to be lazy. We'll See.

73 From Greg KI6RXX (photos submitted by Greg KI6RXX)

Participation points are earned by members supporting Palomar Amateur Radio Club. Support comes through attendance at meetings, work parties, operating events, and community support. These points can be redeemed for tickets at the annual picnic held in August. Points can accumulate up to a maximum of 20 per individual. Historically there are several gift certificates available to win. The real reward is your participation in ham radio. (But maybe a small bribe (*editorial note: to the EDITOR!*) will help!)

Field Day Photos from Mike NA6MB







MIKE NA6MB OPERATING, PHOTO FROM KI6RXX

Log Book Of The World

In the past the FCC required maintenance of a log of all QSOs for one year. This requirement has been dropped, yet many hams continue to log their activity. This gives them a record for awards and other personal information such as band conditions, signal reports, etc. Today, most hams use computer logging.

In 2003 the ARRL rolled out Logbook of the World (LoTW). This online system allows hams to claim and verify QSOs with others to qualify for awards such as DXCC and WAS. It also provides an additional online electronic backup of your log. (You do of course regularly backup your log, don't you?) LoTW has several layers of security utilizing digital certificates minimizing the chance of fraudulent claims. The database is free to licensed hams, although they charge a modest fee to claim award credit. As of early 2013, approximately 500 million QSOs have been recorded by more than 57,000 people.

Let's get started by registering. Have your current FCC license available and a method to record four passwords. If you lose or forget your passwords, you will have to start over. Additionally, these passwords are case sensitive.

Go to the LoTW webpage (www.arrl.org/lotw). Download and run the latest version of "Trust-edQSL." There are separate Windows and MAC versions, but we'll deal with the Windows version here. The Mac version is similar. This will install two programs: TQSLCert and TQSL.

Run TQSLCert. Answer YES to request digital certificate. Follow the subsequent instructions. You'll be prompted to enter a password (call this PW1) to request a certificate. Use the callsign and address on your license for this first, primary certificate. If you have used other callsigns or portable identifiers, you will set up separate certificates for each of them later. But you need to get your primary certificate set up first. Don't forget to record this password. When prompted to digitally sign the certificate request, chose "unsigned." You'll be prompted to save the certificate request file (labeled as a .tq5 file), then send it to the LoTW team at the ARRL as either a) an email with attachment, or b) uploaded from the LoTW webpage.

The ARRL will send a postcard to your address on file with the FCC with a second password (PW2). With this postcard in hand, sign onto the LoTW website and follow the link in the yellow box. You'll

go to a page to enter PW2. You'll receive an email containing a username (usually your callsign), a third password (PW3), and an attachment with your digital certificate (a .tq6 file). Double click on the .tq6 file and it will be imported into TQSL CERT. No one can have too many passwords, so if you want to save your digital certificate onto a storage medium, a fourth password may be used.

The hard part is over! You're now ready to upload your log data to LoTW.

Different logging programs have more or less automated the uploading process, so at this point you should review the documentation for your specific logging program to see how it handles uploads to LoTW. To be thorough, we will describe the steps required for a logging program which does not automate the process at all. So you may or may not need to go through all these steps, depending on your logging program. Using your logging program, export and save the QSOs to be uploaded in either the ADIF (amateur data interchange format) or Cabrillo formats.

Run the program TQSL. The first time you upload data, you will need to define your station location in TQSL using "Station/Add Location." Once that's done, select "FILE/Sign and Upload ADIF or Cabrillo File." It will ask you select the ADIF or Cabrillo file with your data, and then it will ask you for PW1. (Get this right - use PW1, not PW2, PW3 or PW4). At that point, it will encode and upload the file to the LoTW database.

You can now log into the LoTW User Website (www.arrl.org/lotwuser) utilizing your username and PW3. Most of the time, it handles data very quickly, so your data may already be there. At the end of major contests, it gets hammered, but most of the time it's very fast. After you sign in, you can review a summary of your data at the top of the page. Clicking on "Your Account/Your Activity" you can check your upload for errors or QSLs. The "Your QSLs/Most Recent QSLs" links take you to a listing of matched QSOs.

Applying for award credit using LoTW, such and DXCC or WAS is beyond the scope of this write-up. But once you are comfortable with using LoTW, you should be able to go ahead and set up the award accounts you want. LoTW can speed up the award process by months, maybe years. We encourage you to become a LoTW user.

73 ES GUD DX DE ROB WA3IHV, JOHN NA6L, RICK KØXB

PC Tips from Dick K6KAL

PC Tip No.1:

How To Turn Off Indexing Of Your Local Drive In Windows 7 / Vista /XP

If you are troubled by a slow computer used in your shack, or want to increase the performance of your Windows pc further, then turning off Indexing of your local drive(s) is simple way of boosting the performance. This option is automatically set in Windows XP, Windows Vista, and Windows 7. Indexing is enabled because it helps Windows index your files and folder for faster search.

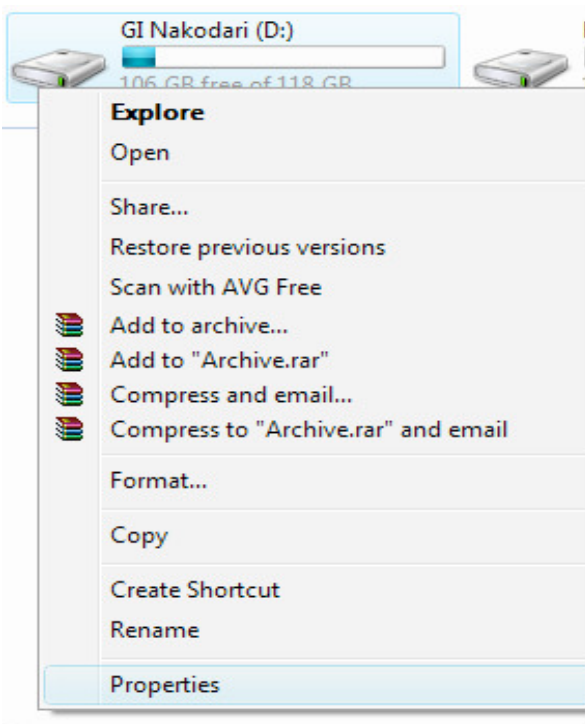
You must ask yourself, how often do I search my hard drive, and would a few extra seconds be an issue. If you answer is seldom or I didn't know I could do that, the steps that follow are for you.

You must also be thinking why turn it off, Microsoft enabled it due to a reason? Well, yes, basically you are right here but sometimes Microsoft choices are not for you, but the masses. Microsoft might have forgot to make their search better and more powerful because they were focused more on releasing Windows on time, or trying to fix that last Blue screen of Death issue.

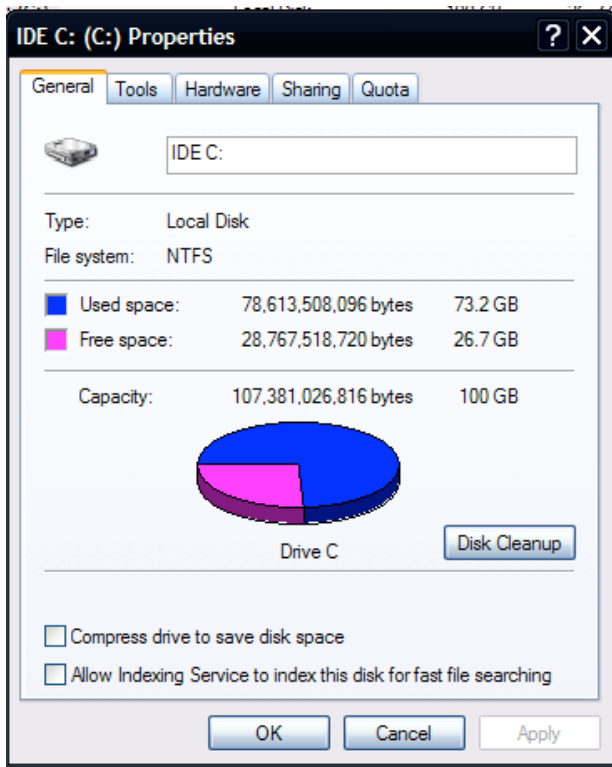
You could use **Google Desktop** or **Windows Search** alternatively which are both faster than the build-in search and of course more powerful, but counter productive. They consume system resources just as Microsoft Indexing does, so be warned.

But that being said let's get down to business.

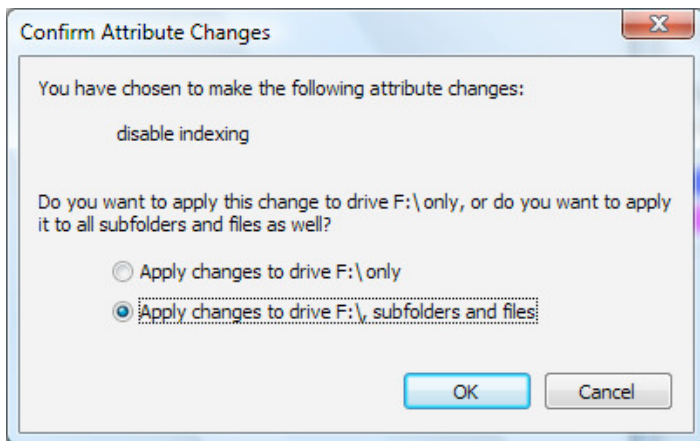
To Turn Off Indexing on your local drive open **My Computer**, right-click any **Local Drive**(C, D, etc) and go to **Properties**.



Now in the General tab you will find a checkbox at the bottom named "**Index this drive for faster searching**", uncheck it as shown in the screenshot below.



It will now ask if you want to turn off indexing only in the root of the drive or you want to turn off indexing for all files and folders? Select "[Apply changes to all files and folders](#)" and click [OK](#) as shown in the screenshot below.



If you select the option saying "Apply changes to root of the drive(C:\, D:\, etc)" then Windows will still index your files and folders, so please do not select this option.

Now sit back while Windows turns off indexing for each and every file, it might take few minutes because every file has a system attribute that tells Windows if it can be indexed or not, so it has to be updated for all files.

Note that if you turn of Indexing where your Windows is installed, lets say drive C, then it will not effect other drives, other drives (D, E, etc). They will still be indexed by Windows. If you want to completely turn off indexing then you will have to do it turn by turn with every drive.

To enable indexing, just follow the above procedures, but instead of unchecking, just check the box where it asks if you want the drive to be indexed.

That should do it.

Indexing is something you can live without, and your PC will run faster without it.



PHOTO OF CONRAD BY KA6KIW



FIRST OF 21 HF CONTACTS ON 40METER, PHOTO BY DON

Info for July SCOPE

While we certainly appreciate Reinstated members, we believe many "Reinstatements" are due to members not aware that their membership was due.

Since many members now get the News Letter (SCOPE) on the web, they don't receive the paper copy that we mark in blue when membership is almost over, and red when the time for renewal has passed.

The Board has recommended that we publish member's calls that are getting close to renewal time. The following members are due for renewal in a month or so, (in some cases a little sooner!) Hopefully, if your call is in this list, you will find time to send a check, or tell PayPal to renew your membership. KK4JRJ, KG6KLV, KE6ZLY, KE6IZ, KJ6JUS, KG6SXU, KJ6VXW, KF7Z-PJ, KD6AKT, KJ6WKB, KF6LWO, N6PD, W6PSK, W6NKB, ZZ9SH, W6BJK, KI6RXX, N1OW, K6BK, AK6AKT, KE6JGJ, K4RB, NE6AA, AK6R. - more next month!

Good news, membership last month is as high as we have had over the last two years!
Thank you,

AI W6GNI
Membership

FIELD DAY SITE AT NIGHT





CONRAD AT GOTA STATION, PHOTO FROM KI6RXX



PARC CLOTHING APPAREL

Last month the club Board of Directors announced the availability of clothing apparel with the club logo, etc.

PARC 2013 FIELD DAY T-SHIRTS

On short order, a few members were able to order PARC Field Day T-shirts for use on FD. They were seen all over the FD site, and as a new product (new manufacturer, process, etc) those who purchased them agreed they were an excellent product, well worth the cost, and VERY NICE.

Many club members who were not at last month's club meeting, so were unable to order the T-shirts, saw them for the first time on FD and asked that the club allow a late order.

So, at this month's meeting, the 2013 FD T-Shirt will be available for ordering on a single special sale basis.

The Field Day T-Shirt (light blue color, with owner's name and call sign in Navy Blue embroidered thread on the right breast, and the PARC logo and labeled PARC FIELD DAY 2013 in Navy Blue on the back of the shirt will be available to order for \$18.63 (tax included) for small, medium, large,

and Xlarge. XXLarge, and XXXLarge add \$2.00 and \$3.00 respectively.

There will be a YL T-Shirt available as well. Same colors, same theme. Price is not yet known but will be known by the club meeting. The price will be very near the same. One of the Club YL's is researching the YL style T-Shirts available in order to standardize. Price will be announced at the club meeting.

GENERIC PARC APPAREL

At this month's meeting, the club will also start selling GENERIC PARC APPAREL.


The T-shirt will have the same T-shirt style and color with the large club logo on the back. Price for small, medium, large, and Xlarge \$13.00. For XXlarge and XXXLarge, add \$2.00 and \$3.00 respectively. Buyers may order their name and call sign ON THE RIGHT breast for an additional \$5.00. YL prices will adjust to the basic T-shirt price (once known).

Shortly PARC will advertise Polo shirts, Ball caps, and windbreaker jackets with options. Stay tuned.

73 de NN3V
Charlie



GOTA VICTOR NUMBER 1, PHOTO BY DON

<p><i>NiCd Lady Company</i></p>	<p>RF PARTS COMPANY <i>From Milliwatts to Kilowatts™</i></p> <p>Complete inventory for servicing amateur and commercial communications equipment</p>
<p>Grace Lloyd N6WPA grace@nicdlady.com</p>	<p>RF POWER TRANSISTORS — TUBES — POWER MODULES Diodes • Relays • Trimmers • Capacitors • Heatsinks Transformers • Chokes • Combiners • Wattmeters • Books</p>
<p>www.nicdlady.com</p>	<p>3-500ZG • 811a • 572B • 4-400a • 6146B • 8072 • 8560AS</p>
<p>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</p>	<p>3CX400A7 • 3CX1200A7/D7/Z7 • 3CX1500A7 • 3CX3000A7 4CX250B • 4CX250R • 4CX400A • 4CX800A • 4CX1500B</p> <p>Merit W6NQ • Gary K6CAQ • Steve K6NDG • Rob WA6GYG • Doug K6DRA</p> <p>760-744-0700</p>
<p>Your Complete Battery Source</p>	<p>www.rfparts.com • orders@rfparts.com</p> <p></p>



SCOUTS LINED UP FOR LUNCH, PHOTO BY DON

IMPULSE *Electronics .com*

- Wouxun Radios and Accessories
- Powerpole Connectors
- Power Cables
- Coax Cable
- Coax Connectors
- Custom Cable Assemblies
- AGM Batteries and Accessories
- CTek & UPG Batteries Chargers
- Fuses and Holders
- Terminals and Splices
- Tools
- RF Industries Coax Adapters



(866) 747-5277

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 3 July 2013, Palomar Amateur Radio Club presents a program by Gene WB9COY on EME using 2 meters.

This is a description of Earth-Moon-Earth (EME) digital communications using the JT65B mode on the 2 meter band. JT65B can decode signals which are 25-28 db below the noise level, which is about 10 db better than what the human ear could copy (e.g., CW). Using 100 watts and two homebrew yagis, Gene has made over a dozen contacts all over the world.

We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA.