

SCOPE February 2008 ❄

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

Technical Committee Meeting

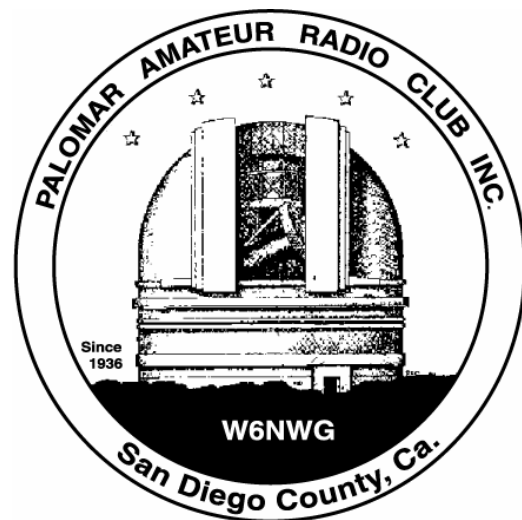
6 February 7:00pm at the Carlsbad Safety Center

Club Meeting – Kerry N6IZW on "Fun with Optics", optical (laser) communications systems.

6 February 7:30pm at the Carlsbad Safety Center

Board Meeting

13 February 7:00pm at W6GNI QTH



January's Raffle Winner



Photo by KB5MU

The winner of January's raffle for a Yaesu VX-170 was KI6MUG, Justin Pitcairn, a new member who joined the club before the drawing. Congratulations Justin!



Photo by W5NYV

Dennis Baca KD6TUJ (on right) presents the Yaesu to Justin. ❄

January's General Meeting

San Diego ARES Update and Recruitment

Jim Cammarano KG6R (pictured below) and Teri Rowe KI6FKD presented an update on San Diego ARES with special emphasis on what sort of amateur radio operator that ARES is looking for.



Photo by KB5MU

Jim writes: "San Diego ARES welcomes everyone. All that is required is a sincere desire to serve the community by enhancing the public safety and an
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President's Message

Steve Early AD6VI

January has come and gone. For the January Program, Jim Cammarano and Teri Rowe provided a presentation on SDGARES. We are getting into winter (by San Diego Standards) and trying to stay warm and dry.

Our February Program will be presented by Kerry Banke, N6IZW. Kerry will be speaking to us about "light" repeaters. One report is for effective relay of 50 miles. This ought to be intriguing. In addition, PARC is celebrating its 72nd year this month

Looking down the road, Field Day is coming. We are looking for volunteers to set-up, captain and operate the stations. We continue to look for a new Field Day site, as last year's is up for sale.

Field Day was originally established to show that amateurs could operate "portable".

This point has been proven and the wildfires drove it home again, as there were areas of the county that did not have phones until about three weeks ago. Some may still not have working phones.

In support of Field Day and to educate the amateur radio community, PARC is creating a seminar on "Basic Portable Operation". We are looking for participants can share their experience and ideas for doing this on a shoe-string budget.

Looking down the road, Dennis Baca is negotiating to get us a presentation on "Smoothing the Antenna Structure Permit Process"

I hope to see you all at the February meeting. Please bring a friend. ✱

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.

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/>

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

1(800) 230-0458

1(760) 945-9503

call us—we may have it!

Arrow Antennas

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Opek Antennas

Gordon West books

Workman Products

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SPECIAL:

New G5RV Antenna

(57 ft total length)

\$ 44.00

February Membership



Photo by KB5MU

New Members Joining PARC: KA6ELK, KG6SPL, and K6FFM. In addition, 14 members reinstated their membership, which had lapsed. Thanks to all!

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

I'll bet you noticed that your renewal date was missing from your label last month! I had a rather severe computer problem last month, but believe that it is straightened out now. So how about checking to see if an expiration date is printed on your label this time, and if your expiration date is getting close, please send in a renewal check!

Al W6GNI

Fold & Staple

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

Goodie Givers



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.

One-Day Amateur Radio Technician License Class #1

Saturday, February 9th, 2008
8am to 5pm (with breaks and one hour lunch)

Salvation Army - Joan Kroc Center
6845 University Ave, San Diego, CA, 92115
Please RSVP with Don Read, at Don_Read@usw.salvationarmy.org so that adequate materials and testing may be arranged.

Cost of Class: Free

Testing, if available at 5:00 PM, will be \$5

This purpose of this course is to aid students in preparation for an amateur radio Technician License written examination (Element 2).

One-Day Amateur Radio Technician License Class #2

Saturday, March 29th, 2008
8 AM to 5 PM (with breaks and one hour lunch)

Salvation Army - Joan Kroc Center
6845 University Ave, San Diego, CA, 92115
Please RSVP with Don Read, at Don_Read@usw.salvationarmy.org so that adequate materials and testing may be arranged.

Cost of Class: Free

Testing, if available at 5:00 PM, will be \$5

Description:

This purpose of this course is to aid students in preparation for an amateur radio Technician License written examination (Element 2). *

Palomar Amateur Radio Club Board of Directors Meeting Minutes

The meeting was called to order at 7:05pm by President Steve Early AD6VI. The meeting was held at the home of Al Donlevy W6GNI. Present at the meeting were:

President Steve Early AD6VI
Vice-President Dennis Baca KD6TUJ
Secretary Loren Hunt AD6ZJ
Treasurer Bob Birch KG6RGI
Director #1 Tom Martin KG6RCW
Membership Al Donlevy W6GNI
Director #2 Paul Williamson KB5MU
Scope Editor Michelle Thompson W5NYV

Treasurers Report

The report was distributed by Bob KG6RGI. Total Assets are \$14,477.94. The prepaid dues are \$5,654.00.

A motion to accept the report was made by Dennis KD6TUJ and seconded by Tom KG6RCW. Motion was carried.

Secretary's Report

Loren AD6ZJ presented the Secretary's report. A motion to accept the report with two name changes was made by Bob KG6RGI and Seconded by Tom KG6RCW. Motion was carried.

Discussion Items

1. Repeater Site

- Tom KG6RCW presented American Batteries as a company willing to accept the old large repeater batteries. It was decided to

coordinate transportation of the batteries to American Battery in the spring.

- Tower painting will wait till spring
- Battery monitoring cables will need to be routed but can wait till spring.
- Two people should go to the site at a time for safety

General Meeting: February topic: Kerry N6IZW will present Fun With Optics

Membership Report: Presented by Al W6GNI

Current membership 373, sent 44 renewal reminders and received 17 renewals

Old Business:

1. Recognition for key players.
2. Projects/Programs for upcoming meetings – Discussed regularly listing our meeting topics with other clubs (more interaction with other clubs in the area is desired).
3. Insurance – We now have insurance with our original carrier at a competitive rate and have received a refund for overpayment.
4. PMVFD Tower – No progress has been made on getting them back on the air after the snow took down the antenna.

New Business:

- 1) Internet Member renewal – Paul KB5MU to look into adding a Paypal button on the PARC website to facilitate Member renewals online as well as donations.
- 2) Disposition of old trailer at repeater site – Paul KB5MU will post a notice at or near Mother's Kitchen to find a buyer for the old trailer

Place of next Board Meeting: Al Donlevy W6GNI. Motion to Adjourn made by Dennis KD6TUJ and seconded by Tom KG6RCW. *

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amateur radio license. Those who desire to serve and be deployed in drills and disasters should have the following qualities:

A sincere desire to serve the public in San Diego and Imperial Counties

A good attitude is as important as emergency communication skills

A willingness to promote San Diego ARES. Remember that when we participate in an ARES event, that we represent the group as a whole. If we do a great job as individuals, the served agency will have a favorable impression of ARES as an organization.

A willingness to attend meetings and training courses on a consistent basis

The ability to follow directions and work in a structured environment

Flexibility when deploying during drills or a disaster

A willingness to work as a team member, good judgment and attention to detail.

The understanding that San Diego ARES has required policies and procedures that must be followed: for safety reasons, as a matter of law, to comply with the Incident Command System and the National Incident Management System”

For additional information or to access our membership application, visit www.sdgares.net *

Source for Tubes

While looking for some transmitting caps for a ham friend's project, I stumbled across this web page

www.virhistory.com/ham/rrab/parts.htm

Dennis N6KI *

An Afterlife for AMSAT OSCAR 16

by Paul Williamson KB5MU

The AMSAT OSCAR 16 spacecraft, one of the four 1200-baud Microsats launched in January 1990, has recently been given a new life as a single-channel voice repeater. It had been in a standby mode for several years, since a memory failure knocked the store-and-forward software system (the "BBS") offline. In this mode it could be used as a simple digipeater, enabling some communications to continue, but most digital satellite users were more interested in the later 9600-baud satellites. Then in mid-2007, AO-16 went silent entirely, for unknown reasons. Unfortunately, the AO-16 command team was disorganized and moribund, so no immediate attempts were made to recover the satellite.

Around the end of October 2007, Drew KO4MA, AMSAT Vice President of Operations, organized a reconstituted command team for AO-16, tapping into the expertise of several of the old guard while relying on the fresh energy of Mark, N8MH, who served as the primary command ground station for a new recovery effort. Mark transmitted a number of reset commands to AO-16 and it came back on the air.

When AO-16 is given a hard reset, it comes up in a special mode. This mode doesn't do much beyond allow more complicated software to be uploaded to the spacecraft's computer in a bootstrapping procedure. When Mark attempted to upload the next level of software, it ran for only a few seconds and then failed again. This suggested problems with the computer memory, so Mark ran a series of memory tests. This confirmed that the memory on AO-16 is no longer functional, which means that any kind of computer-controlled mode is no longer possible. Since AO-16 is designed as a digital satellite and has no linear transponders on board, its mission as originally designed is now over.

The Microsat design incorporates five
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receivers and two transmitters. In normal digital operation, one transmitter is active and it transmits a PSK-modulated data stream created by the onboard computer. The receivers are all active, and in normal operation they receive Manchester-encoded FM data streams from ground station modems, and feed each data stream to the onboard computer. In this mode, there is no connection between the receivers and the transmitter. The main computer receives and transmits according to a set of digital packet radio protocols for store and forward message exchange. Since the main computer is no longer working, that mode can no longer be used.

Fortunately, there is a simple test mode built into the radio module of the Microsat spacecraft. This mode connects the output of one of the receivers to the input of the transmitters, bypassing the data modems (and the main computer) entirely. This mode has now been enabled. This turns AO-16 into a single-channel analog repeater of a somewhat peculiar type.

Because the uplinks are intended to be Manchester-encoded FM data, the receivers are FM receivers. So the analog uplink must be FM. However, the downlink is not FM. The PSK transmitter, fed with an analog signal in this way, produces a double-sideband signal. That's like an old-fashioned AM signal, but with little or no energy in the carrier. It can be received with a single-sideband (SSB) receiver, using either USB or LSB.

Preliminary testing indicates that AO-16 can support this mode indefinitely, but it should still be considered experimental. Watch the AMSAT News Service bulletins for updates on availability. See the article to the right in order to learn how to make use of AO-16's bonus life. *

Using AO-16 in Analog Mode

by Paul Williamson KB5MU

Uplink:

145.920 MHz FM

fixed frequency

5 to 10 watts needed

no-gain omnidirectional antenna OK

Downlink:

437.026 MHz SSB (USB seems better than LSB)

plus or minus Doppler shift of up to 9 kHz

small yagi antenna preferred; omni might work

no elevation rotor needed: fixed 20-degree elevation OK

LISTEN and hear the satellite before you transmit. The tricky part is keeping up with the rapid Doppler shift on the downlink. A computer and satellite tracking software can help with this, but it's very possible to do it by hand. Tune high at the beginning of the pass, between 437.026 and 437.035, until you hear the signal. Then tune down as the signal shifts, just try to keep it sounding intelligible. You'll end up between 437.017 and 437.026 at the end of the pass. You don't need to tune the transmit frequency at all. Just leave it on 145.920 MHz.

The satellite has been crowded in the first few days of operation. Stick to short contest-style QSOs if there are many stations active.

Pass times are currently between 2:30 and 7:00 in both the morning and the afternoon. Use a satellite tracking program or use the "Passes" button on www.amsat.org to compute predictions for your location. An overhead pass is about 15 minutes long. Most useful passes don't go directly overhead, and those passes are shorter. *

Technical Committee Meeting
February 6th
7:00pm Carlsbad Safety Center

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

All club members that are either already on the technical committee or are interested in being on the technical committee are invited to attend.

The purpose of the meeting is to gather input on all current, ongoing, and future projects including but not limited to improvements to the repeaters and repeater site.

The input will be prioritized and work will be assigned through regular Saturday/Sunday work parties that will begin in April 2008. These work parties will be held on the weekend following the general meeting. Goals for each work party will be announced at the general meeting, in the SCOPE, and on the website.

Site improvements, technical challenges, repeater maintenance and improvement, exploration of new technologies, and technical services provided to club members are subjects expected to be discussed at this and future technical committee meetings. See you there! *

Meet the 2008 Board

SCOPE Editor Michelle W5NYV

Born in North Dakota, grew up in Arkansas, trained in engineering, moved to California in 1996 to work for Qualcomm, trained some more in engineering, and retired from Qualcomm in 2001. I have a 6-year-old, a 4-year-old, and a 20-month-old. I'm extremely lucky to have a very supportive family. I enjoy engineering and amateur radio projects very much and am currently learning more about PIC microcontrollers. *

Meet the 2008 Board

Repeater Site Chair Mike Pennington, K6MRP



I was born in Whittier Ca. I have lived in Valley Center for the past 25 years. I retired from Pacific Bell in 2003 after 36 years as an installer and communications technician.

My interests are doing projects around the house which are never-ending, amateur radio, shooting, jeeping, sailing and traveling when time allows.

I have been doing work at the PARC site on Palomar since 1993. The ATV relay link from Palomar to Santiago Pk is located and maintained at my QTH. At this time it is being rebuilt by Art KC6UQH for a different input/output and better performance.

As soon as weather permits we will again have monthly work parties at the PARC site. There is much that needs to be done and plans are already scheduled as to when, where and how. The work parties will be announced in the Scope. Hope to see you there.

Mike K6MRP *

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

(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.

24 GHz Activity Day Report

Ed Munn W6OYJ

On Saturday January 19th, from Mt Soledad DM12ju, I used a modified Pcom with about 100 mW and 24 inch Pcom dish, and worked the following stations on 24 GHz narrowband:

K6JEY, Signal Hill DM03WT, ssb mode, Doug's signal 5x9+, dx 135 km
W6QIW, Secret Site 51 DM04TI, cw mode, Steve's signal 549, dx 200 km
N6RMJ, Huntington Beach DM03XQ, ssb mode, Pat's signal 5x9+, dx 117 km
KC6QHP, Signal Hill DM03WT, cw mode, Tony's signal 549, dx 135 km
Then my cw key fell and yanked its connector off, so I was no longer able to provide a carrier for dish aiming. As I was leaving Mt Soledad I discovered N6TEB operating about 100 yards east of my earlier location with gear for 5, 10 and 4 GHz, and many uhf/vhf bands.

There was a contest that weekend but I was not participating in it. Instead, some of the San Bernardino Microwave Society members scheduled a "24 GHz Activity Day" on Saturday. This was to take advantage of the relatively dry air with lower transmission losses, and the fact that several members have recently assembled gear for the 24 GHz Amateur band. 73s and Thanks to all those who were active that day.

Ed Munn, W6OYJ ✱

Special Event 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. ✱

Contest Corral

NCCC Sprint	0330Z-0400Z, Feb 1
Vermont QSO Party	0000Z, Feb 2 to 2400Z, Feb 3
YL-ISSB QSO Party, CW/RTTY	0000Z, Feb 2 to 2359Z, Feb 3
10-10 Int. Winter Contest, SSB	0001Z, Feb 2 to 2359Z, Feb 3
NCCC Sprint	0330Z-0400Z, Feb 2
YLRL YL- OM Contest, CW	1400Z, Feb 2 to 0200Z, Feb 4
FYBO Winter QRP Sprint	1400Z-2400Z, Feb 2
Minnesota QSO Party	1400Z-2400Z, Feb 2
AGCW Straight Key Party	1600Z-1900Z, Feb 2
Delaware QSO Party	1700Z, Feb 2 to 0500Z, Feb 3 and 1300Z, Feb 3 to 0100Z, Feb 4
Mexico RTTY International Contest	1800Z, Feb 2 to 1759Z, Feb 3
North American Sprint, CW	0000Z-0400Z, Feb 3
ARCI Fireside SSB Sprint	2000Z-2359Z, Feb 3
RSGB 80m Club Championship, SSB	2000Z-2130Z, Feb 4
ARS Spartan Sprint	0200Z-0400Z, Feb 5
NCCC Sprint	0330Z-0400Z, Feb 8
CQ WW RTTY WPX Contest	0000Z, Feb 9 to 2400Z, Feb 10
New Hampshire QSO Party	0001Z, Feb 9 to 0001Z, Feb 11
NCCC Sprint	0330Z-0400Z, Feb 9
Asia-Pacific Spring Sprint, CW	1100Z-1300Z, Feb 9
Dutch PACC Contest	1200Z, Feb 9 to 1200Z, Feb 10
KCJ Topband Contest	1200Z, Feb 9 to 1200Z, Feb 10
YLRL YL- OM Contest, SSB	1400Z, Feb 9 to 0200Z, Feb 11
Louisiana QSO Party	1500Z, Feb 9 to 0300Z, Feb 10
OMISS QSO Party	1500Z, Feb 9 to 1459Z, Feb 10
British Columbia QSO Challenge	1600Z, Feb 9 to 0359Z, Feb 10
FISTS Winter Sprint	1700Z-2100Z, Feb 9
RSGB 1st 1.8 MHz Contest, CW	2100Z, Feb 9 to 0100Z, Feb 10
North American Sprint, SSB	0000Z-0400Z, Feb 10
SKCC Weekend Sprintathon	0000Z-2400Z, Feb 10
ARRL School Club Roundup	1300Z, Feb 11 to 2400Z, Feb 15
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Feb 13
RSGB 80m Club Championship, Data	2000Z-2130Z, Feb 13
NCCC Sprint	0330Z-0400Z, Feb 15
ARRL Inter. DX Contest, CW	0000Z, Feb 16 to 2400Z, Feb 17
Feld Hell Sprint	1500Z-1700Z, Feb 16
Run for the Bacon QRP Contest	0200Z-0400Z, Feb 18
AGCW Semi-Automatic Key Evening	1900Z-2030Z, Feb 20
RSGB 80m Club Championship, CW	2000Z-2130Z, Feb 21
NCCC Sprint	0330Z-0400Z, Feb 22
Russian PSK WW Contest	2100Z, Feb 22 to 2100Z, Feb 23
CQ 160-Meter Contest, SSB	0000Z, Feb 23 to 2359Z, Feb 24
REF Contest, SSB	0600Z, Feb 23 to 1800Z, Feb 24
UBA DX Contest, CW	1300Z, Feb 23 to 1300Z, Feb 24
Mississippi QSO Party	1500Z, Feb 23 to 0300Z, Feb 24
North American QSO Party, RTTY	1800Z, Feb 23 to 0600Z, Feb 24
High Speed Club CW Contest	0900Z-1100Z, Feb 24 and 1500Z-1700Z, Feb 24
North Carolina QSO Party	1700Z, Feb 24 to 0300Z, Feb 25
SKCC Sprint	0100Z-0300Z, Feb 27
NCCC Sprint	0330Z-0400Z, Feb 29

PARC and PARC Affiliated Repeaters

Frequency	Tx	Tone	Call Sign	Remarks
52.680	-	107.2	W6NWX	
146.730	-	107.2	W6NWX	Autopatch; see note 1,
147.075	+	107.2	W6NWX	Autopatch; see note 2
147.130	+	107.2	W6NWX	Autopatch; see note
447.000	-	107.2	W6NWX	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	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	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 tthompson@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
President - Steve Early	AD6VI	619-461-2818 ad6vi@amsat.org
Vice President - Dennis Baca	KD6TUJ	
Secretary - Loren Hunt	AD6ZJ	
Treasurer - Bob Birch	KG6RGI	
Director - Paul Williamson	KB5MU	858-571-8585 kb5mu@amsat.org
Director - Tom Martin	KG6RCW	
Scope Editor - Michelle Thompson	W5NYV	858-229-3399 w5nyv@amsat.org
Repeater Chair - Mike Pennington	K6MRP	mrpenni@pacbell.net
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-58 (for RG58, RG8X & similar cables up to ¼" dia. \$8.50+tax+\$8 S&H/order

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

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This month's General Meeting will be held on February 6th, 2008 (The first Wednesday of each month) at the Carlsbad Safety Center. This month the program is about laser communications. 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)