

SCOPE April 2008 ❄

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

Technical Committee Meeting- repeater repairs

2 April 7:00pm at the Carlsbad Safety Center
Club Meeting – The History of Vacuum Tubes

2 April 7:30pm at the Carlsbad Safety Center
Art KC6UQH will present in memory of Rod AC6V

Repeater Site Work Party

5 April Meet at Mother's Kitchen at 9am

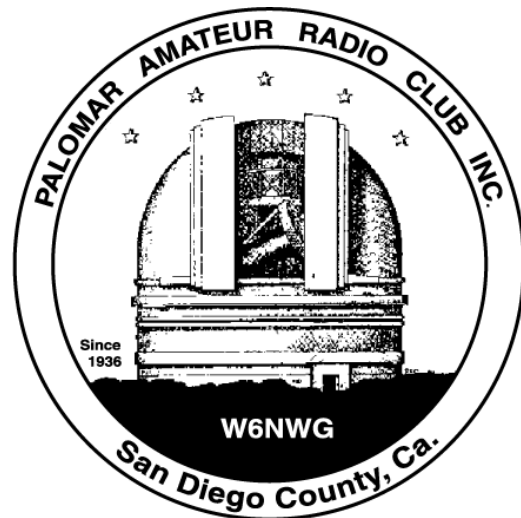
Public Service Events

5 April, see page 8

19 April San Diego Tour de Cure, see page 7

Board Meeting

9 April 7:00pm at W6GNI QTH



K6QK – Silent Key

By Michael KF6HCL

As a 10+ year member of the “lunch bunch”, it has been my honor to know Harvey Hiller, K6QK. In these later years, he treated me like a son. He was like a second Father to me and my admiration of him knew no bounds. Quick to advise me, Harv gave his wisdom freely.

For those that had found him direct or abrupt, I can tell you that the man had a heart of gold and I wish more people were as honest as Harv was. To me, Harv represented a special kind of person. One that, while not always “PC”, told it like it is. All those that knew him knew he was incredibly intelligent and very diverse in his engineering capabilities.

From building his own Field Day trailer to his own Hot Rod, Harv was a master of his craft. So Harv, I am a better man because I knew you and what you ingrained in me, will always be with me. You were the finest Elmer any young man could have ever had. I will miss you dearly. ❖



Harv at Field Day.



Harv at N6KI helping with the SteppIR.

**Technical Committee Meeting
April 2nd 7:00pm
Carlsbad Safety Center**

This meeting will be held immediately before the general membership meeting. Find W5NYV at a table in the back of the room.

The topic under discussion this month is April Work Party.

April Membership

New Members Joining PARC: KI6JMH, KI6FVN, KI6LRV, KI6OHT, KI6NRF, KI6PBU, KI6KJG, KI6MHX, AND KI6LAY. In addition, SIX 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.
Al W6GNI

March Fold & Staple

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

We could use one or two more on the list of Fold & Staple folks. Stop by the membership table and volunteer. A social work exercise, and get a participation point too.

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.

<http://www.kiloxray.com/vec/>

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.

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/>

SCOPE Show And Tell

PARC is looking for members to bring items to the meetings for a "show and tell". These items could be projects in progress or completed old and/or restored equipment, short items of interest, or unusual items, and happens 5-10 minutes prior to the evening's presentation.

Contact Dennis KD6TUJ at 760.802.2573 or email at KD6TUJ@amsat.org to help coordinate.

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

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SPECIAL:

New G5RV Antenna

(57 ft total length)

\$ 44.00

Contest Corral – Edited by Harry W6Y00

Contest	Time and Date
Montana QSO Party	0000Z, Apr 4 to 2400Z, Apr 5
YLRL DX-YL to NA-YL Contest, CW	1400Z, Apr 4 to 0200Z, Apr 6
SP DX Contest	1500Z, Apr 5 to 1500Z, Apr 6
EA RTTY Contest	1600Z, Apr 5 to 1600Z, Apr 6
QCWA Spring QSO Party	1800Z, Apr 5 to 1800Z, Apr 6
Missouri QSO Party	1800Z, Apr 5 to 0500Z, Apr 6 and 1800Z-2400Z, Apr 6
RSGB RoPoCo 1	0700Z-0900Z, Apr 6
RSGB 80m Club Championship, CW	1900Z-2030Z, Apr 7
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Apr 9
YLRL DX-YL to NA-YL Contest, SSB	1400Z, Apr 11 to 0200Z, Apr 13
JIDX CW Contest	0700Z, Apr 12 to 1300Z, Apr 13
Radio Maritime Day	1200Z, Apr 12 to 1200Z, Apr 13
EU Spring Sprint, CW	1600Z-1959Z, Apr 12
Georgia QSO Party	1800Z, Apr 12 to 0359Z, Apr 13 and 1400Z-2359Z, Apr 13
Yuri Gagarin International DX Contest	2100Z, Apr 12 to 2100Z, Apr 13
SKCC Weekend Sprintathon	0000Z-2400Z, Apr 13
UBA Spring Contest, SSB	0600Z-1000Z, Apr 13
RSGB 80m Club Championship, SSB	1900Z-2030Z, Apr 16
Holyland DX Contest	0000Z-2359Z, Apr 19
TARA Skirmish Digital Prefix Contest	0000Z-2400Z, Apr 19
ES Open HF Championship	0500Z-0559Z, Apr 19 and 0600Z-0659Z, Apr 19 and 0700Z-0759Z, Apr 19 and 0800Z-0859Z, Apr 19
Feld Hell Sprint	1500Z-1700Z, Apr 19
EU Spring Sprint, SSB	1600Z-1959Z, Apr 19
Michigan QSO Party	1600Z, Apr 19 to 0400Z, Apr 20
EA-QRP CW Contest	1700Z-2000Z, Apr 19 (20-10m) and 2000Z-2300Z, Apr 19 (80m) and 0700Z-1100Z, Apr 20 (40m) and 1100Z-1300Z, Apr 20 (20-10m)
Ontario QSO Party	1800Z, Apr 19 to 0500Z, Apr 20 and 1200Z-1800Z, Apr 20
YU DX Contest	2100Z, Apr 19 to 0500Z, Apr 20 and 0900Z-1700Z, Apr 20
Run for the Bacon QRP Contest	0100Z-0300Z, Apr 21
SKCC Sprint	0000Z-0200Z, Apr 23
RSGB 80m Club Championship, Data	1900Z-2030Z, Apr 24
SP DX RTTY Contest	1200Z, Apr 26 to 1200Z, Apr 27
Helvetia Contest	1300Z, Apr 26 to 1259Z, Apr 27
QRP to the Field	1500Z, Apr 26 to 0300Z, Apr 27
Florida QSO Party	1600Z, Apr 26 to 0159Z, Apr 27 and 1200Z-2159Z, Apr 27

It's All Downhill From Here

By Michelle W5NYV

Most Extra class hams that enjoy contesting, Field Day, special events, and are active in their club and community have already made their first HF CW contact. However, it was only this past week that I made mine. Yes, it's true. I'd never made a CW contact on HF before. My CW skills are rudimentary. I passed the code test at 5wpm with clear copy, but

5wpm is hardly the stuff of legend, let alone something making you useful at events like Field Day. So, I decided that I would try to contact TX5C this past week. On CW. Taking Harry's advice, I then decided to use my laptop computer, running MixW, to handle the 30 wpm rate I was expecting. After 60+ calls, the contact was successful. It was a tremendous thrill. What was next? A Turks & Caicos Island contact! It was much more fun than I expected it to be and I am looking forward to more. ❖

AC6V – Silent Key



AC6V at Midway.



AC6v at Field Day.

K6QK – Silent Key



Harv at the helm.
Photo by KB5MU.

March Meeting Goodie Givers

KG6VVN Dan
KG6JEI Conrad

Thanks for making the meeting so sweet!

Dennis N6KI Reports about a Heath Company Virtual Museum

Be sure to click on Blue Links in the URL below.

This is definitely a "Blast from the Past" if you were licensed way back when!

<http://www.heathkit-museum.com/hvmhistory.shtml>

The End of the "True" Boatanchors

By Ron Pollack K2RP

For the first 15 or so years after the end of WW II in 1945, most amateur receivers and transmitters were characterized by their substantial size and weight, giving rise to the term "boat anchors." In addition, these units acted independently of each other, making it necessary to tune both to the same frequency, known as "zero beating."

In the late 50s, this was all to change. R.L. Drake and Collins were the innovators in smaller, lighter receivers. Drake introduced the 1A, soon followed by the 2A and 2B receivers. These were triple conversion units with crystal controlled oscillators, and weighed only about 15 pounds with built in power supplies but requiring external speakers. The 1A was introduced at \$300, but the 2A and 2B were priced at \$270. To contrast, Hammarlund was producing the HQ170 at \$370 with a few more features (such as 160 and 6 meter coverage, and a crystal filter instead of passband tuning), but weighing 3 times as much at 45 pounds. The HQ 170 was 19 inches wide, while the Drakes were only about 12 inches wide, as well as being much narrower and shallower.

Collins was also downsizing, replacing the venerable 75A4 with the 75S1, the first of the famous "S Line" of products. This receiver, too, is substantially smaller than the one it replaced. More important, it was designed to mate with the 32S1 transmitter, with the receiver VFO controlling the transmitter for transceiver type operation. The concept of transceivers had been introduced by Collins a year or two earlier with the KWM1 and, later, the KWM2 transceivers. For the first time, the transmit frequency was now automatically the same as the receive frequency, a feature that we take for granted today. The 32S1 required a separate power supply, so the transmit system was still fairly bulky and heavy.

It wasn't long before the Heath Company

saw an opportunity to fill a need for a lower priced light receiver and transmitter that could be offered in kit form. The result was the SB300 receiver and SB400 transmitter, debuting in about 1963 with a multitude of available options and accessories. Styled similarly to the Collins equipment, it was often called the "poor man's S Line." The receiver sold for \$265 and the transmitter for \$325, in sharp contrast to the \$495 and \$590 for the Collins counterparts. Add another \$105 for the required Collins power supply (Heath's was built in) and the Collins station cost twice what the Heathkit did.

Among the accessories available were speakers, CW, SSB and AM filters, VHF converters, SWR bridges, phone patches, keyers, and more. A linear amplifier, the SB200 was soon introduced as well, all in matching green design.

The SB300 receiver used an LMO (Linear Master Oscillator) as the VFO. The output of the LMO varied from 5 to 5.5 MHz and was linear across the band. All crystals were provided for 4 10 meter segments, (as well as 80 thru 15), giving full coverage of the band without buying extra crystals. It is a dual conversion superhet, and the only solid state devices are the rectifiers. Ten tubes were used and most of the wiring was on two printed circuit boards.

The receiver was soon joined by the SB400, which matched both in appearance and function. It was designed to be used with the SB300 receiver, and was interconnected by seven coax cables, providing transceiver operation. Split operation was also possible, and a crystal pack was included so that the transmitter could be used with other receivers. The transmitter used a pair of 6146 tubes in the final amplifier with about 180 watt PEP input. Like the receiver, it had an LMO and covered all bands 80 thru 10,

This pair was a huge success, and many thousands were assembled and many are

continued on page 6

continued from page 5

still in use. In 1966, a refined version, the SB301 replaced the SB300. While basically the same receiver, RTTY capability was included, as well as a noise limiter and WWV capability. At the same time, the SB400 was upgraded to the SB401, with easier switching between separate and transceiver functions. The crystal pack was made optional, as most were used with Heath receivers where the separate crystal pack was not needed. The price was reduced to \$285. These receivers and transmitters were all tube type, with generous use of printed circuit boards, but there was still much point to point wiring. A model SB310 was also made, similar to the SB300, but offering coverage of the short wave broadcast bands.

In 1970, the SB301 was discontinued, and, with great fanfare, the SB303 was launched. It was a completely solid state receiver, using 27 transistors, an IC, and some diodes. It was immensely popular and well received. Because of its all solid state design, it was more stable than its tube type predecessors, and offered a few more features. The crystal calibrator offered 25KHz as well as 100KHz markers, an RF attenuator control, and improved sensitivity. Filters were offered in the AM, SSB, and CW modes, with the CW and AM filters optional. It was built on nine printed circuit boards, enabling a minimum of point to point wiring. This was an outstanding value for its time, retailing for \$345. It is still a hot performer even by today's standards. The SB310 short wave receiver was replaced with the SB313, a solid state version.

These 3 receivers were probably the most successful and popular kit receivers of all time, and many are in use still. The ones pictured here are the last of the series, the SB401 and SB303. They are unique in my collection, in that I bought them new in 1971 and built them myself. They were my main (and only) operating radios for many

years, and still perform flawlessly today, even after being subject to RTTY use for years.



Accessories shown are the SB610 monitor scope which can monitor transmitted waveforms as well as received ones, provides a two tone test signal for SSB testing, and can be used as a simple scope and RTTY tuning aid when wired for these functions. The speaker is the popular SB600, which had space in it for the HP23 series power supplies used with several transceivers (unnecessary with the 401/303). The HM15 SWR bridge was the latest incarnation of the AM2 bridge introduced in 1957. The electronic keyer is model HD 1410 which came out a bit later. The keyer is very versatile, in that it will key positive and negative keying lines up to several hundred volts with no changes. The disadvantage is that the built in keyer paddles are not adjustable. The microphone shown is a Shure 435, with a matching "Heath Green" head.

The SB line eventually included several transceivers, accessory VFOs, phone patches, linear amps, VHF converters, a six meter receiver, antenna tuners, etc. They were hugely popular from the 60s thru the 80s, with many in collections and in use today. I wouldn't part with mine!

Ron Pollack, K2RP ❖

“Thank You PARC!”

On April 19, 2008, the American Diabetes Association (ADA) in San Diego will hold the San Diego Tour de Cure (SDTdc) bicycle ride, an annual fund-raising cycling event in which an estimated 1000 cyclists will participate. The event's three bicycle routes cover most all of San Diego county, from the Start/Finish on the campus of Mira Costa College in Cardiff, to the Torrey Pines hill, east through Rancho Santa Fe in the south, to east of I-15 to Valley Center to Bonsall to Oceanside in the North County and south on the Coast Highway. The 'Tour' starts with the first of three courses, the Century or 100 mile ride, departing at 7:00am and the other two courses, the 70 mile and 30 mile rides, depart at half hour intervals. The event is anticipated to last all day with the last of the riders finishing around 4:30pm.

For the first time for this event in San Diego, and at the request of the ADA, the Motorcycling Amateur Radio Club, MARC, will provide essential safety, route monitoring, control and coordination communications support to this event. This support includes bicycle rider safety, monitoring rider progress throughout the three courses, controlling and dispatching 5 Support and Gear (SAG) vehicles for mechanical assistance to riders, and coordinating and controlling the 11 motorcycles equipped with amateur radio and APRS that are supporting the event.

The Motorcycling Amateur Radio Club was organized 16 years ago (May 10th) with the objective of providing service to the community while combining the two hobbies of motorcycling and ham radio. MARC is dedicated to providing two-way radio communications for selected charity events in their respective regions nationwide. Essential to this service and support is reliable radio communications between MARC's centralized Net Control and the MARC volunteer support vehicles throughout

the course. That's where PARC comes in. This year MARC needed a reliable 70cm back-up/secondary repeater with reliable coverage of all of San Diego County (The BARN/ALERT repeater located on Palomar Mountain will be the primary repeater), and PARC came through with permission to use the PARC 70cm repeater the day of the event.

So from the members of the Motorcycling Amateur Radio Club to the members of the Palomar Amateur Radio Club, a hearty “Thank You” and 73's to you all for helping make this event support possible!

More information on the San Diego Tour de Cure itself can be found at: http://tour.diabetes.org/site/TR/TourdeCure/TDC551018030?pg=entry&fr_id=5059 including links to route maps of the three courses (all routes Start/End at Mira Costa College, Cardiff Campus).

If want to get involved with support to charity events or would like to know more about MARC or putting ham radio or APRS on your motorcycle, here's the link to the MARC web site: <http://www.marc-hq.org/pages/homepage.htm> And remember, you don't have to ride a motorcycle to become a MARC member and get involved; many of MARC's members participate by driving amateur radio equipped support vehicles, an essential element of event support.

My personal thanks, PARC!

Frank Littlebury, KE6WOE
PARC member and MARC member
MARC San Diego Tour de Cure
Coordinator



Author's
motorcycle in
MARC
configuration

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.

(1.20) Help needed. Looking for someone who has experience mounting the Arrow Satellite antenna to a tripod or other support structure.

Thanks, Jim Keller WB6YXY
jkeller@cox.net

(1.1) For Sale 2m Hand held Kenwood TH-K2 FM Transceiver about a year old. Have all the books on the unit and it are programmed with all the local channels. Asking \$75 OBO. Please call Bayard K6GAO 858-755-5507

(1.1) Wanted Yaesu FT-857D transceiver, or similar, for new General licensee. David 760-942-5167
K200G@arrl.net

(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

Public Service Net on 147.130

The Fallbrook Amateur Radio Club has been asked to help with communications for "Avenue of the Oaks" bicycle ride on April 5th, 2008 in Fallbrook. See

<http://www.avenueoftheoaks.com/>

The 147.130 repeater will be used for a secondary communications net. The primary net will be on the FARC repeaters. This is a brand new event,, so much will be learned about supporting the 62 mile route. ❖

Electronics and Ham Radio Resources
<http://www.kiloxray.com/#resources>

Wildland Fire Safety Training

This course is intended for primary and secondary responders.

Instructor: Roxanne Provaznik from the Cal Fire – Monte Vista Station

Location: The Church of Jesus Christ of Latter Day Saints

5555 Aztec Dr, La Mesa, CA 91942

Date: Saturday April 12th, 2008

Time: 9:00 AM to 2:00 PM (?)

Please RSVP with Rich Beisigl at rbeisigl@csst.net In accordance with facility policy, please do not bring coffee or tobacco products into the building. ❖

K6QK Luncheon Fuddrucker's 1 March 2008



Dozens of Harv's friends gathered at Fuddrucker's on March 1 to share memories of Harv with each other and with Harv's wife Dee (seated left). Others pictured include Fred K6ISS, Orlando N6QVW, Dennis N6KI, Jim K6GR, Harry W6YOO, Gayle K6GO, and Arnie W7BIA. Photo by KB5MU.



Arnie W7BIA has just finished writing his message in a book of remembrances of Harv.

Photo by KB5MU. ❖

President's Message

March was a quick month for many. Our March program was given by attorney Jonathan Kramer, W6JLK and was titled: "I'm from the Government (Planning Department) and I'm here to help you!". Jonathon spoke about his experiences as a consultant for community planning departments and provided insight on what to do (and not do) or say, when dealing with our civil servants. Jonathon illustrated how our approach and presentation can lead to success or failure. The presentation, which was recorded, kept everyone's attention for the entire program

Our April program will feature Art McBride, KC6UQH, delivering a presentation prepared by Rod, AC6V (SK), on The History of Vacuum Tubes, beginning with the Edison effect and covering special tube types still in service today. The program will end with a comparison of the advantages of both tubes and solid state technology. This ought to be a good opportunity for many of us to learn a bit about the radio art, as well as the science behind it.

Looking down the road, Field Day is coming soon. The Field Day net will start soon. We are looking for volunteers to set-up, captain and operate the stations. Last month, we were told that the San Marcos site is available, so we will be there again. Field day was originally established to show that Amateurs could operate "portable". This aspect, in turn has proven useful for disaster response and recovery. This point has been proven and the October wildfires drove it home again, as there were areas of the county that did not have phones for several months and amateur radio helped out. A few Field Day Rules have changed. A new one says "One (1) 100-point bonus may be claimed if your Field Day operation includes a specific educational-related activity." It seems to me that a 'Basic Portable Operation Seminar' will meet this requirement and fits the Field Day theme nicely. To that

end, I am looking for participants who can share their experience and ideas for doing this on a shoe-string budget. Specific times and details for this seminar will be announced prior to Field Day.

I hope to see you on April 2nd. Bring a friend.

Steve Early,
President

Palomar Amateur Radio Club. ❖

Field Day Preparations

By Conrad Lara KG6JEI

We are fast approaching the time of year again where we pull out all the stops and go for the gold. Field Day will be held June 27-29 this year. Once again the San Marcos EOC will be hosting our Field Day site at the corner of Rancheros and Santar right off the 78.

A few of our regulars will be unavailable this year. This year will be a perfect chance to get in on the action, and yet still have the support of our more experienced operators to help. Here are our areas of greatest need:

- 1) Band captains and operators for each station (schedule to be worked out with each band captain).
- 2) Shelters (RV'S, Travel Trailers, and the like) for operating stations.
- 3) MANY people need to setup and tear down the site.
- 4) Training. We plan to offer educational training and FCC Amateur License testing. We need volunteers.
- 5) Publicity. Please tell anyone you know that everyone is welcome we will be running a GOTA station for non active/unlicensed operators. Word of mouth is the best way to bring people in hams and non hams alike.

Please contact me at KG6JEI@amsat.org to volunteer or if you have any questions. I am also available at the club meetings. More information will be made available as it develops. ❖

PARC and PARC Affiliated Repeaters

Frequency	Tx	Tone	Call Sign	Remarks
52.680	-	107.2	W6NWX	
146.730	-	107.2	W6NWX	
147.075	+	107.2	W6NWX	
147.130	+	107.2	W6NWX	
447.000	-	107.2	W6NWX	
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	W6NWX-1	Packet node; linked to Metro 9600 net
146.700	-	None	W6NWX-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	0930	147.075	Winlink Users Net	Robert Palle KC2CHN
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	Lin Robertson kj6ef@amsat.org
Friday	2100	146.730	Hiker's Net	Ed KF6DXX@juno.com

Board of Directors Contact Information

Board of Directors Position	Call Sign	Contact Information
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Model BA-8 (for RG-8, RG-213, 9913 and similar cables up to ½" dia. \$16.50+tax+\$8 S&H/order.

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This month's General Meeting will be held on April 2nd, 2008 (The first Wednesday of each month) at the Carlsbad Safety Center. This month the program is about Vacuum Tubes. Talk-in on 146.730 MHz repeater. Technical Committee meeting starts at 19:00. General meeting starts at 19:30 but show up at 19:00 for setup and visiting beforehand. 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)