

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

Reminders

Meeting January 3rd



Letter from the President

Happy New Year to All! The December Meeting (Election and Social) went well. We have a new Vice President (Tom Storer, K16DER) and Dennis Baca (KD6TUJ) has moved to a Director position. At the December Board meeting, Al Donlevy (W6GNI- Membership Chair), Dan Bubke (K6NKC – Repeater Technical Chair), and Michelle Thompson (W5NYV – Scope Editor) were nominated as the three appointed Directors, and approved by the newly elected Board members.

The January Meeting will feature a vote on a Bylaws amendment and to a presentation on EchoLink, by Past President Charlie Ristorcelli, NN3V. It will be a very good presentation and I am looking forward to it

This past holiday season has brought what appears to be mixed blessing to some, but in reality, is a gift to us all. On December 15th, the FCC announced that Element 1 (5wpm) code is being dropped for all classes of amateur radio license. To many seasoned veterans, this appears to be ominous, as there will be more traffic, other than in Morse code, on HF. To the rest of us, it means that we are more likely to keep HF Spectrum, rather than having it re-farmed to other radio services. Regardless, it

means that more operators will be eligible for HF operations. It is my understanding that ALL Technicians will receive what are now Tech Plus privileges, when this is complete.

I would keep an eye on both the Scope and www.palomararc.org, for further developments and possible General written exam preparation classes.

Looking down the road... We have several projects and programs of note coming up. Of course Field Day is a topic of discussion. Preparations are already starting, so Contact the Field Day Chair, Conrad Lara, KG6JEL, with and questions, or to help. PARC will be sponsoring another Special Event in June, Anniversary of the dedication of the Hale Telescope. Please contact our Scope Editor, Michelle Thompson, W5NYV, for more information.

Two major projects are being considered for the repeater site.

- 1) Preparing, sealing and painting all of the buildings.
- 2) Refurbishing the tower.

Our buildings are in need of some exterior maintenance and a good coat of paint. We knocked down the rust on a few of them last month to get ready for winter. In the process, it was decided that a bit more

effort was due in the spring and summer, to protect our investment.

The Tower has stood for twenty-five years. With some heavy maintenance, it should stand another twenty-five years. The maintenance will likely involve that inspection and/or replacement of structural fasteners, chipping and painting of the structure, inspection of antennas, and inspection and re-mounting of the transmission lines.

In the near future, we will be presenting a plan of action and asking for your help to 1) seek donations of materials, 2) seek donations for the things we must purchase, and 3) help with the work.

On the fun side: Dennis Baca, KD6TUJ, has arranged for Gordon West, WB6NOA, to be our May 2nd program. Put that date on your Calendar!

I hope to see you all at the next General Meeting on January 3rd, and the Carlsbad Safety Center.

Steve Early
AD6VI

*



"The fold and staple crew needs a couple of new members. We get together on the last Wednesday of the month at noon, and get the SCOPE ready for the Post Office.

The meeting place is in Vista, and takes an hour or so. The regulars have interesting conversations, and get the work done quite quickly.

Please make yourself known to Al (W6GNI) at the Membership Table during a meeting if you want to volunteer for this fun and social activity."

PARC Bylaws Amendment

One amendment approved and one to be voted on by the membership.

To all PARC Members,

Paul Williamson, KB5MU (and our Webmaster), proposed two PARC Bylaws Amendments for the Board's consideration. This was done per section 13 ("Amendments") (f) of the PARC bylaws.

The first amendment is intended to allow e-mail distribution of the Scope to be an acceptable alternative for legal notification of an official vote to be made by the membership. This is in support of the Board's effort to reduce annual printing and mailing costs to the club, by distributing the Scope electronically (e-mail) to those members that find it convenient. For the foreseeable future, a hard copy of the Scope will be sent to those members that want one.

First proposed amendment:
Date: Wednesday, August 16, 2006 3:28 AM

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Amendment to the Bylaws of Palomar Amateur Radio Club, Inc.

1. The entire existing text of Section 15, Newsletter, is renumbered as paragraph (a).

2. The following paragraph (b) is added to Section 15:

(b) The board may authorize the Editor to distribute the newsletter electronically. Members who opt not to receive the newsletter by mail shall be deemed to have received the newsletter electronically, and this shall satisfy all requirements for notice or publication in the

newsletter specified in these bylaws. No reduction of membership dues shall apply for members who opt not to receive the newsletter by mail.

=====

The PARC Board agrees that this amendment is needed.

Pursuant to Section 13 (a) 1, Section 13(f) and Section 7(l), the Board believes that this potentially affects each member's voting right's in the sense that it makes provides electronic publishing and transmittal of the Scope with the same standing as a hard copy that is mailed.

For those of you that have already elected to take the Scope Electronically, you received a December Scope for the legal notice of the Annual Meeting with Officer Elections. You have received this Hard Copy of the January Scope to meet legal notice for a vote on the amendment (because this notice was not submitted prior to the deadline for the December Scope)

The second proposed amendment was to allow on-line applications for club membership.

Second proposed amendment:
Date: Monday, November 06, 2006 1:56 AM

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Amendment to the Bylaws of Palomar Amateur Radio Club, Inc.

Section 4, paragraph (a) is modified by replacing the sentence "Membership shall be by written application under terms set forth herein." with the sentence "Membership shall be by written or online application under terms set forth herein."

This Amendment was approved by the Board at the November 2006 Board of Directors Meeting, as it brings us up to par with most large amateur radio clubs and it does not affect Voting rights.

For comparison and review, the current bylaws can be found at

<http://www.palomararc.org/PARCBylaws.pdf>

Please attend the January 3rd, 2007 Meeting (Echolink) and vote on this amendment. *

License Classes

Technician License Classes

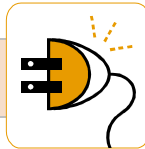
Alpine

One-Day Amateur Radio "Technician" License Class
Saturday, January 13th, 2007, 8 AM to 5 PM (with breaks and one hour lunch)
At the Church of Jesus Christ of Latter-Day Saints
2425 Tavern Rd, Alpine, CA 91901.
Please RSVP with Steve Early at ad6vi@cox.net or 619-461-2818. Cost: Class is Free. Testing, if available, at 5:00 PM \$5 -14.

El Cajon

Tentative Date
One-Day Amateur Radio "Technician" License Class
Saturday, February 3rd, 2007 (Could be changed to 10th) 8 AM to 5 PM (with breaks and one hour lunch)
At the Church of Jesus Christ of Latter-Day Saints
1270 S Orange Ave, El Cajon, CA 92020
Please RSVP with Steve Early at ad6vi@cox.net or

continued page 3, on right



Club Classified Ads

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(11.6) For Sale: Aluminum tower disassembled in 7 ft sections (6 each), with hinged base plate, top fixture for rotor, plus two guy plates. Tower snaps together with aircraft safety pins. make offer, moving to Guam. Contact KE6DUG-Rich at 760-806-4870 or email at richnjo@aol.com. Located in vista.

(10.23) Silent Key, WB6CLT - selling all equipment and antenna (new in box). Asking for fair offers. Let your conscience be your guide. Swan: 120 single sideband transceiver; 250C transceiver; ICOM: 1C-V8000 VHF FM transceiver w/antenna; IC-21; Heathkit: Oscilloscope Model 10-17; Frequency Scaler 1B-102; frequency counter 1B-1100; Hybrid phone patch HD-15; SD-610; HW-8 receiver; HWA-7-1 Power supply; HM-21-2 Astron SS30 power supply, Butternut antenna and all attachments Model HF9V still in boxes; Master control center CV89-URA-8A. Most have manuals. Contact Eileen 619 417-3113, 760 788-6345 or inkydew@aol.com

(9.26) For Sale: 2 MFJ Loop tuning Capacitors: One Large, one small. Brand new. Never used. \$70/\$55. Contact Ron, K2RP (760) 436-8109 K2RP@ARRL.NET *

License Classes, continued from page 2

619-461-2818. Cost: Class is Free. Testing, if available, at 5:00 PM \$5-14.

Chula Vista

South Bay Amateur Radio Society (SOBARS) Technician License preparation class Time: 9:00 AM to 12:00 Noon. Dates: Every Saturday morning, starting on January 6, and will run to March 3, 2007. Location: Chula Vista Police Station, 315 Fourth Avenue, Chula Vista, CA

Please RSVP with Len Cardoza, W6RAP, at w6rap@arrl.net

General Code and Theory License Classes

(Probably the last code class for a long time to come)

Alpine

Schedule:

Thursday, January 18th, 2007, from 6:30 to 9:30 PM
Friday, January 19th, 2007, from 6:30 to 9:30 PM
Saturday, January 20th, 2007, from 8:00 AM to 5:00 PM
Thursday, January 25th, 2007, from 6:30 to 9:30 PM
Friday, January 26th, 2007, from 6:30 to 9:30 PM
Saturday, January 27th, 2007, from 8:00 AM to 5:00 PM

At the Church of Jesus Christ of Latter-Day Saints 2425 Tavern Rd, Alpine, CA 91901. Please RSVP with Steve Early at ad6vi@cox.net or 619-461-2818. Cost: Class is Free. Testing, if available, at 5:00 PM, on January 27th, 2007 \$5-14

Contact Steve Early at ad6vi@cox.net or 619-461-2818 for additional information. *

HAM RADIO OUTLET

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Ron N6OMW
Jose XE2SJB
Bob KA6EKT

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Committee Chairpersons

ARES Info	Tony	KC6YSP
ARES Net	Dennis S.	K7DCC@amsat.org
Attendance	Al	W6GNI@amsat.org
ATV	Art	KC6UQH@amsat.org
Auction	Tom M.	KG6RCW@amsat.org
Badges New	Al	W6GNI@amsat.org
Batteries	David	BK6EBYDAT@Gerry.Palomar.caltech.edu
BBS Monitor	Bill B.	N6FMK@amsat.org
Billing Ads/etc	Jo A.	KB6NMK@amsat.org
Contest Info	Dennis V.	N6KI@amsat.org
Control Ops	Filled	W6NWG@amsat.org
Del Mar Fair	Jim Cooper	NE6O@amsat.org
EmComm	Harry	W6YOO@amsat.org
	Dennis V.	N6KI@amsat.org
Field Day Tech	John K.	WB6IQS@amsat.org
Inventory	Dennis B.	KD6TUJ@amsat.org
New Member	Christy M.	K16AOL
Nets	PARC	Board@palomararc.org
Newsletter	Michelle	W5NYV@amsat.org
Patch Info	Stan	W9FQN@amsat.org
Patch Electronics	Jerry H.	WB6FMT@amsat.org
Picnic	Mark R.	KF6WTN@amsat.org
Power AC/DC	Mike P.	K6MRP@amsat.org
Programs	Dennis B.	KD6TUJ@amsat.org
Publicity	Terry R.	K3PXX
QSL Cards	Harry H.	W6YOO@cox.net
RACES Info	Jo A.	KB6NMK@amsat.org
RED Flag	Steve	AD6VI@amsat.org
Repeater Site	Mike P.	K6MRP@amsat.org
Repeater Tech	Mike D.	AB6QT@amsat.org
SANDARC	Jim/Steve	NE6O/AD6VI
Seller Table	John K.	WB6IQS@amsat.org
Testing VE	Rusty	dunedancer@cox.net
Trustee	Mike D.	AB6QT@amsat.org
Web	Paul W.	www.palomararc.org

Contest Calendar

Jan 1	SARTG New Year RTTY Contest
Jan 1	AGCW Happy New Year Contest
Jan 1	AGCW VHF/UHF Contest
Jan 2	ARS Spartan Sprint
Jan 7	Original QRP Contest
Jan 6	ARRL RTTY Roundup
Jan 6	EUCW 160 Meter Contest
Jan 7	Kids Day Contest
Jan 13	Hunting Lions in the Air contest
Jan 13	070 Club PSKfest
Jan 13	MI QRP January CW Contest
Jan 13	SPAR Winter Field Day
Jan 13	Midwinter Contest, CW
Jan 13	North American QSO Party, CW
Jan 14	NRAU-Baltic Contest, CW
Jan 14	Midwinter Contest, Phone
Jan 14	NRAU-Baltic Contest, SSB
Jan 14	DARC 10 Meter Contest
Jan 18	NAQCC Straight Key/Bug Spring
Jan 20	LZ Open Contest
Jan 20	UK DX Contest, RTTY
Jan 20	Hungarian DX Contest
Jan 20	North American QSO Party, SSB
Jan 20	ARRL January VHF Sweepstakes
Jan 22	Run For the Bacon QRP Contest
Jan 27	CQ 160 Meter Contest, CW
Jan 27	REF Contest, CW
Jan 27	SARL Youth for Amateur Radio
Jan 27	BARTG RTTY Sprint
Jan 27	UBA DX Contest, SSB

Wow! They are sure starting off the New Year with a bunch of contests. CW, SSB, RTTY, PSK, they are all there. You can find the rules in QST, CQ, NCJ, Worldradio magazines and on the contest reflectors.

See you in the contest. 73, Harry, W6YOO

Repeater Information

52.680 W6NWG -0.5 MHz, Autopatches: 146.730-, 147.075+, *147.130+, *447.000-

PKT: 145.050s (PALMAR/W6NWG-1) 146.700- (Duplex Pkt) PALBBS/EMG use 145.070/146.700- (W6NWG-3/PALBBS)

ATV input: 915 wbfm, 2441.25 wbfm

ATV output: 1241.25 MHz am

Intercom: 146.415 PL 79.7 nbfm

Affiliated: 224.380-, 224.940 KK6KD (HARS) 447.050-, 145.260 KK6KD (HARS) 146.175+ N6FQ (Fallbrook ARC)

Linked to: 445.600-, 224.900- WD6HFR (Convair/220 ARC), 446.140- WB6FMT (123.0) Vista

† under repair * 107.2 Hz PL Tone

PARC Repeater Usage Policy

At December 13, 2006 PARC Board of Director's meeting, the following repeater policy was reviewed and approved.

Casual use – No formal net control:

- 1) Compliance with all FCC regulations and Good Amateur Practice is required at all times
- 2) User members are to keep QSO's short and to pause between exchanges to allow for breaks to pass traffic.
- 3) If interference comes up on the repeater, IGNORE it or change to an alternate frequency.
- 4) Contacts in which a "third party" participates must be initiated and terminated by a licensed operator.

Note 1: These are open repeaters and Club membership is not required for casual use.

Note 2: Our repeaters are automatically timed out with a carrier over 90 seconds unless deactivated by a Control Operator (no courtesy tone at end of transmission).

Standing Scheduled Nets: (weekly nets, etc.)

In addition to items 1 through 4, listed above, Groups using the Palomar Amateur Radio Club repeaters (W6NWG) standing scheduled nets shall:

- 5) Secure permission from the PARC Board of Directors for such a net.
- 6) Conduct the net on the schedule published in the Scope.
- 7) Ensure that all Net Control Operators are current PARC Members.

Emergency Use: (Declared

Emergencies, such as wild fires, etc)

- 8) Net Control Operator Membership requirement is waived for Declared Emergencies

- 9) Repeater Assignments:

147.075: Mercury Amateur Radio Association

146.730: Palomar Emergency Services Net

147.130: Back-up to either 147.075 or

146.730, and to be a shared resource by organizations that are not serviced by MARA or the Palomar Emergency Services Net.

447.000: Shared Resource.

52.68: Shared Resource

Note 3: During a Declared Emergency, it is requested that user organizations make a good faith effort to notify a Member of the PARC Board that they are using one of our repeaters.

Special Events (Races, Parades, Public Service, etc.)

- 10) Net Control Operator Membership requirement may be waived for special events.

- 11) Groups desiring to use a PARC repeater shall e-mail the PARC Board of Directors at board@palomararc.org. The Board requests as much notice as possible, so that our membership may be notified that the repeater has been reserved. Regardless, submitting a request a minimum of 72 Hours prior to the special event is expected.

Note 4: This is to ensure that no more than one organization is scheduled to use the same repeater during the prescribed time period.

Note 5: The 72 period starts when a PARC Board Member acknowledges receipt of the request. A PARC response will be sent within 72 Hrs after the Acknowledgment Response.

Note 6: Permission is not assumed to be granted.

Note 7: The PARC Repeater Usage Policy may be adjusted, without prior notice, to serve the Public Good as determined by the PARC Board of Directors. *



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Time for a membership survey.

One of the duties of the PARC Board of Directors is to ensure that the Club maintains relevance to its membership and to the Amateur Radio Community. This has been at topic at every Board meeting this year. The biggest questions are: What would our membership like is to provide? And what are the best ways to determine this?

One tool to help this process is the old fashioned survey. So here it is! Instructions for submitting the survey are below.

1) What topics would you like presented at next year's meetings?	
2) Would you like to hear meeting announcements on the repeater?	
3) Would you like a voice Identifier on a PARC repeater?	
4) What can we do to see you at our monthly meetings?	
5) Should PARC sponsor a Car Pool Net for club meetings?	
6) Should PARC offer amateur radio-related training, like Contesting Techniques, Emergency Operations, Antennas 101, etc? If yes – name a topic.	
7) How can we improve our repeaters?	
8) Would you like the Scope by e-mail, or by traditional mail?	
9) What question (s) should we be asking of the members?	
10) How would you answer the question we should ask?	

Please take some time to answer these questions and either bring your responses to the next meeting, or send them to me at adovi@cox.net or at 4724 Maple Ave, La Mesa, Ca, 91941.

There is also an online form on our website www.palomararc.org

License and Class Information

Register 5-7 days in advance for the following test sessions.

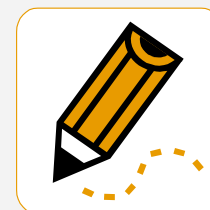
☑ PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Test sessions may be cancelled if no one pre-registers. Contact Rusty Massie AA6OM at (760) 747-5872 or dunedancer@cox.net.

☑ EARS Testing is in Escondido on the Last Saturday of the month at 9:00 am at 9:00 a.m. at the LDS Church.

The address is 1917 East Washington Avenue , Escondido , 92025.

Contact Harry W6YOO (760) 743-4212 or W6YOO@amsat.org.

☑ "The ARRL Technician Class Course for Ham Radio Licensing" Course No. EC-010 \$99 ARRL members / \$139 non-members. Courses begin on the first and third Tuesday of each month. For more information, email cce@arrl.org or via regular mail to ARRL CCE, 225 Main Street, Newington, CT 06111.



Are you interested in upgrading your license? Do you work better in small study groups or on your own? Let SCOPE know! Certified instructors in PARC are ready and willing to help you. Write to scope@palomararc.org with your license goal and study preferences. Possibilities include online study groups, pre-PARC meeting study groups, and weekend study groups.

www.ac6v.com

This wonderful ham radio website, run by Rod AC6V, is a fantastic online resource for amateur radio information. With 700 topics, 6,000 links, and 132 pages, it weighs in at the top of the scale as one of the best topical indices of ham radio webpages. The site gets well over 1,000 hits a day. Readers from 127

countries have visited www.ac6v.com which been in operation since 1997. Unlike many sites that post reams of links, only to let them rot over time, Rod sees that the links at his site are checked monthly. This removes one of the most irritating things about resource sites – the dreaded 404 Page Not

Found.

Thanks to Rod, things are easier to find on the ever-growing and often chaotic Internet. Thanks Rod, for doing such a great job and providing such a wonderful service to the ham radio community!

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SDG ARES Needs TNCs

As the primary backup communications provider for local hospital emergency medical services (EMS), San Diego Amateur Radio Emergency Services Inc (SDGARES) is implementing email over ham radio using Winlink for all area hospitals.

Our initial demonstration systems will use 1200 baud VHF packet as the transport mechanism for Winlink. We would expect that a successful demonstration will encourage EMS to fund a D-Star based Winlink system to handle the anticipated higher message volumes.

SDG ARES needs packet TNC's for hospitals

The following is a list of packet TNCs that will work with the Airmail program used by Winlink

SCS TNC	PTC-II
	PTC-IIe
	PTC-IIex
	PTC-IIpro
	PTC-USB
Kantronics	KAM+
	KAM 98
	KAM XL
	KPC 3
Timewave	PK-232
	PK-900
AEA	DSP1232
	DSP2232

If you wish to donate or lend a TNC, please contact sec@sdgares.org or reply to this email. Your donations are tax deductible.

If you are interested in Winlink, you might want to try working with AIRMAIL

<http://www.siriuscyber.net/ham/>

Even if you do not own a TNC, download a copy of Airmail 3 and play with it... so that you can become familiar with its operations.

WINLINK TRAINING - NEW MEETING LOCATION

SDGARES will be holding a Winlink training session on Saturday January 13 at Scripps Green Hospital
<http://www.sdgares.org/GreenMeetings.htm>

Bring your computer, radio, TNC and cables.

SDGARES Experts will load software for you, help you get started and train you in Winlink.

With over 260 Members, SDGARES is the largest and fastest-growing ham radio emergency services organization in San Diego County.

We provide emergency communications and training of responders for many organizations including hospital emergency medical services, California Department of Forestry Red Flag Patrols, Miramar Marine Corp Air Station Fire and Rescue, Coronado Life Guards, most local CERT teams as well as for major search and rescue events such as the Miramar Air Show, Special Olympics and numerous public athletic events.

We are a 501 © 3 charitable corporation and your donations to SDGARES are tax deductible. More information may be found at www.sdgares.org. *

PALOMAR ENGINEERS

Box 462222, Escondido, CA 92046

TOROID CORES

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 \$25 +tax+\$6 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. \$7.50+tax+\$6 S&H/order

Model BA-8 (for RG-8, RG-213, 9913 and similar cables up to 1/2" dia. \$15+tax+\$6 S&H/order.

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Model PT-340 \$99.95+tax+\$6 S&H

See catalog at www.Palomar-Engineers.com

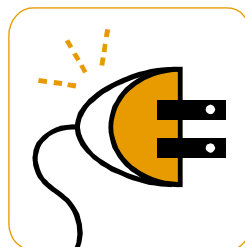
Please check our complete ads in **QST**, **73**, **CQ**, and **World Radio** magazines.

Regular Nets Sponsored by PARC

DAY	TIME	FREQ.	NET NAME	NET MANAGER CONTACT INFORMATION
T/R/S	2000	146.730	NTS Traffic Net	Charles N6TEP cmiele@juno.com
Sun	0830	146.730	ARES Sunday Net	Dennis K7DCG
Sun	2045	147.075	MARA ES	Glenn Jones KG6JDF@amsat.org
Mon	1915	146.730	RACES Sub-Net	
Mon	2100	146.730	Microwave Net	Kerry B.
Tues	1900	147.130	Red Cross Net	Ted tthompson@sclarc.org
Tues	2100	146.730	Off-Road Net	Jerry A. K6PFP jwak6pfp@cts.com Dick W. KA7AYT rwillimek@home.com
Thurs	2100	146.730	Ham Help	Manager Needed
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com Glenn P. KE6ZLY@juno.com
Nightly	>2200	147.130	Facetious Group	

PARC 2007 Board

President- Steve Early, AD6VI - 619-461-2818 - ad6vi@amsat.org
 Vice President - Tom Storer - KI6DER - ki6der@amsat.org
 Secretary - Gary Kent - W6GDK - 858-679-0578 - w6gdk@arrl.net
 Treasurer - Bob Birch - KG6RGI - rrbirch@cox.net
 Dir. - Tom Martin - KG6RCW
 Dir. - Dennis Baca - KD6TUJ - 760-722-0251 - kd6tuj@amsat.org
 Scope Editor - Michelle Thompson - W5NYV - w5nyv@amsat.org
 Repeater Tech Chair - Dan Bubke - K6NKC - k6nkc@amsat.org
 Membership: Al Donlevy - W6GNI - 760-630-3096 - w6gni@amsat.org



Membership Report

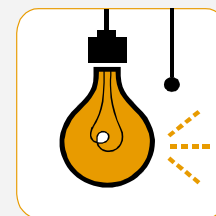
New Members Joining PARC: **KI6FUR, KG6TTZ, KS6RFI, KI6FVH, KI6FOO.**

Please welcome these new members. Five members reinstated their membership. Welcome back!

The participation points for the December meeting (party) have not been entered yet, maybe more people brought delectable goodies than signed up at the goodie table. If you brought treats, and didn't manage to sign in for them, please let me know. It's not too late to get an extra point!

Did you check your label this month? If all goes well with my printing, your e-mail of record will be there. What do we do with the info? If the Post Office returns your SCOPE, and we have an e-mail address, we can often find out why the mail didn't make it. I also phone if this happens. It seems that sometimes SCOPE's are returned, even though the address is correct. Please check what is there, and send me a correction if appropriate. If you want your "special" e-mail address kept confidential, let me know, and it will not be printed.

-Al, W6GNI



FREE TUBES

Club Members ONLY! The

PARC has a tube bank

that includes many 6 & 12

volt receiving tubes (and

some transmitting types)

for use by club members

to repair their own

personal equipment. Not

for commercial use or

resale. If we have your

requests, I will pre-check

and deliver them to the

next club meeting.

Contact

WB6IQS@amsat.org, -John

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Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on January 3rd, 2007 (the first Wednesday of each month) at the Carlsbad Safety Center. The meeting will be about Echolink. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome!

The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, sailing, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA).

73 and hope to CU you on the air! -NN3V (past president of PARC)



We're on the Web!
 See us at:
www.palomararc.org

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

Reminders

Meeting February 7th



Letter from the President

This year has had a unique start. In January, our scheduled speaker was called out of town at the last minute. Harry Hodges, W6YOO, stepped in with a DVD on the Peter the First Island DXpedition. A crowd that had come to see an Echolink presentation was captivated by this program. As I watched the audience, it occurred to me that virtually nobody left early, fell asleep, or made noise. They were all intently watching the show. Afterward, one longtime member said he would like to see more programs like this. We'll do our best! Our February meeting celebrates PARC's 71st Birthday.

Our program will be on Radio Astronomy, a theme that should fit well with the QRP buffs, as it is all about sensitive receivers and is in line with our namesake. Looking down the road, the March meeting will be our third turn at "I have my license...now what?" This will be a slightly different format than last year so that we stay on schedule. The program will be geared towards new hams, but will also have something for the seasoned amateur operator as well. With the pending change in testing requirements (dropping Morse code) for General and Extra class licenses, PARC is anticipating a need for one

or more General Upgrade classes and perhaps an Extra Upgrade class as well. Keep an eye on the Scope for class schedules and details. The General Question Pool changes on July first, so we hope to have a class by then. Soon April will be here, followed by Gordon West as our presenter in May. June will be a busy month. We will host a special event station on Palomar Mountain to celebrate the anniversary of the Hale Telescope, then Field Day soon after. Start marking your calendars. I hope to see you on February 7th.

Bring a friend!



W6NWG in mid-January 2007h some snow and ice loading on the tower. Photo W5NYV. Designing a tower installation requires consideration of both wind and snow & ice loading. Although some minor damage was sustained in the March of 2006 snowstorm, no damage was noted during the January precipitation.



"The fold and staple crew needs a couple of new members. We get together on the last Wednesday of the month at noon, and get the SCOPE ready for the Post Office.

The meeting place is in Vista, and takes an hour or so. The regulars have interesting conversations, and get the work done quite quickly.

Please make yourself known to Al (W6GNI) at the Membership Table during a meeting if you want to volunteer for this fun and social activity."

2007 International DX Convention

The 2007 International DX Convention will take place April 27, 28 & 29, 2007 at the Holiday Inn Hotel & Conference Center in Visalia, California. This is an ARRL sanctioned convention that is sponsored this year by the Northern California DX Club. It is expected to draw visitors from around the World and will feature programs from recent DXpeditions and contest operations.

The Convention theme this year is, "Elmering New DXers is Job Number One!"

Accordingly, a portion of the programming will be devoted to helping new DXers learn about how to be noticed in a pile-up, snag a "new one" and get that elusive QSL card.

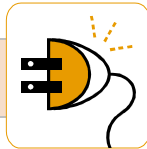
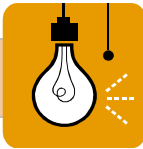
Other Convention offerings will include: DX, Top Band and Contest Forums, technical talks, many door prizes, both Friday and Saturday evening "attitude adjustments", Saturday Barbecue Lunch, Saturday night banquet, Sunday morning "power" breakfast, Vendors Exhibits and QSL card checking.

Current information and registration forms are available on the Convention web page, which can be found at www.dxconvention.org. Additional registration information can be obtained by contacting Convention Registration Chairman, Dick Letrich, W6KM via Email at dlw6km@aol.com.

If you're interested in DX or DXing, the Visalia International DX Convention is the place to be. We hope to see you there.

W6NWG Winter Photos





Club Classified Ads

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(1.22) Avenger 4000 Alarm System. 8-PIR's, 2 Sirens, Numerical Keypad, 5 Zones. \$60.00 OBO contact Dennis K7DCG@arrl.net or (858) 748-9046

(1.22) 3 Kenwood TM-211's 2 meter transceivers. 20 watts, Digital encoded squelch w/manuals \$70.00/ea or \$180.00 for all three. w/SS32 PL's. Contact Dennis K7DCG@arrl.net or 858-748-9046

(1.22) Homebrew copper pipe 220 MHz J-Pole Antenna \$10.00 OBO, contact Dennis K7DCG@arrl.net or 858-748-9046

(1.22) Cushcraft 11 element beam, can be set up for Horizontal or Vertical Polarization. \$20.00 OBO, contact Dennis K7DCG@arrl.net or 858-748-9046

(10.23) Silent Key, WB6CLT - selling all equipment and antenna (new in box). Asking for fair offers. Let your conscience be your guide. Swan: 120 single sideband transceiver; 250C transceiver; ICOM: 1C-V8000 VHF FM transceiver w/antenna; IC-21; Heathkit: Oscilloscope Model 10-17; Frequency Scaler 1B-102; frequency counter 1B-1100; Hybrid phone patch HD-15; SD-610; HW-8 receiver; HWA-7-1 Power supply; HM-21-2 Astron SS30 power supply, Butternut antenna and all attachments Model HF9V still in boxes; Master control center CV89-URA-8A. Most have manuals. Contact Eileen 619 417-3113, 760 788-6345

or inkydew@aol.com

(9.26) For Sale: 2 MFJ Loop tuning Capacitors: One Large, one small. Brand new. Never used. \$70/\$55. Contact Ron, K2RP (760) 436-8109 K2RP@ARRL.NET *

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Committee Chairpersons

ARES Info	Tony	KC6YSP
ARES Net	Dennis S.	K7DCC@amsat.org
Attendance	Al	W6GNI@amsat.org
ATV	Art	KC6UQH@amsat.org
Auction	Tom M.	KG6RCW@amsat.org
Badges New	Al	W6GNI@amsat.org
Batteries	David	BK6EBYDAT@Gerry.Palomar.caltech.edu
BBS Monitor	Bill B.	N6FMK@amsat.org
Billing Ads/etc	Jo A.	KB6NMK@amsat.org
Contest Info	Dennis V.	N6KI@amsat.org
Control Ops	Filled	W6NWG@amsat.org
Del Mar Fair	Jim Cooper	NE6O@amsat.org
EmComm	Harry	W6YOO@amsat.org
	Dennis V.	N6KI@amsat.org
Field Day Tech	John K.	WB6IQS@amsat.org
Inventory	Dennis B.	KD6TUJ@amsat.org
New Member	Christy M.	K16AOL
Nets	PARC	Board@palomararc.org
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Patch Info	Stan	W9FQN@amsat.org
Patch Electronics	Jerry H.	WB6FMT@amsat.org
Picnic	Mark R.	KF6WTN@amsat.org
Power AC/DC	Mike P.	K6MRP@amsat.org
Programs	Dennis B.	KD6TUJ@amsat.org
Publicity	Terry R.	K3PXX
QSL Cards	Harry H.	W6YOO@cox.net
RACES Info	Jo A.	KB6NMK@amsat.org
RED Flag	Steve	AD6VI@amsat.org
Repeater Site	Mike P.	K6MRP@amsat.org
Repeater Tech	Mike D.	AB6QT@amsat.org
SANDARC	Jim/Steve	NE6O/AD6VI
Seller Table	John K.	WB6IQS@amsat.org
Testing VE	Rusty	dunedancer@cox.net
Trustee	Mike D.	AB6QT@amsat.org
Web	Paul W.	www.palomararc.org

Contest Calendar

Feb 3	Vermont QSO Party
Feb 3	10-10 Int'l Winter Contest, SSB
Feb 3	AGCW Straight Key Party
Feb 3	Minnesota QSO Party
Feb 3	YLRL YL- OM Contest, CW
Feb 3	Delaware QSO Party
Feb 3	Mexico RTTY International Contest
Feb 4	North American Sprint, SSB
Feb 4	ARCI Fireside SSB Sprint
Feb 5	RSGB 80m Club Championship, SSB
Feb 6	ARS Spartan Sprint
Feb 10	CQ WW RTTY WPX Contest
Feb 10	Asia-Pacific Spring Sprint, CW
Feb 10	KCJ Topband Contest
Feb 10	Dutch PACC Contest
Feb 10	YLRL YL- OM Contest, SSB
Feb 10	British Columbia QSO Challenge
Feb 10	FISTS Winter Sprint
Feb 10	RSGB 1st 1.8 MHz Contest, CW
Feb 11	North American Sprint, CW
Feb 12	ARRL School Roundup (til 2/16)
Feb 14	NAQCC Straight Key/Bug Sprint
Feb 14	AGCW Semi-Automatic Key Evening
Feb 14	RSGB 80m Club Championship, Data
Feb 17	ARRL International DX Contest, CW
Feb 19	Run For The Bacon QRP Contest
Feb 22	RSGB 80m Club Championship, CW
Feb 23	Russian PSK WW Contest
Feb 24	CQ 160-Meter Contest, SSB
Feb 24	REF Contest, SSB
Feb 24	UBA DX Contest, CW
Feb 24	North American QSO Party, RTTY
Feb 25	High Speed Club CW Contest
Feb 25	North Carolina QSO Party

If you can't find something you like in this month's list then you definitely aren't a contester. CU in the contest!
73, Harry, W6YOO

Repeater Information

52.680 W6NWG -0.5 MHz, Autopatches: 146.730-, 147.075+, *147.130+, *447.000-
PKT: 145.050s (PALMAR/W6NWG-1) 146.700- (Duplex Pkt) PALBBS/EMG use 145.070/146.700- (W6NWG-3/PALBBS)
ATV input: 915 wbfm, 2441.25 wbfm
ATV output: 1241.25 MHz am
Intercom: 146.415 PL 79.7 nbfm
Affiliated: 224.380-, 224.940 KK6KD (HARS) 447.050-, 145.260 KK6KD (HARS) 146.175+ N6FQ (Fallbrook ARC)
Linked to: 445.600-, 224.900- WD6HFR (Convair/220 ARC), 446.140- WB6FMT (123.0) Vista

† under repair * 107.2 Hz PL Tone

Snow-covered Trees at W6NWG





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Time for a membership survey.

One of the duties of the PARC Board of Directors is to ensure that the Club maintains relevance to its membership and to the Amateur Radio Community. This has been at topic at every Board meeting this year. The biggest questions are: What would our membership like is to provide? And what are the best ways to determine this?

One tool to help this process is the old fashioned survey. So here it is! Instructions for submitting the survey are below.

1) What topics would you like presented at next year's meetings?	
2) Would you like to hear meeting announcements on the repeater?	
3) Would you like a voice Identifier on a PARC repeater?	
4) What can we do to see you at our monthly meetings?	
5) Should PARC sponsor a Car Pool Net for club meetings?	
6) Should PARC offer amateur radio-related training, like Contesting Techniques, Emergency Operations, Antennas 101, etc? If yes – name a topic.	
7) How can we improve our repeaters?	
8) Would you like the Scope by e-mail, or by traditional mail?	
9) What question (s) should we be asking of the members?	
10) How would you answer the question we should ask?	

Please take some time to answer these questions and either bring your responses to the next meeting, or send them to me at adovi@cox.net or at 4724 Maple Ave, La Mesa, Ca, 91941.

There is also an online form on our website www.palomararc.org

License and Class Information

Register 5-7 days in advance for the following test sessions.

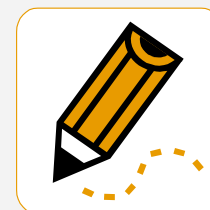
☑ PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Test sessions may be cancelled if no one pre-registers. Contact Rusty Massie AA6OM at (760) 747-5872 or dunedancer@cox.net.

☑ EARS Testing is in Escondido on the Last Saturday of the month at 9:00 am at 9:00 a.m. at the LDS Church.

The address is 1917 East Washington Avenue , Escondido , 92025.

Contact Harry W6YOO (760) 743-4212 or W6YOO@amsat.org.

☑ "The ARRL Technician Class Course for Ham Radio Licensing" Course No. EC-010 \$99 ARRL members / \$139 non-members. Courses begin on the first and third Tuesday of each month. For more information, email cce@arrl.org or via regular mail to ARRL CCE, 225 Main Street, Newington, CT 06111.



Are you interested in upgrading your license? Do you work better in small study groups or on your own? Let SCOPE know! Certified instructors in PARC are ready and willing to help you. Write to scope@palomararc.org with your license goal and study preferences. Possibilities include online study groups, pre-PARC meeting study groups, and weekend study groups.

www.ac6v.com

This wonderful ham radio website, run by Rod AC6V, is a fantastic online resource for amateur radio information. With 700 topics, 6,000 links, and 132 pages, it weighs in at the top of the scale as one of the best topical indices of ham radio webpages. The site gets well over 1,000 hits a day. Readers from 127

countries have visited www.ac6v.com which been in operation since 1997. Unlike many sites that post reams of links, only to let them rot over time, Rod sees that the links at his site are checked monthly. This removes one of the most irritating things about resource sites – the dreaded 404 Page Not

Found.

Thanks to Rod, things are easier to find on the ever-growing and often chaotic Internet. Thanks Rod, for doing such a great job and providing such a wonderful service to the ham radio community!

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Radio Astronomy

From Wikipedia, the free encyclopedia

Radio astronomy is the study of celestial phenomena through measurement of radio waves emitted by physical processes occurring in space. Radio waves have a much greater wavelength than light waves. In order to receive signals with large signal-to-noise ratio, radio astronomy requires a large antenna or an array of smaller antennas working together (for example, the Very Large Array). Most of these radio telescopes use a parabolic dish to reflect the waves to a receiver which detects and amplifies the signal into usable data. This allows astronomers to see a region of the radio sky. Radio astronomy is a relatively new field of astronomical research that still has much more to be discovered.



SDG ARES Needs TNCs

As the primary backup communications provider for local hospital emergency medical services (EMS), San Diego Amateur Radio Emergency Services Inc (SDGARES) is implementing email over ham radio using Winlink for all area hospitals.

Our initial demonstration systems will use 1200 baud VHF packet as the transport mechanism for Winlink. We would expect that a successful demonstration will encourage EMS to fund a D-Star based Winlink system to handle the anticipated higher message volumes.

The following is a list of packet TNCs that will work with the Airmail program used by Winlink

SCS TNC	PTC-II
	PTC-IIe
	PTC-IIex
	PTC-IIpro
	PTC-USB

Kantronics	KAM+
	KAM 98
	KAM XL
	KPC 3
Timewave	PK-232
	PK-900
AEA	DSP1232
	DSP2232

If you wish to donate or lend a TNC, please contact sec@sdgares.org or reply to this email. Your donations are tax deductible.

If you are interested in Winlink, you might want to try working with AIRMAIL

<http://www.siriuscyber.net/ham/>

Even if you do not own a TNC, download a copy of Airmail 3 and play with it... so that you can become familiar with its operations.
*

Trees with snow and ice loading at the repeater site. No limbs were down in January. The sky was bright and clear.

PALOMAR ENGINEERS

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

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\$25 +tax+\$8 to ship.

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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.

TUNER-TUNER

Tune your tuner without transmitting. Save that rig! Just listen to the Tuner-Tuner's noise with your receiver. Adjust your tuner for a null and presto! You have a 1:1 SWR.

Model PT-340 \$99.95+tax+\$8 S&H

See catalog at www.Palomar-Engineers.com

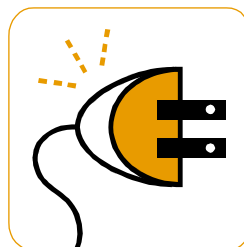
Please check our complete ads in **QST**, **CQ**, and **World Radio** magazines.

Regular Nets Sponsored by PARC

DAY	TIME	FREQ.	NET NAME	NET MANAGER CONTACT INFORMATION
T/R/S	2000	146.730	NTS Traffic Net	Charles N6TEP cmiele@juno.com
Sun	0830	146.730	ARES Sunday Net	Dennis K7DCG
Sun	2045	147.075	MARA ES	Glenn Jones KG6JDF@amsat.org
Mon	1915	146.730	RACES Sub-Net	
Mon	2100	146.730	Microwave Net	Kerry B.
Tues	1900	147.130	Red Cross Net	Ted tthompson@sclarc.org
Tues	2100	146.730	Off-Road Net	Jerry A. K6PFP jwak6pfp@cts.com Dick W. KA7AYT rwillimek@home.com
Thurs	2100	146.730	Ham Help	Manager Needed
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com Glenn P. KE6ZLY@juno.com
Nightly	>2200	147.130	Facetious Group	

PARC 2007 Board

President- Steve Early, AD6VI - 619-461-2818 - ad6vi@amsat.org
 Vice President - Tom Storer - KI6DER - ki6der@amsat.org
 Secretary - Gary Kent - W6GDK - 858-679-0578 - w6gdk@arrl.net
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 Dir. - Tom Martin - KG6RCW
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 Scope Editor - Michelle Thompson - W5NYV - w5nyv@amsat.org
 Repeater Tech Chair - Dan Bubke - K6NKC - k6nkc@amsat.org
 Membership: Al Donlevy - W6GNI - 760-630-3096 - w6gni@amsat.org



Membership Report

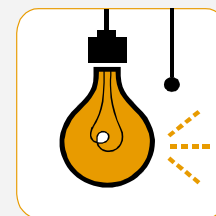
New Members Joining PARC:

W6PSK, KI6FCN, KI6BUY, K6DAF, in addition, 4 members reinstated their membership, which had lapsed. Thanks to all.

We need new members! And equally important, a greater percentage of renewals!

Thanks for checking your last months mailing label for your e-mail of record. No one sent me a complaint that the e-mail was printed this year, and we received one "correction". We only do that once a year!

Al
W6GNI



FREE TUBES

Club Members ONLY! The

PARC has a tube bank

that includes many 6 & 12

volt receiving tubes (and

some transmitting types)

for use by club members

to repair their own

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WB6IQS@amsat.org, -John

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Submissions: scope@palomararc.org
 Questions? Ideas? Comments? W6NWG@amsat.org

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73 and hope to CU you on the air! -NN3V (past president of PARC)



We're on the Web!
 See us at:
www.palomararc.org

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

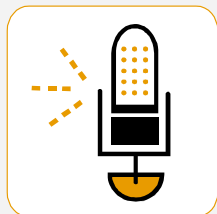
Reminders

Meeting March 7th

The program will be a beginner's tutorial on getting the most out of your hand-held 2m radio.

Auction April 12th

The Escondido Amateur Radio Club is holding their auction. See page 5 for details.



For the March meeting, compliments of Jerry Kostro, we will have two door prizes.

1. 2006/2007 ARRL repeater directory
2. gift certificate/coupon for a Nifty Accessories radio guide



Letter from the President

Our February meeting provided a very good program on Radio Astronomy. For March, we are providing a twist on the "I've got my license... now what?" theme of the last few years. We have been running a series of 5-minute programs, end to end, geared towards new hams. These have been well attended and the talk of the crowd. The downside was that many 5 minute programs became 10 minutes in length, getting most of us home a bit late. This year, for our March program, we are providing a single program aimed at new hams, but is just as applicable to many seasoned veterans:

"How to get the most out of your Hand-Held Transceiver" by Jerry Kostro, AK6QJ.

From personal experience, I can say that this program is a must for anyone that owns or is considering the purchase of a hand-held radio. I have owned a handheld radio for about ten years and have

become very familiar with the features, benefits, and limitations of a handheld as compared to a VHF/UHF mobile radio. Several of us had the opportunity to see this program at a Red Cross Communications meeting last fall.

Jerry was able to present additional techniques and solutions to common hand-held operational problems. I learned a great deal from this program. I believe that many of you will too. If you know anyone that has a hand-held, or is likely to buy one, please tell them about this program. It will likely help them get the most out of their radio.

Looking down the road, the April 4th program topic is still in the air (tentatively on SteppIR antennas). The May 2nd program will be Gordon West, WB6NOA. Gordon West always puts on a good program, so tell your friends.

By the time you see this, the Morse code requirement will have been removed from all classes of Amateur

Radio Licenses. PARC is anticipating a need for one or more General upgrade classes and perhaps an Extra upgrade class as well. The PARC Board is looking into sponsoring these classes in the Carlsbad/Oceanside area, perhaps at the Carlsbad Safety Center. If you are interested in upgrading to General or Extra, please e-mail me at ad6vi@cox.net

If you would like to help teach such a class, please e-mail me as well. June will be a busy month. We will host a special event station on Palomar Mountain, to celebrate the anniversary of the Hale Telescope, then Field Day. Start marking your calendars.

With all of this, we will be moving forward with the Repeater Site Refurbishment Project this spring and summer.

I hope to see you on March 7th. Bring a friend! *

Fold & Staple Team Credits

Nov 06 SCOPE

Rich, KE6DUG
Jo, KB6NMK
Al, W6GNI & Kathy
Art, KB6YHZ
Sonny, WA5ACE
Harry, W6YOO

Dec 06 SCOPE

Art, KB6YHZ
Jo, KB6NMK
Al, W6GNI & Kathy
Harry, W6YOO
Rich, KE6DUG
Sonny, WA5ACE

Jan 07 SCOPE

Harry, W6YOO
Jo, KB6NMK
Terri, N6UZH & Tyler & Matthew
Al, W6GNI & Kathy

Feb 07 SCOPE

Sonny, WA6ACE
Art, KB6YHZ
Al, W6GNI & Kathy
Merle, KR6BT

QSL Card Design Competition

**For the Hale Telescope
Special Event Station June
2-3, 2007**

The Palomar Amateur Radio Club invites you to participate in an Art Competition, organized on behalf of the special event station celebrating the 59th anniversary of the dedication of the 200 inch Hale Telescope at Palomar Mountain.

The competition is open to all forms of art.

Entries will be judged for their popular appeal as well as which one is best suited for use as a QSL card.

A QSL card is confirmation of a communication between two amateur radio stations. A QSL card is the same size and made from the same material as a postcard (3.5 x 5.5 inches).

The 200-inch (5.1 m) Hale Telescope (f/3.3) was one of the world's largest telescopes for 45 years (1948 - 1993). It is still an important scientific instrument and is used almost every night of the year in a wide variety of astronomical studies.

For complete rules on the design competition, please visit www.palomararc.org

The Board of Directors of the Palomar Amateur Radio Club will judge the entries. Prizes will be awarded to the winner and two runners-up.

2007 International DX Convention

The 2007 International DX Convention will take place April 27, 28 & 29, 2007 at the Holiday Inn Hotel & Conference Center in Visalia, California. This is an ARRL sanctioned convention that is sponsored this year by the Northern California DX Club. It is expected to draw visitors from around the World and will feature programs from recent DXpeditions and contest operations.

The Convention theme this year is, "Elmering New DXers is Job Number One!"

Accordingly, a portion of the programming will be devoted to helping new DXers learn about how to be noticed in a pile-up, snag a "new one" and get that elusive QSL card.

Other Convention offerings will include: DX, Top Band and Contest Forums, technical talks, many door prizes, both Friday and Saturday evening "attitude adjustments", Saturday Barbecue Lunch, Saturday night banquet, Sunday morning "power" breakfast, Vendors Exhibits and QSL card checking.

Current information and registration forms are available on the Convention web page, which can be found at www.dxconvention.org. Additional registration information can be obtained by contacting Convention Registration Chairman, Dick Letrich, W6KM via Email at dlw6km@aol.com.

If you're interested in DX or DXing, the Visalia International DX Convention is the place to be. We hope to see you there. *

California Rally Series Needs Hams

An Invitation to join the Desert Storm Rally Communicators John Beckwith N6JCB and I have volunteered to handle communications for the California Rally Series - Desert Storm Road Rally, March 23-24th, 2007, near Blythe, California, and we would like to invite you and your members to join us. John and I are new to this event and look forward to your participation. It's fun, and an excellent chance for us to exercise our emergency communications equipment and practice our communications skills.

Rally cars are street-legal vehicles especially modified to handle well and go quickly on rough roads. It's a timed event, with each car racing the clock. The lowest elapsed time (and fewest penalties) in each class wins.

We're looking for Ham Radio Operators to serve as Communications Captains. Captains find the stages and blockages using GPS coordinates. We also need

Block Communicators to provide strategic safety and vehicle movement information along each stage as it is run. We need more communicators than usual and we hope you are interested in joining us. We scouted the stages mid-January and found the roads well maintained and scenic. The desert will be lovely in March.

The organizers are still working on the specifics, but we do know this rally has some especially challenging communications issues such as long stages run on fast roads in terrain that will require at least two net control sites. The stages will be run in La Paz County in western Arizona, just across the state line from Blythe, California. Seven of the stages are new and have never been run before. We'll be using the Yuma Proving Grounds and roads north and south of Interstate 10. Because of the distances involved, those of you with higher gain antennas and portable masts should

definitely plan to bring them with you. Mobile radios and clear, concise communications skills will be necessary. This is going to be a very busy rally with two days of racing and lots of individual stages, so we're going to have our hands full. We really need your help.

Rally races are an excellent real-word test of communications equipment and skills and they're a lot of fun.

Volunteer by signing up at: www.californiarallyseries.com

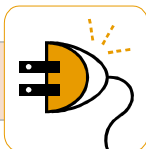
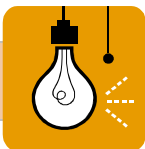
Click on Volunteer Signup and then click on Desert Storm.

Additional information will be posted on:

www.desertstormrally.com

Jonathan Zimmerman K6JGZ
Desert Storm Assistant
Communication Chief
jzimmerman@sprynet.com

*



Club Classified Ads

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG. Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(2.5) Wanted: Rotators for AZ-EL Microwave dish project: Need two antenna rotators: AR-22, 5-wire Alliance, TR-44, etc. Do not need control boxes, just the rotators. Repairable "AS-IS" OK. WB6IQS@amsat.org, 760-727-3876.

Wanted: Alinco DJ-560 battery for HT. Broke my battery, need replacement 12 volt battery for Alinco HT. NiCad battery condx not important, just need the housing. WB6IQS@amsat.org, 760-727-3876.

(1.22) Avenger 4000 Alarm System. 8-PIR's, 2 Sirens, Numerical Keypad, 5 Zones. \$60.00 OBO contact Dennis K7DCG@arrl.net or (858) 748-9046

(1.22) 3 Kenwood TM-211's 2 meter transceivers. 20 watts, Digital encoded squelch w/manuals \$70.00/ea or \$180.00 for all three. w/SS32 PL's. Contact Dennis K7DCG@arrl.net or 858-748-9046

(1.22) Homebrew copper pipe 220 MHz J-Pole Antenna \$10.00 OBO, contact Dennis K7DCG@arrl.net or 858-748-9046

(1.22) Cushcraft 11 element beam, can be set up for Horizontal or Vertical Polarization. \$20.00 OBO, contact Dennis K7DCG@arrl.net or 858-748-9046

(9.26) For Sale: 2 MFJ Loop tuning Capacitors: One Large, one small. Brand new. Never used. \$70/\$55. Contact Ron, K2RP (760) 436-8109 K2RP@ARRL.NET *

Special Event Station

The Palomar Amateur Radio Club, with the Palomar Mountain Volunteer Fire Department Radio Club (K16FDN), will sponsor a special event station on Palomar Mountain June 2-3, 2007. This event commemorates the 59th anniversary of the June 3, 1948 dedication of the Hale Telescope at the Palomar Mountain Observatory and will be held in the communications center of the Palomar Mountain Volunteer Fire Department.

Operators are needed for this event. Everyone is welcome.

QSL cards will be given for each contact. This means that QSL cards need to be designed. In order to achieve the best design, and in order to provide a forum for artistic endeavor, a design competition has been announced. See the sidebar on page 2 for the QSL Card Design Competition announcement.

Equipment is needed for the amateur radio station at the volunteer fire department. VHF and HF gear, including masts and antennas, is desired.

To indicate interest in operating or volunteering at the special event station, to enter the QSL card design competition, and to donate equipment to the station, please contact

Michelle W5NYV
(858) 229-3399
w5nyv@amsat.org

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Ron N6OMW
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Committee Chairpersons

ARES Info	Tony	KC6YSP
ARES Net	Dennis S.	K7DCC@amsat.org
Attendance	Al	W6GNI@amsat.org
ATV	Art	KC6UQH@amsat.org
Auction	Tom M.	KG6RCW@amsat.org
Badges New	Al	W6GNI@amsat.org
Batteries	David	BK6EBYDAT@Gerry.Palomar.caltech.edu
BBS Monitor	Bill B.	N6FMK@amsat.org
Billing Ads/etc	Jo A.	KB6NMK@amsat.org
Contest Info	Dennis V.	N6KI@amsat.org
Control Ops	Filled	W6NWG@amsat.org
Del Mar Fair	Jim Cooper	NE6O@amsat.org
EmComm	Harry	W6YOO@amsat.org
	Dennis V.	N6KI@amsat.org
Field Day Tech	John K.	WB6IQS@amsat.org
Inventory	Dennis B.	KD6TUJ@amsat.org
New Member	Christy M.	K16AOL
Nets	PARC	Board@palomararc.org
Newsletter	Michelle	W5NYV@amsat.org
Patch Info	Stan	W9FQN@amsat.org
Patch Electronics	Jerry H.	WB6FMT@amsat.org
Picnic	Mark R.	KF6WTN@amsat.org
Power AC/DC	Mike P.	K6MRP@amsat.org
Programs	Dennis B.	KD6TUJ@amsat.org
Publicity	Terry R.	K3PXX
QSL Cards	Harry H.	W6YOO@cox.net
RACES Info	Jo A.	KB6NMK@amsat.org
RED Flag	Steve	AD6VI@amsat.org
Repeater Site	Mike P.	K6MRP@amsat.org
Repeater Tech	Mike D.	AB6QT@amsat.org
SANDARC	Jim/Steve	NE6O/AD6VI
Seller Table	John K.	WB6IQS@amsat.org
Testing VE	TBD	TBD
Trustee	Mike D.	AB6QT@amsat.org
Web	Paul W.	www.palomararc.org

Contest Calendar

Mar 3	ARRL International DX Contest, SSB
Mar 3	Wake-UP! QRP Sprint
Mar 3	Ukraine Open RTTY Championship
Mar 4	DARC 10-meter digital contest
Mar 5	RSGB 80m Club Championship, Data
Mar 6	ARS Spartan Sprint
Mar 6	AGCW YL CW Party
Mar 8	Pesky Texan Armadillo Chase
Mar 10	RSGB Commonwealth Contest
Mar 10	ID, OK, WI QSO Parties
Mar 10	AGCW QRP Contest
Mar 10	Spain PSK31 Contest
Mar 10	SOC Marathon Sprint
Mar 11	North American Sprint, RTTY
Mar 11	WBA Spring Contest, CW
Mar 11	NSARA Contest
Mar 13	CLAARA and Family HF Contest
Mar 14	RSGB 80m Club Championship, CW
Mar 16	SARL VHF/UHF Contest
Mar 17	10-10 International Mobile Contest
Mar 17	BARTG Spring RTTY Contest
Mar 17	Russian DX Contest
Mar 17	AGCW VHF/UHF Contest
Mar 17	Virginia QSO Party
Mar 18	UBA Spring Contest, 6 Meters
Mar 18	Kuwait 15-Meter Contest
Mar 18	ARCI HF Grid Square Sprint
Mar 19	Run for the Bacon QRP Contest
Mar 19	Bucharest Contest
Mar 22	NAQCC Straight Key/Bug Sprint
Mar 22	RSGB 80m Club Championship, SSB
Mar 24	CQ WW WPX Contest, SSB
Mar 26	QRP Homebrew Sprint

Rather a long list of contests for March with something for everyone including SSB, CW, Digital and Sprints. Also a few state QSO parties for WAS chasers. Complete rules may be found on the Internet and in QST, CQ, NCJ and Worldradio magazines. See you in the contest!

—Harry W6YOO

Repeater Information

52.680 W6NWG -0.5 MHz, Autopatches: 146.730-, 147.075+, *147.130+, *447.000-

PKT: 145.050s (PALMAR/W6NWG-1) 146.700- (Duplex Pkt) PALBBS/EMG use 145.070/146.700- (W6NWG-3/PALBBS)

ATV input: 915 wbfm, 2441.25 wbfm

ATV output: 1241.25 MHz am

Intercom: 146.415 PL 79.7 nbfm

Affiliated: 224.380-, 224.940 KK6KD (HARS) 447.050-, 145.260 KK6KD (HARS) 146.175+ N6FQ (Fallbrook ARC)

Linked to: 445.600-, 224.900- WD6HFR (Convair/220 ARC), 446.140- WB6FMT (123.0) Vista

† under repair * 107.2 Hz PL Tone

Public Service Event

Lake Hodges 50km Trail Race

From <http://www.lakehodges50k.com/>

Date: 31 March 2007

Start Time: 0700

Where: Sunset Drive Trail Head, Escondido, CA

The Lake Hodges 50k Trail Race is 31 March 2007 and has something to offer ultra-runners of all abilities. The course has sufficient challenge and interest for experienced and competitive runners yet, at the same time, is a very "runnable" race for the novice and middle of the pack ultra-marathoners. What is enjoyed and appreciated by all the runners, crew, and spectators is Lake Hodges' natural beauty and scenic trails being so conveniently located near to the City of San Diego.

Located in a coastal canyon, Lake Hodges offers an environment that serves as a pleasant backdrop to a variety of recreational uses (besides ultra-running), including fishing, boating, sailing, bike and horseback riding, and picnicking.

The dirt hiking and riding trails around much of the lake wind through ever-changing terrain and biological settings which include streams, lush river valleys, canopied oak forests, arid rocky terrain and open fields. The topography changes from elevated vistas to marsh-like wetlands.

Jim Egerton, W6SST (w6sst@amsat.org), is the Communications Coordinator for this race. The 147.130 machine will be used during the event to allow the six aid station checkpoints to communicate. *

PARC Meeting Videos

PARC meetings have been video recorded for the last year. These videos can be purchased for a cost of \$2.00 to cover expenses. The videos include:

March	I Got My License, Now What?
April	Restoring Old Radios
May	6 Meters
June	Field Day Escondido and Palomar
July	PARC Repeater Site and History
August	DXing 101
September	RF Safety
October	TAPR Digital Communications Conference Report
February	Amateur Radio Astronomy

January was a video of the Peter I Island 3Y0X DXpedition and is available from:

<http://70.103.16.185/~trexsoft/trexsoftware.com/peterone/dvd/index.htm>

Order copies through Dennis KD6TUJ at the meetings. *

Public Service Opportunities

1) Needed: volunteers for Pacific Crest Trail 50 mile run on May 12th 2007, contact pschmidt1@cox.net

2) Needed: Special Olympics Amateur Radio Support Coordinator, contact Paul Rios at KC6QLS@cox.net



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Club Auction

**All PARC members
invited to attend**

The Escondido Amateur Radio Society will be holding our annual club auction on April 12th at the Salvation Army building in Escondido. The address is 1301 Las Villas Way, in Escondido. We request sellers register at 6:00pm and buyers at 6:30pm. The auction will start at 7:00pm.

-Dirk Reschly, N6SUN

Time for a membership survey.

One of the duties of the PARC Board of Directors is to ensure that the Club maintains relevance to its membership and to the Amateur Radio Community. This has been at topic at every Board meeting this year. The biggest questions are: What would our membership like is to provide? And what are the best ways to determine this?

One tool to help this process is the old fashioned survey. So here it is! Instructions for submitting the survey are below.

1) What topics would you like presented at next year's meetings?	
2) Would you like to hear meeting announcements on the repeater?	
3) Would you like a voice Identifier on a PARC repeater?	
4) What can we do to see you at our monthly meetings?	
5) Should PARC sponsor a Car Pool Net for club meetings?	
6) Should PARC offer amateur radio-related training, like Contesting Techniques, Emergency Operations, Antennas 101, etc? If yes – name a topic.	
7) How can we improve our repeaters?	
8) Would you like the Scope by e-mail, or by traditional mail?	
9) What question (s) should we be asking of the members?	
10) How would you answer the question we should ask?	

Please take some time to answer these questions and either bring your responses to the next meeting, or send them to me at adovi@cox.net or at 4724 Maple Ave, La Mesa, Ca, 91941.

There is also an online form on our website www.palomararc.org

License and Class Information

Register 5-7 days in advance for the following test sessions.

☑ PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Please call 619-465-EXAM for the latest contact info.

Test sessions may be cancelled if no one pre-registers.

☑ EARS Testing is in Escondido on the Last Saturday of the month at 9:00 am at 9:00 a.m. at the LDS Church.

The address is 1917 East Washington Avenue , Escondido , 92025.

Contact Harry W6YOO
(760) 743-4212 or
W6YOO@amsat.org.

☑ "The ARRL Technician Class Course for Ham Radio Licensing" Course No. EC-010 \$99 ARRL members / \$139 non-members. Courses begin on the first and third Tuesday of each month. For more information, email cce@arrl.org or via regular mail to ARRL CCE, 225 Main Street, Newington, CT 06111.



Mentors and a Mentor Coordinator Needed

PARC is looking for persons interested in help others to become better Amateur Radio Operators.

We are looking for individuals that might be available the second Saturday afternoon of each month from 12 noon to 2 PM to help work with those that have either just earned their license or an upgrade.

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI.

www.ac6v.com

This wonderful ham radio website, run by Rod AC6V, is a fantastic online resource for amateur radio information. With 700 topics, 6,000 links, and 132 pages, it weighs in at the top of the scale as one of the best topical indices of ham radio webpages. The site gets well over 1,000 hits a day. Readers from 127 countries

have visited www.ac6v.com which been in operation since 1997. Unlike many sites that post reams of links, only to let them rot over time, Rod sees that the links at his site are checked monthly. This removes one of the most irritating things about resource sites – the dreaded 404 Page Not Found.

Thanks to Rod, things are easier to find on the ever-growing and often chaotic Internet. Thanks Rod, for doing such a great job and providing such a wonderful service to the ham radio community!

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Repeater Site Refurbishment

As mentioned in the January Scope, PARC will be refurbishing the repeater site this spring and summer.

A refurbishment fund has already been started, with a substantial donation from Richard Krist, W6TKE.

We will be in need of volunteers to do several tasks, including, but not limited to **tower climbers** to clean/paint the tower and change out hardware, and **grounds crews** to assist the climbers and for working on refurbishing the grounds, and buildings.

Building refurbishment projects include sealing, preparing and painting the buildings, removing excess materials, and general site clean-up and fire mitigation.

Keep an eye on the April Scope for a detailed plan. If you want to help, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI. *



Volunteer Examiners Needed

After 18 years of dedicated service as the SANDARC Carlsbad Volunteer Examiner (VE) Team Leader, Rusty Massie, AA6OM, has tendered his resignation, as team leader, to the San Diego County Amateur Radio Council VE Coordinator. Assi Friedman is serving as Interim Team Leader, pending identification and appointment of a permanent VE Team Leader for the site.

If you see Rusty, please thank him for all his years of dedication to the VE program.

In the meantime, Rusty and Assi have both said there is a need for more VEs at the Carlsbad site. Amateur Extras are preferred, but Advanced and General Class operators may serve as well.

Hams seeking accreditation as VEs must be 18 years of age or older, have never had their amateur station or operator licenses suspended or revoked, and must hold a valid General, Advanced or Extra Class license (Section 97.509).

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI.*

Fair Volunteers Needed!

A call for volunteers to staff the San Diego County Fair Amateur Radio Exhibit

June is fast approaching, and the San Diego County Amateur Radio Council is asking for PARC participation in the SANDARC exhibit at the San Diego County Fair in Del Mar.

The Fair will run June 8th, through July 4th, but will be closed June 11-12, 18-19, and the 25th.

Shifts are 10 AM to 2 PM and 2 PM to 6 PM. We need two people per shift.

This is a good opportunity to present amateur radio to the general public and answer questions for those that are interested. In previous years, there have been some very enthusiastic (about radio) children and parents, as well as plenty of people that simply need directions to the bathroom. In both cases, volunteering provides a very useful service.

If you would help out, please contact Jim Cooper, NE6O, at ne6o@amsat.org *

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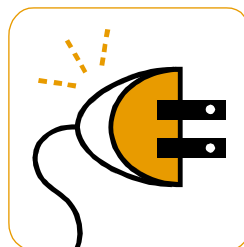
Please check our complete ads in **QST**, **CQ**, and **World Radio** magazines.

Regular Nets Sponsored by PARC

DAY	TIME	FREQ.	NET NAME	NET MANAGER CONTACT INFORMATION
T/Th/Sa	2000	146.730	NTS Traffic Net	Charles N6TEP cmiele@juno.com
Sun	0830	146.730	ARES Sunday Net	Dennis K7DCG
Sun	2045	147.075	MARA ES	Glenn Jones KG6JDF@amsat.org
Mon	1915	146.730	RACES Sub-Net	
Mon	2100	146.730	Microwave Net	Kerry B.
Tues	1900	147.130	Red Cross Net	Ted tthompson@sclarc.org
Tues	2100	146.730	Off-Road Net	Dick Wilimek KA7AYT rwilimek@cox.net Mike Doyle AB6QT
Thurs	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com Glenn P. KE6ZLY@juno.com
Nightly	>2200	147.130	Facetious Group	

PARC 2007 Board

President- Steve Early, AD6VI - 619-461-2818 - ad6vi@amsat.org
 Vice President - Tom Storer - KI6DER - ki6der@amsat.org
 Secretary - Gary Kent - W6GDK - 858-679-0578 - w6gdk@arri.net
 Treasurer - Bob Birch - KG6RGI - rrbirch@cox.net
 Dir. - Tom Martin - KG6RCW
 Dir. - Dennis Baca - KD6TUJ - 760-722-0251 - kd6tuj@amsat.org
 Scope Editor - Michelle Thompson - W5NYV - w5nyv@amsat.org
 Repeater Tech Chair - Dan Bubke - K6NKC - k6nkc@amsat.org
 Membership: Al Donlevy - W6GNI - 760-630-3096 - w6gni@amsat.org



February Meeting Goodie Givers

KE6DUG Rich
 KG6RCW Tom
 KG6JEI Conrad
 K6ISS Fred

Membership Report

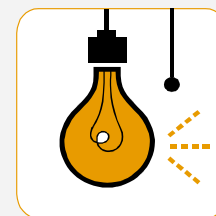
New Members Joining PARC:

KI6BUT, N6SF, KI6HEC, and KI6FWW.

Two previous members reinstated their membership. Please be sure to welcome the new and old returning members.

Please use the firms that support the club, and mention that you saw their advertisements in the newsletter.

Al
 W6GNI



FREE TUBES

Club Members ONLY! The

PARC has a tube bank

that includes many 6 & 12

volt receiving tubes (and

some transmitting types)

for use by club members

to repair their own

personal equipment. Not

for commercial use or

resale. If we have your

requests, I will pre-check

and deliver them to the

next club meeting.

Contact

WB6IQS@amsat.org, -John

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Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on March 7th, 2007 (the first Wednesday of each month) at the Carlsbad Safety Center. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. The program will be a beginner's tutorial on getting the most out of your hand-held 2m radio. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome!

The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA).

73 and hope to CU you on the air! -NN3V (past president of PARC)



We're on the Web!
 See us at:
www.palomararc.org

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

Reminders

Meeting April 4th

PARC's general meeting.

Auction April 12th

The Escondido Amateur Radio Club is holding their annual auction. See page 5 for details.

Special Event Station W6P
Jun 2-Jun 3, 1300Z-0700Z,
San Diego, CA. Sponsored
by K16FDN and W6NWG.
Hale Telescope on Palomar
Mountain dedication
anniversary. 14.260 7.260.
QSL. Michelle Thompson,
W5NYV, 5379 Carmel Knolls
Dr, San Diego, CA 92130.



For the March meeting, compliments of Jerry Kostro, we had two door prizes.

1. 2006/2007 ARRL repeater directory – won by David Doan, KC6YSO
2. gift certificate/coupon for a Nifty Accessories radio guide – won by Conrad Lara, KG6JEI and Mike Harris, KG6ZUW (guest)



Letter from the President

It is now April and spring has sprung. The clocks have all rolled forward for local Daylight Savings Time so many of our HF Nets have changed by one hour (isn't Universal Coordinated time grand!).

Our March Meeting was "How to Get the Most Out of Your Hand-Held Transceiver" by Jerry Kostro, AK6QJ.

This is the kind of topic that is in great demand by newer hams, as attested to by the 20, or so, first-time visitors to a PARC meeting. As predicted last month, Jerry was able to present additional techniques and solutions to common hand-held operational problems. If you know anyone that has a hand-held, or is likely to buy one, please tell them about this program, as it was recorded and should be posted on the PARC website in the near future.

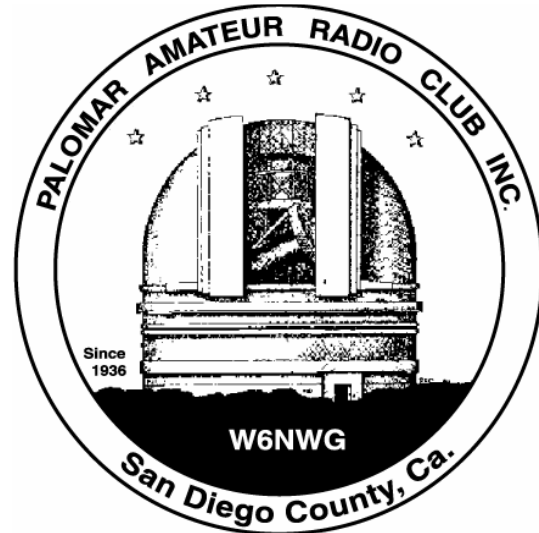
The April 4th program topic will be on SteppIR / MonstIR Antennas, presented by Howard White, KY6LA.

Looking down the road: April through August - Repeater site refurbishment work parties. Watch the website for details.

The May 2nd Program will be Gordon West, WB6NOA. Gordon always puts on a good program, so tell your friends.

On Saturday Morning, May 19, from 8:00 AM to noon, PARC will be sponsoring a "Get On The Air" Seminar for new and returning hams. We will cover such subjects as

1. What To Buy (And Why)
2. Basic Radio Connections That Enable Field Operation
3. Basic Radio Functions
4. Programming The Radio
5. How to talk on the radio



We are tentatively scheduled for the Carlsbad Safety Center, so keep an eye on <http://www.palomararc.org> for an up to date schedule

In June, we are very busy!

On June 2nd (from 6 am to midnight PDT), The Palomar Amateur Radio Club, with the Palomar Mountain Volunteer Fire Department Radio Club (K16FDN), will sponsor a Special Event Station (Callsign: W6P) on Palomar Mountain. This event commemorates the 59th anniversary of the June 3, 1948 dedication of the Hale Telescope at the Palomar Mountain Observatory and will be held in the communications center of the Palomar Mountain Volunteer Fire Department. Operators are needed for this event. Everyone is welcome. Shifts of 2 to 4 hours (or more if so inclined). If interested, please contact Michelle, W5NYV, at (858) 229-3399 or w5nyv@amsat.org

Also on June 2nd and 9th (and finishing June 9th), The Palomar Amateur Radio Club is offering a 2-day General upgrade class at the Carlsbad Safety Center

See the Scope or website for the schedule.

Please contact Steve Early at ad6vi@cox.net or 619-461-2818, if you are interested in upgrading to "General".

June 6th - PARC General Membership Meeting

June 22, 23, 24 - Field Day Last year, we had over 100 participants and visitors. This year, as was the case two years ago, we are actively looking for a new Field Day site, as last year's site is scheduled for construction.

We are looking for a fairly flat lot, about 1000 feet across, with good public access and with a good RF view to the northeast (for HF) and to the northwest (for VHF). If you can think of any, please let our Field Day Chair, Conrad Lara, know at kg6jel@amsat.org

I hope to see you on April 4th. Bring a friend! *

QSL Card Design Competition

**For the Hale Telescope
Special Event Station June
2-3, 2007**

The Palomar Amateur Radio Club invites you to participate in an Art Competition, organized on behalf of the special event station celebrating the 59th anniversary of the dedication of the 200 inch Hale Telescope at Palomar Mountain.

The competition is open to all forms of art.

Entries will be judged for their popular appeal as well as which one is best suited for use as a QSL card.

A QSL card is confirmation of a communication between two amateur radio stations. A QSL card is the same size and made from the same material as a postcard (3.5 x 5.5 inches).

The 200-inch (5.1 m) Hale Telescope (f/3.3) was one of the world's largest telescopes for 45 years (1948 - 1993). It is still an important scientific instrument and is used almost every night of the year in a wide variety of astronomical studies.

For complete rules on the design competition, please visit www.palomararc.org

The Board of Directors of the Palomar Amateur Radio Club will judge the entries. Prizes will be awarded to the winner and two runners-up.

2007 International DX Convention

The 2007 International DX Convention will take place April 27, 28 & 29, 2007 at the Holiday Inn Hotel & Conference Center in Visalia, California. This is an ARRL sanctioned convention that is sponsored this year by the Northern California DX Club. It is expected to draw visitors from around the World and will feature programs from recent DXpeditions and contest operations.

The Convention theme this year is, "Elmering New DXers is Job Number One!"

Accordingly, a portion of the programming will be devoted to helping new DXers learn about how to be noticed in a pile-up, snag a "new one" and get that elusive QSL card.

Other Convention offerings will include: DX, Top Band and Contest Forums, technical talks, many door prizes, both Friday and Saturday evening "attitude adjustments", Saturday Barbecue Lunch, Saturday night banquet, Sunday morning "power" breakfast, Vendors Exhibits and QSL card checking.

Current information and registration forms are available on the Convention web page, which can be found at www.dxconvention.org. Additional registration information can be obtained by contacting Convention Registration Chairman, Dick Letrich, W6KM via Email at dlw6km@aol.com.

If you're interested in DX or DXing, the Visalia International DX Convention is the place to be. We hope to see you there. *

San Diego Orienteering Club Event

Supported by ARES

By Jim Egerton W6SST

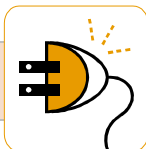
On January 13, 14 and 15, 2007, ARES supported an San Diego Orienteering Club event in Anza Borrego Desert State Park. For those of you who are not familiar with orienteering it is a race where you find your way from check point to check point with no more than a compass and a topographical map. There were close to 150 participants in several different competitions handicapped in age and experience categories. Our job was to stay as close as possible to the participants and provide emergency communications if needed. The course covers a two square-mile area in the Anza Borrego Desert called Borrego Mountain that contains geological wonders such as "The Slot" and Hawk Canyon. From the East Butte of Borrego Mountain you can see the Salton Sea. It was freezing at night and in the 50s during the day. We first started out with the PAPA System UHF repeater on

Toro Peak and it worked flawlessly. Thanks Cecil! We also had the RACES repeater to call in paramedics if needed. Ed Hasselmann and Andre Hansen set up on top of the East Butte and devised a method of cross banding UHF simplex to VHF simplex. This gave us a 700 foot tower that could simplex into Borrego Springs approximately 15 miles away. Even from Hawk Canyon, completely surrounded by high cliffs, you could still communicate. This type of quick thinking and experimentation is key to deploying and setting up communications in emergency situations. Bill Gookin of the Orienteering Club of San Diego asked me to thank all of the ham community for supporting his club, especially the following amateur radio volunteers:

David Doan KC6YSO rover for 1 day
Jo Ashley KB6NMK net control for 1 day
Ed Hasselmann KF6NXY cross band for 2 days

Andre Hansen K6AH cross band and Winlink experimentation and NVIS antenna demo for 2 days
Jerry Kostro AK6QJ net control for one day
Don Johnson WD6FWE rover for one day
Tom Martin KG6RCW rover for one day
Bob and Sue Kruger K6DEX and K6FKB food and shelter for three 1/2 days and 3 nights. Without their fifth wheel we would have suffered the elements. Sue's tasty sandwiches, soup, and coffee were wonderful. Bob also was net control.
Preston Butler W6ASP rover for 1 day
Jim Cooper NE6O rover for 1 day
Ralph Smith AE6SV rover for 1 day
Mark Robinson KG6PSK net control for 1 day
Howard White KY6LA observer, critic, and rover 3/4 day

How many times do you get to be outdoors in a beautiful area, brave the elements, learn something new, establish a communications plan and help a group of grateful people if they need it? This is amateur radio at its best. *



Club Classified Ads

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG. Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(4.1) EF-610 Force-12 6-element 10m beam - condx: good, on the ground, \$60. A-50-5S Cushcraft 5-el 6m beam - condx: bent boom and bent 2 elements, fixable, on the ground, \$25. Parts for TX472MDP Tower: M-15R mast, TRX-80HD tower raising fixture with K2550 winch, and new HD T-Base. \$60 for all. Miscellaneous aluminum tubing from Sommer beam: come and get it. Peter KQ6AA potifar@pacbell.net or 760-917-2264

(2.5) Wanted: Rotators for AZ-EL Microwave dish project: Need two antenna rotators: AR-22, 5-wire Alliance, TR-44, etc. Do not need control boxes, just the rotators. Repairable "AS-IS" OK. WB6IQS@amsat.org, 760-727-3876.

Wanted: Alinco DJ-560 battery for HT. Broke my battery, need replacement 12 volt battery for Alinco HT. NiCad battery condx not important, just need the housing. WB6IQS@amsat.org, 760-727-3876.

(1.22) Avenger 4000 Alarm System. 8-PIR's, 2 Sirens, Numerical Keypad, 5 Zones. \$60.00 OBO contact Dennis K7DCG@arrl.net or (858) 748-9046

(1.22) 3 Kenwood TM-211's 2 meter transceivers. 20 watts, Digital encoded squelch w/manuals \$70.00/ea or \$180.00 for all three. w/SS32 PL's. Contact Dennis K7DCG@arrl.net or 858-748-9046

(1.22) Homebrew copper pipe 220 MHz J-Pole Antenna \$10.00 OBO, contact Dennis K7DCG@arrl.net or 858-748-9046

(1.22) Cushcraft 11 element beam, can be set up for Horizontal or Vertical Polarization. \$20.00 OBO, contact Dennis K7DCG@arrl.net or 858-748-9046 *

Photos from the Orienteering Club Event. Article page 2.



KF6NXY and WD6FWE at "The Slot".



KF6NXY's solar panels supplying cross band repeater.

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Bob KA6EKT

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Committee Chairpersons

ARES Info	Tony	KC6YSP
ARES Net	Dennis S.	K7DCC@amsat.org
Attendance	Al	W6GNI@amsat.org
ATV	Art	KC6UQH@amsat.org
Auction	Tom M.	KG6RCW@amsat.org
Badges New	Al	W6GNI@amsat.org
Batteries	David	BK6EBYDAT@Gerry.Palomar.caltech.edu
BBS Monitor	Bill B.	N6FMK@amsat.org
Billing Ads/etc	Jo A.	KB6NMK@amsat.org
Contest Info	Dennis V.	N6KI@amsat.org
Control Ops	Filled	W6NWG@amsat.org
Del Mar Fair	Jim Cooper	NE6O@amsat.org
EmComm	Harry	W6YOO@amsat.org
	Dennis V.	N6KI@amsat.org
Field Day Tech	John K.	WB6IQS@amsat.org
Inventory	Dennis B.	KD6TUJ@amsat.org
New Member	Christy M.	K16AOL
Nets	PARC	Board@palomararc.org
Newsletter	Michelle	W5NYV@amsat.org
Patch Info	Stan	W9FQN@amsat.org
Patch Electronics	Jerry H.	WB6FMT@amsat.org
Picnic	Mark R.	KF6WTN@amsat.org
Power AC/DC	Mike P.	K6MRP@amsat.org
Programs	Dennis B.	KD6TUJ@amsat.org
Publicity	Terry R.	K3PXX
QSL Cards	Harry H.	W6YOO@cox.net
RACES Info	Jo A.	KB6NMK@amsat.org
RED Flag	Steve	AD6VI@amsat.org
Repeater Site	Mike P.	K6MRP@amsat.org
Repeater Tech	Dan k6nkc	k6nkc@amsat.org
SANDARC	Jim/Steve	NE6O/AD6VI
Seller Table	John K.	WB6IQS@amsat.org
Testing VE	TBD	TBD
Trustee	Mike D.	AB6QT@amsat.org
Web	Paul W.	www.palomararc.org

Contest Calendar

Apr 3	ARS Spartan Contest
Apr 3	YLRL YL to YL Contest, CW
Apr 7	ARLHS Spring QSO Party
Apr 7	ARCI Spring QSO Party
Apr 7	SP DX Contest
Apr 7	Spain RTTY Contest
Apr 7	Missouri QSO Party
Apr 9	Low Power Spring Sprint
Apr 10	YLRL YL to YL Contest, SSB
Apr 11	NAQCC Straight Key/Bug Sprint
Apr 14	KIDX CW Contest
Apr 14	EU Spring Sprint, CW
Apr 14	Georgia QSO Party
Apr 16	Run for the bacon QRP Contest
Apr 21	TARA Skirmish Digital Contest
Apr 21	Holyland DX Contest
Apr 21	EU Spring Sprint, SSB
Apr 21	Michigan QSO Party
Apr 21	Spain QRP CW Contest I
Apr 21	Ontario QSO Party
Apr 21	YU DX Contest
Apr 28	SP DX RTTY Contest
Apr 28	Helvetia Contest
Apr 28	Florida QSO Party
Apr 28	Nebraska QSO Party

CW, SSB, RTTY, Sprints! What more could you ask for. Complete rules can be found on the WEB, and QST, CQ, NCJ and Worldradio magazines.

CU in the contest! 73, Harry, W6YOO

Repeater Information

52.680 W6NWG -0.5 MHz, Autopatches: 146.730-, 147.075+, *147.130+, *447.000-

PKT: 145.050s (PALMAR/W6NWG-1) 146.700- (Duplex Pkt) PALBBS/EMG use 145.070/146.700- (W6NWG-3/PALBBS)

ATV input: 915 wbfm, 2441.25 wbfm

ATV output: 1241.25 MHz am

Intercom: 146.415 PL 79.7 nbfm

Affiliated: 224.380-, 224.940 KK6KD (HARS) 447.050-, 145.260 KK6KD (HARS) 146.175+ N6FQ (Fallbrook ARC)

Linked to: 445.600-, 224.900- WD6HFR (Convair/220 ARC), 446.140- WB6FMT (123.0) Vista

† under repair * 107.2 Hz PL Tone

Photos from the Orienteering Club Event. Article page 2.



A group of orienteering participants approach "The Slot".



KF6NXY, K6AH and NE60 on Goat Trail East Butte.

PARC Meeting Videos

PARC meetings have been video recorded for the last year. These videos can be purchased for a cost of \$2.00 to cover expenses. The videos include:

March	I Got My License, Now What?
April	Restoring Old Radios
May	6 Meters
June	Field Day Escondido and Palomar
July	PARC Repeater Site and History
August	DXing 101
September	RF Safety
October	TAPR Digital Communications Conference Report
February	Amateur Radio Astronomy

January was a video of the Peter I Island 3Y0X DXpedition and is available from:

<http://70.103.16.185/~trexsoft/trexsoftware.com/peterone/dvd/index.htm>

Order copies through Dennis KD6TUJ at the meetings. *

Public Service Opportunities

1) Needed: volunteers for Pacific Crest Trail 50 mile run on May 12th 2007, contact pschmidt1@cox.net

2) Needed: Special Olympics Amateur Radio Support Coordinator, contact Paul Rios at KC6QLS@cox.net



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Club Auction

**All PARC members
invited to attend**

The Escondido Amateur Radio Society will be holding our annual club auction on April 12th at the Salvation Army building in Escondido. The address is 1301 Las Villas Way, in Escondido. We request sellers register at 6:00pm and buyers at 6:30pm. The auction will start at 7:00pm.

-Dirk Reschly, N6SUN



Tower Take-Down Party Report

By Harv Hiller K6QK

Participants: Bruce N7TY, Harv K6QK, Tom KG6RCW, Dave N6EEG, Howard KY6LA, Tom W0NI, Ron N6XT and Bob, Sam, and Joe (calls unknown). Additionally, we were assisted by Jim K6ZH and Wayne NN6R on the afternoon of Friday, March 16th. The crew removed a TV antenna/mast, a 2m beam, a HyGain TH-7, and a Tri-Ex LM-354, three section tower and a HyGain 18HT High Tower vertical. A special thanks to K6DEX for the loan of the raising fixture and Dennis N6KI for working with the family to coordinate the removal of the station. The station belongs to Ed Carry K6ICG who is in a home and not expected to return.

Group Photo:

Front row KY6LA, N7TY, K6QK, N6XT, ????

Middle row N6EEG, W0NI, Bob (not sure of call)

Back row KC6RCW, ????*



License and Class Information

Register 5-7 days in advance for the following test sessions.

☑ PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Please call 619-465-EXAM for the latest contact info.

Test sessions may be cancelled if no one pre-registers.

☑ EARS Testing is in Escondido on the Last Saturday of the month at 9:00 am at 9:00 a.m. at the LDS Church.

The address is 1917 East Washington Avenue , Escondido , 92025.

Contact Harry W6YOO
(760) 743-4212 or
W6YOO@amsat.org.

☑ "The ARRL Technician Class Course for Ham Radio Licensing" Course No. EC-010 \$99 ARRL members / \$139 non-members. Courses begin on the first and third Tuesday of each month. For more information, email cce@arrl.org or via regular mail to ARRL CCE, 225 Main Street, Newington, CT 06111.



Mentors and a Mentor Coordinator Needed

PARC is looking for persons interested in help others to become better Amateur Radio Operators.

We are looking for individuals that might be available the second Saturday afternoon of each month from 12 noon to 2 PM to help work with those that have either just earned their license or an upgrade.

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI.

www.ac6v.com

This wonderful ham radio website, run by Rod AC6V, is a fantastic online resource for amateur radio information. With 700 topics, 6,000 links, and 132 pages, it weighs in at the top of the scale as one of the best topical indices of ham radio webpages. The site gets well over 1,000 hits a day. Readers from 127 countries

have visited www.ac6v.com which been in operation since 1997. Unlike many sites that post reams of links, only to let them rot over time, Rod sees that the links at his site are checked monthly. This removes one of the most irritating things about resource sites – the dreaded 404 Page Not Found.

Thanks to Rod, things are easier to find on the ever-growing and often chaotic Internet. Thanks Rod, for doing such a great job and providing such a wonderful service to the ham radio community! *

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Overheard On The Repeater

"To the optimist, the glass is half full. To the pessimist, the glass is half empty. To the ham, the glass is twice as big as it needs to be."

Repeater Site Refurbishment

As mentioned in the January Scope, PARC will be refurbishing the repeater site this spring and summer.

A refurbishment fund has already been started, with a substantial donation from Richard Krist, W6KTE (*call sign corrected from March SCOPE -W5NYV*).

We will be in need of volunteers to do several tasks, including, but not limited to **tower climbers** to clean/paint the tower and change out hardware, and **grounds crews** to assist the climbers and for working on refurbishing the grounds, and buildings.

Building refurbishment projects include sealing, preparing and painting the buildings, removing excess materials, and general site clean-up and fire mitigation.

Keep an eye on the Scope for a detailed plan. If you want to help, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI. *



147.130 Repeater Report

The 147.130 repeater was reported as being down during the last week of February. During the trip up to the mountain on Saturday, March 3, high winds were encountered at an estimated steady speed of 25 mph with gusts up to 50 mph. There was snow in the shaded areas and the daytime high was 45 degrees. With those conditions, it was hoped that the repeater trouble was inside the equipment building and not outside on the tower! The problem was a dead RF power module in the transmitter's PA assembly. This particular module had cracked once before and had been successfully repaired and returned to service. PARC has gotten several years of use from this repaired module! This time though, we decided to replace it, as well as machine the heatsink and chassis for flatness. Fred K6ISS did a great job milling the heatsink and chassis, while Art KC6UQH made the electronic repairs. As the PA assembly had to be completely stripped for the milling work, Art had access to the harmonic suppressor and the bandpass filter which are buried deep within the chassis and therefore not regular maintenance items. Art found the suppressor had an insertion loss of 1.5 dB. He replaced it with a spare that had an insertion loss of 0.5 dB. The bandpass filter tuning was touched up as well. The repeater was returned to operation on the hill on Saturday, March 10. Thank you Fred and Art for your great work getting the 147.130 repeater on the air!

Dan K6NKC
Repeater Tech Chair *

Fair Volunteers Needed!

June is fast approaching, and the San Diego County Amateur Radio Council is asking for PARC participation in the SANDARC exhibit at the San Diego County Fair in Del Mar. The Fair will run June 8th, through July 4th, but will be closed June 11-12, 18-19, and the 25th. Shifts are 10 AM to 2 PM and 2 PM to 6 PM. We need two people per shift. This is a good opportunity to present amateur radio to the general public and answer questions for those that are interested. In previous years, there have been some very enthusiastic (about radio) children and parents, as well as plenty of people that simply need directions to the bathroom. In both cases, volunteering provides a very useful service.

If you would help out, please contact Jim Cooper, NE6O, at ne6o@amsat.org *

VEs Needed

After 18 years of dedicated service as the SANDARC Carlsbad Volunteer Examiner (VE) Team Leader, Rusty Massie, AA6OM, has tendered his resignation, as team leader, to the San Diego County Amateur Radio Council VE Coordinator. Assi Friedman is serving as Interim Team Leader, pending identification and appointment of a permanent VE Team Leader for the site. If you see Rusty, please thank him for all his years of dedication to the VE program. In the meantime, Rusty and Assi have both said there is a need for more VEs at the Carlsbad site. Amateur Extras are preferred, but Advanced and General Class operators may serve as well.

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI.*

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See catalog at www.Palomar-Engineers.com

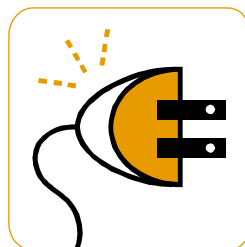
Please check our complete ads in **QST**, **CQ**, and **World Radio** magazines.

Regular Nets Sponsored by PARC

DAY	TIME	FREQ.	NET NAME	NET MANAGER CONTACT INFORMATION
T/Th/Sa	2000	146.730	NTS Traffic Net	Charles N6TEP cmiele@juno.com
Sun	0830	146.730	ARES Sunday Net	Dennis K7DCG
Sun	2045	147.075	MARA ES	Glenn Jones KG6JDF@amsat.org
Mon	1915	146.730	RACES Sub-Net	
Mon	2100	146.730	Microwave Net	Kerry B.
Tues	1900	147.130	Red Cross Net	Ted thompson@sdlarc.org
Tues	2100	146.730	Off-Road Net	Dick Wilimek KA7AYT rwilimek@cox.net Mike Doyle AB6QT
Thurs	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com Glenn P. KE6ZLY@juno.com
Nightly	>2200	147.130	Facetious Group	

PARC 2007 Board

President- Steve Early, AD6VI - 619-461-2818 - ad6vi@amsat.org
 Vice President - Tom Storer - KI6DER - ki6der@amsat.org
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 Dir. - Dennis Baca - KD6TUJ - 760-722-0251 - kd6tuj@amsat.org
 Scope Editor - Michelle Thompson - W5NYV - w5nyv@amsat.org
 Repeater Tech Chair - Dan Bubke - K6NKC - k6nkc@amsat.org
 Membership: Al Donlevy - W6GNI - 760-630-3096 - w6gni@amsat.org



Reports from the Board

March meeting goodie-givers were Tom KG6RCW, Conrad KG6JEI.

March Issue Fold & Staple Crew were Merle KR6BT, Sonny WA5ACE, Jo KB6NMK, Harry W6YOO, Al W6GNI & Kathy, Art KB6YHZ, Rich KE6DUG.

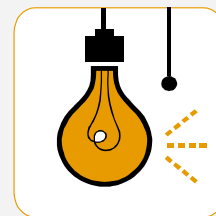
New Members Joining PARC: KI4OHS, KD6LDI, KI6FXO, K6JWP, KI6DBL, and K6EDY. In addition, two past members reinstated their membership. Of course we welcome all members, new and "old", even "new" old timers. The Board is seeking helpers to encourage membership in the club, and to help retain the members we have when renewal time comes about.

In Other News

"Quiet Before the Storm"

http://science.nasa.gov/headlines/y2006/10mar_stormwarning.htm

Tom KG6RCW reports "On the day before the tower take-down party (see page 6) we went over to a fellow ham's house in North Park who became a silent key a short time ago, Stanley Cichy W6GGL. The PARC board was contacted a few weeks ago regarding his things. Paul, his son, did not want his father's things to end up in the landfill, but to pass them on to someone who could use them. So a few of us went over and picked up a small tower as well as a truck load of items including books, parts, 3 boxes of tubes and a tube tester. That will go in the clubs tube bank. Also, some old transformers and boxes of things I have know idea what they are. But, they all need a good home. They will be set aside and saved for the next club Auction. Thanks to all that helped out on this job! Photo at right.



FREE TUBES

Club Members ONLY! The PARC has a tube bank that includes many 6 & 12 volt receiving tubes (and some transmitting types) for use by club members to repair their own personal equipment. Not for commercial use or resale. If we have your requests, I will pre-check and deliver them to the next club meeting. Contact WB6IQS@amsat.org, -John



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Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on April 4th, 2007 (the first Wednesday of each month) at the Carlsbad Safety Center. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome!

The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA).

73 and hope to CU you on the air! -NN3V (past president of PARC)



We're on the Web!
 See us at:
www.palomararc.org

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

Reminders

Meeting May 2nd

PARC's general meeting.

Gordon West WB6NOA

will be giving the presentation for May to our Club. His talk will cover GPS, APRS, and LIVE EQUIPMENT displays and demonstrations. He will also be relating how new changes in GPS and new ham radio equipment can affect the APRS world.



Special Event Station W6P
Jun 2-Jun 3, 1300Z-0700Z,
San Diego, CA. Sponsored
by K16FDN and W6NWX.
Hale Telescope on Palomar
Mountain dedication
anniversary. 14.260 7.260.
QSL. Michelle Thompson,
W5NYV, 5379 Carmel Knolls
Dr, San Diego, CA 92130.



Letter from the President

What is "good amateur practice", and how can it affect us? Over the years, I have had many of my Technician license students ask me this question. I have responded with a few examples and described it as generally behaving in a manner that would not offend the average grandparent. However, I have never really examined the question myself, until now.

I found a good article in QST, titled: "Good Amateur Practice" Means Never Having to Say You're Sorry, dated October 9th, 2002. In the article, Riley Hollingsworth is quoted: "Good amateur practice is a hard thing to define ... I'd have to say it's operating with the realization that frequencies are shared, that there's going to be occasional interference and that's no reason to become hateful and paranoid." This article pretty much said that good amateur practices amount to being a good neighbor when on the air and gave several good examples.

But what about when we are off of the air? Does this concept change each time we un-key the microphone? I like to think not, but I have found several in the amateur community who apparently disagree.

Many of our friends, family, neighbors, and even complete strangers recognize us as Amateur Radio operators, regardless of our surroundings. They see the radios, the antennas and other trappings of a ham radio operator and know that is what we are. But, what else do they see? Do they see a helpful neighbor? Do they see community service? Do they see a friendly person pursuing a hobby?



Do they see us providing essential communications?

Or do they see something entirely different?

I am concerned about the latter. I believe that what we do off-of-the-air is having a greater effect on the ham radio community than what we do on the air. For instance, we are in a constant struggle with zoning regulations. Several of us have gone before elected officials to plead our cases, yet, what do they perceive of us?

I know of several people who are marginally civil on the air, but less than civil behind the scenes. Unfortunately, elected officials and representative of served agencies see this and wonder if we (hams) are always difficult and unfriendly. To be honest, I have found it difficult to tolerate some of the boorish behavior I have experienced from other local hams. From time to time, I have been tempted to respond to bad behavior in kind, but recognize that such a response would only hurt the whole Amateur Radio community.

Fortunately, we have a Board of Directors that keeps me in check, ensuring that these episodes do not reflect badly on the Palomar Amateur Radio Club. I believe that our Board Members do a great job of using "good amateur practice" when off the air. Thanks to our Board, PARC has never had to say we are "sorry".

If we are attacking each other, rather than finding common ground for the good of the community, we will all lose sight of common goals, rather than gain ground in our attempts to do the right thing.

The next time you have a disagreement with another person, regardless of who they are, please remember that others are watching how you present yourself, your position and our community.

Steve Early
President,
Palomar Amateur Radio
Club

QSL Card Design Competition

**For the Hale Telescope
Special Event Station June
2-3, 2007**

The Palomar Amateur Radio Club invites you to participate in an Art Competition, organized on behalf of the special event station celebrating the 59th anniversary of the dedication of the 200 inch Hale Telescope at Palomar Mountain.

The competition is open to all forms of art.

Entries will be judged for their popular appeal as well as which one is best suited for use as a QSL card.

A QSL card is confirmation of a communication between two amateur radio stations. A QSL card is the same size and made from the same material as a postcard (3.5 x 5.5 inches).

The 200-inch (5.1 m) Hale Telescope (f/3.3) was one of the world's largest telescopes for 45 years (1948 - 1993). It is still an important scientific instrument and is used almost every night of the year in a wide variety of astronomical studies.

For complete rules on the design competition, please visit www.palomararc.org

The Board of Directors of the Palomar Amateur Radio Club will judge the entries. Prizes will be awarded to the winner and two runners-up.

Contest Calendar for May 2007

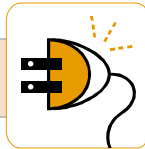
May 1	AGCW QRP Party
Mar 4	NCCC Sprint Ladder
May 5	MARAC County Hunter Contest, CW
May 5	10-10 Int'l Spring Contest, CW
May 5	Microwave Spring Sprint
May 5	7th Call Area QSO Party
May 5	NA High Speed Meteor Scatter Spring Rally
May 5	US IPARC Annual Contest, CW
May 5	Portuguese Navy Day Contest, CW/SSB/PSK
May 5	Indiana QSO Party
May 5	New England QSO Party
May 5	ARI Int'l DX Contest
May 6	US IPARC Annual Contest, SSB
May 7	RSGB 89m Club Championship, SSB
May 8	ARS Spartan sprint
May 9	SKCC Sprint
May 11	NCCC Sprint Ladder
May 12	Nevada Mustang Roundup
May 12	SBMS 2 GHz and Up WW Club Contest
May 12	VK/Trans-Tasman 80m Contest, Phone
May 12	CQ-M Int'l DX Contest
May 12	VOLTA WW RTTY Contest
May 12	Mid-Atlantic QSO Party
May 12	FISTS Spring Sprint
May 12	EACW International Contest
May 12	50 MHz Spring Sprint
May 16	RSGB 80m Club Championship, Data
May 17	NAQCC Key/Bug Sprint
May 17	QRP Minimal Art Session
May 18	NCCC Sprint Ladder
May 19	US Counties QSO Party
May 19	King of Spain Contest, CW
May 19	EU PSK DX Contest
May 19	MM All America Contest
May 19	Baltic Contest
May 21	Run for the Bacon QRP Contest
May 24	RSGB 80m Club Championship, CW
May 26	CQ WW WPX Contest, CW
May 26	VK/Trans-Tasman 80m Contest, CW
May 27	SKCC Weekend Sprint
May 27	MI QRP Memorial Day CW Sprint
May 27	ARCI Hootowl Sprint

Lots of contests this month, from 80 meters up to GigaHerz.

You'll find complete rules in QST, CQ, NCJ, and Worldradio and on the web.

CU in the contest.

73, Harry/W6YOO



Club Classified Ads

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG. Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(4.1) EF-610 Force-12 6-element 10m beam - condx: good, on the ground, \$60. A-50-5S Cushcraft 5-el 6m beam - condx: bent boom and bent 2 elements, fixable, on the ground, \$25. Parts for TX472MDP Tower: M-15R mast, TRX-80HD tower raising fixture with K2550 winch, and new HD T-Base. \$60 for all. Miscellaneous aluminum tubing from Sommer beam: come and get it. Peter KQ6AA potifar@pacbell.net or 760-917-2264

(2.5) Wanted: Rotators for AZ-EL Microwave dish project: Need two antenna rotators: AR-22, 5-wire Alliance, TR-44, etc. Do not need control boxes, just the rotators. Repairable "AS-IS" OK. WB6IQS@amsat.org, 760-727-3876.
Wanted: Alinco DJ-560 battery for HT. Broke my battery, need replacement 12 volt battery for Alinco HT. NiCad battery condx not important, just need the housing. WB6IQS@amsat.org, 760-727-3876. *

PARC Meeting Videos

PARC meetings have been video recorded for the last year. These videos can be purchased for a cost of \$2.00 to cover expenses. The videos include:

March	I Got My License, Now What?
April	Restoring Old Radios
May	6 Meters
June	Field Day Escondido and Palomar
July	PARC Repeater Site and History
August	DXing 101
September	RF Safety
October	TAPR Digital Communications Conference
February	Amateur Radio Astronomy

January was a video of the Peter I Island 3Y0X DXpedition and is available from:

<http://70.103.16.185/~trexsoft/t-rexsoftware.com/peterone/dvd/index.htm>

Order copies through Dennis KD6TJ at the meetings. *

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Committee Chairpersons

ARES Info	Tony	KC6YSP
ARES Net	Dennis S.	K7DCC@amsat.org
Attendance	Al	W6GNI@amsat.org
ATV	Art	KC6UQH@amsat.org
Auction	Tom M.	KG6RCW@amsat.org
Badges New	Al	W6GNI@amsat.org
Batteries	David	BK6EBYDAT@Gerry.Palomar.caltech.edu
BBS Monitor	Bill B.	N6FMK@amsat.org
Billing Ads/etc	Jo A.	KB6NMK@amsat.org
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EmComm	Harry	W6YOO@amsat.org
	Dennis V.	N6KI@amsat.org
Field Day Tech	John K.	WB6IQS@amsat.org
Inventory	Dennis B.	KD6TUJ@amsat.org
New Member	Christy M.	KI6AOL
Nets	PARC	Board@palomararc.org
Newsletter	Michelle	W5NYV@amsat.org
Patch Info	Stan	W9FQN@amsat.org
Patch Electronics	Jerry H.	WB6FMT@amsat.org
Picnic	Mark R.	KF6WTN@amsat.org
Power AC/DC	Mike P.	K6MRP@amsat.org
Programs	Dennis B.	KD6TUJ@amsat.org
Publicity	Terry R.	K3PXX
QSL Cards	Harry H.	W6YOO@cox.net
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RED Flag	Steve	AD6VI@amsat.org
Repeater Site	Mike P.	K6MRP@amsat.org
Repeater Tech	Dan k6nkc	k6nkc@amsat.org
SANDARC	Jim/Steve	NE6O/AD6VI
Seller Table	John K.	WB6IQS@amsat.org
Testing VE	TBD	TBD
Trustee	Mike D.	AB6QT@amsat.org
Web	Paul W.	www.palomararc.org

City of Carlsbad needs Volunteers

Sue Irey, the Community Volunteer Coordinator for the City of Carlsbad, is asking for our help.

Sue wrote:

"The City of Carlsbad is looking for a team of volunteers who are knowledgeable about today's audio visual equipment - things like computer projectors. This team will be asked to set up equipment for various presentations throughout the City on an occasional basis. Do you know anyone who might be interested in this opportunity?"

I have known Sue for a long time through the San Diego/Imperial Counties Chapter of the American Red Cross and know that Sue is a pleasure to work with.

One of the primary locations that Sue is talking about is the Carlsbad Safety Center Conference Room that we meet in. A few of us have working knowledge of these specific systems and I am certain that any of us can learn from the others.

If you are interested in helping out the City of Carlsbad, please let both Sue Irey, and myself know.

Sue can be reached at:

Sue Irey
Community Volunteer Coordinator
City of Carlsbad
sirey@ci.carlsbad.ca.us
760-434-2906
Fax 760-720-9461

I can be reached at ad6vi@cox.net or at 619-461-2818
*

Repeater Information

52.680 W6NWG -0.5 MHz, Autopatches: 146.730-, 147.075+, *147.130+, *447.000-

PKT: 145.050s (PALMAR/W6NWG-1) 146.700- (Duplex Pkt) PALBBS/EMG use 145.070/146.700- (W6NWG-3/PALBBS)

ATV input: 915 wbfm, 2441.25 wbfm

ATV output: 1241.25 MHz am

Intercom: 146.415 PL 79.7 nbfm

Affiliated: 224.380-, 224.940 KK6KD (HARS) 447.050-, 145.260 KK6KD (HARS) 146.175+ N6FQ (Fallbrook ARC)

Linked to: 445.600-, 224.900- WD6HFR (Convair/220 ARC), 446.140- WB6FMT (123.0) Vista

† under repair * 107.2 Hz PL Tone

Gateway Electronics Loses Lease

The following quote is from craigslist, as reported by Bill K1CT.

"Gateway Electronics Inc of California has lost our lease! All kinds of components, cables, test equipment, speakers, connectors, widgets, gadgets, and stuff we're not quite sure what it does...but it's gotta go! All store fixtures for sale as well. 9222 Chesapeake Drive - San Diego CA 92123. Saturday 4/13/07 9am - 5pm."



Photo from April 13th sale by W5NYV.



Photo from April 13th sale by W5NYV.

I decided to go to the closing sale to photograph the store. I've visited Gateway electronics many times. More than once, treasures were found and a good time was had by all. The store smelled like rotting PVC mixed with mouse-shredded junk drawer paper lining, but I didn't mind at all. In general, I knew it was time to wrap up a day's shopping when my fingers were about as dirty as the floor and I had doubled my list of intended projects.

Two factors (besides continually rising real estate costs) that greatly contribute to the closing of stores like Gateway are the continued advancement of integrated circuits and the rise of internet ordering of components.

There is a rumor that some of the Gateway employees will be opening another surplus electronics store in San Diego. *

-Michelle W5NYV

Public Service Opportunities

1) Needed: volunteers for Pacific Crest Trail 50 mile run on May 12th 2007, contact pschmidt1@cox.net

2) Needed: Special Olympics Amateur Radio Support Coordinator, contact Paul Rios at KC6QLS@cox.net




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SDG ARES 2006 Annual Report

San Diego – (March 20, 2007) San Diego Amateur Radio Emergency Services Group (SDGARES) recorded a number of significant accomplishments in 2006. These accomplishments would not be possible without the generous support of the Ham Radio Community. ARCEC, CERO, EARS, ECRA, Fallbrook ARC, PARC, RACES, ROARS, SANDRA, Six Shooters and SANDARC have provided their repeaters, nets and have advertised our events.

Since July 2006, SDG ARES Membership has surged from 160 Members to over 275 making it the largest and fastest growing Official Emergency Communications (EMCOMM) organization in San Diego. The synergy between the experienced and new younger members has been remarkable. Dedicated Hospital Emergency Medical Services (EMS) Responders more than doubled from 30 to 78. SDGARES EMS Coverage of major hospitals leaped from less than 50% to almost 100%. In a time when most ham groups are experiencing declining membership, such a surge is a remarkable testament that the leadership is doing something right.

SDG ARES was incorporated as a 501 © 3 charitable foundation. In 2006 SDGARES Inc raised more than \$20,000 to fund vital Public Safety EMCOMM Operations, equip the County EOC with radios, constructed Emergency Go Kits and started working on a new Mobile Command Center.

SDG ARES has moved its meeting location from the less than ideal back room of a restaurant and its training from a community center 6 miles further away to a catered breakfast and the plush first class training amphitheatre at Scripps Green Hospital. The move resulted in an immediate increase in attendance at training and meetings and a general upgrade in professionalism of the meetings and training.

SDGARES now has its own URL www.sdgares.org with a dynamic web site with up to the minute breaking news such as Red Flag Alerts, detailed online operations manuals, membership rosters and communications plans. New members now register online for membership, members can sign up for drills and SDG ARES even accepts donations online.

Post 911, all emergency services agencies were required to use the National Incident Management Systems (NIMS) Incident Command Systems (ICS). Today, SDG ARES fully complies with ICS. As a result, SD American Red Cross and CERT have reestablished their close working relationship with SDGARES.

Post 911, under NIMS, all Responders wear colored reflective vests to identify their functions. Anyone who has ever been to the EOC or MOC will see that everyone complies with the vest directive. Starting with the Miramar 2005 Air Show, SDG ARES adopted the standard ARRL Radio Communications Reflective Orange Vest as its uniform in addition to the yellow shirts, jackets, and caps.

In order that Public Safety Agencies can quickly contact ARES responders, today SDG ARES responder contact information is available through web. Under ICS, the first responder on the air is Net Control until relieved by a superior. SDG ARES now trains all responders to be Net Controls.

Under NIMS ICS, responders are required to go to the place where they would do the most good for the most number of people. As SDG ARES now follows NIMS, the EMS image of SDG ARES has been upgraded and most hospitals and the MOC are in the process of building permanent in place radio facilities for SDG ARES.

For the past 10 years, SDG ARES has known that it could not handle the volume of EMCOMM traffic for EMS without delays on two voice channels alone as the complex message traffic often exceeds bandwidth. Today SDG ARES has a proactive Winlink program to equip all hospitals with Winlink. In the latest EMS Drill,

more than 60% of message traffic went via Winlink which significantly freed up voice channels enabling the first EMS drill in a long time, to perform without any standbys or delays.

Since 2005, SDG ARES demonstrated a new "Can Do" attitude under ICS with proactive Search and Rescue Efforts that reunited 46 lost children in 2005 and 44 lost children in 2006. As a result, SDG ARES has been upgraded to primary EMCOMM backup for MCAS Miramar and the Marines are donating and installing a permanent in place radio system for SDG ARES at MCAS Miramar.

Servicing Public Safety Agencies such as ARC, EMS, CDF, Lifeguards, CERT, and Marines requires a huge commitment of manpower and resources. The staffing of "Community Events" such as walks, runs, parades and races drained critical resources. In many cases, these are commercial events that can be handled just as well if not better by cell phones. Today SDG ARES has removed the Cell Phone events from its calendar choosing to concentrate on Public Safety where SDG ARES resources are actually needed and can and do "Make a Difference".

This concentration on Public Safety has resulted in a spike in new membership. SDG ARES still supports "Community Events" where there may be a Public Safety need such as longer back country runs, Special Olympics Greater Games and that can operate under ICS training environment but with the huge post 911 Public Safety demand on SDGARES, the number of "Community Events" on the calendar is limited.

Today SDGARES has recruited 40 active people in leadership position who are bringing new vitality and ideas to the organization.

Getting responders to respond in an emergency can be difficult as not every emergency starts with the shaking of the earth or the smell of smoke. Today SDG ARES has an Automated Phone Dialer Activation System that can call all 275 responders in under 2 minutes. Frankly there have been so many recent changes in the way that SDG ARES operates that it is difficult to list them all.

The Amateur Radio Emergency Services of the American Radio Relay League has been providing Emergency Communications since 1935. The 275 members of San Diego Amateur Radio Emergency Services (SDGARES) provides vital public safety

communications when other commercial and government systems fail. SDGARES serves many public agencies including San Diego County Emergency Medical Services, American Red Cross, Community Emergency Response Teams, California Department of Forestry, MCAS Miramar Air Show, Coronado Lifeguard as well as many local and community functions. For example, during the 2006 Miramar Air Show SDGARES Search and Rescue teams were responsible for reuniting more than 44 lost children with their care givers. During the 2003 San Diego Fires, SDGARES responders manned Red Cross Shelters around the County as the only communications and provided primary communications between fire fighting teams when the government 800 MHz radios failed. *

More Information: www.sdgares.org

Paul Rios KC6QLS

ARRL (SDG) Public Information Coordinator

License and Class Information

Register 5-7 days in advance for the following test sessions.

☑ PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Please call 619-465-EXAM for the latest contact info.

Test sessions may be cancelled if no one pre-registers.

☑ EARS Testing is in Escondido on the Last Saturday of the month at 9:00 am at 9:00 a.m. at the LDS Church.

The address is 1917 East Washington Avenue , Escondido , 92025.

Contact Harry W6YOO (760) 743-4212 or W6YOO@amsat.org.

☑ "The ARRL Technician Class Course for Ham Radio Licensing" Course No. EC-010 \$99 ARRL members / \$139 non-members. Courses begin on the first and third Tuesday of each month. For more information, email cce@arrl.org or via regular mail to ARRL CCE, 225 Main Street, Newington, CT 06111.

www.ac6v.com

This wonderful ham radio website, run by Rod AC6V, is a fantastic online resource for amateur radio information. With 700 topics, 6,000 links, and 132 pages, it weighs in at the top of the scale as one of the best topical indices of ham radio webpages. The site gets well over 1,000 hits a day. Readers from 127 countries

have visited www.ac6v.com which been in operation since 1997. Unlike many sites that post reams of links, only to let them rot over time, Rod sees that the links at his site are checked monthly. This removes one of the most irritating things about resource sites – the dreaded 404 Page Not Found.

Thanks to Rod, things are easier to find on the ever-growing and often chaotic Internet. Thanks Rod, for doing such a great job and providing such a wonderful service to the ham radio community! *

Mentors and a Mentor Coordinator Needed

PARC is looking for persons interested in help others to become better Amateur Radio Operators.

We are looking for individuals that might be available the second Saturday afternoon of each month from 12 noon to 2 PM to help work with those that have either just earned their license or an upgrade.

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.
-Steve Early AD6VI.

AMSAT Satellite Launch News

By Paul Williamson KB5MU

On April 17, 2007, a Dnepr rocket launched from Baikonur Cosmodrome in Kazakhstan carrying seven CubeSat spacecraft and seven other small payloads. The launch was a complete success! Several of the CubeSats were amateur radio missions. These spacecraft have not (yet) been given OSCAR numbers, but they continue the proud tradition of amateur radio in space begun with the launch of OSCAR-1 in 1961.

A CubeSat is a tiny spacecraft built to fit in a standardized form factor so as to make it easy to launch multiple satellites on the same vehicle, sharing much of the design and logistical effort that goes into getting a spacecraft into orbit. These efficiencies *continued on sidebar pg 10*

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continued from sidebar pg 9

make it feasible for a university or even a high school to successfully construct a spacecraft and see it launched into orbit. This opens up tremendous educational opportunities for students in many related fields.

A CubeSat is cube-shaped, 10 centimeters on each side, and weighs up to one kilogram. The small surface area available for solar panels places severe constraints on how much power can be generated for payload operations. The small volume inside the spaceframe also limits how extensive the electronics can be, especially when it must be constructed using technology accessible to university students. Some CubeSats do little more than basic housekeeping and beaconing, while others are more ambitious and include experimental payloads.

Three of the four amateur radio payloads launched on the Dnepr mission have already been heard from and declared functional, and the last (CP3) has yet to be tested at this writing. Here are brief summaries on these newest amateur radio satellites:

Libertad-1 (5K3L) was built at the Universidad Sergio Arboleda in Bogotá, Columbia and carries a standard packet radio package with uplink on 145.825 MHz and downlink on 437.405 MHz FM with a power of 400 mW. It is the first satellite ever launched by Columbia.

CAPE1 (K5USL), the Cajun Advanced Picosatellite Experiment, was built at the University of Louisiana at Lafayette. It carries a sensor package and a 9600-baud packet radio system with a

continued on sidebar pg 11

TEST EQUIPMENT AVAILABLE FOR LOAN TO PARC MEMBERS

Thanks to the effort of John WB6IQS PARC now has a working H/P 8640 Signal Generator. John spent many hours repairing this unit. He donated it to PARC and it is now available for loan to PARC members for projects. John asked me to verify calibration with my 8640 after he completed the repairs. I have done this and it is now ready for loan.

Technical Description:

AM/FM 0.5 to 512 MHz on fundamentals and 512 to 1024 MHz on 2nd harmonic.

Output range +10 to -130 dBm Female N

connector front panel output

Crystal lock for stability.

Note: This signal generator, designed in the last century, has a very low phase noise specification, equal to or better than most modern signal generators made today. In addition to the H/P 8640 I have the following test equipment from the W6JAB estate available for loan to PARC Members

SWR meter (Diamond SX-600)

Texscan CATV Spectrum analyzer 50- 400 MHz MFJ 269B

MFJ 300W dummy load

IFR 1100 Communication Monitor

I also maintain a H/P Z3801A GPS Receiver and frequency standard with a 10 MHz output. It is available for use by appointment for PARC members needing to calibrate equipment.

Contact me for use of the above items, kc6uqh@amsat.org or (760) 758-6062 evenings 7:00 to 10:00 PM & weekends 9:00 AM to 10:00 PM. *

Art,
KC6UQH

Fair Volunteers Needed!

June is fast approaching, and the San Diego County Amateur Radio Council is asking for PARC participation in the SANDARC exhibit at the San Diego County Fair in Del Mar. The Fair will run June 8th, through July 4th, but will be closed June 11-12, 18-19, and the 25th. Shifts are 10 AM to 2 PM and 2 PM to 6 PM. We need two people per shift. This is a good opportunity to present amateur radio to the general public and answer questions for those that are interested. In previous years, there have been some very enthusiastic (about radio) children and parents, as well as plenty of people that simply need directions to the bathroom. In both cases, volunteering provides a very useful service.

If you would help out, please contact Jim Cooper, NE6O, at ne6o@amsat.org *

VEs Needed

After 18 years of dedicated service as the SANDARC Carlsbad Volunteer Examiner (VE) Team Leader, Rusty Massie, AA6OM, has tendered his resignation, as team leader, to the San Diego County Amateur Radio Council VE Coordinator. Assi Friedman is serving as Interim Team Leader, pending identification and appointment of a permanent VE Team Leader for the site. If you see Rusty, please thank him for all his years of dedication to the VE program. In the meantime, Rusty and Assi have both said there is a need for more VEs at the Carlsbad site. Amateur Extras are preferred, but Advanced and General Class operators may serve as well.

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.

Steve Early AD6VI.*

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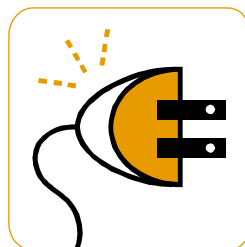
Please check our complete ads in **QST**, **CQ**, and **World Radio** magazines.

Regular Nets Sponsored by PARC

DAY	TIME	FREQ.	NET NAME	NET MANAGER CONTACT INFORMATION
T/Th/Sa	2000	146.730	NTS Traffic Net	Charles N6TEP cmiele@juno.com
Sun	0830	146.730	ARES Sunday Net	Dennis K7DCG
Sun	2045	147.075	MARA ES	Glenn Jones KG6JDF@amsat.org
Mon	1915	146.730	RACES Sub-Net	
Mon	2100	146.730	Microwave Net	Kerry B.
Tues	1900	147.130	Red Cross Net	Ted tthompson@sdlarc.org
Tues	2100	146.730	Off-Road Net	Dick Wilimek KA7AYT rwilimek@cox.net Mike Doyle AB6QT
Thurs	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com Glenn P. KE6ZLY@juno.com
Nightly	>2200	147.130	Facetious Group	

PARC 2007 Board

President- Steve Early, AD6VI - 619-461-2818 - ad6vi@amsat.org
 Vice President - Tom Storer - KI6DER - ki6der@amsat.org
 Secretary - Gary Kent - W6GDK - 858-679-0578 - w6gdk@arri.net
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 Dir. - Tom Martin - KG6RCW
 Dir. - Dennis Baca - KD6TUJ - 760-722-0251 - kd6tuj@amsat.org
 Scope Editor - Michelle Thompson - W5NYV - w5nyv@amsat.org
 Repeater Tech Chair - Dan Bubke - K6NKC - k6nkc@amsat.org
 Membership: Al Donlevy - W6GNI - 760-630-3096 - w6gni@amsat.org

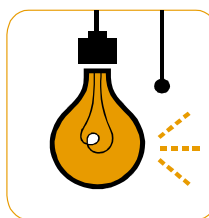


Reports from the Board

New Members Joining PARC: KG6VTR, WA7LB, KB7TVZ, KG6POY, KI6FII, KI6INW, KD6YWI, AND KI6HZS. A great month for new members.

Please welcome these new members, on the air, and in person.
 We also had one "reinstatement".

Multiple year renewals are really appreciated, as that makes less work, less chance for my errors, and fewer trips to the bank for yours truly.



continued from sidebar pg 10

downlink on 435.245 MHz with a power of up to one watt. It also emits a CW beacon, which is much easier to locate on the air than the noise-like 9600 baud packet signal. It transmits the CW beacon for 30 seconds, then packet for 30 seconds, and so on, with a rotation of three different CW messages to cover all the telemetry data.

CP3 was built at California Polytechnic State University at San Luis Obispo, and features an experimental attitude control system using only magnetic torquers and magnetometer sensors. It carries a non-standard packet radio system with a downlink on 436.845 MHz with a power of about 500 mW.

CP3 was also built at Cal Poly, and features an energy dissipation experiment. It carries a non-standard packet radio system with a downlink of 437.325 MHz with a power of about 500 mW.

The latest scoop on copying these satellites can be found on the AMSAT-BB mailing list offered by AMSAT. You can subscribe by email or look at the message on the web. See www.amsat.org for details.

*

FREE TUBES

Club Members ONLY! The PARC has a tube bank that includes many 6 & 12 volt receiving tubes (and some transmitting types) for use by club members to repair their own personal equipment. Not for commercial use or resale. If we have your requests, I will pre-check and deliver them to the next club meeting.

Thanks!

The club's tube bank has received a donation of more than 200 new and used vacuum tubes from Ed Carry, K6ICG. Dennis, N6KI has also given the club about 300 new Triad vacuum tubes for the club tube bank.

Thank you for the donation.

These tubes will be cataloged and placed in safe storage for use by club members. The club's tubes now include 1.5v octals for early Zenith Transoceanics (7 series), 1920's numbered tubes (4 - 6 pin), pre-WWII octals (w/grid caps), WWII octals, many 7 - 9 pin "modern" tubes, numbered industrial and a few transmitting tubes (807, 1625, one 4-400A etc.).

Contact
WB6IQS@amsat.org, -John



We're on the Web!

See us at:
www.palomararc.org

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Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on May 2nd, 2007 (the first Wednesday of each month) at the Carlsbad Safety Center. Gordon West WB6NOA will give a presentation at this meeting. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome!

The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA).

73 and hope to CU you on the air! -NN3V (past president of PARC)

SCOPE June 2007

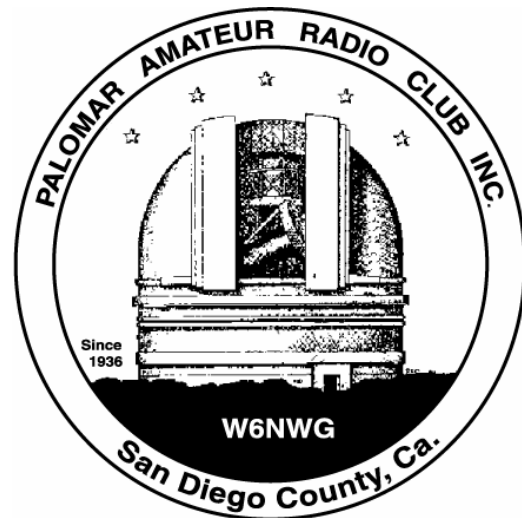
A newsletter by and for the Palomar Amateur Radio Club of San Diego, CA, USA.

Hale Telescope Special Event Station W6P
2-3 June 6:00am to 12:00am on 14.260 7.260

Club Meeting "Field Day"
6 June 7:30pm at the Carlsbad Safety Center

Board Meeting
13 June 7:00pm at W5NYV QTH

Field Day
23-24 June at the San Marcos Field Day Site



Board of Directors	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
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Repeater Chair - Dan Bubke	K6NKC	k6nkc@amsat.org
Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

Frequency	Tx	Tone	Call Sign	Remarks
52.680	-	107.2	W6NWG	
146.730	-	None	W6NWG	Autopatch; see note 1,2
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note 2
447.000	-	107.2	W6NWG	Autopatch; see note 2
224.380	-	107.2	KK6KD	Americas Unidos
224.900	-	107.2	WD6HFR	Convair/220 ARC
224.940	-	107.2	KK6KD	Sharp Hospital Coverage
446.140	-	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; autopatch; linked to 445.600
445.600	-	107.2	N6FQ	Fallbrook ARC; autopatch; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	-	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 919 MHz AM, 2441.25 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrl.net
Sunday	0830	146.730	ARES Net	Dennis K7DCG
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted tthompson@sdarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYT rwilimek@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com
Nightly	>2200	147.130	Facetious Group	

President's Message

June is rushing-in with a lot of PARC activity. The weather is starting to warm up inland, though the coast will likely stay cool a little longer.

Our May 2nd Meeting featured Gordon West, WB6NOA. Those of you who saw Gordon in action, know that he gave entertaining program. Gordon used physical representations and a bit of humor to teach us about radio navigation aides up to and including the Global Positioning System. The room was a bit crowded due to a City of Carlsbad preemption, but we packed everyone in and learned a few things.

This month we are very BUSY!

On June 2nd (from 6 am to midnight PDT), The Palomar Amateur Radio Club, with the Palomar Mountain Volunteer Fire Department Radio Club (KI6FDN), will sponsor a Special Event Station (Callsign: W6P) on Palomar Mountain. This event commemorates the 59th anniversary of the June 3, 1948 dedication of the Hale Telescope at the Palomar Mountain Observatory. Operators are needed for this event. Everyone is welcome. Shifts of 2 to 4 hours (or more if so inclined). If interested, please contact Michelle, W5NYV, at (858) 229-3399 or w5nyv@amsat.org

Also on June 2nd and 9th (and finishing June 9th), The Palomar Amateur Radio

Club is offering a 2-day General Upgrade class at the Carlsbad Safety Center. Please contact Steve Early at ad6vi@cox.net or 619-461-2818, if you are interested in upgrading to "General".

June 6th - PARC General Membership Meeting - Field Day. This will be a presentation on what has happened in the past, and what to expect this year.

June 22, 23, 24 - Field Day - We've Got Site! Dennis Baca and Conrad Lara have worked diligently to secure us a site this year. Several months ago, we were notified that the site used last year (and the year before) would not be available due to construction. Dennis and Conrad got to work, running down all of the locations proposed by PARC members. At this writing, it is my understanding that they have one secured and are negotiating on a better site. Keep an eye on the PARC website, www.palomararc.org, for the latest information.

Last year, we had over 120 participants and visitors and won the 4F category, nationwide. This year, let's see if we can exceed 140 attendee's this year. Bring a friend (or two, or three).

Looking down the road:
July through September - Repeater site refurbishment work parties. Watch the website for details.

continued on page 3

"President's Message"
continued from page 2

July Meeting: Handi-Hams, presented by Marcia De Runtz, KG6FIX.

Please note that the July Meeting will be held on July 11th, so that we can all enjoy the 4th of July with our loved ones and friends.

I hope to see you on June 6th. Bring a friend!

-Steve Early, AD6VI

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The address is 1917 East Washington Avenue, Escondido, 92025.
Contact Harry W6Y00 (760) 743-4212 or W6Y00@amsat.org.

April Meeting Goodie Givers

Tom KG6RCW, Conrad KG6JEI, Marvin KD6YJB

April Fold & Staple

Rich KE6DUG, Art KB6YHZ, Jo KB6NMK, Sonny WA5ACE, Al W6GNI & Kathy

May Fold & Staple

Jo KB6NMK, Harry W6Y00, Al W6GNI & Kathy, Sonny WA5ACE

Club Classified Advertisements

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG.

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(4.1) EF-610 Force-12 6-element 10m beam - condx: good, on the ground, \$60. A-50-5S Cushcraft 5-el 6m beam - condx: bent boom and bent 2 elements, fixable, on the ground, \$25. Parts for TX472MDP Tower: M-15R mast, TRX-80HD tower raising fixture with K2550 winch, and new HD T-Base. \$60 for all. Miscellaneous aluminum tubing from Sommer beam: come and get it. Peter KQ6AA potifar@pacbell.net or 760-917-2264

Fair Volunteers Needed

June is fast approaching, and the San Diego County Amateur Radio Council is asking for PARC participation in the SANDARC exhibit at the San Diego County Fair in Del Mar.

The Fair will run June 8th, through July 4th, but will be closed June 11-12, 18-19, and the 25th. Shifts are 10 AM to 2 PM and 2 PM to 6 PM. We need two people per shift. This is a good opportunity to present amateur radio to the general public and answer questions for those that are interested. In previous years, there have been some very enthusiastic (about radio) children and parents, as well as plenty of people that simply need directions to the bathroom. In both cases, volunteering provides a very useful service.

If you would help out, please contact Jim Cooper, NE6O, at ne6o@amsat.org

Generator Sound Shielding

Field Day is coming, and one of the annoyances of Field Day is the noise the gas-powered generators make, all day and all night. There's plenty of noise on the HF bands without a generator droning in your ear. With a long extension cord you can move the generator some distance from the station, which helps, but the noise is still bothersome. I stumbled across a tip for reducing generator noise on the web site for Burning Man, which is (among other things) a giant desert camp-out. They suggested building an open-top box out of 3/4-inch plywood, to direct the sound up instead of out toward nearby people. I resolved to find out how well this works.

At Home Depot I bought two 4x8 sheets of plywood and two 8-foot pieces of 2x3 pine, and had each cut in half.



That gave me four four-foot sticks for the corners, to which it was easy to screw the four plywood sides to make the sound shield. I equipped one side with hinges, to make it possible to service the generator without disassembling the shield or lifting it over the generator. For this test I didn't worry about paint or any other fine points of construction.

I brought the shield up to Palomar Mountain, where I store a club generator and a smaller generator of my own, both in the club's small trailer. After evicting the mouse who had taken up residence in the trailer, I set up both generators. The club's generator failed to start, and getting

that fixed will be another project to do before Field Day. Luckily my own generator fired right up, so I used it for testing the sound shield.



I set up a sound level meter at some distance from the generator, more or less typical of the distances you see between Field Day stations and their generators. First I fired up the generator without any shielding at all, and measured 66 dBA sound pressure level as a baseline (with no load on the generator). Then I erected three walls of the shield, with the open side facing away from the meter.



I was excited to measure 55 dBA, a full 11 dB less noise than without any shield, and with only three walls in place. The next step was to install the fourth wall and measure again. *continued on page 5*

"Generator Sound Shielding" *continued from page 4*



I was a little surprised to find the noise was back up to 61 dBA, only 5 dB less than the unshielded generator.



Apparently the open three-sided configuration effectively directs the sound out the open side, while the closed configuration distributes the sound

equally in all directions. The closed configuration (as recommended for Burning Man) would be best if people are in all directions from the generator. The three-sided configuration would be much better if the generator can be placed off to one side of all the people. Usually it's possible to arrange a Field Day site that way.

So, is it worth the trouble? Maybe. A noise reduction of 11 dB would definitely reduce the bother and fatigue at Field Day, even though it wouldn't create anything like silence. The shield is awkward to handle and rather heavy, and requires on-site assembly. Perhaps worst of all, it takes up considerable storage space between Field Days. And of course, the plywood and other materials aren't free.

In my opinion, it'd be better to replace the 3.5 kW generators the club owns and borrows for Field Day with a set of 1 kW Honda generators, which are much, much quieter to begin with. They are also lighter and more fuel-efficient under light loads. But of course, these nice little generators also cost money - quite a bit more money than two sheets of plywood. So, perhaps sound shields like this one have a place at Field Day.

73 -Paul, KB5MU

Volunteer Examiners Needed

After 18 years of dedicated service as the SANDARC Carlsbad Volunteer Examiner (VE) Team Leader, Rusty Massie, AA6OM, has tendered his resignation, as team leader, to the San Diego County Amateur Radio Council VE Coordinator.

Assi Friedman is serving as Interim Team Leader, pending identification and appointment of a permanent VE Team Leader for the site.

If you see Rusty, please thank him for all his years of dedication to the VE program. In the meantime, Rusty and Assi have both said there is a need for more VEs at the Carlsbad site. Amateur Extras are preferred, but Advanced and General Class operators may serve as well.

If you are interested in helping out, please contact me at ad6vi@cox.net, or 619-461-2818.
- Steve Early, AD6VI

Test Equipment

Available for loan to PARC members. Thanks to the effort of John, WB6IQS PARC now has a working HP 8640 Signal Generator. John spent many hours repairing this unit, donated it to PARC, and it is available for loan to PARC members for projects. John asked me to verify calibration with my 8640 after he completed the repairs, which I have done and it is now ready for loan.

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Contact me for use of the above items, kc6uqh@amsat.org or 760.758.6062 evenings 7:00 to 10:00 PM & weekends 9:00 AM to 10:00 PM
-Art, KC6UQH

City of Carlsbad needs Volunteers

Sue Irely, the Community Volunteer Coordinator for the City of Carlsbad, is asking for our help.

Sue wrote:

"The City of Carlsbad is looking for a team of volunteers who are knowledgeable about today's audio visual equipment - things like computer projectors. This team will be asked to set up equipment for various presentations throughout the City on an occasional basis. Do you know anyone who might be interested in this opportunity?"

I have known Sue for a long time through the San Diego/Imperial Counties Chapter of the American Red Cross and know that Sue is a pleasure to work with.

One of the primary locations that Sue is talking about is the Carlsbad Safety Center Conference Room that we meet in. A few of us have working knowledge of these specific systems and I am certain that any of us can learn from the others.

If you are interested in helping out the City of Carlsbad, please let both Sue Irely, and myself know.

Sue can be reached at:

Sue Irely

Community Volunteer Coordinator
City of Carlsbad

sirey@ci.carlsbad.ca.us

760-434-2906

Fax 760-720-9461

I can be reached at ad6vi@cox.net or at 619-461-2818

Membership Report

K7MOA, KI6IWZ, KI6IET, WB6YVT, KI6ABV, KI6FVV, KI6FVU, K6AH, W6DEO, KI6CTS, NOMGT, AC6RV. And, Charlie, NN3V, renewed for 10 years! (The maximum time we accept.) We also had 6 "old" members reinstate their membership. Welcome back! Be sure to check your label next issue, your "participation points" will be printed there. Zero's are not printed. Come to the monthly club meeting, get 1 point, bring something for the Goodie Table, and get another. Work at the repeater site, and get two. Field day is a great way to earn points, setup, operate, help, tear down, etc. Be sure to sign the sign in sheets! Participation points are exchangeable for prize drawing tickets at the Annual Club Picnic. (Max 20 tickets per person. Several have 20 or more points already!)

Lake Hodges 50k Foot Race Report

The Lake Hodges 50K foot race took place on 31 March 2007. The following hams participated in the race as run trackers at 6 aid stations plus a net control: Andre Hansen K6AH, David Doan KC6YSO, Don Johnson WD6FWE, Ed Hasselmann KF6NXY, Frank Norton KI6HZV, Fred Smittle K6ISS, Jerry Kostro AK6QJ, Jim Egerton W6SST, Mike Fisher KG6QXO, Paul Schmidt K6PKS, Preston Butler W6ASP, Tom Aterno KI6ASP, Tom Martin KG6RCW.

These dedicated amateur radio operators did what emergency communications and ham radio is all about. They took their diverse radio systems and set them up in the field in 6 different locations and started communicating runner numbers and times with no equipment glitches and no delays. The start was at 0700 and the last runners finished at 1700.

Some statistics: 197 runners were scheduled to start. 14 did not start, and 19 dropped out towards the end of the race. The team gathered, transmitted, recorded, and processed just over 1400 separate bib numbers as they tracked the runners through the aid stations. This process sounds simple, but believe me it is not. Here are some reasons why. We had eight runners that did not finish and we considered them lost. They turned out to be drops the racing staff did not tell us about. We had two "runner down" reports but could not find them. It seems runners fall and think they are seriously hurt sometimes and lay there and recover enough to continue or limp into the next aid station and drop out. Both our runners down dropped out by going past the nearest aid station and dropped at the start finish line. Paul K6PKS went looking for them but could not find them. Each runner down scenario takes priority over any other communication. The Kiosk aid station missed logging several runners because of this distraction.

Of course the good thing is that they were ok and ultimately found. The conditions the competitors perform in are extreme. It is a high-risk athletic event and our services as radio operators are very welcome. SURF is a gracious host with food and t-shirts for us. I prefer calling them hosts as opposed to "served agency" because we are there at their invitation. I don't know how many times runners came by and said thanks for being here.

- Jim Egerton W6SST



Mike KG6QXO and Ed KF6NXY getting set up at Hernandez.



Fred K6ISS and Jerry AK6QJ at net control.



Ed KF6NXY at Ysabel Aid Station.

Photos from the Lake Hodges 50k Foot Race



Dave KC6YSO calling net control from The Kiosk.



Preston W6ASP congratulating runner at finish line.



Paul K6PKS and Andre K6AH at Ysabel aid station.



Mike KG6QXO and Jerry AK6QJ at net control.

Vintage Novice Station

In response to a steadily diminishing number of requests, I've been asked to write a few words each month on the subject of collecting, restoring and using older equipment, fondly known as "boat anchors." I've been a ham since 1959, and for the first number of years, all we had was tube type equipment. Some was "home brew," some kits, and some manufactured.

For the first article, we will feature a "typical" entry level Novice station of the early to mid 50s. This setup is all Heathkit, and is notable in that the transmitter, the AT1, was Heath's very first amateur product, and the AR2 receiver was the first Heathkit receiver capable of use on the amateur CW bands.

A bit of history is in order here, both of the Heath Company and the Novice license. In 1951, the FCC restructured the licensing program and introduced the Novice license. This entry level ticket required a 5 word per minute code test and a simple written test. Novices were limited to small portions of the cw bands on 80, 40, and 15 meters, plus a portion of 2 meters for phone (AM in those days) and cw. All transmitters were to be crystal controlled, and power was limited to 75 watts input. The license was for a one year term and not renewable, so the emphasis was on cw speed, as 13 wpm was required for the General Class license. It was upgrade or go off the air!

The Heath Company, which manufactured airplane kits and parts in the 20s and 30s, entered the electronics field after World War II by buying a tremendous quantity of surplus components from the military. They began marketing these components to hobbyists and other users, and in 1947 marketed the first "Heathkit." It was a 5 inch oscilloscope, and was inspired by the thousands of 5 inch CRTs that they had obtained! It was an instant success, and was quickly followed by a number of other test equipment kits, all of which sold

briskly. When the Novice license was introduced, there was a scarcity of appropriate transmitters on the market. Many Novices built their own transmitters, but if a manufactured unit was desired, each of the available transmitters had drawbacks. Some had no built in power supply, some were higher power and thus too expensive, and some used plug in coils instead of bandswitching.

Heath saw an opportunity to test the market for amateur radio kits, and offered the AT1 at the end of 1952. It was very successful, and was produced for 4 years in two styles of panel, although the circuitry was identical. Engineering costs were minimal for the simple circuit, and most of the parts were available from the surplus stock. It was bandswitched, covered 80 thru 10 meters with a built-in power supply. It was a 3 tube design, with a 5U4 rectifier, 6AG7 oscillator, and a 6L6 amplifier/doubler. Input power was 25 to 30 watts, and output about 10 watts, due to the inefficiency of the 6L6 at higher frequencies and its use as a doubler. It sold for \$29.50, including all tubes and parts.

The AR2 receiver debuted in 1952 as well, and was a simple 6 tube general coverage superhet, with a transformer power supply, as opposed to the AC/DC series filament string types common at the time. There was a model AR1, but it lacked the BFO necessary for cw work. It sold for \$25.50, and the cabinet added \$4.50.

The photo (page 10) shows two other Heathkit accessories: The AC1 antenna tuner and QF1 Q multiplier. The AT1 had no pi network output. It was designed to match a 50 ohm load, so an antenna tuner was necessary. This one was designed to use "long wire" type antennas. Minimum required length was 75 feet for 80 meters, and less for the higher bands. Loading was monitored by means of a neon bulb, and a ceramic standoff insulator on the front panel is used to connect the antenna. The QF1 was

meant to improve the inadequate selectivity of the receiver. It was introduced somewhat later, about 1955 or so.

I have owned the units shown in the photo for several years. The transmitter is the same model as my first one as a Novice, and is the earlier version. Fortunately, when I got this one, the panel and cabinet were unmodified and intact. The 6L6 had been replaced by a 6146, but no structural or coil modifications were done. The original construction was carefully done. I replaced the old filter capacitors and rewired the amplifier for the original 6L6.

The AR2 came to me described as in working condition, but it wasn't! The construction techniques were sloppy, so rather than trouble shoot, I decided to "rekit." In the restoration hobby, this term means "take it apart down to the component level, and rebuild." I replaced all the small resistors and capacitors with modern components, and used only the parts that could not be duplicated, such as variable capacitors, transformers, and of course the panel and cabinet. I followed the "step by step" instructions in the manual, just as someone else had 50 plus years before, and it worked just fine! The receiver was aligned with a signal generator, and meets the original specs. Another benefit of the rekitting

process is that it gives us the opportunity to actually "build" a Heathkit just as was done when they were new.

The key in the photo is a surplus J-38, which were available by the thousands in the 50s. This one has an "L" logo on it, indicating it was made by Lionel, the electric train outfit!

So, did they work? Sure, in a primitive kind of way! I made contacts as a novice with an AT1, and used this setup to make a few contacts on 40 meters just last week. The low output power is a challenge, and crystal control is a thing of the past. Perhaps intending to broaden the appeal, provision was made to use a VFO, the VF1, which was introduced in 1952, and a modulator, which was never produced by Heathkit. I use a VF1 with this setup today, but never tried to modulate it. It's hard enough getting out on cw with low power; I don't have the patience to try 10 watts of AM!

If there is interest, I'd be happy to do a monthly article detailing the history of some of the vintage stations that I've restored. Visitors are always welcome too! And, if you have or know of some vintage equipment looking for a new home, let me know.

Please address questions or comments to Ron, K2RP@ARRL.NET



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Address service requested

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on June 6th, 2007 (the first Wednesday of each month) at the Carlsbad Safety Center. The subject will be Field Day. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! -NN3V (past president of PARC)

SCOPE July 2007

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

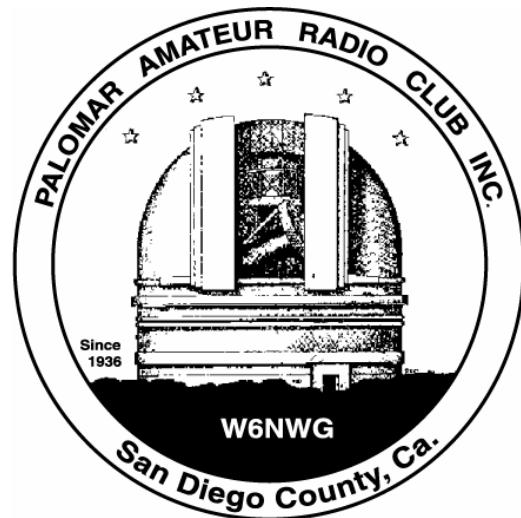
Club Meeting "Handi-Hams"

NOTE: MEETING IS NOT FIRST WEDNESDAY

11 July 7:30pm at the Carlsbad Safety Center

Board Meeting

18 July 7:00pm at W6GNI QTH



Board of Directors	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
Vice President - Tom Storer	KI6DER	ki6der@amsat.org
Secretary - Gary Kent	W6GDK	858-679-0578 w6gdk@arrl.net
Treasurer - Bob Birch	KG6RGI	rrbirch@cox.net
Director - Tom Martin	KG6RCW	619-778-3866 rbg4@aol.com
Director - Dennis Baca	KD6TUJ	760-722-0251 kd6tuj@amsat.org
Scope Editor - Michelle Thompson	W5NYV	w5nyv@amsat.org
Repeater Chair - Dan Bubke	K6NKC	k6nkc@amsat.org
Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

Frequency	Tx	Tone	Call Sign	Remarks
52.680	-	107.2	W6NWG	
146.730	-	None	W6NWG	Autopatch; see note 1,2
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note 2
447.000	-	107.2	W6NWG	Autopatch; see note 2
224.380	-	107.2	KK6KD	Americas Unidos
224.900	-	107.2	WD6HFR	Convair/220 ARC
224.940	-	107.2	KK6KD	Sharp Hospital Coverage
446.140	-	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; autopatch; linked to 445.600
445.600	-	107.2	N6FQ	Fallbrook ARC; autopatch; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	-	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 919 MHz AM, 2441.25 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrl.net
Sunday	0830	146.730	ARES Net	Dennis K7DCG
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted tthompdson@sdarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYT rwilimek@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com
Nightly	>2200	147.130	Facetious Group	

Contest Corral

RAC Canada Day Contest	0000Z-2359Z, Jul 1
Six Club Contest	0000Z, Jul 1 to 2400Z, Jul 31
SKCC Weekend Sprint	0000Z-2400Z, Jul 1
RSGB 80m Club Championship, CW	2000Z-2130Z, Jul 2
ARS Spartan Sprint	0100Z-0300Z, Jul 3
MI QRP July 4th CW Sprint	2300Z, Jul 4 to 0300Z, Jul 5
Venezuelan Independence Day Contest	0000Z, Jul 7 to 2359Z, Jul 8
VK/Trans-Tasman 160m Contest, Phone	0800Z-1400Z, Jul 7
DL-DX RTTY Contest	1100Z, Jul 7 to 1059Z, Jul 8
Original QRP Contest	1500Z, Jul 7 to 1500Z, Jul 8
DARC 10-Meter Digital Contest	1100Z-1700Z, Jul 8
ARCI Summer Homebrew Sprint	2000Z-2400Z, Jul 8
SKCC Sprint	0000Z-0200Z, Jul 11
RSGB 80m Club Championship, SSB	2000Z-2130Z, Jul 11
NCCC Sprint Ladder	0230Z-0300Z, Jul 13
FISTS Summer Sprint	0000Z-0400Z, Jul 14
IARU HF World Championship	1200Z, Jul 14 to 1200Z, Jul 15
Colorado QSO Party	1200Z, Jul 15 to 0400Z, Jul 16
Run for the Bacon QRP Contest	0100Z-0300Z, Jul 16
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Jul 19
RSGB 80m Club Championship, Data	2000Z-2130Z, Jul 19
NCCC Sprint Ladder	0230Z-0300Z, Jul 20
VK/Trans-Tasman 160m Contest, CW	0800Z-1300Z, Jul 21
North American QSO Party, RTTY	1800Z, Jul 21 to 0600Z, Jul 22
CQ Worldwide VHF Contest	1800Z, Jul 21 to 2100Z, Jul 22
SKCC Weekend Sprint	0000Z-2400Z, Jul 22
RSGB Low Power Field Day	0900Z-1600Z, Jul 22
CQC Great Colorado Gold Rush	2000Z-2200Z, Jul 16
NCCC Sprint Ladder	0230Z-0300Z, Jul 27
RSGB IOTA Contest	1200Z, Jul 28 to 1200Z, Jul 29
ARS Flight of the Bumblebees	1700Z-2100Z, Jul 28

Now that Field Day is over, you can start honing your skills for next year. VHF, 160m, CW, SSB and RTTY are all in the mix for July. Complete rules may be found in QST, CQ, NCJ, Worldradio and on the web. CU in the contest. 73, Harry

President's Message

June was a very busy month. First, PARC sponsored a special event station, W6P, on Palomar Mountain, headed up by Michelle Thompson, W5NYV, and operated by Michelle, Paul Williamson, KB5MU, and Al Donlevy, W6GNI. This event commemorated the 59th anniversary of the June 3rd, 1948 dedication of the Hale Telescope at the Palomar Mountain Observatory.

Also on June 2nd (finishing June 9th) The Palomar Amateur Radio Club held a General upgrade class at the Carlsbad Safety Center.

June 6th was the PARC general membership meeting. The topic was Field Day, followed by a presentation from Harv Hiller K6QK, about "Flip-Mount" brackets to aid in the assembly and deployment of portable towers.

On June 9th, PARC sponsored a "Get on High Frequency" seminar, which was designed to provide basic information on connecting and tuning a high frequency (HF) system, as well as practical propagation for HF antenna systems.

June 22, 23, 24 - Field Day - We've Got Site! As of this writing, Field Day is just about on us, so a report will be forth coming at the July PARC Meeting

The July program will be on Handi-Hams, presented by Marcia De Runtz,

KG6FIX. The Handi-Hams program provides additional resources to those that may have physical challenges. Marcia is also starting a local Handi-Ham net, Sunday Evenings at 7:00 PM on 147.130 (tone 107.2)

Please note that July 4th is a national holiday and that the July Meeting will be held on July 11th, so that we can all enjoy the 4th of July with our loved ones and friends.

For July through September we will be doing repeater site refurbishment work parties. In August, we will have the annual picnic. Watch the website for details. I hope to see you on July 11th. Bring a friend! -Steve Early AD6VI



above: Steve Early chairing the June Board of Directors meeting.



The station at W5NYV was open for the June 16th, 2007 ARRL Kid's Day Contest. Several children were able to visit the station and most participated by getting on the air. Michael (pictured) made several contacts. Kid's Day is held twice a year and encourages kids to work other stations. The typical exchange is name, location, and favorite color. An entire pizza was eaten in celebration after the event concluded.

PARC Field Day 2007



Preparing to mount a yagi antenna on top of a tower.



Paul WN6K operating 20m CW using WriteLog logging software and powered by Fig Newtons and grapes.



Wild Bill WB6BFG operating up a storm on 20m SSB.

PARC Field Day 2007



15/40m CW Station



Microwave and Satellite Station



Field Day visitors at Information Booth



10m station during a break.



Juan W6NOW setting up 15/40m SSB.

June Meeting Goodie Givers

Tom KG6RCW, Conrad KG6JEL, Mark KI6FVH, Preston W6ASP, Wild Bill WB6BFG, Ellen N6UWW, Michelle W5NYV

June Fold & Staple

Terri N6UZH & Matthew, Art KB6YHZ, Jo KB6NMK & Tyler & Toby, Al W6GNI & Kathy

Membership Report

New Members Joining PARC: KG6FIX, KC6QLS, KI6JET, KI6FJZ, and KC7IKD. And we had 2 "old" members reinstate their memberships. Welcome back!

Club Classified Advertisements

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG.

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(4.1) A-50-5S Cushcraft 5-el 6m beam - condx: bent boom and bent 2 elements, fixable, on the ground, \$25.

Miscellaneous aluminum tubing from Sommer beam: come and get it. Peter KQ6AA potifar@pacbell.net or 760-917-2264



Steve Early was presented with this plaque at the June 2007 general membership meeting of the Palomar Amateur Radio Club. Congratulations and thank you Steve for your service to the club and to the amateur radio community.

Tower Party

A crank-up 3-section 50 ft. tower was removed on May 22nd 2007 from the QTH of Kenneth Clayton, WA6GXS. The following people attended.

Bob Kruger K6DEX
Paul Dorey WN6K
Dennis Vernacchia N6KI
Wild Bill Wiederhold WB6BFG
Jim Egerton W6SST
Paul Williamson KB5MU
Michelle Thompson W5NYV

Most of them did some work on the tower. Some of them were instrumental. According to rumors overheard at the scene, at least one of them was in charge.



Planning session.



Preparing to hinge the base.



Tower winched down.



Antenna on the ground and disassembled.

Vintage Radios

By Ron Pollack

Last month we discussed the earliest of the Heathkit Amateur Radio kits, the AT1 transmitter and AR2 receiver. These kits were very successful for Heath, but more importantly they proved that a viable market existed for low price equipment in kit form among the growing thousands of Novice licensees.

Heath jumped on the bandwagon, and was joined by others, notably Johnson Viking (who had been producing complex transmitter kits for several years), Knight Kit (Allied Radio), Eico, Globe (World Radio Labs), and others. The AT1 transmitter had two big drawbacks: Limited power and no antenna tuning stage. In that era, transmitters were rated by input power, rather than output as is common today. Input power was calculated by multiplying plate voltage times plate current in the final stage. Output depended on the efficiency of the tube and circuit, but was in the 60% range. Depending on the antenna tuner and antenna, only 10 to 15 watts actually went into the antenna from the typical AT1. Novices were limited to 75 watts input, so there was a demand for more power.

So, in 1957 the AT1 was replaced by the DX 20, which became one of Heath's most successful transmitters ever. The DX20 boasted a TV sweep tube as the final, with 50 watts input and a wide range pi network output capable of matching 50 to 1000 ohm loads. The previous year, the DX 35 was introduced, with more power and a screen modulator. (We'll feature this one next month.) In order not to compete with the DX35, the DX20 had no provision for adding a modulator or VFO once the coveted General Class ticket was obtained. It was possible to use a VFO, but a wiring change was needed, and no auxiliary power connector was furnished, so a self

powered VFO or separate power supply was required. Heath sold thousands of them at \$36. There were many offered in the used market when their owners upgraded to General.

An example of the higher end of the low power CW offerings is the Globe Chief 90, available in both kit and wired form from WRL, World Radio Labs. It was introduced in 1956. This unit was meant to appeal to those who did not want to change transmitters upon upgrading. To this end, power was rated at 90 watts, with provision for operating at the legal 75 W Novice limit. Provision was made for VFO operation as well as screen and plate modulators. All of these accessories were produced by WRL. Pi network output was provided. The final stage consisted of 2 807 transmitting tubes, which were considered to be much more rugged than the sweep tube in the DX 20. The Globe Chief also included 160 meter capability, while most others were limited to 80 thru 10. Another nice feature was grid block keying as opposed to cathode keying used on most basic transmitters. A big advantage of grid block keying is that high voltage does not appear on the key terminals. This transmitter, which cost about \$60 in kit form, or \$75 in wired form, was a great success as well.

The marketing of kit transmitters aimed at the Novice was not matched by nearly the same number of receivers. In 1956, Heath replaced the AR2 with the AR3, but improvements were minimal. The AR series suffered from terrible sensitivity, selectivity, and stability. They were general coverage receivers, with a small bandspread control which was not calibrated for the amateur bands. There was no calibrator, so it was impossible to determine with any accuracy what frequency was tuned in. The Q multiplier, introduced in the late 50s, helped the selectivity somewhat, but for the most part, hams wishing for better receivers had to resort to commercially built units. There were plenty of these

continued page 9



R55A with DX20.



Globe Chief 90 with Knight Kit R100.

continued from page 7

available, in a wide variety of price ranges, from manufacturers such as Hallicrafters, National, Hammarlund, and others.

Why the glut of transmitter kits and lack of receiver kits? One answer is that transmitters of the day, simple crystal controlled low power units, were relatively easy to design and, more importantly, easy to build successfully. There was little or no adjustment or alignment required and the chassis were big enough to have plenty of work space. Improving the AT1 type of transmitter by adding more power and a pi network output was relatively simple. All the Novice transmitters of the day consisted of an oscillator stage, one or two amplifier tubes, and a rectifier tube. They all used about the same number of parts.

However, improving a receiver was a much bigger challenge. To improve selectivity and sensitivity required more RF and IF stages, and improving stability required heavier duty components and shielding. Features such as crystal filters and noise limiters required still more tubes. Alignment of all but the simplest receivers required test equipment and skills not usually available to the typical Novice. It would be a number of years before Heath introduced a more sophisticated receiver.

The lone (as far as I know) exception was Knight Kit, owned by Allied Radio of Chicago. In 1958 they introduced a 9 tube general coverage receiver that was several steps above the simple AR2 and AR3. For a bit over \$100, a receiver was available with an RF stage and 2 IF stages, calibrated bandspread for the amateur bands, and a built in Q multiplier for added selectivity. A crystal calibrator, S meter, and matching speaker were offered as options. Oddly, it originally had no name or designation other than catalog number, but was soon named the R100, and a later version called the R100A. The only

difference between the 3 models was cosmetic. One way Knight was able to overcome the construction problems was to use printed circuit boards. Most parts were mounted on two printed circuit boards, and the control and interconnecting wiring was completed. This reduced the chances of wiring error, and added to the physical rigidity and stability. It was an outstanding value for the day, and was a great success. I bought one of these about 1960 and used it for several years. Compared to the primitive S38C I had previously, performance was several orders of magnitude better! This receiver is shown with the Globe Chief 90 discussed earlier, along with Heath's ubiquitous AM2 SWR meter.

Several years later, the R55 was introduced as a lower price version. This receiver also featured a large calibrated amateur bandspread. It had no RF stage or Q multiplier, but had 6 tubes, several of which served dual purposes. An unusual feature was that it covered 6 meters as well. The reason was probably compatibility with the T60 transmitter, a low powered CW and screen modulated AM transmitter, which also covered 6 meters. It also featured an internal speaker, unlike the R100. The one shown is the R55A model, identical to the R55 except for slight cosmetic changes on the panel. This sold for about \$65 in kit form. Many of these were sold, but it was never as popular as the R100 series. Knight Kit manuals were thorough and easy to follow, so most builders had little problem building their receivers. The one shown here is paired with the DX 20 discussed earlier. All these units are in good working condition!

Next month we'll show what happened when the Novice upgraded and was able to use AM phone and VFO!

Questions and comments welcome at
K2RP@ARRL.NET

7-Land QSO Party Report

by Harv K6QK

The 7Land QSO Party was held on Saturday 5 May and began at 0600 and ended at 2400 for a total of eighteen hours. The station is the new super station of Bud N7CW, a former resident of San Diego and now a permanent resident of Prescott, Arizona. The group invited to operate, along with Bud, were Jim K6ZH, Dave N6EEG, Paul NN6X and myself Harv K6QK. We also had the pleasure of Dennis N6KI joining us while on a one day stop on his way to Tucson. This group, except Dennis, operates the California QSO Party as W6PT, the call of the San Diego DX Club.

The drive from San Diego to Prescott was a 7-1/2 hour journey. It was without incident but when we arrived we were faced with winds gusting to 46MPH and temps in the low 60's. The nights were probably around the mid forties. We awakened to sunny skies but that turned to a sort of mist which produced small hail followed by snow and then just plain old overcast. We had it all. The end result of the weather was a high static noise condition as a result of the charged particles falling on the antennas creating difficult receive conditions. The crew operated 2-hour shifts throughout the contest giving everyone an equal opportunity to do their thing whether it is CW or SSB. We also had the opportunity to operate a new rig, an ORION II by Ten-Tec. The final results were QSO's: CW-561, SSB-599; Multipliers-65; Total Score-187,265 points. A good time was had by all.

The tower and antenna system were installed by Bud N7CW, Bruce N7TY, and myself K6QK. If you are interested in additional information and details of the station check out <http://www.n7cw.com>.

A special thanks to Bud and Susan for their hospitality. Photos courtesy of K6ZH.



Bud, Harvey, Paul, Dave, and Jim.



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Submissions: scope@palomararc.org
Questions? Ideas? Comments? W6NWG@amsat.org

This month's General Meeting will be held on July 11th, 2007 (Usually the first Wednesday of each month, but not this month) at the Carlsbad Safety Center. The subject will be Handi-Hams. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! -NN3V (past president of PARC)

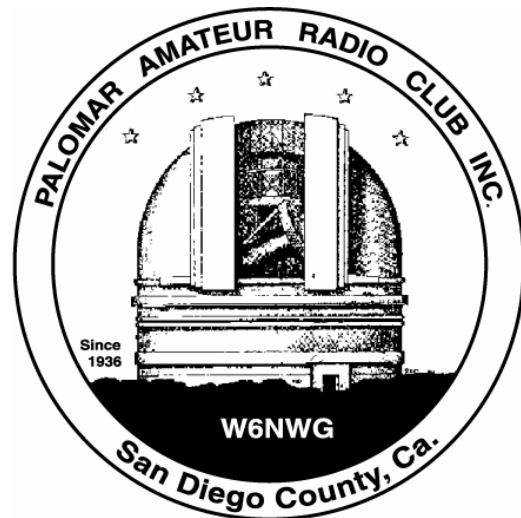
SCOPE August 2007

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

Club Meeting "Radio Direction Finding" by K6VCR
1 August 7:30pm at the Carlsbad Safety Center

Annual Picnic
5 August 10am-6pm at San Dieguito County Park
Picnic Area 4

Board Meeting
8 August 7:00pm at W5NYV QTH



President's Message

By Steve Early AD6VI

July has gone by quickly. We got a late start because Independence Day, July 4th, fell on the first Wednesday of the month, so in patriotic fashion, we rescheduled the PARC general membership meeting for the second Wednesday.

The July Program was on Handi-Hams, presented by Marcia De Runtz, KG6FIX. Marcia gave a good presentation on what Handi-Hams is and does. A local Handi-Hams net has been established on Sunday Evenings at 7:00pm on 147.130+107.2. In addition, Marcia is looking for help to re-establish the amateur radio station at the Vista Center for the Blind and to establish a new station at the San Diego Center for the Blind.

The August 1st program will be on radio direction finding in anticipation of the T-hunt at the PARC Picnic on Sunday, August 5th.

The picnic is a little early this year due to site availability and will be held on Sunday, August 5 from 10am to about 6pm in the San Dieguito County Park at picnic area 4 (same place as last year and 2005). Stop by, good times will be had by all.

In addition to the Sunday night Handi-Hams net, PARC is now hosting a SATERN (Salvation Army Team Emergency Radio Network) net on Thursday evenings, at 8:00pm on the 147.075 repeater. SATERN is a worthwhile program that supports disaster-affected communities in time of need. Looking down the road: The September program will be on PSK31 and will be presented by Ralph Smith, AE6SV. August through September - Repeater site refurbishment work parties. Watch the website for details.

I hope to see you on August first. Bring a friend!

Picnic Notes:

We hope to operate the club's station in the Ten-Ten Summer QSO Party from the picnic site. We also plan a foxhunt (hidden transmitter hunt). Win a gift certificate prize in the annual drawing – number of tickets based on your participation in club activities this year. The club provides meat (probably hot dogs, hamburgers, chicken) and paper plates, cups, and utensils. Other courses are pot luck. Members whose last names begin with A through H, please bring salad or fruit. I through P, please bring beverages. Q through Z, desserts, chips, or cookies. Bring enough to feed yourself and about two other people. (Same as last year.) ☼

Introducing SATERN

By Tom Carmody KJ6TDC

Last night, (July 18th), I attended your board meeting to ask permission to conduct a weekly Net for the Salvation Army Team Emergency Radio Network also known as SATERN.

Permission was granted and we will be running the Net on your 147.075 repeater on Thursdays at 8:00 PM. At 8:30 PM we then conduct the regular SATERN Net on 145.320 with a CTCSS tone of 107.2

I was also asked to submit an article about what SATERN does that will be printed in this month's SCOPE. The following information was obtained from the official SATERN web site which is www.saturn.org.

Maj. McPherson, Art Evans, N9KQ and two Canadian hams, Harold Gibson, VE3NKK, and Ernie Reid, VE3BIX, started a SATERN net in June 1988. The purpose was to keep the lines of communication between the various Salvation Army Emergency Disaster Services (EDS) units open and to be able to provide efficient and rapid mutual aid in times of need.

That original 40 meter net has grown over the past 19 years into over 3500 members world-wide, dozens of VHF/UHF local and divisional nets, and 4 territorial nets. An international net, our flagship net, is on 14.265 MHz. The international SATERN net has become recognized by the emergency communications community in the same company with the HWN, the MMSN and the various MARS Nets, all of which provide communication in times of trouble.

The unique service that SATERN provides is that we "find lost people". We have become the premier Health and Welfare Net. Through our web site at saturn.org, and a bank of telephones in the Elk Grove, IL EDS Center, incoming requests for information about loved ones in the

midst of various disasters are received and handled in a rapid and efficient manner.

For example, in the two weeks following landfall of hurricane Katrina in September 2005, SATERN received over 61,000 requests for information on loved ones and put 25,000 families back in touch with their friends and relatives who had been out of touch.

In addition to providing long distance H&W support to the public, SATERN members are found at many local emergencies and disasters as volunteers with The Salvation Army EDS responses. We provide tactical communications to keep the food and supplies coming where they are needed, and often we are also there, as trained food handlers and EDS volunteers, helping to serve those in need, providing food and refreshments to the emergency responders and the families involved in the emergency and dispensing clean-up kits and other supplies to those who have lost so much in a disaster.

SATERN continues to evolve through the inspiration and initiative of its members and has specific future goals.

1) Miniaturization

As Hams interested in emergency communications, we are constantly looking for ways to pack more communication capability into smaller packages, requiring smaller power packs.

2) Digital Modes

SATERN members are experimenting with the latest digital modes of communication (WinLink, D-Star, etc.) to improve the dependability and speed of the support communication that we provide.

3) Propagation

Some of our members are investigating various prediction software packages to help improve the reliability of our HF capabilities. Several members are working on NVIS antennas to determine their

continued on page 6

July Meeting Goodie Givers

Mark KI6FVH, Wild Bill WB6BFG, Ellen N6UWW, Michelle W5NYV, Marvin KD6YJB, Paul KB5MU

July Fold & Staple

Art KB6YHZ & Janet, Jo KB6NMK, Al W6GNI & Kathy

July Membership Report

New Members Joining PARC: None! Zero, Zip! However 5 members reinstated their membership.

If you are reading this on the web site because you didn't get a SCOPE in the mail - how about joining, or rejoining PARC? The club needs the support of many hams to keep Palomar Mountain repeating back what goes up there!

Our membership is still dropping. Bring a friend, and let's sign them up. Maybe too much internet/cell phone competition? But, there are many aspects to ham radio, new ones every year. The digital modes are really neat! How many other hobbies can brag about having their own satellites up?

As a reminder, in accordance with the by-laws, the year for participation points is August 1 through July 31. So, the points for attending the August 1st, 2007 club meeting will be starting points for year 2008. The fold and staple crew will get their points added in 2007, since this newsletter was prepared and mailed July 25th.

Al
W6GNI



My membership lapsed?!

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(6.30) Cushcraft R-8 Vertical Antenna, New In Box, \$375.00 (New \$550.00). IC-756PRO II Transceiver with IC-PS125 Power Supply, Never Used, Purchased Feb. 2005 from HRO, Original Cost \$2399, Will Sell for \$1975.00. Selling because of CC&R Issues. Call John N6LMY rohring@sbcglobal.net or (760) 602-5041

(4.1) A-50-5S Cushcraft 5-el 6m beam - condx: bent boom and bent 2 elements, fixable, on the ground, \$25.

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Time to Upgrade!

How a Typical Vintage Novice Station Moved into General Class Usage

By Ron Pollack

In the last couple of articles, we discussed some of the early Novice transmitters, receivers, and accessories that were available in the early and mid 1950s. Novices were restricted to crystal control, 75 watts input, and CW on several of the HF bands. Privileges were also available on AM phone and CW in a part of the 2 meter band (No FM repeaters in those days!) Initially, Novices were restricted to portions of 80 meters and 11 meters (it was a ham band then!). Very quickly, the frequency allocations were changed to 80, 40, and 15 meters. 15 had just been opened for amateur use.

Novice licenses were issued for one year only, and were not renewable. If a novice didn't upgrade to Technician or General during that year, he was off the air! It was a "one time only in a lifetime" license. Upgrading to General required a 13 WPM code test and a more complex written exam.

Of course, many novices were successful in upgrading their privileges. As soon as the coveted General ticket came (which, at that time, afforded all amateur privileges), most hams couldn't wait to get on phone, use a VFO, and usually run more power. Along with these changes usually came a better receiver for the station.

Of the three restrictions lifted upon receipt of the General Class, perhaps crystal control was the most inconvenient. In the novice bands, everyone was "rockbound," and the custom was to call "CQ" and tune the band for replies. (Of course, with some of the primitive receivers like the R55 and AR2 we showed earlier, the selectivity was so poor that you were listening to most of the band anyway!) But by the mid 50s, most general class ops were using VFOs, so most replies were on the same frequency.

Many novices also wanted to try "phone" on the HF bands, too. SSB was in its infancy, and AM was the predominant voice mode.

Many novices had planned ahead, and obtained novice transmitters with phone capability and/or built in VFO so they would be ready to use their general class privileges.

Pictured is a typical mid to late 1950s station as might have been used by someone who had recently upgraded.

One very popular transmitter, introduced in 1956 by Heathkit was the DX 35 shown in the photo on page 5. Its 65 watt CW input was near maximum for a novice, but there was a "controlled carrier" (screen) modulator built in for AM. In place of the sweep tube or 807 final in some of the low power units, the DX 35 employed a 6146 final in a very conservative circuit. The pi network output matched a wide variety of loads, making a separate antenna tuner unnecessary in most cases. The kit price was \$57. While there was no VFO included, Heath offered the VF1, introduced in 1952 (designed for the AT1), for \$19. The VFO was designed to be powered by the transmitter, and an auxiliary power socket was provided on the DX35 to match. In addition, the transmitter had sockets for 3 crystals as well as a VFO input. These were switch selectable from the back panel. In contrast, many of the "CW only" novice transmitters had to be modified to use a VFO. If crystal control was desired, usually the mod had to be removed, or a switch added. Many times there was no provision for power connections. This was true of the DX 20. Perhaps Heath didn't want to include many features in the DX 20 in order to make the DX 35 more attractive.

As we discussed, there weren't many decent receivers available in kit form in the 1950s, so most hams used factory manufactured ones. The one in this photo
continued on page 5



continued from page 4
 is a National NC109, introduced around 1957. It was an order of magnitude better than the 5 tube jobs that many novices started with in terms of stability, selectivity, and sensitivity. It had 11 tubes, a calibrated bandspread scale for the ham bands, and a crystal filter with 6 positions from 3.8 Hz down to 50 Hz for sharp selectivity. There is a stage of RF amplification as well as 2 stages of IF. Recognizing the oncoming popularity of SSB, National included a separate product detector for CW and SSB use. The receiver was priced at \$200, and was very popular. The setup pictured above is fully functional, and is used frequently, especially during the "Classic Exchange" contests, where multipliers are based on the age of the equipment, and the same station may be worked multiple times using different equipment.

The receiver is quite common, but the DX 35 is less so, having been built for only 2 years, 1956 and 57. Far more common is the DX40, which replaced the '35 in 1958

and was manufactured until 1960, when it was replaced by the more stylish DX60. There were several minor differences, but the greater popularity of the DX40 was probably due to the much longer production run. The VF 1 VFO pictured is very common, having been introduced in 1952 and produced until 1961.

The only thing missing that the newly minted General wanted was more power! In the 50s, this meant either an amplifier or a big leap in cost for a higher power transmitter, so many were satisfied with the 75 to 90 watt limit available in lower priced transmitters.

Thanks for the nice comments I've received. I hope to continue writing these columns until I run out of equipment! That seems unlikely, as old radios have a way of following me home! Recently I found a Hammarlund HQ129X in my car trunk, and shortly thereafter there was a Collins 75A4 in there. Wonder how they got in there? ☼

Introducing SATERN

continued from page 2

utility in regional emergency communications.

3) Training

Our Members are encouraged to become associated with their divisional HQ EDS groups and avail themselves of the excellent opportunities provided by TSA for learning new skills that will increase the usefulness of the volunteers at disaster sites. There are also training opportunities for new Net Control Stations for our International Net and the Regional Nets. We are always looking for experienced hams who may be interested in learning to become regular NCSs.

4) Establishing Communication Hubs

As our members become DHQ EDS volunteers, it is natural that they want to set up a ham station in DHQ and in the canteen on which they may be serving. This is happening in many DHQs as more and more SATERN members sign up to help on site in disasters.

If you are interested in learning more about SATERN, visit our web site at satern.org. Explore the various windows, see pictures of some of our members and some of our recent activities, learn more of our history and emergency communications basics and, if you are not yet a member, complete the on-line application form to become a SATERN Member. Of course, you are always welcome on any of our nets. Their times and frequencies are all listed on the web site.

For further information contact:
US and International:
Maj. Pat McPherson
WW9E
patrick.mcpherson@usc.salvationarmy.org

You can also contact me and I will try to help you any way I can. I am the net control for SATERN in San Diego County. Tom Carmody, KJ6TDC,
tomcarmody@cox.net, 760-789-4993 ☼

July PARC Board Meeting Minutes

The Abridged Version

Discussion Items:

1. Field Day Close Out– Field Day is over and bills are coming in. Score needs to be submitted by July 21. We need to get next years site lined up this fall. The DMV site is still a very strong candidate.
2. Repeater site refurbishment- Dan has already tightened some bolts. Difficulty in getting galvanized bolts with same specifications as existing bolts. We also need unistrut supports for coax.
3. Mailing list for board members – it was suggested the list of members on the Board mailing list be reviewed.
4. Picnic – Picnic will be held on August 5th at San Dieguito county park, site 4. This coincides with the Ten-Ten contest for which we want to man a station at the picnic. Hours are from 10 AM to 6 PM. Cooks will be KG6RCW, W6GDK and KI6DER.

General Meeting for August – Direction finding by K6VCR

Repeater – Tech The building seems to be running a bit warm, so there will be a work party on July 29 to do preliminary work on tower and to paint the roof of the building white.

Site report – Brush looks pretty good for fire hazard mitigation. A few branches into guy wires need to be trimmed.

New Business

1. Autopatch – some members have been asking about control codes for auto patch. The system has been down for some time, and we need to study how to update the system.
2. SATERN - Satern would like to hold a net on the 147.075 repeater on Thursday at 7:30 PM. KK6LJ from MARA was asked to attend the meeting so we could coordinate the use of that repeater for emergency use and nets. ☼

Contest Corral

Contest	Time and Date
TARA Grid Dip Shindig	0000Z-2400Z, Aug 4
10-10 Int. Summer Contest, SSB	0001Z, Aug 4 to 2359Z, Aug 5
National Lighthouse Weekend QSO Contest	0001Z, Aug 4 to 2359Z, Aug 5
European HF Championship	1200Z-2359Z, Aug 4
ARRL UHF Contest	1800Z, Aug 4 to 1800Z, Aug 5
North American QSO Party, CW	1800Z, Aug 4 to 0600Z, Aug 5
RSGB RoPoCo 2	0700Z-0900Z, Aug 5
SARL HF Phone Contest	1300Z-1630Z, Aug 5
ARS Spartan Sprint	0100Z-0300Z, Aug 7
WAE DX Contest, CW	0000Z, Aug 11 to 2359Z, Aug 12
Maryland-DC QSO Party	1600Z, Aug 11 to 0400Z, Aug 12 and 1600Z-2359Z, Aug 12
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Aug 15
SARTG WW RTTY Contest	0000Z-0800Z, Aug 18 and 1600Z-2400Z, Aug 18 and 0800Z-1600Z, Aug 19
ARRL 10 GHz and Up Contest	0600 local, Aug 18 to 2400 local, Aug 19
Keyman's Club of Japan Contest	1200Z, Aug 18 to 1200Z, Aug 19
Russian District Award Contest	1400Z, Aug 18 to 0800Z, Aug 19
ARCI Silent Key Memorial Sprint	1500Z-1800Z, Aug 18
North American QSO Party, SSB	1800Z, Aug 18 to 0600Z, Aug 19
New Jersey QSO Party	2000Z, Aug 18 to 0700Z, Aug 19 and 1300Z, Aug 19 to 0200Z, Aug 20
Run for the Bacon QRP Contest	0100Z-0300Z, Aug 20
ALARA Contest	0600Z, Aug 25 to 1159Z, Aug 26
Hawaii QSO Party	0700Z, Aug 25 to 2200Z, Aug 26
SCC RTTY Championship	1200Z, Aug 25 to 1159Z, Aug 26
YO DX HF Contest	1200Z, Aug 25 to 1200Z, Aug 26
Ohio QSO Party	1600Z, Aug 25 to 0400Z, Aug 26
SKCC Weekend Sprint	0000Z-2400Z, Aug 26
SARL HF CW Contest	1400Z-1600Z, Aug 26

Contest Comments

Send your comments and scores to scope@palomararc.org

Something for everyone this month from straight HF CW and SSB contests to 10 GHz and up. Like playing with 5 watts? There is some of that also. Complete rules may be found in QST CQ, NCJ, and Worldradio magazines and on the Web. CU in the contest! 73, Harry, W6Y00

IARU HF World Championship Report

Call: NX6T (at N6KI) Ops: KB5MU, W5NYV, N6KI. Class: MS Mixed HP. QTH: CA.

Operating Time (hrs): 9

515 Qs Total

Total Score = 143,689

Invited a few hams over for practice and fun. Not much on 15 after starting at almost 2 PM. Paul, KB5MU and Michelle, W5NYV worked afternoon and early eve. N6KI worked late night and early Sunday AM and had some nice grayline EU contacts on 20 and 40. Dennis N6KI

Block KOJPK with Tone Decode

By Paul Williamson KB5MU

It's summertime, and radio propagation up and down the coast is hot. That means that in some parts of our area, you can hear a strong signal from the KOJPK repeater on Rio Hondo Peak (see map on page 9), which shares the 146.730 MHz frequency with our own W6NWG repeater on Palomar Mountain. The signal may be too strong to eliminate by adjusting the squelch control on your transceiver. As long as W6NWG's signal is substantially stronger, this doesn't cause any problem when there's activity on our repeater. Local activity will cover up the unusual signal from KOJPK. But when our repeater falls silent, you'll be stuck listening to conversations on the other repeater. It can be fun to hear signals from far away, but often you'd rather hear only your friends on the local repeater.

There's an easy way to do that. If your radio is fairly new, it probably contains a tone decoder. If you turn on the tone decoder, your radio will remain silent unless it detects a particular low-pitched tone superimposed on the received signal. This is called CTCSS, for Continuous Tone-Coded Squelch System, or sometimes PL after the Motorola trade name Private Line. It's the same technique most repeaters use to limit access to stations intending to use that repeater. When used that way, you set your transmitter to emit the tone and the repeater's receiver detects it. That's usually designated "Tone" on the transceiver's display. For our purposes, though, we want the opposite: the repeater emits the tone on its transmitted signal, and your rig detects it. This setting is often designated "CTCSS" or just "CT" on the transceiver's display.

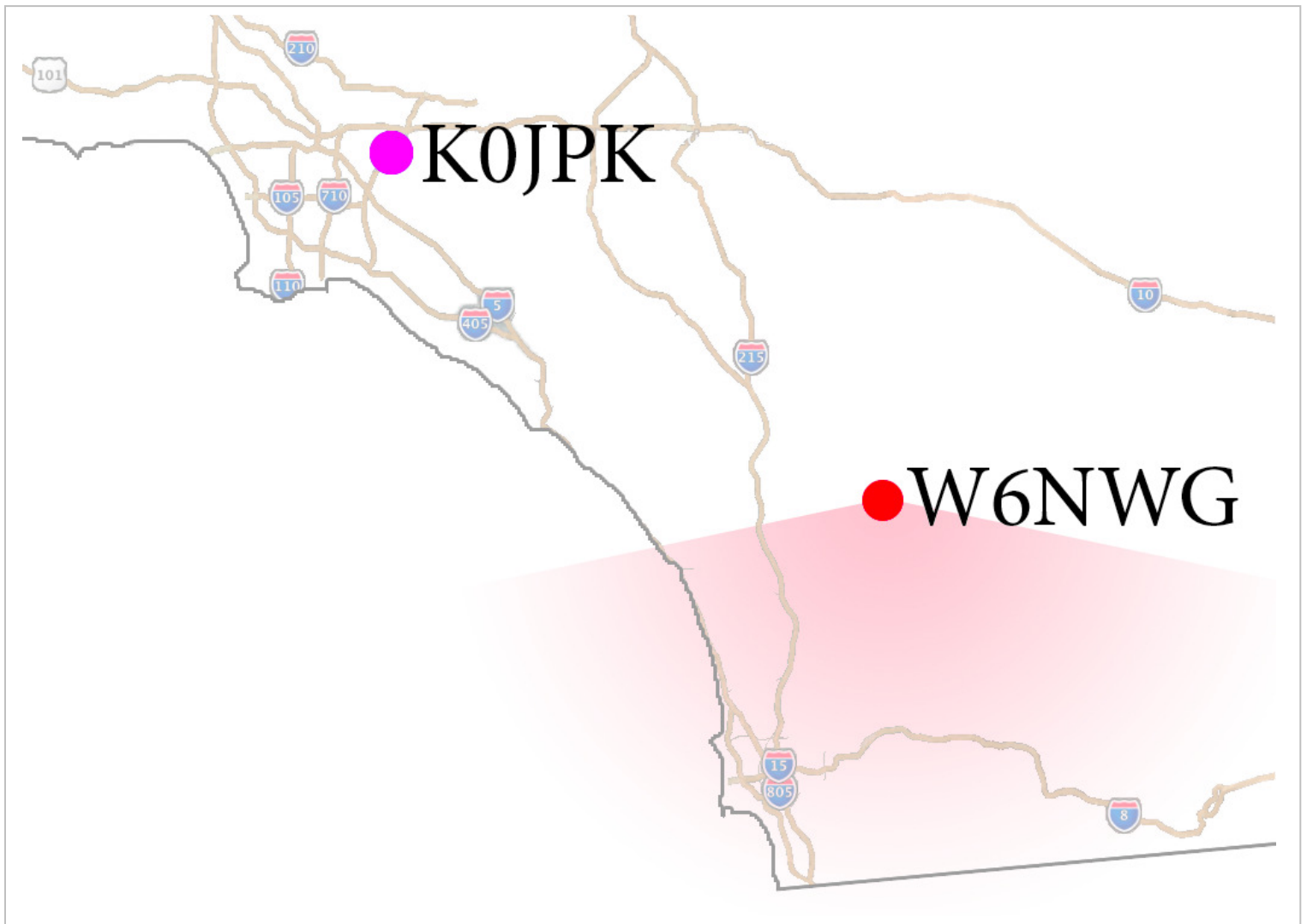
Besides turning the feature on, you must also tell the transceiver which of the common tones to detect. This may be a separate setting, or (commonly) a shared setting with the radio's tone encoder. Set it to 107.2 Hz. Some older radios will require you to look this up in a table to

find a code number, but newer radios will just display the value 107.2 directly, making this setting very easy - once you've figured out how to get at the feature in the first place. You may need to consult your radio's manual (or a third-party cheat sheet) to find the feature hiding among the button functions or in the menus.

On some radios you can't enable the tone decoder without also enabling the tone encoder, and that's fine. Even though you don't usually need to transmit a tone to access the 146.730 MHz W6NWG repeater, it does no harm to transmit it anyway - and you'll be ready when the control operators have to enable the repeater's tone decoder to eliminate interference, as they have recently done.

This trick doesn't work on every repeater. It requires the repeater to transmit (or pass through) the tone and most repeaters don't do that. The W6NWG repeaters do, specifically to allow this trick to work. If you tune off to another repeater, you'll probably need to disable the tone decoder in order to hear anything. It can be very confusing if you forget! Most radios retain the tone encode and decode settings with each memory location, so make use of the memories for repeater access and you shouldn't need to worry much about the tone settings.

In some locations, on some occasions, the KOJPK signal can be almost as strong as the signal from W6NWG, or even stronger. At those times, you won't be able to hear the Palomar repeater clearly, and the tone decoder trick won't help. Your only recourse in that case is to move to a better location or use a directional antenna to favor the signal from Palomar Mountain over the one from up north. A small yagi antenna may be a practical solution if you live in an area where KOJPK is especially strong. In most parts of the county, though, all you need is the tone decoder built into your radio. ☼



Map edited by KB5MU

Radio Direction Finding Fundamentals

by Michelle Thompson W5NYV

In anticipation of the August club meeting program, here's a short introduction to RDF (radio direction finding). RDF dates back to World War I. During the cold war, several very large circular antenna arrays were constructed in order to locate high frequency radio signals. Current research involves using software-defined radios and multi-channel multi-array antennas to accomplish the direction finding functions.

RDF is often employed to track down transmitters that are causing harmful interference. PARC members have used RDF techniques to identify "jammers" in the past.

Transmitter hunting is also done for fun and sport. There are several groups in southern California that have regular transmitter hunts and all levels of expertise are welcome. For more skilled and competitive RDF enthusiasts, the USA/IARU Region 2 Championships of Amateur Radio Direction Finding is scheduled for September 14-16 in the forests near Lake Tahoe. The next World Championships is in 2008 as the competition is held only in even-numbered years.

Repeaters Sponsored by PARC

Frequency	Tx	Tone	Call Sign	Remarks
52.680	–	107.2	W6NWG	
146.730	–	107.2	W6NWG	Autopatch; see note 1,
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note
447.000	–	107.2	W6NWG	Autopatch; see note 2
224.380	–	107.2	KK6KD	Americas Unidos
224.900	–	107.2	WD6HFR	Convair/220 ARC
224.940	–	107.2	KK6KD	Sharp Hospital Coverage
446.140	–	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; autopatch; linked to 445.600
445.600	–	107.2	N6FQ	Fallbrook ARC; autopatch; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	–	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 2441.5 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrl.net
Sunday	0830	146.730	ARES Net	Jo Ashley KB6NMK@arrl.net
Sunday	1900	147.130	Handi-Hams	Marcia De Runtz KG6FIX
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted tthompdson@sdarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYTrwilimek@cox.net
Thursday	2000	147.075	SATERN	tomcarmody@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com
Nightly	>2200	147.130	Facetious Group	

Contact Information

Board of Directors Position	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
Vice President - Tom Storer	KI6DER	ki6der@amsat.org
Secretary - Gary Kent	W6GDK	858-679-0578 w6gdk@arrl.net
Treasurer - Bob Birch	KG6RGI	rrbirch@cox.net
Director - Tom Martin	KG6RCW	619-778-3866 rbg4@aol.com
Director - Dennis Baca	KD6TUJ	760-722-0251 kd6tuj@amsat.org
Scope Editor - Michelle Thompson	W5NYV	w5nyv@amsat.org
Repeater Chair - Dan Bubke	K6NKC	k6nkc@amsat.org
Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.

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Address service requested

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on August 1st, 2007 (The first Wednesday of each month) at the Carlsbad Safety Center. The subject will be "Radio Direction Finding". Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! -NN3V (past president of PARC)

SCOPE September 2007

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

Club Meeting "PSK31" by AE6SV
5 September 7:30pm at the Carlsbad Safety Center

Board Meeting
12 September 7:00pm at W6GNI QTH

Repeater Site Refurbishment
22-23 September 10:00am – 5:00pm at the repeater site on Palomar Mountain

Simplex Mapping Exercise
29 September 9:00am – 11:00am sponsored by MARA



President's Message

By Steve Early AD6VI

August got off to an early start. On August 1st, we had a very good presentation on Radio Direction Finding. On August 5th, we had the annual picnic. These closely followed an unusually late July meeting due to Independence Day.

The September 5th program will feature PSK31, presented by Ralph Smith, AE6SV, who provided PSK31 for Field Day and was one of two people that copied the ARRL Field Day bulletin for PARC.

On Saturday September 22nd and Sunday September 23rd will be our PARC repeater site project weekend. The goal for this weekend is to paint all of the buildings and the antenna tower. It has been 25 years since the PARC tower went up. This year the PARC board determined that it was time for a good inspection and refurbishment project to extend the tower's useful life. Dan Bubke K6NKC, our Repeater Technical Chairman, has inspected all of the fasteners on the tower, finding only one that needed replacement. Now we are ready to clean off any loose paint and apply a new coat so that the tower will hopefully last another 25 years.

To make this task safer and faster, PARC is renting a very large man lift for this weekend. While we are at it, we expect to prepare and paint all of the small buildings

to help protect them from the weather and to blend in with the neighborhood. We will be needing lots of help with the tower and with preparing and painting the buildings.

Several of us will be visiting the site over the next several weeks to prepare for the big weekend. This is a great opportunity to do service for PARC, so that PARC can continue to provide service to the community. If you have time and the desire, please contact Dan Bubke (dbubke@juno.com) or myself, Steve Early (ad6vi@cox.net / 619-461-2818) for schedules and information.

Looking down the road, the October 3rd program will be the annual PARC auction. Because of the expected duration, the door will open to sellers around 6:00pm and to buyers around 6:30pm. The auction will start at 7:00pm. Watch www.palomararc.org and see the October SCOPE for details

Also in October, the Amateur Radio Emergency Service (ARES) will be needing volunteers for the Miramar Air Show. Contact Section Emergency Coordinator Jim Cammarano KG6R at 858-486-2871 or kg6r@arrl.net.

For those wanting to upgrade, keep an eye open for a one-day General class in November, and a two-day Extra class on Saturdays December 1st and 8th.

I hope to see you on September 5th. Bring a friend!

Field Day Results

Steve Early AD6VI

Many of you may have seen the preliminary 2007 ARRL Field Day results posted at <http://www.arrl.org/contests/claimed/> under 2007 ARRL Field Day.

Conspicuously absent is a listing for W6NWG, the Palomar Amateur Radio Club. I am looking into this, but want to assure you that PARC records were submitted to the ARRL on July 22nd, via <http://b4h.net/cabforms/>, with support documentation sent via the US Postal Service. This was two days ahead of the posted deadline. We used the same methods that we used for the last two years. Hopefully this matter will be resolved prior to the September club meeting.

Regardless, I want to thank everyone who contributed to our 2007 Field Day, which earned the Palomar Amateur Radio Club 10,638 points and registered 116 participants and visitors.

Picnic Report

Dennis Baca KD6TUJ

Prizes won at the August meeting, provided by Ham4Less.com:

9 led flashlight Art KC6UQH
Speaker mike Doug Ferris
Speaker mike W6PSK

At the September meeting there will be a led flashlight and 3 speaker microphones (icom/kenwood).

The picnic was held at San Dieguito County Park with 27 members, family, and guests. Prize participation was based on one ticket per activity participation point with a maximum of 20 tickets allowed per member. The winners were given gift certificates to HRO.

\$100 W6FWE Don
50 W6YOO Harry
50 KD6TUJ Dennis
25 W5NYV Michellle
25 KG6FIX Marcia
25 KB5MU Paul
25 KC6UQH Art

See the website for more photos of the picnic!

August PARC Board Meeting Minutes

The Abridged Version

August 8, 2007

The meeting was called to order at 7:03 PM by President Steve Early AD6VI. The meeting was held at the house of Michelle Thompson W5NYV in her newly painted living room/dining room.

Present were:

President Steve Early AD6VI
Vice President Tom Storer KI6DER
Treasurer Bob Birch KG6RGI
Secretary Gary Kent W6GDK
Director #1 Tom Martin KG6RCW
Director #2 Dennis Baca KD6TUJ
Membership Al Donlevy W6GNI
Repeater Tech chair Dan Bubke K6NKC
Scope Editor Michelle Thompson W5NYV
Guest Jo Ashley KB6NMK
Guest Paul Williamson KB5MU
Guest Conrad Lara KG6JEI

Treasurer's Report:

Bob KG6RGI presented the board with the treasurer's report. We currently have Total Assets of \$15,970.09. Income for the year exceeds outflow by \$3102.51, but quite a bit of that is for the Tower Refurbishment fund. Bob also presented a comparison of income and expenses for this year and last year. It was moved to approve by Gary Kent, seconded by Tom Martin. Approved

Secretary's report:

The minutes of the July meeting were submitted by W6GDK. Only correction was the deletion of a note indicating the minutes were presented by AD6VI. This was a cut and paste error. It was then moved by Bob and seconded by Tom Martin to approve the minutes. Motion approved.

Discussion Items:

1. Repeater site refurbishment- Dan has already tightened all bolts. The tower is ready for brushing, galvanizing and painting. Steve painted the roof of the building white. Neighbors are requesting we paint all of the buildings a color that will blend in with the environment.
2. Autopatch – It was suggested that we simplify the autopatch to one line connected at Art McBride's house.

August Meeting Minutes continued on page 6

August Meeting Goodie Givers

Conrad KG6JEI, Preston W6ASP, Tom KG6RCW,
Wild Bill WB6BFG, Ellen N6UWW

August Fold & Staple

Merle KR6BT, W6YOO Harry, Jo KB6NMK & Terri,
Art KB6YHZ & Janet, Al W6GNI & Kathy, Sonny
WA5ACE

August Membership Report

Just a reminder, according to the bylaws, everyone starts all over again collecting "Participation Points", Starting July 1, 2006. Those that attended the picnic picked up a point for this year (2006 - 2007).

New Members Joining PARC.

K6DRH, KI6FKB, KI6JSR, KI6JSU, KI6JSP,
KJ6TDC, and KI6IID. Much better than last month!! Thank you!

Please be sure to check your SCOPE mailing label each month. Avoid the dreaded red "Last Issue" on your label. "Last Issue" means your membership expires in a few days, OR has expired as you received the SCOPE in the mail.

We get a number of new members that download the membership application form from the club web site. This is great, and the web site is a good way to tell potential members about the club. Do you know our web address? Palomararc.org Think - Palomar A-mateur R-adio C-lub dot Org.

JOTA October 19-21, 2007

Jamboree-on-the-Air, or JOTA, is an annual scouting and amateur radio event sponsored by the World Scout Bureau of the World Organization of the Scout Movement. Thousands of amateur radio stations around the world participate. If the conditions are right, it is common to contact a hundred scouting countries during the weekend!

These URLs explain it further.

<http://www.arrl.org/FandES/ead/jota.html>

<http://home.tiscali.nl/worldscout/Jota/jota.htm>

We have 12 scouts interested. If you would like to participate, please contact Steve Early at ad6vi@cox.net or 619-461-2818.

Club Classified Advertisements

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG.

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**Ken Clark, KE4MII
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**(8.26) (qty 5) 10 foot sections of Tri-axial type aluminum tower, sections made of 1" tubing on 10.5" centers, the top section has a platform for a rotor \$65.00 for all 50'.
Loren, AD6ZJ, 760-724-4644**

(7.22) Wanted: Transport for amateur UHF antennas to San Francisco Bay area. Fred Brown, W6HPH. Tel. 760-741-1328. w6hph@yahoo.es

**(6.30) Cushcraft R-8 Vertical Antenna, New In Box, \$375.00 (New \$550.00).
IC-756PRO II Transceiver with IC-PS125 Power Supply, Never Used, Purchased Feb. 2005 from HRO, Original Cost \$2399, Will Sell for \$1975.00. Selling because of CC&R Issues. Call John N6LMY rohring@sbcglobal.net or (760) 602-5041**

Stepping up in the 1950s

By Ron Pollack

The last few months, we've been discussing some entry level equipment popular in the 1950s, both CW and AM.

The big news of this era, however, was the introduction and rise in popularity of SSB, which is still by far the predominant voice mode on HF today. Like all changes in ham radio (and life, for that matter!), this revolution was not without controversy.

Part of the reluctance of many at this time involved the complexity of building, maintaining, and adjustment of the transmitting equipment. All but the most sophisticated receivers lacked a product detector, making tuning SSB signals difficult. The favored method was to advance the audio gain to maximum and use the RF gain as a volume control. Eventually product detectors and better AVC made tuning SSB signals a snap. For those accustomed to listening to the rich sound of plate modulated AM, the tinny sound of SSB was not pleasing to the ear. A typical comment of the time: "If God wanted us to use SSB, He would have given us only one nostril!"

But, the SSB enthusiasts had powerful arguments on their side. First, the fact that only one sideband was transmitted rather than two identical ones, meant that the number of signals in a given band could be doubled. The phone bands were even narrower then than they are now, so overcrowding was a serious problem, especially during contests and busy weekend times. When two AM signals were in the receiver's passband, an annoying heterodyne was created, further limiting the number of stations on the band. Since SSB uses a suppressed carrier, no heterodynes are created. Another important advantage is efficiency. An AM signal consists of a carrier, using half the power output of the transmitter. The remaining half is split between two identical sidebands. The carrier contributes nothing to speech, and the one of the sidebands is superfluous, as they both contain identical information. With SSB, all the power can be used for generating one sideband, so that effective power is quadrupled for the same input. Since power is only used during speech, the duty cycle is much lower. In AM, the carrier is using full power whenever the transmitter is on the air. Therefore, lighter, less expensive, and cooler running power supplies are used. There are no heavy modulation

transformers, either. In SSB reception, the receiver BFO replaces the missing carrier, and an intelligible signal results.

Besides making believers of the AM diehards, there were substantial technical challenges to be overcome. Generation of SSB signals could be done with two systems: Filter and Phasing. The first used crystal filters and balanced modulators to suppress the carrier, and the second used a phasing network to accomplish the same thing. The early homebrew units, and even some early manufactured transmitters, were tricky to adjust and required test equipment to operate.

By the late 50s, it became apparent that SSB was not going away, and many manufacturers started producing transmitters and receivers for the new mode. Several, like Johnson and Heathkit, produced adapters for existing AM transmitters.

Because of the relative complexity of the design and construction of SSB transmitters, they were quite expensive, but were very popular. One example of a popular SSB station is shown below.



The transmitter is a Hallicrafters HT32, introduced in early 1957. It is a filter type rig, with the sideband signal generated at 4.95 MHz, through a filter and balanced modulator. To aid stability, the VFO operated from 5 to 5.5 MHz. This gave a constant tuning rate on each band through a triple conversion system, similar to a triple conversion receiver. Because on some bands the VFO added to the frequency and some subtracted, some bands tune clockwise, and some counter clockwise! Two 6146 tubes were used in the finals,

with a power output of up to 100 watts. CW was available, as was AM, with much reduced power. These modes were provided by unbalancing the balanced modulator. The circuitry is complex but tune up was as easy as the AM transmitters of the day, but the features were enough to satisfy the most technological hams of the day. A matching HT33 amplifier was offered using two 4CX300A tubes. (I don't have one of these to show!) The transmitter is self contained with power supply, and is bandswitched. It even had a built in VOX. Because the VFO covers only 500 KHz, four crystals are needed to cover the 10 meter band. Only one is supplied, and only one 10 meter (and 11 meter!-Still an amateur band then) position is available on the bandswitch. Those desiring other portions of the band needed to supply other crystals and change them "under the hood" for those portions. The price was a hefty \$675, and many were sold. The HT32 was quickly followed by upgraded versions, the HT32A and HT32B. They were almost the same, except for minor improvements. The 32A added Push to Talk capability, and the 32B provided full coverage for 10 meters, as well as slight other changes. The basic unit was the same. The HT32B was last produced in 1964 and sold for \$725. Many thousands were produced, and many are still in use.

The matching receiver was the SX101 series, introduced in 1957. This was Hallicrafters' first Ham Band Only receiver, and it, too, was a great success. Among the desirable features were: Selectable sidebands, five positions of selectivity from 5 KHz to 500 Hz, a huge slide rule dial, with only the band in use being lit, a notch filter, and many others. The oscillator tube filament is always lit for stability. There were several versions of this receiver made, with the primary difference between them being frequency coverage. When 11 meters was given to the Cbers in 1958, that band was dropped. Early versions included 160 meters, while later versions dropped this band in favor of a position designed for use with VHF converters. All versions sold for \$395, and again many thousands were produced, and many survive. The one shown here is an SX101A, the last of the series.

The two units were designed to work together, with relay provisions in the transmitter to mute the receiver on transmit and use antivox signals from the receive audio. However, the tuning of the receiver and

transmitter are independent, meaning the operator had to "zero beat" to transmit and receive on the same frequency! Transceiver operation with independent receivers and transmitters was still a few years away, although Collins introduced the famous KWM1 transceiver at about the same time.

Shown with the station is the matching R 46B speaker, priced at \$18, and HA1 keyer, priced at \$80. (The keyer was not introduced until 1960). Also in the photo is the famous Astatic D104 "lollipop" microphone, and Vibroplex keyer paddle. These are authentic contemporary accessories.

So if the ham of a half century ago wanted a good quality state of the art setup, he might go to the local predecessor of HRO and bring this station home. And, many of them did! He'd lay out about \$1300 (about the price of a new Volkswagen at the time!), and probably need help carrying it all into the shack. The setup weighs over 125 pounds, and employs 41 tubes!

The station you see on page 4 has been completely restored to original specs. The only minor change is the addition of PTT to the transmitter. Not seen is an original Dow Key relay for switching the antenna. It is used on the air frequently, most recently in the August NAQP CW contest, where I made nearly 100 contacts all over the country in a few hours! The feel of the flywheel weighted dials and smell of hot tubes is a joy and trip back in time for me. Anyone wishing to share the experience just give me a call and you'll be welcome to operate this classic station.

Ron K2RP

Kit Builder Note

via Dennis N6KI

Kit builders will enjoy taking a look at the QRP offerings at <http://kitsandparts.com/rftoolkits.asp> where numerous modules are available. There is also a Google group for the kits at <http://groups.google.com/group/RF-toolkits> for user support and ideas. (Thanks, Doug N6TQS and Bob KC5WA)

August Meeting Minutes continued from page 2

It was moved by KG6RGI and seconded by KG6RCW that the tech committee investigate placing a single autopatch on 147.130. Motion approved.

Super weekend at site for tower refurbishment on Sept 22,23.

New Business:

1. Community meeting on repeaters. Steve would like to organize a meeting on Sept 15th at either the Red Cross building or EOC or the Carlsbad Safety Center with several emergency comms groups to discuss how to better utilize our repeaters.

2. SANDARC proposal for Cal Fire – Rich Biesigl, N6NKJ, would like to have SANDARC provide new radios and equipment for the CDF fire station in Monte Vista for Red Flag patrol. Moved by W6GDK, seconded by W6GNI that we vote yes at the next SANDARC meeting. Approved.

3. ARES requested the use of the 447.000 and 147.130 repeaters for the SET on August 18. Approved.

4. Steve suggested we have some sort of recognition for Mike Doyle AB6QT for his many years of service as the Repeater Trustee. Moved by KG6RGI, seconded by KG6RCW that we make such recognition with an appropriate plaque. Approved.

5. KB5MU stated that the club has a 3.5 KW generator on a trailer which is in Paul's possession. The trailer is in need of extensive repairs. After discussion, it was decided to give the donor of the generator the right of first refusal, and then sell it.

6. Calendar item – Steve is holding a PARC sponsored Extra Class on Dec 1 and Dec 8 with an exam in Escondido. There will be a General Class in November at a TBD date.

7. Tom Storer, KI6DER announced that he will have to step down as Vice President. He is moving to Washington State. He will send Steve a formal letter of resignation.

Next meeting will return to Al Donlevy's house.

Motion to adjourn by KI6DER, second by KG6RCW.
Approved at 8:45PM

Respectfully submitted by W6GDK

PARC Gets 10-10 Number

Through the efforts of Preston D Butler W6ASP, along with all the other stations he contacted, the Palomar Amateur Radio Club has a 10-10 number of its very own. Shown below is Preston (left) presenting a 10-10 International certificate to club president Steve Early AD6VI at the August 2007 club meeting.



Ten-Ten International Net is an organization of amateur radio operators dedicated to actively using the 10-meter ham band. There are about 70,000 members in "10-10", which sponsors a net (daily except Sunday SSB net on 28.8 and 28.380 MHz at 1800Z), chapters all over the world, awards, contests, and certificates, and a bi-annual (oddly numbered years) convention.

From <http://www.ten-ten.org/>

"Any licensed amateur authorized to operate on the 10 meter band can join 10-10. It is required that you contact 10 10-10 members (on 10 meters), listing their information as noted on the Membership Application form."

Either Preston W6ASP or Michelle W5NYV can exchange the 10-10 number on the air on behalf of the club, and both strongly encourage activity on 10 meters. At the annual picnic, PARC operated a 10m station in order to participate in the 10-10 Summer QSO Party.

Contest Corral

Contest	Time and Date
All Asian DX Contest, Phone	0000Z, Sep 1 to 2400Z, Sep 2
Russian RTTY WW Contest	0000Z-2400Z, Sep 1
Wake-Up! QRP Sprint	0400Z-0429Z, 0430Z-0459Z, 0500Z-0529Z, 0530Z-0600Z Sep 1
RSGB SSB Field Day	1300Z, Sep 1 to 1300Z, Sep 2
IARU Region 1 Field Day, SSB	1300Z, Sep 1 to 1259Z, Sep 2
DARC 10-Meter Digital Contest	1100Z-1700Z, Sep 2
MI QRP Labor Day CW Sprint	2300Z, Sep 3 to 0300Z, Sep 4
ARS Spartan Sprint	0100Z-0300Z, Sep 4
NCCC Sprint, CW	0230Z-0300Z, Sep 7
AGCW Straight Key Party	1300Z-1600Z, Sep 7
WAE DX Contest, SSB	0000Z, Sep 8 to 2359Z, Sep 9
NCCC Sprint, CW	0230Z-0300Z, Sep 8
Swiss HTC QRP Sprint	1300Z-1900Z, Sep 8
Arkansas QSO Party	1400Z, Sep 8 to 0600Z, Sep 9 and 1500Z-2400Z, Sep 9
ARRL September VHF QSO Party	1800Z, Sep 8 to 0300Z, Sep 10
SOC Marathon Sprint	1800Z-2400Z, Sep 8
North American Sprint, CW	0000Z-0400Z, Sep 9
Tennessee QSO Party	1800Z, Sep 9 to 0300Z, Sep 10
ARCI End of Summer Digital Sprint	2000Z-2359Z, Sep 9
YLRL Howdy Days	1400Z, Sep 11 to 0200Z, Sep 13
NCCC Sprint, CW	0230Z-0300Z, Sep 14
SARL VHF/UHF Contest	1600Z, Sep 14 to 1600Z, Sep 15 and 1600Z, Sep 15 to 1000Z, Sep 16
NCCC Sprint, CW	0230Z-0300Z, Sep 15
ARRL 10 GHz and Up Contest	0600 local, Sep 15 to 2400 local, Sep 16
Scandinavian Activity Contest, CW	1200Z, Sep 15 to 1200Z, Sep 16
South Carolina QSO Party	1300Z, Sep 15 to 2100Z, Sep 16
QRP Afield	1500Z-2100Z, Sep 15
Washington State Salmon Run	1600Z, Sep 15 to 0700Z, Sep 16 and 1600Z-2400Z, Sep 16
QCWA Fall QSO Party	1800Z, Sep 15 to 1800Z, Sep 16
North American Sprint, SSB	0000Z-0400Z, Sep 16
Run for the Bacon QRP Contest	0100Z-0300Z, Sep 17
144 MHz Fall Sprint	1900 local - 2300 local, Sep 17
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Sep 20
NCCC Sprint, CW	0230Z-0300Z, Sep 21
Scandinavian Activity Contest, SSB	1200Z, Sep 22 to 1200Z, Sep 23
CIS DX Contest	1200Z, Sep 22 to 1200Z, Sep 23
AGCW VHF/UHF Contest	1600Z-1900Z, Sep 22 (144) and 1900Z-2100Z, Sep 22 (432)
SKCC Weekend Sprint	0000Z-2400Z, Sep 23
222 MHz Fall Sprint	1900 local - 2300 local, Sep 25
NCCC Sprint, CW	0230Z-0300Z, Sep 28
ARRL EME Contest	0000Z, Sep 29 to 2359Z, Sep 30
CQ Worldwide DX Contest, RTTY	0000Z, Sep 29 to 2400Z, Sep 30
CQIR - Ireland Calling	1200Z, Sep 29 to 1200Z, Sep 30
Texas QSO Party	1400Z, Sep 29 to 0200Z, Sep 30 and 1400Z-2000Z, Sep 30
FISTS Coast to Coast Contest	1700Z, Sep 29 to 1700Z, Sep 30
UBA ON Contest, CW	0600Z-1000Z, Sep 30

Confessions of a Contest Novice

By Harry Hodges W6YOO

Some of you may not know that I got my first ticket as ZP5HZ early in 1973 in the country of Paraguay, South America. I was stationed there with the US Army as an advisor. My two daughters were in college in the US and long distance telephone charges were eating us alive. So, at the advice of the Administrator at the US Embassy, I studied for, was tested, and received a Paraguayan Class A license which allowed me access to the HF bands and the ability to phone patch into the US and sometimes directly to the Ham club on my daughter's campus. We could talk for a long time for FREE!

As I learned more about Ham radio, DXing, and award chasing, I found out about contesting. About the time of the USMC birthday bash in the fall of 1973, I decided to get on the air for one of the CQ WW DX Contests using the embassy's club station. Now, in California, contests usually start at 2400Z on Friday which is 4:00 or 5:00 pm depending on the season. Well, the farther east one goes the start time is later in the day. So this particular contest was to start about 9:00 p.m. in the evening local time following the US Embassy's USMC guard's celebration of the Corps' birthday and of course all US folks were invited to share drinks, hors d'ourves, birthday cake and finally champagne. I left the party about fifteen minutes before contest start time and fired up the rig in the club station after having consumed a considerable amount of beer, food, and champagne. Well ZP5HZ was immediately popular on the band and I was logging contacts as fast as I could as this was before the days of PCs and I had to concentrate on getting the calls correctly in to the log.

In no time at all I had a splitting headache and experienced other physical discomfort as well and the restroom was one floor down. I lasted about three hours before I had to abandon ship and call my wife to come haul me home. What did I learn from this experience? Well, first of all, get some rest before the contest starts, eat lightly, and most of all, stay away from alcohol! In future contests I followed the advice of other testers with respect to physical preparation and contesting became a rather enjoyable experience.

73, Harry W6YOO

Licensing and Class Information

Register 5-7 days in advance for the following test sessions.

PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Please call 619-465-EXAM for the latest contact info. Test sessions may be cancelled if no one pre-registers.

EARS Testing is in Escondido on the last Saturday of the month at 9:00 am at the LDS Church. The address is 1917 East Washington Avenue , Escondido , 92025. Contact Harry W6YOO (760) 743-4212 or W6YOO@amsat.org.

Test Equipment

Available for loan to PARC members. Thanks to the effort of John, WB6IQS, PARC now has a working HP 8640 Signal Generator. John spent many hours repairing this unit, donated it to PARC, and it is available for loan to PARC members for projects. John asked me to verify calibration with my 8640 after he completed the repairs, which I have done and it is now ready for loan.

Technical Description:

AM FM 0.5 to 512 MHz on fundamentals and 512 to 1024 MHz on 2nd harmonic. Output range +10 to -130 dBm. Female N Connector front panel output. Crystal lock for stability. Note: This signal generator, designed in the last century, has a very low phase noise specification, equal to or better than most modern signal generators made today. In addition to the HP 8640 I have the following test equipment from the W6JAB estate available for loan to PARC Members

- SWR meter (Diamond SX-600)
- Texscan CATV Spectrum analyzer 50- 400 MHz
- MFJ 269B
- MFJ 300W dummy load
- IFR 1100 Communication Monitor

I also maintain a HP Z3801A GPS Receiver and frequency standard with a 10 MHz output. It is available for use by appointment for PARC members needing to calibrate equipment. Contact me for use of the above items,

kc6uqh@amsat.org or 760.758.6062 evenings

7:00 to 10:00 PM & weekends

9:00 AM to 10:00 PM

-Art, KC6UQH

Ten Ten Convention Report

By Preston Butler W6ASP

Well I along with my XYL, Susan KG6MGA left on Wednesday, August 8, 2007 at 9:30am to attend the Ten Ten International Convention held in Omaha, NE. The convention did not officially start till Friday, August 10. We arrived early as most of Susan's family live about 35 miles outside of Omaha and of course visiting them was top of the list for Thursday. Board members were showing up on Wednesday for Thursday's scheduled Ten Ten board meeting which was schedule to last all day. Although I did not attend the board meeting I did take the time to say hello to quite a few ten tenners that had also shown up early and were congregating around the entrance of the hotel. Most of them we met and said hello to were members we had met in June, 2005 in Mesa, AZ for that convention. The convention is held every other year on the odd year. Mesa being so close to us I just couldn't resist that one.

The weather there was extremely hot there as it did not get below 96 degrees and on Saturday it got up to 100 with the humidity up in the 80's and 90's. On Friday we went on a scheduled bus trip to Boys and Girls Town, NE. It is actually a town now. We had a tour guide that took us all around the town as well as telling the history of the town and Father Flanagan who organized it. The basic way Boy's and Girl's Town survive is by all the boys and girls being taught different crafts. They in turn use their new talents to help support themselves and Boys and Girls Town. They have a vegetable garden that supplies them quite a bit of food. They are also supported by the donations from the public as well. They all live in homes that consist of at least 3 boys or 3 girls along with an adult couple there to supervise them in their studies. Check out Boys and Girls Town USA at the following web site:

<http://www.girlsandboystown.org/home.asp>

From there we went to Old Town Market Place in Omaha, NE. Even though I wasn't too impressed with this part of the bus tour we did find an antique store where the wife enjoyed looking around there. Sure was glad we flew back to Omaha instead of drove as we might have brought about a third of that store back with us...Hi Hi. None of the other stores interested us. Another ham, Al N1API with Ten Ten #25468 joined us in walking around and the three of us finally went to a restaurant called Upstream where we ordered Fish &

Chips. It turned out to be a good portion of fish and the price was very reasonable.

We returned to the hotel (Hotel Carlisle) around 2:30pm where we started meeting with as many other members of Ten Ten as we could. One of the members that we had dinner with on Friday night was W3TUJ Bill with the Ten Ten #7561 and his XYL Donna, who is not a ham. We got each others attention because they live in Arbutus, MD. Which happens to be a town adjacent to Elkridge, MD where a brother of mine lives.

There were six (soon to be eight) Ten Ten couples from Germany that attended. I'll explain that in a bit. We had four Ten Ten members from England and one Ten Ten member from northeast Canada. Now back explaining the eighth couple from Germany. On Saturday evening prior to the scheduled banquet dinner two of the German Ten Ten members were married! They then became the 8th couple. Back to the Friday evening of getting acquainted, we were all scattered out in different areas of the hotel. Most of us went into what was called the Chapter conference room. Another name for this is paper chasers. Paper Chasing is another phase of Ten Ten that keeps you trying to work other Ten Ten members and it is a hobby in itself.

On Saturday a number of members left in the morning to go on a river boat trip that lasted pretty much the entire morning and early afternoon. My wife and I chose not to go on the river boat trip. While Susan relaxed in a cool hotel room I went down to where the Chapter managers were sitting down at their tables trying to convince people to join there paper chasing chapters. I managed to escape most of them as I only joined up with two of them.

At 2:00pm a presentation in the use of the Win1010 logging program was presented by Cliff K5FBS, Ten Ten #48461. This program is very highly used by members of the Ten Ten International membership. This program tracks literally everything involved with what Ten Ten members want to get involved with. I use it to log all Ten Ten members only even though you can use for all bands and non Ten Ten members as well. More can be found on Win1010 at the following web site: <http://hds.net/win1010.htm> ...

To Be Continued in November 2007 SCOPE

PARC and PARC Affiliated Repeaters

Frequency	Tx	Tone	Call Sign	Remarks
52.680	–	107.2	W6NWG	
146.730	–	107.2	W6NWG	Autopatch; see note 1,
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note
447.000	–	107.2	W6NWG	Autopatch; see note 2
224.380	–	107.2	KK6KD	Americas Unidos
224.900	–	107.2	WD6HFR	Convair/220 ARC
224.940	–	107.2	KK6KD	Sharp Hospital Coverage
446.140	–	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; linked to 445.600
445.600	–	107.2	N6FQ	Fallbrook ARC; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	–	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 2441.5 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrl.net
Sunday	0830	146.730	ARES Net	Jo Ashley KB6NMK@arrl.net
Sunday	1900	147.130	Handi-Hams	Marcia De Runtz KG6FIX
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted thompson@sdarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYTrwilimek@cox.net
Thursday	2000	147.075	SATERN	tomcarmody@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com
Nightly	>2200	147.130	Facetious Group	

Board of Directors Position	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
Vice President - Tom Storer	KI6DER	ki6der@amsat.org
Secretary - Gary Kent	W6GDK	858-679-0578 w6gdk@arrl.net
Treasurer - Bob Birch	KG6RGI	rrbirch@cox.net
Director - Tom Martin	KG6RCW	619-778-3866 rbg4@aol.com
Director - Dennis Baca	KD6TUJ	760-722-0251 kd6tuj@amsat.org
Scope Editor - Michelle Thompson	W5NYV	w5nyv@amsat.org
Repeater Chair - Dan Bubke	K6NKC	k6nkc@amsat.org
Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.



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Submissions: scope@palomararc.org
Questions? Ideas? Comments? W6NWG@amsat.org

This month's General Meeting will be held on September 5th, 2007 (The first Wednesday of each month) at the Carlsbad Safety Center. The subject will be PSK31. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! –NN3V (past president of PARC)

SCOPE October 2007

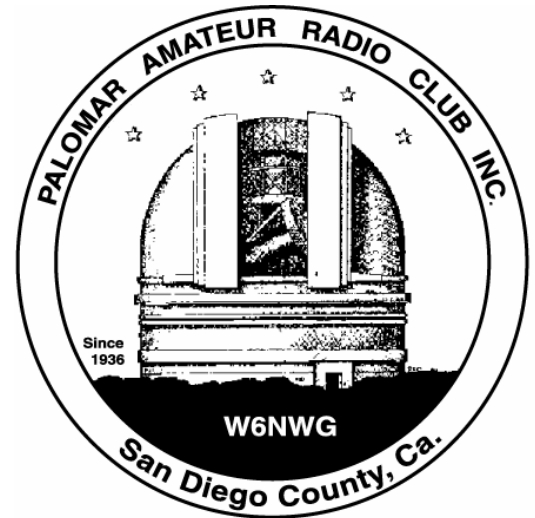
A newsletter by and for the Palomar Amateur Radio Club of San Diego, CA, USA.

Club Meeting - Annual Auction
3 October 7:00pm at the Carlsbad Safety Center

Board Meeting
10 October 7:00pm at W6GNI QTH

Repeater Site Work Parties
6-7 October at the Repeater Site

Miramar Air Show
12-14 October at MCAS Miramar



President's Message

By Steve Early AD6VI

August got off to an early start. On August 1st, we had a very good presentation on Radio Direction Finding and on August 5th, we had the annual picnic. These events closely followed an unusually late July meeting due Independence Day.

The September 5th program featured PSK31, which was presented by Ralph Smith, AE6SV, who provided PSK31 for Field Day and was one of two people that copied the ARRL Field Day Bulletin for PARC. In addition, we hosted the two official candidates for the ARRL Southwestern Division Director position.

Saturday, September 22nd was supposed to be the first day of the PARC Super Weekend at the PARC repeater site. Unfortunately, Mother Nature had other plans, mainly a "Rain Day". So, we re-grouped, watched the weather reports, and headed up the mountain on Sunday September 23rd. On Sunday, we had a very productive day. All of the buildings were prepared for sealing and primer paint, and we were able to take two truck-loads of "Stuff" off of the mountain. In addition, we met with the Palomar

Mountain Volunteer Fire Department Chief, George Lucia, and his Communications Chairman, Chris Kusick, regarding opportunities for PARC to assist the Department and for the Department to assist PARC. More on Fire Department's needs later.

Because of both the rain delay and materials availability, we are now planning to paint the tower and all of the buildings on the weekend of October 6th and 7th. We are looking for volunteers to help. If you have time and the desire, please contact Dan Bubke (dbubke@juno.com) or myself, Steve Early (ad6vi@cox.net / 619-461-2818) schedules and information.

Looking down the road:

The October 3rd program will be the annual PARC Auction. Because of the expected duration, the door will open to sellers at 6:00pm and to buyers at 6:30pm. The auction will start at 7:00pm.

It appears that at least one truck-load of "Stuff" from the mountain is likely to make to the auction block. Also on the 3rd, PARC will announce this year's Nominating Committee. It is that season, so if you have recommendations for good candidates for PARC leadership, please let the Nominating Committee know.

continued on page 2

continued from page 1

October 6th and 7th: Paint and continue to clean the repeater site.

Also in October, the Amateur Radio Emergency Service (ARES) will be needing volunteers for the Miramar Air Show. Contact Section Emergency Coordinator Jim Cammarano, KG6R, at 858-486-2871 or kg6r@arrl.net.

For those wanting to upgrade, keep an eye open for a long-one day General Class in November, and a Two-Day Extra Class on (2) Saturdays in December.

I hope to see you on October 3rd. Bring a friend!

Repeater Site Work Party News



Photo by KB5MU

Equipment buildings at the PARC repeater site on Palomar Mountain are being repainted. Work started in September and will continue into October.

The shipping container and camper trailer were both cleaned and organized. Plans are to keep the shipping container and remove the camper trailer.



Photo by KB5MU

Above is the camper trailer after being cleaned out of all items.



Photo by KB5MU

Fancy new electric meters like this one at the repeater site are suspected of being a source of interference on the input frequency of the 146.730 MHz repeater. Investigations are underway. If you have one of these meters, can you check for interference on or near the repeater input? Send results to scope@palomararc.org

September Meeting Goodie Givers

Fred K6ISS, Conrad KG6JEI, Bill WB6BFG, Ellen N6UWW, Preston W6ASP, Mark KI6FVH, Tom KB6RCW

September Fold & Staple

Art KB6YHZ, Jo KB6NMK, Al W6GNI & Kathy, Harry W6Y00

Statement of Ownership 2007

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Signed: A.L. Donlevy Publisher
09/26/2007

Club Classified Advertisements

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG.

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(9.9) AC ARC Welder, Marquette 180. 220 VAC power. With heavy duty cables and welding rod holder. \$50 OBO. WB6IQS, John. 760-727-3876.

Satellite Dishes. 1 meter Primestar and smaller. Ku band LNBs. Most with hardware and mounting clamps. Make offer / free to good ham radio homes. WB6IQS, John 760-727-3876.

Reloading Equipment: Pistol / rifle dies, Rockchucker press, Lyman press, accessories, brass, copper jacketed bullets, lead casting molds and furnace. Lots of cast lead in small ingots. Best offer for all or parts. WB6IQS@att.net, John 760-727-3876.

(8.26) FOR SALE:
YAESU FT 840 Transceiver
ASTRON RS 35A Power Supply
MJF 949 Deluxe Versatuner
30 Foot Vertical Cushcraft Antenna

ICOM IC-2100H 144 MHZ Transceiver
SAMLEX SEC1223 DC Power Supply
ARX2B RINGO RANGER II Antenna

Ken Clark, KE4MII
200 N El Camino Real #165
Oceanside, CA 92058
760-231-8377

(8.26) (qty 5) 10 foot sections of Tri-axial type aluminum tower, sections made of 1" tubing on 10.5" centers, the top section has a platform for a rotor \$65.00 for all 50'.
Loren, AD6ZJ, 760-724-4644

continued on page 4

continued from page 3

(7.22) Wanted: Transport for amateur UHF antennas to San Francisco Bay area. Fred Brown, W6HPH. Tel. 760-741-1328. w6hph@yahoo.es

(6.30) Cushcraft R-8 Vertical Antenna, New In Box, \$375.00 (New \$550.00). IC-756PRO II Transceiver with IC-PS125 Power Supply, Never Used, Purchased Feb. 2005 from HRO, Original Cost \$2399, Will Sell for \$1975.00. Selling because of CC&R Issues. Call John N6LMY rohring@sbcglobal.net or (760) 602-5041

JOTA October 19-21, 2007

Jamboree-on-the-Air, or JOTA, is an annual scouting and amateur radio event sponsored by the World Scout Bureau of the World Organization of the Scout Movement. Thousands of amateur radio stations around the world participate. If the conditions are right, it is common to contact a hundred scouting countries during the weekend! We have 12 scouts interested. If you would like to participate, please contact Steve Early at ad6vi@cox.net or 619-461-2818.

Technical Equipment Available for Loan To PARC Members

Thanks to the effort of John, WB6IQS PARC now has a working H/P 8640 Signal Generator. John spent many hours repairing this unit, donated it to PARC and it is available for loan to PARC members for projects. John asked me to verify calibration with my 8640 after he completed the repairs, which I have done and it is now ready for loan.

Technical Description:
AM/ FM 0.5 to 512 MHz on fundamentals and 512 to 1024 MHz on 2nd harmonic.
Output range +10 to -130 dBm "Female N Connector front panel output"
Crystal lock for stability.
Note: This signal generator, designed in

the last century, has a very low phase noise specification, equal to or better than most modern signal generators made today.

In addition to the H/P 8640 I have the following test equipment from the W6JAB estate available for loan to PARC Members

SWR meter (Diamond SX-600)
Texscan CATV Spectrum analyzer 50-400 MHz
MFJ 269B
MFJ 300W dummy load
IFR 1100 Communication Monitor

I also maintain a HP Z3801A GPS Receiver and frequency standard with a 10 MHz output.
It is available for use by appointment for PARC members needing to calibrate equipment.

Contact me for use of the above items, kc6uqh@amsat.org or 760.758.6062
evenings 7:00 to 10:00 PM & weekends 9:00 AM to 10:00 PM

Art,
KC6UQH

Licensing and Class Information

Register 5-7 days in advance for the following test sessions.

□ PARC Testing is in Carlsbad on the 2nd Saturday of the month at 9:30am at the Carlsbad Safety Center. Please call 619-465-EXAM for the latest contact info. Test sessions may be cancelled if no one pre-registers.

□ EARS Testing is in Escondido on the Last Saturday of the month at 9:00 am at the LDS Church.
The address is 1917 East Washington Avenue, Escondido, 92025.
Contact Harry W6Y00 (760) 743-4212 or W6Y00@amsat.org.



Photo by KB5MU

The inside of the storage container at the repeater site was cleaned out and organized.



Photo by KB5MU

Food at the early August PARC picnic.



Photo by KB5MU

Ralph Smith AE6SV, presenting his PSK31 program at the September PARC General Meeting

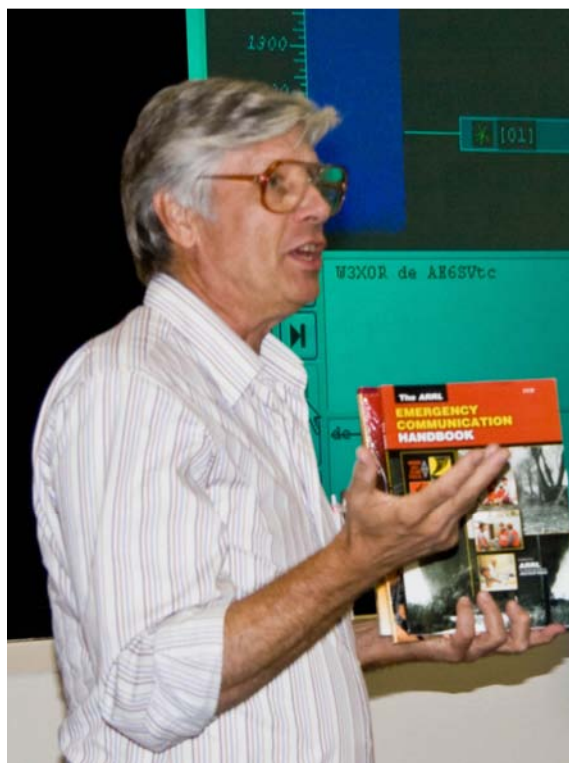


Photo by KB5MU

Dick Norton N6AA at PARC's September 2007 General Meeting.



Photo by KB5MU

Carl Gardenias WU6D at PARC's September 2007 General Meeting.

Contest Corral

Contest	Time and Date
YLRL Anniversary Party, CW	1400Z, Oct 2 to 0200Z, Oct 4
German Telegraphy Contest	0700Z-0959Z, Oct 3
432 MHz Fall Sprint	1900 local - 2300 local, Oct 3
SARL 80m QSO Party	1700Z-2000Z, Oct 4
NCCC Sprint, CW	0230Z-0300Z, Oct 5
TARA PSK Rumble Contest	0000Z-2400Z, Oct 6
Logbook of the World Contest, Phone	0000Z-2359Z, Oct 6
NCCC Sprint, CW	0230Z-0300Z, Oct 6
Oceania DX Contest, Phone	0800Z, Oct 6 to 0800Z, Oct 7
International HELL-Contest	1400Z-1600Z, Oct 6 (80m) and 0900Z-1100Z, Oct 7 (40m)
California QSO Party	1600Z, Oct 6 to 2159Z, Oct 7
EU Autumn Sprint, SSB	1600Z-1959Z, Oct 6
PRO CW Contest	1600Z-1800Z, Oct 6 and 0600Z-0800Z, Oct 7
UBA ON Contest, 6m	0600Z-1000Z, Oct 7
RSGB 21/28 MHz Contest	0700Z-1900Z, Oct 7
YLRL Anniversary Party, SSB	1400Z, Oct 9 to 0200Z, Oct 11
10-10 Int. 10-10 Day Sprint	0001Z-2359Z, Oct 10
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Oct 10
NCCC Sprint, CW	0230Z-0300Z, Oct 12
Makrothen RTTY Contest	0000Z-0759Z, Oct 13 and 1600Z-2359Z, Oct 13 and 0800Z-1559Z, Oct 14
Microwave Fall Sprint	0600 local - 1200 local, Oct 13
Oceania DX Contest, CW	0800Z, Oct 13 to 0800Z, Oct 14
Pennsylvania QSO Party	1600Z, Oct 13 to 0500Z, Oct 14 and 1300Z-2200Z, Oct 14
EU Autumn Sprint, CW	1600Z-1959Z, Oct 13
FISTS Fall Sprint	1700Z-2100Z, Oct 13
North American Sprint, RTTY	0000Z-0400Z, Oct 14
UBA ON Contest, SSB	0600Z-1000Z, Oct 14
ARRL School Club Roundup	1300Z, Oct 15 to 2400Z, Oct 19
NCCC Sprint, CW	0230Z-0300Z, Oct 19
JARTS WW RTTY Contest	0000Z, Oct 20 to 2400Z, Oct 21
ARCI Fall QSO Party	1200Z, Oct 20 to 2400Z, Oct 21
Worked All Germany Contest	1500Z, Oct 20 to 1459Z, Oct 21
Feld Hell Sprint	1500Z-1700Z, Oct 20
W/VE Islands QSO Party	1600Z, Oct 20 to 2359Z, Oct 21
070 Club 160m Great Pumpkin Sprint	2000 local, Oct 20 to 0200 local, Oct 21
50 MHz Fall Sprint	2300Z, Oct 20 to 0300Z, Oct 21
Asia-Pacific Fall Sprint, CW	0000Z-0200Z, Oct 21
UBA ON Contest, 2m	0600Z-1000Z, Oct 21
Illinois QSO Party	1700Z, Oct 21 to 0100Z, Oct 22
Run for the Bacon QRP Contest	0100Z-0300Z, Oct 22
NCCC Sprint, CW	0230Z-0300Z, Oct 26
CQ Worldwide DX Contest, SSB	0000Z, Oct 27 to 2400Z, Oct 28
ARRL EME Contest	0000Z, Oct 27 to 2359Z, Oct 28
10-10 Int. Fall Contest	0001Z, Oct 27 to 2359Z, Oct 28

Ten Ten Convention Report Part 2

By Preston Butler W6ASP

This article is continued from the September 2007 SCOPE.

At 4:00pm on Saturday they had a parking lot net where there were 138 check-ins. It took an hour to complete. I used my FT817 with a ten-meter telescopic antenna to check in from our hotel room. I estimated about 175 to 180 people attended this convention. Some of them obviously not hams. They were there supporting their spouses or friends.

At 5:00pm on Saturday there was the wedding. It took about 30 minutes. It was a real nice wedding. I never did find out if the minister that married them had a Ten Ten number. I wouldn't be a bit surprised if he did. A catered dinner was served on Saturday evening at the hotel that began at 6:00pm. There were quite a few servers there so everyone received what they ordered in a timely manner. You had a choice of chicken, pork chops or rib eye steak. There were several cakes made commemorating the convention being held in Omaha. Needless to say I stayed away from that myself.

Toward the close of the dinner Joe KONEB, Ten Ten#74181, gave a series of slide presentations of past Dayton Ham conventions that he put to music that was very impressive. Joe is the official photographer at Dayton Hamvention and after seeing his presentation I could certainly see why. I know some of you that attend Dayton have seen him walking around. He is the one walking around wearing a tall red and white "Cat In The Hat" style hat. He also has VHF/UHF type antenna fixed to the back of the hat. On the front of the hat he has his call sign and name. He has some of his videos on the following web site that you can

download.

<http://radiodx.googlepages.com/>

The convention came to an end on Sunday morning after the morning breakfast buffet and the viewing of some videos clips of storm chasers.

Some of these people don't have both oars in the water. One example is two guys went into a hail storm where the hail was as big as golf balls and the wind was really blowing. By the time they decided to get to cover the two back passenger windows were totally broken out. The front window was hit in numerous places causing massive cracks where you couldn't see out. Another incident involved two storm chasers who decided to take refuge in an old abandoned shack with their vehicle. The shack collapsed during the high winds and completely destroyed their vehicle. I wanted to know where these guys got their training so I knew not to go there. Most everyone left on Sunday to head for their homes. Susan and I headed out to visit family around 10:00am and returned a little after 4:00pm. Good thing we did because around 4:30pm while eating dinner a major thunder and lightning storm came through. The lightning was so close that the thunder followed immediately seeing the lightning. While the thunder was rumbling it felt like an aftershock of an earthquake going through the building that we were having dinner in. We left Omaha on Monday morning, August 13 at 7:00am for home.

73

De

Preston D Butler-W6ASP, Ten Ten#73446,
VP:3257

WASP Amateur Radio Club-W4BZB, Ten
Ten#74397

Susan Butler-KG6MGA, Ten Ten#74602

PARC and PARC Affiliated Repeaters

Frequency	Tx	Tone	Call Sign	Remarks
52.680	–	107.2	W6NWG	
146.730	–	107.2	W6NWG	Autopatch; see note 1,
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note
447.000	–	107.2	W6NWG	Autopatch; see note 2
224.380	–	107.2	KK6KD	Americas Unidos
224.900	–	107.2	WD6HFR	Convair/220 ARC
224.940	–	107.2	KK6KD	Sharp Hospital Coverage
446.140	–	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; linked to 445.600
445.600	–	107.2	N6FQ	Fallbrook ARC; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	–	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 2441.5 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrrl.net
Sunday	0830	146.730	ARES Net	Jo Ashley KB6NMK@arrrl.net
Sunday	1900	147.130	Handi-Hams	Marcia De Runtz KG6FIX
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted tthompdson@sdaarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYTrwilimek@cox.net
Thursday	2000	147.075	SATERN	tomcarmody@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com

Board of Directors Position	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
Vice President - Tom Storer	KI6DER	ki6der@amsat.org
Secretary - Gary Kent	W6GDK	858-679-0578 w6gdk@arrrl.net
Treasurer - Bob Birch	KG6RGI	rrbirch@cox.net
Director - Tom Martin	KG6RCW	619-778-3866 rbg4@aol.com
Director - Dennis Baca	KD6TUJ	760-722-0251 kd6tuj@amsat.org
Scope Editor - Michelle Thompson	W5NYV	w5nyv@amsat.org
Repeater Chair - Dan Bubke	K6NKC	k6nkc@amsat.org
Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.



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

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Address service requested

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on October 3rd, 2007 (The first Wednesday of each month) at the Carlsbad Safety Center. The subject will be the annual auction. Talk-in on 146.730 MHz repeater. Auction starts at 19:00 but doors open earlier for seller setup. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! -NN3V (past president of PARC)

SCOPE November 2007

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

Club Meeting – Officer Nominations, Icom's D-STAR, and SDARES

7 November 7:30pm at the Carlsbad Safety Center

Technician License Class

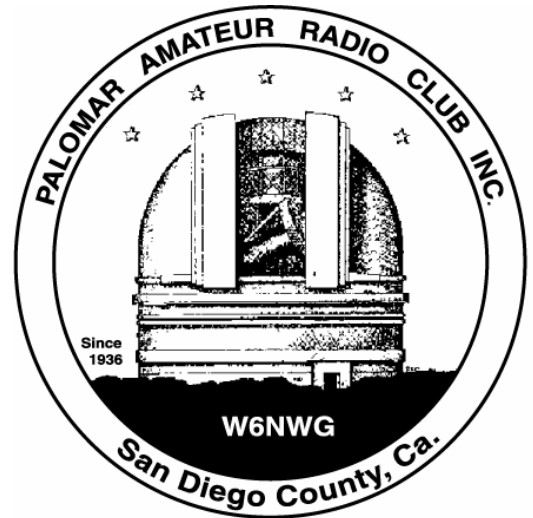
10 November in Chula Vista

Board Meeting

14 November 7:00pm at W6GNI QTH

Extra License Class

8 & 15 December at Carlsbad Safety Center



President's Message

By Steve Early AD6VI

October got off to a rocky start. As of this writing, the smoke is literally still rising.

Upon arriving at the Carlsbad Safety Center for the annual PARC auction, PARC discovered that we had been displaced, again, by a forensic photography class that was "scheduled" until 5:00 PM. Needless to say, we are talking the city of Carlsbad about this. Being amateur radio operators accustomed to adapting to adverse conditions, we simply set up outside by the entrance and had our auction by LED flashlight. The weather cooperated and good times were had by all.

The tower re-sealing saga continues. We received the industrial grade paint that will be used and we pressure washed a good portion of the tower. There was hope that we would get to it this weekend (10/27 and 10/28), but other events have driven a different schedule.

About a week and a half ago, the National Weather Service predicted a Santa Ana wind and it came. Along with it came the Harris fire, the Witch Fire, and a host of others, starting on

Sunday, October 21st. I do not yet have full details, but PARC members started the Fire Information Net on 147.73 and continued it until the repeater finally went off the air Wednesday or Thursday. These people should be commended for their service in getting information to the amateur community.

The Red Cross utilized the 147.130 machine on an informal basis until it failed, and then switched over to the 147.075 repeater, which was being used by various MARA sub-units.

As a side note, MARA has priority on the 147.075 repeater during emergencies because MARA supplied the repeater and cavities to PARC many years ago. In the interest of community service MARA agrees with the PARC policy of equal communications access in an emergency. This was well demonstrated when the ECRA 147.030 repeater failed and the SDGARES EMS Net needed another place to operate. The EMS Net agreed to provide net control functions and included ALL parties that needed to use the 147.075 machine. EMS had the bulk of the traffic, so it made sense that they, rather than MARA, would provide net control. This was a very good example of the Amateur Radio Community working together.

continued on page 2

continued from page 1

In the meantime, back at the repeater site, there was trouble. The Poomacha fire started October 23 as a structure fire on the Lajolla Indian Reservation. As of the morning of 28 October, it has burned 49,150 acres and is 50 percent contained. Evacuations are still in place for the communities of Valley Center, Rincon, Pauma Valley, Pala Reservation, and Palomar. This fire is still active on Palomar Mountain and came to within a few hundred yards of the repeater site. For those that know the area, the fire was stopped below the repeater site at East Grade Road.

PARC, along with many others, is fortunate that it was spared the loss of property. The site lost commercial power in the early morning of Monday, October 23rd. The repeater system switched over to the battery back-up automatically, as expected. Mike Doyle, AB6QT, was able to make one visit to the site on Monday evening to provide a partial charge to the battery system. Soon afterward he, along with all other residents of the mountain, was evacuated. The site continued to operate on the 40-year-old batteries for a few days, but age took its toll. PARC lost the 147.130 repeater to a transfer switch malfunction, but 146.73 and 147.075 and several others continued to operate. Eventually, all the repeaters succumbed to low voltage. The last was the 147.075, which was reported to have given up early Thursday morning. As one would imagine, PARC leadership (the Board of Directors and the Technical Committee) were already looking at contingency plans for: 1) If the site was destroyed, or 2) It was simply out of power. Early on there was discussion of cobbling together a couple of repeaters and hauling Field Day equipment up the mountain to get on the air, if the site had burned. Fortunately, this was not required, so the discussion moved on to getting access and re-introducing power to the site. At that point SDG&E said October

8th. At this writing, SDG&E says October 11th. This meant that it was up to PARC to fend for itself.

Working with a couple of agencies, a work party of four was able to get to the site on Saturday morning, October 27th. Dan Bubke (Repeater Technical Chair), Mike Pennington (Repeater Site Chair), Glenn Jones (MARA Net Manager) and I were able to visit the site, reconfigure equipment and get two repeaters (146.730 and 147.075) back on the air on emergency power. To keep things going, we will need to visit the site almost daily for the next two weeks. This will be an on going effort.

In addition to all of those that helped the Fire Net, I would like to thank all of those that helped each and every place they could. We must remember those that were injured, have been evacuated, and that have lost their homes and livelihoods. The next few weeks and months are going to be challenging to most of us, and the next few years will be challenging to a number of us, our friends, and associates.

Looking down the road:

The November meeting will feature nominations for PARC President, Vice President, Secretary and Treasurer. Please talk with the Nominating Committee (Jo Ashley, Jim Egerton and Tony May about your preferences.

I expect we will have a report on the repeater site as well.

For those wanting to upgrade, the 27 October one-day General Class was a casualty of the fire, but will eventually rise from the ashes.

The Two-Day Extra Class will be held on December 8th and December 15th at the Carlsbad Safety Center. See www.palomararc.org for details.

I hope to see you on November 6th. Bring a friend!

Steve Early AD6VI

November Membership

New members joining PARC:
This month is off to a slow start.
Zero new members, so far!

Watch for the colored "Please renew now" and avoid the dreaded red "Last Issue" on your SCOPE label. "Last Issue" means your membership expires within a few days, or has expired very recently.

As most know by now, your investment in repeaters, batteries, etc. has paid off again with the recent fire emergency. You and the ham radio community can rightfully be proud; hopefully proud enough to maintain your membership in PARC!

Al W6GNI

October Fold & Staple

Sonny WA5ACE, Jo KB6NMK,
Al W6GNI, Harry W6Y00,
Art KB6YHZ

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Test sessions may be cancelled if no one pre-registers.

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The address is 1917 East Washington Avenue , Escondido , 92025.
Contact Harry W6Y00 (760) 743-4212 or W6Y00@amsat.org.

☐ Extra License Class 8 & 15 December at Carlsbad Safety Center

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Technical Description:

AM/ FM 0.5 to 512 MHz on fundamentals and 512 to 1024 MHz on 2nd harmonic.

Output range +10 to -130 dBm

Female N connector front panel output.
Crystal lock for stability.

Note: This signal generator, designed in the last century, has a very low phase noise specification, equal to or better than most modern signal generators made today.

In addition to the HP 8640 I have the following test equipment from the W6JAB estate available for loan to PARC Members

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MFJ 269B

MFJ 300W dummy load

IFR 1100 Communication Monitor

I also maintain a HP Z3801A GPS Receiver and frequency standard with a 10 MHz output.

It is available for use by appointment for PARC members needing to calibrate equipment.

Contact me for use of the above items,
kc6uqh@amsat.org or 760.758.6062
evenings 7:00 to 10:00 PM & weekends
9:00 AM to 10:00 PM

Art, KC6UQH

Electronic Meter Interference

I have heard other guys in our Fallbrook ARC talking about the new electric meters and possible interference. I have done some research and found the manufacturers website with many details.

http://www.gepower.com/prod_serv/products/metering/en/utility_revenue_meters/kv2c_encompass_elec.htm

73

Dave Bannerman KI6GVL

Time Machine

By Ron Pollack K2RP

We've been turning back the clock to the 50s to look at what ham radio was like during that decade. This month, we'll turn that clock back even more, to the 1940s!

During the war years, from late 1941 to 1945, ham radio activity was virtually stopped. When the war ended, there was a great demand for new radios. Several factors fueled this demand. Many GIs were trained in electronics and communications, and developed an interest in amateur radio. The technological advances that came out of the expanded need for communications rendered many pre-war units obsolete. And, much privately owned equipment went to the military for war needs. Meters especially were in great demand.

Just as the first postwar cars were very similar to their counterparts made just before the war, the first commercial available amateur receivers were very similar to the ones in pre-war production.

Recently, I was fortunate enough to acquire an example of Hammarlund's first post-war receiver, the HQ 129X, shown on the right in the photo to the right. In 1938, Hammarlund had

introduced the HQ 120X, a general coverage receiver with bandspread on the ham bands, with some novel and innovative features. Most of the better receivers of the era had an RF stage and two IF stages. The HQ series, which continues through several improvements such as the HQ 140X and HQ180, had three IF stages. Not only did this increase sensitivity, but the extra tuned circuits improved selectivity as well. Instead of the three section variable capacitor that was common, the main tuning had six sections and the bandspread had nine! This enabled each band to be spread over the entire tuning dial, making tuning on the high bands much easier. Also included was a 5 position crystal filter with phasing control, for remarkable selectivity. The large tuning capacitors and rugged construction made the HQ 129X one of the most stable of its era. It was probably the most popular in its \$180 price class, especially since it was introduced at \$129. Several minor improvements were made during the production run, which ended in 1953 with the introduction of the HQ 140X, which used miniature tubes in place of the octals in the previous models. One change that was made around 1951 was the inclusion of calibrated bandspread for the 15 meter band, which became available for amateur use around this time.



One disadvantage of the 3 IF stages and steep skirt selectivity is that alignment

requires a sweep generator and oscilloscope, instead of just a signal generator and VTVM.

When I received this unit (see photo page 4) from a longtime Palomar member, it was complete but dirty. The line cord and filter caps had been replaced, and the receiver was operable. However, all the old wax bypass and coupling caps were oozing, so all were replaced by modern polystyrene ones. This improved performance and stability enormously, and no further alignment was done. It is even stable enough to receive SSB signals. Since there was no product detector, in order to receive sideband signals, the routine is to advance the AF gain all the way and use the RF gain (labeled "Sensitivity" on this one!) as a volume control. As was common in receivers of this age, the AGC is disabled when the BFO is in use, so strong SSB signals will overload the front end.

The speaker shown in the photo on page 4 is not the matching unit, but is one common to the period.

The transmitter shown is from the same era. It is a Johnson Viking I, introduced around 1948. It was available in kit form for about \$210, and assembled for about \$260. The matching VFO added another \$42 in kit form. Output was rated 115 watts on CW, 100 on AM phone. The EF Johnson Company was well known for producing high quality heavy duty components, and I believe that this was their first entry into the transmitter field. Their success inspired many more transmitters and accessories for a number of years.

This was one of the first complex transmitters offered in kit form. The prices did NOT include tubes! Shown with the transmitter is the matching Johnson Viking VFO. VFOs were not as common in those days. The transmitter has sockets for 10 crystals, selected by a switch on the front panel.

Changing crystals involved opening the lid on the top of the unit. This was easy, until some modifications were made. More on this later. Provision was made for powering and keying the VFO via an octal socket on the rear apron, and a SO239 coax socket brought the VFO signal to the transmitter. The VFO was selected by an eleventh position on the crystal selector switch. An unusual final tank circuit was employed. The typical bandswitching transmitter had a heavy duty bandswitch to switch the oscillator, buffer, and final tank circuits to the appropriate band. Typically, the bandswitch section in the final tank circuit was used to short out turns in the final tank inductor to resonate with the tuning capacitor in the desired band. In this design, the capacitor and a variable pitch rotary inductor are geared in tandem continuously to resonate in the desired band. The big dial and crank knob in the center of the panel is used to tune the final. At first glance it looks like the VFO tuning, but as mentioned, the VFO was external. The system works smoothly and flawlessly, and I wonder why it wasn't used in other designs. The heavy duty switch is eliminated, with its common arcing and burning problems.

Although it sold very well, this model was only made for about two years before being replaced by the even more popular Viking II. Several factors dictated the new model. The 4D32 tube, although rated conservatively, was quite expensive. Remember, the tubes were not included in the purchase price! Perhaps a bigger factor was that there was no TVI proofing in this design! This may sound strange, but remember, in 1949, there were few TV sets and fewer TV stations! By the early 50s, though, TVI was a major headache to amateur radio. Johnson offered a TVI proofing kit, which has been installed on my unit. The kit consisted of filters on the filament, AC, and keying lines, and a perforated cage around the sides and top of the chassis and a solid plate on the bottom of the chassis.

Unfortunately, a number of screw holes
continued on page 6

continued from page 5

needed to be drilled through the front panel. (www.rigpix.com has many photos of old gear. Their photo of the Viking I also shows the screw holes holding the shielding in place.) Even more of a problem is that if using crystal control, the 10 crystal sockets are now underneath the shield. Changing crystals now involved removing more than a dozen screws! The Viking II was designed with TVI proofing, and used a pair of 6146 tubes in the final, which were more reasonably priced. The power was a bit higher as well.

Also shown in the photo are a couple of period accessories. One is a Vibroplex "bug," or semi automatic key. Pressing the lever one way closed the contact as in a conventional key. Pressing the other direction activated a vibrating bar that made a string of automated dots. The position of a weight along the bar regulated the speed of the dots. These were very popular for decades, until the advent of the electronic keyer, which made both self completing dots and dashes. The D 104 Astatic microphone (the "lollipop" mike) was a common fixture in hamshacks from the 30s thru today.

I've been having a great time with this setup. There is some AM activity, especially on 75 meters, but most of my contacts have been on CW. Any of our "old timers" who wish to revisit the past are welcome to get in touch with me, visit, and make a few contacts the same way it was done in 1949. The same invitation is extended to anyone who wants to get a feel for how things were in that bygone era!

Ron K2RP

Annual Auction Convenes in the Dark

photos by Dennis Baca



PARC's annual auction, held at the October membership meeting, had to relocate outside the building due to a scheduling conflict with a forensic photography class.

Tables were set up outside and the auction items were tagged and displayed. A laptop computer with spreadsheet program was used to track the sales. Art KC6UQH served as auctioneer. With a flashlight, he examined and introduced each item. Auction participants then bid on the item.



Gross proceeds from the auction were \$1393.00 giving the club a profit of \$620.80.

Club Classified Advertisements

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG.

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(10.15) For Sale 2 meter FM Transceiver. ICOM IC-2100H Mobile 207 memory Channels, HM-98S Lighted Mike, 55 Watts output. Green or Amber Display. Like NEW. All Local Channels Programmed in. \$75.00 OBO. Please call Bayard K6GAO at 858-755-5507.

For Sale Uniden Weather Radio WX 500 NOAA all Hazards Weather Radio. With S.A.M.E. AC power supply. \$25.00 OBO. Please call Bayard K6GAO at 858-755-5507.

For Sale Like New UNIDEN BEARCAT SCANNER BC-350C all pre programmed for all service Freq. AC and DC power supply cables. \$75.00 OBO. Please Call Bayard K6GAO at 858-755-5507.

(9.9) AC ARC Welder, Marquette 180. 220 VAC power. With heavy duty cables and welding rod holder. \$50 OBO. WB6IQS, John. 760-727-3876.

Satellite Dishes. 1 meter Primestar and smaller. Ku band LNBs. Most with hardware and mounting clamps. Make offer / free to good ham radio homes. WB6IQS, John 760-727-3876.

Reloading Equipment: Pistol / rifle dies, Rockchucker press, Lyman press, accessories, brass, copper jacketed bullets, lead casting molds and furnace. Lots of cast lead in small ingots. Best offer for all or parts. WB6IQS@att.net, John 760-727-3876.

(8.26) FOR SALE:
YAESU FT 840 Transceiver
ASTRON RS 35A Power Supply
MJF 949 Deluxe Versatuner
30 Foot Vertical Cushcraft Antenna

ICOM IC-2100H 144 MHZ Transceiver
SAMLEX SEC1223 DC Power Supply
ARX2B RINGO RANGER II Antenna

Ken Clark, KE4MII
200 N El Camino Real #165
Oceanside, CA 92058
760-231-8377

(7.22) Wanted: Transport for amateur UHF antennas to San Francisco Bay area. Fred Brown, W6HPH. Tel. 760-741-1328. w6hph@yahoo.es

(6.30) Cushcraft R-8 Vertical Antenna, New In Box, \$375.00 (New \$550.00). IC-756PRO II Transciever with IC-PS125 Power Supply, Never Used, Purchased Feb. 2005 from HRO, Original Cost \$2399, Will Sell for \$1975.00. Selling because of CC&R Issues. Call John N6LMY rohring@sbcglobal.net or (760) 602-5041

Palomar Amateur Radio Club Board of Directors Meeting (approved minutes)

September 12, 2007

The meeting was called to order at 7:20 PM by President Steve Early AD6VI. The meeting was held at the house of Al Donlevy, W6GNI

Present were:
President Steve Early AD6VI
Treasurer Bob Birch KG6RGI
Secretary Gary Kent W6GDK
Director #1 Tom Martin KG6RCW
Membership chair Al Donlevy W6GNI
Repeater Tech chair Dan Bubke K6NKC
Scope Editor Michelle Thompson W5NYV
Guest Conrad Lara KG6JEI

continued on page 9

Contest Corral

Contest	Time and Date
IPARC Contest, CW	0600Z-1000Z, Nov 3 and
	1400Z-1800Z, Nov 3
Ukrainian DX Contest	1200Z, Nov 3 to 1200Z, Nov 4
ARRL Sweepstakes Contest, CW	2100Z, Nov 3 to 0300Z, Nov 5
NA Collegiate ARC Championship, CW	2100Z, Nov 3 to 0300Z, Nov 5
IPARC Contest, SSB	0600Z-1000Z, Nov 4 and
	1400Z-1800Z, Nov 4
High Speed Club CW Contest	0900Z-1100Z, Nov 4 and
	1500Z-1700Z, Nov 4
DARC 10-Meter Digital Contest	1100Z-1700Z, Nov 4
ARS Spartan Sprint	0200Z-0400Z, Nov 6
WAE DX Contest, RTTY	0000Z, Nov 10 to 2359Z, Nov 11
JIDX Phone Contest	0700Z, Nov 10 to 1300Z, Nov 11
OK/OM DX Contest, CW	1200Z, Nov 10 to 1200Z, Nov 11
Kentucky QSO Party	1400Z, Nov 10 to 0600Z, Nov 11
CQ-WE Contest	1900Z, Nov 10 to 0500Z, Nov 12
SKCC Sprint	0100Z-0300Z, Nov 14
YO International PSK31 Contest	1600Z-2200Z, Nov 16
SARL Field Day Contest	1000Z, Nov 17 to 1000Z, Nov 18
LZ DX Contest	1200Z, Nov 17 to 1200Z, Nov 18
Feld Hell Sprint	1500Z-1700Z, Nov 17
All Austrian 160-Meter Contest	1600Z, Nov 17 to 0700Z, Nov 18
ARRL Sweepstakes Contest, SSB	2100Z, Nov 17 to 0300Z, Nov 19
RSGB 2nd 1.8 MHz Contest, CW	2100Z, Nov 17 to 0100Z, Nov 18
NA Collegiate ARC Championship, SSB	2100Z, Nov 17 to 0300Z, Nov 19
EU PSK63 QSO Party	0000Z-2400Z, Nov 18
Run for the Bacon QRP Contest	0200Z-0400Z, Nov 19
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Nov 22
CQ Worldwide DX Contest, CW	0000Z, Nov 24 to 2400Z, Nov 25
ARRL EME Contest	0000Z, Nov 24 to 2359Z, Nov 25
SKCC Weekend Sprintathon	0000Z-2400Z, Nov 25
ARCI Topband Sprint	0000Z-0600Z, Nov 29
ARRL 160-Meter Contest	2200Z, Nov 30 to 1600Z, Dec 2
IPARC Contest, CW	0600Z-1000Z, Nov 3 and
	1400Z-1800Z, Nov 3
Ukrainian DX Contest	1200Z, Nov 3 to 1200Z, Nov 4
ARRL Sweepstakes Contest, CW	2100Z, Nov 3 to 0300Z, Nov 5
NA Collegiate ARC Championship, CW	2100Z, Nov 3 to 0300Z, Nov 5
IPARC Contest, SSB	0600Z-1000Z, Nov 4 and
	1400Z-1800Z, Nov 4
High Speed Club CW Contest	0900Z-1100Z, Nov 4 and
	1500Z-1700Z, Nov 4
DARC 10-Meter Digital Contest	1100Z-1700Z, Nov 4
ARS Spartan Sprint	0200Z-0400Z, Nov 6
WAE DX Contest, RTTY	0000Z, Nov 10 to 2359Z, Nov 11
JIDX Phone Contest	0700Z, Nov 10 to 1300Z, Nov 11
OK/OM DX Contest, CW	1200Z, Nov 10 to 1200Z, Nov 11
Kentucky QSO Party	1400Z, Nov 10 to 0600Z, Nov 11
CQ-WE Contest	1900Z, Nov 10 to 0500Z, Nov 12

continued from page 7

Discussion Items:

1. Repeater site refurbishment. We can get an 86 foot lift for \$1068.00. We need to order a special type of paint first which Tom Martin will do through his company. We will wait to commit to the lift until the paint arrives. We will still have a work party on the weekend of September 22 to paint buildings and clean up area..

2. Autopatch. It was decided to further study the autopatch situation before committing to a plan.

3. Auction. The annual auction will be held on the October 3 meeting. Room setup begins at 5:30 PM, sellers at 6 pm, buyers at 6:30 PM and the auction begins at 7:00 PM

General Meeting for October Auction

Membership 371 members

Old Business

1. The planned community meeting on repeaters between PARC and served agencies etc has been delayed due to a conflict with the ARES meeting.

New Business

1. ARES program in November.
2. Cal Fire equipment proposal. The proposal from SDGARES was discussed. Board decided to take no action regarding this proposal.
3. Red Cross would like to place a 47.42 MHz remote base at our repeater site. Technical committee will study the proposal.
4. Ron, N6XT would like to buy the 3.5 kW generator in KB5MU's possession. Suggested we ask \$100 for it.
5. Future club speaker possibility - Attorney John Kramer W6JLK on antenna zoning.

Palomar Amateur Radio Club Board of Directors Meeting (unapproved minutes)

October 10, 2007

President Steve Early AD6VI
Treasurer Bob Birch KG6RGI
Secretary Gary Kent W6GDK
Director #1 Tom Martin KG6RCW
Membership chair Al Donlevy W6GNI
Repeater Tech Chair Dan Bubke K6NKC
Guest Conrad Lara KG6JEI
Guest Jim Egerton W6SST
Guest Arththur McBride III KC6UQH
Guest John Kuivinen WB6IQS

The meeting was called to order at 7:07 PM by President Steve Early AD6VI. The meeting was held at the house of Al Donlevy, W6GNI

Discussion Items:

General Meeting for November General meeting for November is nomination of officers, a presentation on D-Star by WD6FZA, and a presentation by SDGARES.

Carlsbad Safety Center The class in the meeting room last month was supposed to have vacated by 5:00 PM. This will be closely monitored.

Repeater – Tech A lengthy discussion was held about the future plans for the repeaters. Topics included

- a. ATV
- b. Autopatch system resurrection
- c. Echolink/IRLP
- d. Voice ID on one repeater as a test project
- e. Site improvements
- f. Future of packet - need a committee to study this
- g. Security/access
- h. Fire department cache
- i. Disaster recovery plan
- j. Power/emergency Power

Repeater User Community meeting Delayed until further notice

Respectfully submitted by W6GDK

PARC and PARC Affiliated Repeaters

Frequency	Tx	Tone	Call Sign	Remarks
52.680	–	107.2	W6NWG	
146.730	–	107.2	W6NWG	Autopatch; see note 1,
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note
447.000	–	107.2	W6NWG	Autopatch; see note 2
224.380	–	107.2	KK6KD	Americas Unidos
224.900	–	107.2	WD6HFR	Convair/220 ARC
224.940	–	107.2	KK6KD	Sharp Hospital Coverage
446.140	–	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; linked to 445.600
445.600	–	107.2	N6FQ	Fallbrook ARC; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	–	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 2441.5 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrrl.net
Sunday	0830	146.730	ARES Net	Jo Ashley KB6NMK@arrrl.net
Sunday	1900	147.130	Handi-Hams	Marcia De Runtz KG6FIX
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted tthompdson@sdaarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYTrwilimek@cox.net
Thursday	2000	147.075	SATERN	tomcarmody@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com

Board of Directors Position	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
Vice President - Tom Storer	KI6DER	ki6der@amsat.org
Secretary - Gary Kent	W6GDK	858-679-0578 w6gdk@arrrl.net
Treasurer - Bob Birch	KG6RGI	rrbirch@cox.net
Director - Tom Martin	KG6RCW	619-778-3866 rbg4@aol.com
Director - Dennis Baca	KD6TUJ	760-722-0251 kd6tuj@amsat.org
Scope Editor - Michelle Thompson	W5NYV	w5nyv@amsat.org
Repeater Chair - Dan Bubke	K6NKC	k6nkc@amsat.org
Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.



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Address service requested

Scope (USPS #076530) is published monthly by the Palomar Amateur Radio Club 1651 Mesa Verde Drive, Vista, CA 92084. Periodicals postage paid at Vista, CA 92085. Dues are \$18 per year or \$30 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

This month's General Meeting will be held on November 7th, 2007 (The first Wednesday of each month) at the Carlsbad Safety Center. The subject will be officer nominations, D-star, and SDGARES. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30 but show up at 19:00 for setup and visiting before the meeting. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! -NN3V (past president of PARC)

SCOPE December 2007

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

Club Meeting – Holiday Social, Elections, and Raffle kickoff (see page 2 for details)

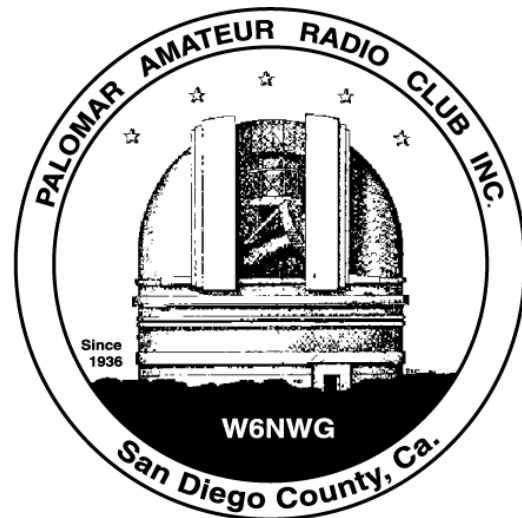
5 December 7:30pm at the Carlsbad Safety Center

Board Meeting

12 December 7:00pm at W6GNI QTH

Extra License Class

8 & 15 December at Carlsbad Safety Center



President's Message

By Steve Early AD6VI

December is upon us. As I write this, I am giving thanks that my family was not directly affected by this year's fires, yet I must think about those that were not so fortunate. On the brighter side, our November meeting was well-attended with a good presentation on D-STAR, a VOIP/Datastream format that is gaining popularity in the area.

We also heard reports from Harry Hodges W6Y00 about the activities of the Fire Information Net and from Jim Cammarano regarding ARES activities with the county EMS net. The December program will feature the annual elections and Christmas social. This is a great opportunity to meet with next year's PARC leadership and discuss projects that you would like to see happen.

Looking down the road, on December 8th and 15th, PARC is providing a two-day Amateur Extra Exam Preparation Class. This class is open to all, but an RSVP would be appreciated to allow the instructors to bring sufficient materials on the 8th. The January program will feature a presentation on San Diego Section ARES.

On a more serious side, beginning next year PARC will be looking to our willing membership to help staff seminars and courses on such topics as licensing, getting on the air, getting on HF, getting into VHF/UHF contesting, getting onto HF contesting (Field Day is coming up in June), getting into Amateur television, getting into Amateur satellite communications, EchoLink, IRLP, and a host of others. One immediate need is an instructor for a General License exam preparation class. The one PARC recently scheduled was cancelled due to the effects for the fires. I have had a very rewarding experience teaching licensing classes for the last several years. However, I am seeking new responsibilities within amateur radio that will demand the time I have spent teaching. The need for instructors to help new and prospective hams is great, but so is the personal satisfaction. As an example, Lin, KJ6EF, volunteered to take over the HAM Help Net that Dave Doan, KC6YSO, had kept staffed and alive for many years. The most recent correspondence from Lin asked: "Should we cut it at 10:00 PM regardless?" This is the kind of quandary I like to have. It means that the service that Lin, Dave, and others, are providing is needed. Please watch the Scope for opportunities to help and to serve!

Volunteers Wanted

Volunteers needed to help set up a 2m/440, 50W Yaesu radio and antenna at the Elfin Forest Fire Dept. Help will be needed with attaching the antenna (Diamond X-50a Vertical) and setting up and programming the mobile radio for use in the fire department and to possibly set up the mobile antenna on a car. Date of project TBD.

Contact:

Mickey Cross, KI6CSY

760-744-2034 or mickeykc@juno.com.

Raffle!

Available for raffle starting at the December meeting and continuing until \$200.00 in tickets are sold!

MFJ 1724B antenna and Yaesu FT1802M 2m transceiver, fixed with Anderson power pole connectors and a cigarette lighter adapter included.

Complete! Plug and play! It's pre-programmed with San Diego frequencies with alpha tags. Radio purchased for raffle with help from Ham Radio Outlet, San Diego.

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/>

<http://www.earsclub.org/>

<http://roars.net/>

<http://www.wa6bgs.org/>

<http://n6six.50megs.com/>

Special Event Station

The Point Loma Amateur Radio Club, call sign W6RDF, will conduct a special radio event on 1 December to celebrate 50 years of operation from the Space and Naval Warfare Systems Command (SPAWAR) Systems Center San Diego (SSCSD). W6RDF will operate SSB on

the following frequencies: 28.350, 21.350, 14.300, and FM on 146.52 MHz. A 50th anniversary commemorative QSL certificate will be issued to stations making contact with W6RDF.

SSCSD occupies some of the same property on which Navy Radio Station Point Loma (NPL) was built in 1906. It is the premier Command Control Communications Computers Intelligence Surveillance and Reconnaissance (C4ISR) research and development center for the Department of Defense.

The command has had several other names since World War II: Navy Radio and Sound Lab (NRSL), Naval Electronics Lab (NEL), Naval Command Control and Communications Lab Center (NCCCLC), Naval Electronics Lab Center (NELC), Naval Ocean Systems Center (NOSC), and the Naval Command Control and Ocean Surveillance Center (NCCOSC) Research Development Test and Evaluation (RDT&E) Division (NRaD).

Club Members ONLY!

PARC has a tube bank that includes many 6 & 12 volt receiving tubes (and some transmitting types) for use by club members to repair their own personal equipment. Not for commercial use or resale.

If we have your

requests, I will pre-check and deliver them to the next club meeting.

WB6IQS@amsat.org, -John

Ham4Less.com

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SPECIAL:

New G5RV Antenna

(57 ft total length)

\$ 44.00

December Membership

New members joining PARC:
KG6SLH, WA6YCA, and Chris Bouse
(No Call Yet).

Please greet these members, and help
Chris as needed!

And we had one reinstatement.
Welcome back!

We may send out reminders to all
those that let their membership
expire in 2006 and 2007. If you are
reading this on the web, and get one
of those reminders, PLEASE renew!
(Last chance at the present rate -
Reinstatements and Renewals at the
present rate MUST be postmarked in
2007)

Al W6GNI

November Fold & Staple

Sonny WA5ACE, Jo KB6NMK,
Al W6GNI & Kathy, Harry W6Y00,
Ron K2RP

Licensing and Class Information

Register 5-7 days in advance for the
following test sessions.

☐ PARC Testing is in Carlsbad on the
2nd
Saturday of the month at 9:30am at
the Carlsbad Safety Center. Please call
619- 465-EXAM for the latest contact
info.
Test sessions may be cancelled if no
one pre-registers.

☐ EARS Testing is in Escondido on the
Last Saturday of the month at 9:00
am at the LDS Church.
The address is 1917 East Washington
Avenue , Escondido , 92025.
Contact Harry W6Y00 (760) 743-
4212 or W6Y00@amsat.org.

☐ Extra License Class 8 & 15
December at Carlsbad Safety Center

Technical Equipment Available for Loan To PARC Members

Thanks to the effort of John, WB6IQS
PARC now has a working HP 8640
Signal Generator. John spent many
hours repairing this unit, donated it to
PARC and it is available for loan to
PARC members for projects. John asked
me to verify calibration with my 8640
after he completed the repairs, which I
have done and it is now ready for loan.

Technical Description:
AM/ FM 0.5 to 512 MHz on
fundamentals and 512 to 1024 MHz on
2nd harmonic.
Output range +10 to -130 dBm
Female N connector front panel output.
Crystal lock for stability.
Note: This signal generator, designed in
the last century, has a very low phase
noise specification, equal to or better
than most modern signal generators
made today.

In addition to the HP 8640 I have the
following test equipment from the
W6JAB estate available for loan to PARC
Members

SWR meter (Diamond SX-600)
Texscan CATV Spectrum analyzer 50-
400 MHz
MFJ 269B
MFJ 300W dummy load
IFR 1100 Communication Monitor

I also maintain a HP Z3801A GPS
Receiver and frequency standard with a
10 MHz output.
It is available for use by appointment
for PARC members needing to calibrate
equipment.

Contact me for use of the above items,
kc6uqh@amsat.org or 760.758.6062
evenings 7:00 to 10:00 PM & weekends
9:00 AM to 10:00 PM

Art, KC6UQH

San Diego 100 Mile Endurance Run Communications Wrap-Up

By Ellen N6UWW & Wild Bill WB6BFG

We want to thank all who participated in the San Diego 100 Mile Endurance Run communications effort. Operators involved were K6PKS Paul, N6UWW Ellen, WB6BFG Wild Bill, W6SST Jim, WN6K Paul, KG6RCW Tom, W6ABE Ed, WD6FWE Don, KC6YSO Dave, W6HME Jim, K6AH Andre, K5WFW Len, AK6QJ Jerry, KG6WNW Candace, KB9WFS Brian, KI6FKA Chell, KI6FKC Karen, KG6WOB Lyle, KI6JYC Sandra and AE6AV Larry. With their invaluable help we were able to have a successful event, ensure the safety of all those involved and have a load of fun!

The organization behind the run, "S.U.R.F." (San Diego Ultra Running Friends, a non-profit organization), donated \$2,500 of the proceeds to Cal Fire for the purpose of acquiring new radio equipment. How about that! We had a total of 106 runners entered in the race and 104 runners left the start line at the Cuyamaca School Camp shortly after 0600hrs on Saturday October 20th. The male leader/winner of the race, bib #1 Karl Meltzer, finished the 100 miles in 17:45:50 minutes. Runner-up was Sander Nelson nearly an hour behind with a time of 18:40:00. The lead female runner, Kim Holak, was just over an additional hour back with a time of 19:48:10. The final runner, 68 year old Fred Pollard, finished in 30:54:12 hours. All amazing times to say the least! By 1300hrs on Sunday October 22nd, we had 55 runners successfully complete the run and 51 drop-outs/no-starts accounted for safely.

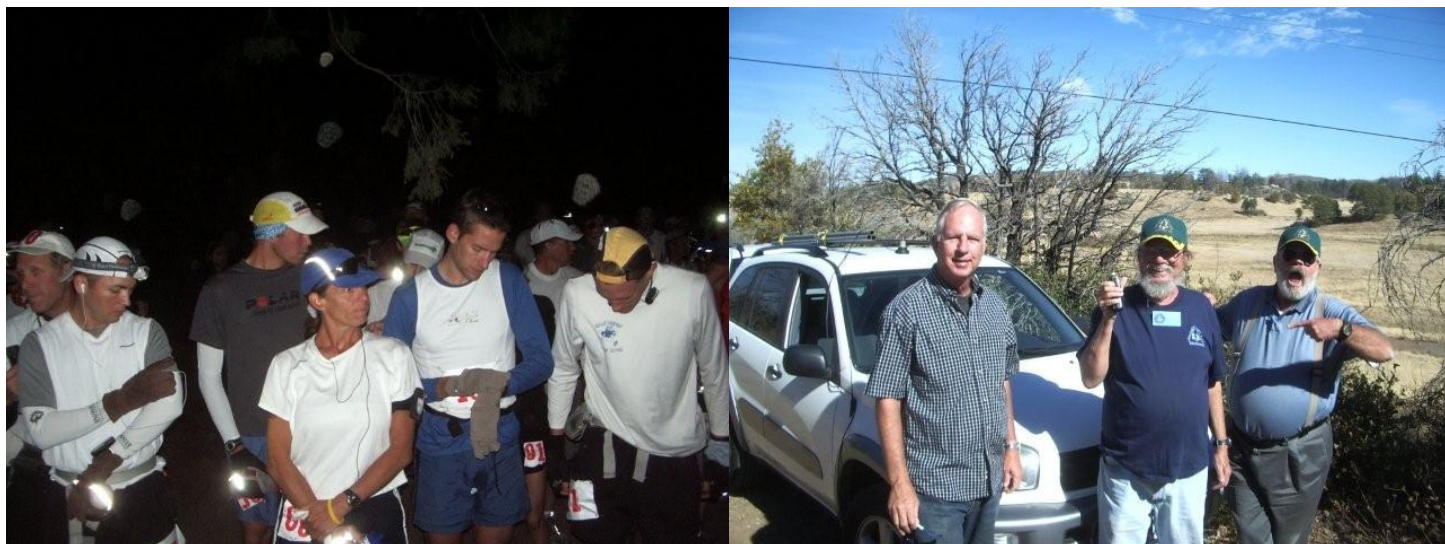
Kudos go to all involved and special thanks to those "regulars" who always seem to answer the call for volunteers and do so early in the planning stages. This core group can always be relied upon and their participation on a consistent basis is much appreciated. We had several new operators on board

this event. Had they never told us they had no prior experience doing communications at an event similar to this, we certainly wouldn't have known so by listening to them handle their share of traffic. They all did a GREAT job and we hope to see them at future events.

Special pats on the back go to those more experienced operators who took the new operators under their wing and made sure they were comfortable with the task at hand. We will try to make a point of including new operators at future events and hope we continue to have volunteers for mentor positions. The flexibility of the operators really helped in the smoothness of operations. Having a team of operators willing and able to move from one Aid Station to another, to extend shifts well beyond that which was originally discussed, and the sense of teamwork and collective genius amongst the entire crew really kept the Communications Coordinators at ease.

Little did we know that the commemorative hat we were given in appreciation of our communications involvement would be a premonition of what was to come in San Diego County (see Ellen modeling the flame-bedecked hat on page 9). Santa Ana winds were a-howlin' as the final hours on the clock ticked Sunday at the finish line. Runners came in telling tales of having dust devils chase them and trees fall across their paths. Thankfully nobody was injured but there were definitely some VERY close calls. One woman reported that she heard strange noises so stopped running in order to decipher just what it was and with that a tree fell right in front of her. She said that "for Medal of Valor points at the finish line" she measured, heel to toe, that it had missed her by only two of her feet! Thanks again to all those who helped make the SD 100 Mile Endurance Run a fun and successful event. We look forward to next year's run. If you have an interest in working the event in 2008, don't be afraid to throw your *hat* in the ring now.

Here are photos of some of the aid stations.



Read more about the race at <http://members.cox.net/sandiegol00/>



Photos continued on page 6



Best 7 3 de Ellen Utschig N6UWW and Wild Bill Wiederhold WB6BFG

Club Classified Advertisements

Personal equipment ads are free to members and could be bumped after 3 months. Make up your ad like the ones on this page and send to SCOPE@PALOMARARC.ORG.

Commercial ads in big boxes: \$2/col. inch/month. We will squash your ad copy to the number of inches bought.

(11.29) Looking for a small 3 element tri-band HF beam such as the TH3-JRS.
Jim Keller wb6yxy@arrl.net
760-717-6126

(10.15) For Sale 2 meter FM Transceiver. ICOM IC-2100H Mobile 207 memory Channels, HM-98S Lighted Mike, 55 Watts output. Green or Amber Display. Like NEW. All Local Channels Programmed in. \$75.00 OBO. Please call Bayard K6GAO at 858-755-5507.

For Sale Uniden Weather Radio WX 500 NOAA all Hazards Weather Radio. With S.A.M.E. AC power supply. \$25.00 OBO. Please call Bayard K6GAO at 858-755-5507.

For Sale Like New UNIDEN BEARCAT SCANNER BC-350C all pre programmed for all service Freq. AC and DC power supply cables. \$75.00 OBO. Please Call Bayard K6GAO at 858-755-5507.

(9.9) AC ARC Welder, Marquette 180. 220 VAC power. With heavy duty cables and welding rod holder. \$50 OBO. WB6IQS, John. 760-727-3876.

Satellite Dishes. 1 meter Primestar and smaller. Ku band LNBs. Most with hardware and mounting clamps. Make offer / free to good ham radio homes. WB6IQS, John 760-727-3876.

Reloading Equipment: Pistol / rifle dies, Rockchucker press, Lyman press, accessories, brass, copper jacketed bullets, lead casting molds and furnace. Lots of cast lead in small ingots. Best offer for all or parts. WB6IQS@att.net,

John 760-727-3876.

(8.26) FOR SALE:
YAESU FT 840 Transceiver
ASTRON RS 35A Power Supply
MJF 949 Deluxe Versatuner
30 Foot Vertical Cushcraft Antenna

Ken Clark, KE4MII
200 N El Camino Real #165
Oceanside, CA 92058
760-231-8377

(7.22) Wanted: Transport for amateur UHF antennas to San Francisco Bay area. Fred Brown, W6HPH. Tel. 760-741-1328. w6hph@yahoo.es

(6.30) Cushcraft R-8 Vertical Antenna, New In Box, \$375.00 (New \$550.00). IC-756PRO II Transciever with IC-PS125 Power Supply, Never Used, Purchased Feb. 2005 from HRO, Original Cost \$2399, Will Sell for \$1975.00. Selling because of CC&R Issues.
Call John N6LMY rohring@sbcglobal.net or (760) 602-5041

Contest Corral

Contest	Time and Date
TARA RTTY Melee	0000Z-2400Z, Dec 1
Wake-Up! QRP Sprint	0400Z-0429Z, Dec 1 and
	0430Z-0459Z, Dec 1 and
	0500Z-0529Z, Dec 1 and
	0530Z-0600Z, Dec 1
TOPS Activity Contest	1600Z, Dec 1 to 1800Z, Dec 2
ARS Spartan Sprint	0200Z-0400Z, Dec 4
NCCC Sprint, CW	0330Z-0400Z, Dec 7
ARRL 10-Meter Contest	0000Z, Dec 8 to 2400Z, Dec 9
SKCC Weekend Sprintathon	0000Z-2400Z, Dec 9
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Dec 12
NA High Speed Meteor Scatter Winter Rally	0000Z, Dec 13 to 0200Z, Dec 17
NCCC Sprint, CW	0330Z-0400Z, Dec 14
MDXA PSK DeathMatch	0000Z, Dec 15 to 2400Z, Dec 16
OK DX RTTY Contest	0000Z-2400Z, Dec 15
Croatian CW Contest	1400Z, Dec 15 to 1400Z, Dec 16
Feld Hell Sprint	1500Z-1700Z, Dec 15
International Naval Contest	1600Z, Dec 15 to 1559Z, Dec 16
ARCI Holiday Spirits Homebrew Sprint	2000Z-2400Z, Dec 16
Run for the Bacon QRP Contest	0200Z-0400Z, Dec 17
NCCC Sprint, CW	0330Z-0400Z, Dec 21
SKCC Sprint	0100Z-0300Z, Dec 26
DARC Christmas Contest	0830Z-1059Z, Dec 26
NCCC Sprint, CW	0330Z-0400Z, Dec 28
RAC Winter Contest	0000Z-2359Z, Dec 29
Original QRP Contest	1500Z, Dec 29 to 1500Z, Dec 30
Stew Perry Topband Challenge	1500Z, Dec 29 to 1500Z, Dec 30
TARA RTTY Melee	0000Z-2400Z, Dec 1
Wake-Up! QRP Sprint	0400Z-0429Z, Dec 1 and
	0430Z-0459Z, Dec 1 and
	0500Z-0529Z, Dec 1 and
	0530Z-0600Z, Dec 1
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ARS Spartan Sprint	0200Z-0400Z, Dec 4
NCCC Sprint, CW	0330Z-0400Z, Dec 7
ARRL 10-Meter Contest	0000Z, Dec 8 to 2400Z, Dec 9
SKCC Weekend Sprintathon	0000Z-2400Z, Dec 9
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Dec 12
NA High-Speed Meteor Scatter Winter Rally	0000Z, Dec 13 to 0200Z, Dec 17
NCCC Sprint, CW	0330Z-0400Z, Dec 14
MDXA PSK DeathMatch	0000Z, Dec 15 to 2400Z, Dec 16
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Run for the Bacon QRP Contest	0200Z-0400Z, Dec 17
NCCC Sprint, CW	0330Z-0400Z, Dec 21
SKCC Sprint	0100Z-0300Z, Dec 26

Photos from November Meeting



Ellen N6UWW models the cap operators received after providing communications for a 100-mile trail run. Photo by KB5MU.



Mike AB6QT received special recognition for years of service. Photo by KB5MU



Section Emergency Coordinator Jim Cammarano KG6R gives an update. Photo by KB5MU.



D-STAR demonstration after the presentation. Photo by KB5MU.

PARC and PARC Affiliated Repeaters

Frequency	Tx	Tone	Call Sign	Remarks
52.680	–	107.2	W6NWG	
146.730	–	107.2	W6NWG	Autopatch; see note 1,
147.075	+	107.2	W6NWG	Autopatch; see note 2
147.130	+	107.2	W6NWG	Autopatch; see note
447.000	–	107.2	W6NWG	Autopatch; see note 2
224.380	–	107.2	KK6KD	Americas Unidos
224.900	–	107.2	WD6HFR	Convair/220 ARC
224.940	–	107.2	KK6KD	Sharp Hospital Coverage
446.140	–	123.0	WB6FMT	Vista
146.175	+	107.2	N6FQ	Fallbrook ARC; linked to 445.600
445.600	–	107.2	N6FQ	Fallbrook ARC; linked to 146.175
145.050	(s)	None	W6NWG-1	Packet node; linked to Metro 9600 net
146.700	–	None	W6NWG-4	Packet duplex repeater; Duplex; PALBBS use OK

PARC also conducts the following ATV (amateur fast-scan television) operations:

ATV in: 915 MHz WBFM, 2441.5 MHz WBFM

Intercom: 146.415 MHz NBFM simplex (tone 79.7)

ATV out: 1241.25 MHz AM

Regular Nets Sponsored by PARC

Day	Time	Frequency	Name	Manager
T/Th/Sa	2000	146.730	NTS Traffic Net	Marvin KD6YJB KD6YJB@arrrl.net
Sunday	0830	146.730	ARES Net	Jo Ashley KB6NMK@arrrl.net
Sunday	1900	147.130	Handi-Hams	Marcia De Runtz KG6FIX
Sunday	2045	147.075	MARA	Glenn Jones KG6JDF@amsat.org
Monday	1915	146.730	RACES Sub-net	
Monday	2100	146.730	Microwave Net	Kerry B.
Tuesday	1900	147.130	Red Cross Net	Ted tthompdson@sdaarc.org
Tuesday	2100	146.730	Off-Road Net	Dick Wilimek KA7AYTrwilimek@cox.net
Thursday	2000	147.075	SATERN	tomcarmody@cox.net
Thursday	2100	146.730	Ham Help Net	
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com

Board of Directors Position	Call Sign	Contact Information
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
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Membership - Al Donlevy	W6GNI	760-630-3096 w6gni@amsat.org

¹ The 146.730 repeater transmits a CTCSS tone of 107.2, but does not usually require any tone for access. When necessary, an access tone of 107.2 can be enabled. A 107.2 tone is always required for autopatch access.

² PARC autopatches are closed, for members only, and always require an access tone of 107.2. For PARC autopatch access info, email autopatch@PalomarARC.org.

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Address service requested

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Submissions: scope@palomararc.org
Questions? Ideas? Comments? W6NWG@amsat.org

This month's General Meeting will be held on December 5th, 2007 (The first Wednesday of each month) at the Carlsbad Safety Center. This month is the Holiday Social, Elections, and Raffle kickoff. Talk-in on 146.730 MHz repeater. Meeting starts at 19:30 but show up at 19:00 for setup and visiting before the meeting. Ridesharing and coordinating for dinner beforehand often occurs on the repeater on Wednesday afternoons. Everyone is welcome! The Palomar Amateur Radio Club serves the Amateur Radio community of San Diego County California with repeaters located on Palomar Mountain. The club has monthly meetings, Field Day festivities, an annual auction, and many other fun and interesting functions. All are welcome at our club meetings and on-the-air interactive radio nets which now feature discussion groups on hiking, microwave, off-roading, as well as traditional message traffic and emergency communications nets (RACES - ARES - MARA). 73 and hope to CU you on the air! -NN3V (past president of PARC)