

Palomar Amateur Radio Club

Volume XXXI No. 11

November 2004

November Meeting Handyhams

We are honored for a presentation on the subject of "Handyhams". Have you ever considered how ham radio allows handicapped people to enjoy the benefits of the hobby, and a window on the world non-handicapped enjoy? Come and learn about yet another facet of ham radio of which many of us are unaware, and that means so much for the handicapped members of our hobby. The presentation will be made by KG6FIX (Marc) who is a handyham, and a PARC member.

73 de NN3V

Inside this issue:

Contest Coral	2
PARC Repeaters	3
Committee Chairs / Net	3
Board Meeting Minutes	4
Calendar of Events / Nets	5
For Sale	6
VoIP and Amateur Radio	8
Crossword Puzzle	9
Hiker's Net News	10

President's Message

Please accept my **heartiest wishes for a joyous Thanksgiving**. It is amazing how quickly time has passed since the dawn of the New Year, and we are now ready to start that most enjoyable season of family traditions. Please take a moment to enjoy all that is around you. Family, friends, and the friendship of ham radio.

Did you make it to the PARC auction? I hope you left with at least one treasure! If not, then I sincerely hope you were at least able to attend the auction and enjoy the camaraderie and fun we always have during the event. We all owe a tremendous debt of gratitude to KC6UQH for his invariably superb and enjoyable performance as the auctioneer. Having been a member of several ham clubs across the

country, and having enjoyed similar events at each club, I can assure you there are few people around who can have so much fun selling other people's "junk" as new owners' treasures. WELL DONE ART!

Did any of you notice that Scope transitioned to our new editor without a whimper? **Nicely done Michelle (W6MYP), and the crew who made the transition a painless event.**

On behalf of all the Club's members, Michelle please know we appreciate your service ensured the uninterrupted availability of "Scope" which is such an important part of the Club's activity.

As mentioned at last month's meeting, the PARC Board Of Directors ap-



pointed a Nominating Committee to search for candidates to run for election to PARC officers, and the Board Of Directors for the 2005 Calendar Year term. The nominating committee consists of KC6UQH (Art), WN6K (Paul), AC6V (Rod), and NN6X (Paul). This is a great opportunity for PARC members wishing to add their influence to the way PARC operates. **If you are imbued with the**

(Continued on page 2)

Repeater Interference

Over the past 2 months several PARC members have questioned what can be done about the recent increased interference on our repeaters, principally the 146.730 MHz repeater. The preponderance of the complaints or comments heard on the 146.730 repeater are associated with other repeaters in the So Cal area, and a potential that they are not well coordinated.

The PARC Board initiated an inquiry into past coordination of the 146.730 MHz repeater frequency. The inquiry revealed that TASMA (charged with coordination of SoCal 2 meter repeaters) has a fragmented set of records regarding our 2 meter repeaters, and the Club's records, while far more comprehensive than those available to TASMA, also show uncertainty as to the precise

coordination directions that may have existed some 15 or so years ago.

The Board is interested in resolving any interference issues through the normal resources available to ham operators, as governed by FCC Part 97, local coordination organizations, and the simple rule of amateur courtesy.

(Continued on page 7)

(President's Message Continued from page 1)

spirit of volunteerism, now is the time to act with alacrity and contact the nominating committee in order to be among nominees for office.

The salary for the positions is impressive, and the privileges are unique!

More or less in parallel with the November Presidential elections, but certainly without the euphoria of the Presidential shouting matches (debates), PARC elections will take place at the December meeting. Make sure you vote well (and do not vote often!). KC6UQH guarantees there will be no Chad issues in our elections!

Please come to the November meeting prepared to spend a few minutes chatting about our December meeting. Our December meeting is traditionally dedicated to the spirit of the season, and to a celebration of the very American tradition of Christmas. Some of you have asked that we spruce this event up a little. Would you like to have some fun? Perhaps PARC should consider some innovative ways of celebrating the season amongst our members. I know there are some exceptional treasures waiting to be exchanged for Christmas, and maybe have a blind gift exchange hoping to also enjoy some silliness in the process.

Last but not least, please read elsewhere in this Scope the effort the PARC Board Of Directors is starting I order to document repeater performance. Your assistance will be valuable.

73 de NN3V

P.A.R.C. Inc (2004 Board)

Pres: Charlie Ristorcelli **NN3V**
858.676.3307 NN3V@amsat.org

VP: Dennis Baca **KD6TUJ**
760.722.0251 KD6TUJ@amsat.org

Sec: Dick Kalkofen **K6KAL** 760.519.0670
K6KAL@amsat.org

Treas: Jo Ashley **KB6NMK**
760.741.2560 KB6NMK@amsat.org

Dir#1: Merle Risdon **KR6BT**
760.941.0213 KR6BT@amsat.org

Dir#2: Steve Early **AD6VII**
619.461.2818 AD6VII@amsat.org

Repeater Site:
Michelle Thompson **W5NYV**
858.229.3399 W5NYV@amsat.org

Membership:
Al Donlevy **W6GNI**
760.630.3096 W6GNI@amsat.org

New Member:
John Earnest **KG6EQU**
858.484.8579 KG6EQU@amsat.org

Repeater Technical:
Mike Doyle **AB6QT**
760.742.1573 AB6QT@amsat.org

Contest Coral

Nov 6 ARRL Sweepstakes, CW
Nov 6 Ukranian DX Contest
Nov 6 Collegiate Club Contest, CW
Nov 7 DARC 10 Mtr Digital Contest
Nov 13 WAE DX Contest, RTTY
Nov 13 Japan International DX, SSB
Nov 13 OK/OM DX Contest, CW
Nov 20 ARRL Sweepstakes, SSB
Nov 20 LZ DX Contest
Nov 20 Austrian DX Contest, 160 Mtr
Nov 20 Collegiate Club Contest, SSB
Nov 20 RSGB 2d 1.8 MHz Test, CW
Nov 27 CQ WW CW Contest
Dec 2 ARCI Top-Band Sprint
Dec 3 ARRL 160 Meter Contest
Dec 4 TARA RTTY Melee
Dec 11 ARRL 10 Meter Contest

What you see is what you get: A little bit of everything. CW, SSB, RTTY, Top Band, you name it. You can tell the days are getting longer with the increase in 160 meter activity. Don't miss the ARRL Sweepstakes, it's always lots of fun. All 50 states and 8 Canadian provinces will be on and the challenge is to make a "clean sweep", that is to work at least one station in each. No matter how many Q's you rack up, it's not for sure that you'll collect all 58 multipliers. Complete rules are in QST, CQ, NCJ, and Worldradio magazines. CU in the Contest. 73, Harry/W6YOO

RF PARTS Company

From MILLIWATTS to KILOWATTS

435 South. Pacific St., San Marcos, CA 92078

RF POWER TRANSISTORS - TUBES - POWER MODULES

3-500ZG - 811A - 572B - 4-400A - 6146B & W - 8072 - 8560AS

3CX400A7 - 3CX1200A7 / D7 / Z7 - 3CX1500A7 - 3CX3000A7

4CX250B & R - 4CX400A

Complete Inventory for servicing Amateur and
Commercial Communications Equipment

Transistors - Modules - Diodes - Relays - Trimmers - Capacitors

Heatsinks - Transformers - Chokes - Combiners - Wattmeters - Books

Merit W6NQ - Gary K6CAQ - Steve K6NDG - Doug K6DRA - Rob WA6GYG

760-744-0700

An address to remember:

www.rfparts.com

e-mail: rfp@rfparts.com

Send for your FREE 2004 Catalog or visit our website.

PARC RepeatersPalomar Mt. Repeaters (W6NWG)**PARC Trustee: AB6QT*****52.680- W6NWG, -0.5 MHz****Autopatches:****146.730-, 147.075+*****147.130+, *447.000-****PKT:****145.050s (PALOMAR/W6NWG -1)****146.700- (Duplex Pkt) PALBBS/EMG**
use**145.070/146.7- (W6NWG -3/PALBBS)****ATV"IN":****915 wbfm, 2441.25 wbfm****ATV "Output"****1241.25 MHz am****Intercom:****146.415 PL 79.7 nbfm****Affiliated:*****224.38- & *224.94 KK6KD (HARS)*****447.05- & *145.26 KK6KD (HARS)*****146.175+ N6FQ(Fallbrook ARC)****Linked to*****445.600 MHz (-)*****224.90- WD6HFR (Corvair/220 ARC)****446.14- WB6FMT (123.0) Vista***** = 107.2 Hz PL Tone****Committee Chairpersons**

ARESinfo	Dennis S	K7DCG@amsat.org
Attendance	Al	W6GNI@amsat.org
ATV	Art	KC6UQH@amsat.org
Auction		AD6VI
Badges new	Al	W6GNI@amsat.org
Batteries	David	KD6EBY DAT@Gerry.Palomar.caltech.edu
BBS Monitor	Bill B	N6FMK@amsat.org
Billing:Ads/etc	Lyell K	K6GVM@arrl.net
Contest Info	Dennis V	N6KI@amsat.org
Control Ops	-filled	N6NWG@amsat.org
Del Mar Fair		
Emergency QTH's (Emergency Com Centers)		
Harry H	W6YOO	W6YOO@amsat.org
Dennis V	N6KI	N6KI@amsat.org
Field Day	Charlie R	NN3V@amsat.org
Field Day Tech	John K	WB6IQS@amsat.org
Inventory	Dennis B	KD6TUJ@amsat.org
New Members	John E	KG6EQU@amsat.org
Nets		
Newsletter	Michelle P	W6MYP@amsat.org
PALBBS Pkt	Bruno H	KF6QDP@amsat.org
Patch Info	Stan R	W9FQN@amsat.org
PatchETronics	Jerry H	WB6FMT@amsat
Picnic		
Power AC/DC	Mike P	KD6VHI@amsat.org
Programs	Dennis B	KD6TUJ@amsat.org
Publicity		
QSL Cards	Merle R	KR6BT@juno.com
RACES Info	Jo A	KB6NMK@amsat.org
RED Flag		
Repeater Site	Michelle T	W5NYV@amsat.org
Repeater Skeds		
SANDARC		
Seller Table	John K	WB6IQS@juno.com
Assistant SW Div Dir		
Tech Site	Mike D	AB6QT@amsat.org
Testing VE	Rusty M	DuneDancer@cox.net
Training		W6NWG@amsat.org
Trustee W6NWG	Mike D	AB6QT@amsat.org

Net Managers

ARES Sun	Dennis	K7DCG
ARES 6m	David D	KC6YSO@amsat.org
Ham Help Net	David D	KC6YSO@amsat.org
Hiking	Ed	KF6DXX@juno.com
	Glenn P	KE6ZLY@juno.com
MARA	Cathy	KE6IQU W6NWG@amsat.org
Microwave	Kerry B	
Off Road	Jerry A	jwak6pfp@cts.com
	Dick W	KA7AYTrwillimek@home.com
Sailors	Paul	NN6X@amsat.org
	Rod	AC6V@amsat.org
Traffic SDCTN	Charles	N6TEP cmiele@juno.com

de AB6QT

To all PARC Repeater users:

Please let me know by TELEPHONE 760-742-1573 or EMAIL (ab6qt@amsat.org) if you learn of any of our club repeaters failing to operate. I was made aware during a recent board meeting that the 147.130 repeater had been OFF the AIR for 2 WEEKS!. If I don't know it's broken, I can't fix it!. My Phone number is listed next to my callsign on every issue of the SCOPE under the list of club officers. Thanks!. It has been repaired for now, but the problem is intermittent and I expect it to return.

73 de AB6QT.

Minutes Palomar Amateur Radio Club Board of Directors October 13, 2004

The meeting was called to order at 7:01 PM by NN3V at the home of NN3V.

President, Charles Ristorcelli, NN3V
Vice President, Dennis Baca KD6TUJ
Secretary, Dick Kalkofen, K6KAL
Treasurer, Jo Ashley, KB6NMK
Director Steve Early, AD6VI
Director Merle Risdon, KR6BT

Membership Chairman, Al Donlevy, W6GNI
New Member Ex-Officio, John Earnest, KC6EQU
Repeater Tech Chair, Mike Doyle, AB6QT
(by Phone)
Repeater Site Chair Michelle Thompson, W5NYV

Treasurer's Report of 08/31/2004

Jo, KB6NMK has submitted the Treasurer's Report for review by the board. Al, W6GNI moved that the report as submitted be approved, and was seconded by Steve AD6VI. The motion carried.

Secretaries Report

The minutes were distributed to the board and scope editor. Dennis, KD6TUJ moved that the minutes as distributed be approved, and was seconded by Steve, AD6VI. The motion was carried.

Discussion Items

Dave, KC6YSO made a proposal by email, to update the Preamble as read on all Parc nets. Using a draft copy of the Ham Help Net Preamble to "basically a cleanup of an old copy I have which was dated 9 Jul 96. Abbreviations have been expanded and the Net List updated as best I can." The board will review this update and re-distribute to all Net Control operators when approved by the Board.

There was a discussion of the interference on the 146.730 machine. After a brief review of old documents retrieved from storage, it was agreed to pursue the issue on several fronts. One task will be the collection of specific interference incidents and the other by Charlie, NN3v to draft correspondence to Tasma sharing the old documents we have found, and questioning the status of our last coordination. There will be more information about this published in the Scope.

Another topic was presented by Michelle, W5NYV as an update on the repeater site. To make a long story short, the trees tagged by the forestry service for removal were felled, by a crew she located working in the area on other properties. The other trees were limbed to 10 feet, to comply with new ordinances. She indicated that the club was able to take advantage of a grant

for the chipping work and will follow up on all work performed.

Steve, AD6VI gave a brief review of the Auction, which was well received and a good time had by many. Merle, KR6BT reviewed the Picnic, where a fun time was had, with great weather and a fine location.

Mike, AB6QT questioned the request he submitted for a container for the repeater site to serve as a workspace for repairs and some storage where the trailer once was. Michelle, W5NYV was able to determine that there are no local laws or ordinances that would prohibit 'Small' (20 Ft.) container at the site.

Steve, AD6VI reported that he was able to review our plan to use the "147.075" machine for 'Echo Link'

(Continued on page 10)

HAM
RADIO
OUTLET

H
R
O

Tom KM6K
Ron N6OMW
Jose XE2SJB
Bob KA6EKT

KENWOOD
rf CONCEPTS
DIAMOND
US TOWERS
KANTRONICS
YAESU
MFJ, ICOM
BENCHER, Inc.
HUSTLER
COMET
AMERITRON

Astron,
AEA,
OUTBACKER
Larsen Antennas
TEN-TEC
hy-gain, Tri-EX,
cushcraft
and
others too
numerous to
mention!

Drop in to see our display of working equipment.
Find out about Pkt location determining equipment (APRS).
Check our complete line of magazines, ARRL books, license manuals, and Bulletin Board with all sorts of goodies listed.

Open: 10a.m. - 5:30p.m.
Monday thru Saturday
858 560-4900 or toll free 1-800-854-6046

Ask about our great prices

Dec98

Directions: On 163, take **Clairemont Mesa Blvd.** off ramp to East. Stay in right-hand lane. Turn right at stop light. As you are turning right you can see our beams in the shopping center. Travel 100 yds. on Kearny Villa Rd. and U-turn back to shopping area and **HRO** sign. Be sure to see our equipment in action on **real** antennas.

November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 Club Meeting	4	5	6
7	8	9	10 Board Meeting	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

If you would like to include information for the calendar, please send an email to:
SCOPE@palomararc.org

Schedule of Events

- November 3—Monthly PARC Meeting
- November 10 Board Meeting

PARC NETS

Sunday 0830 146.730 ARES
Sunday 1000 146.730 Sailors Net
Sunday 2045 146.075 MARA Emergency Services
Monday 1915 146.730 RACES Sub-Net
Monday 2100 146.730 Microwave Net
Tuesday 2100 146.730 Off-Road Net
2nd Wednesday 2100 146.730 PARC Board Net
Thursday 1930 147.075 Young Hams Net
Thursday 2100 146.730 Ham Help Net
Friday 2100 146.730 Hiker's Net
Saturday 2000 52.680 6 Meter Ares Net
Tue/Thu/Sat 2000 146.730 NTS Traffic Net (SDCTN)

Last Month

Goodie Table



KE6ZLY
K3PXX
N6ISC

Glenn
Terry
Paul

Club Membership

New Members Joining PARC:
KI4GVB, W6UYW, N6VNW, AE6LT,
 and **KG6QXO.**

Be sure to greet these new members when you see or hear them on the repeaters. In addition, we had 1 reinstatement, and several two-year renewals.

Worry about the time it takes for the deposit of your membership check? We pick up mail from our Post Office Box at least once a week, and the membership list is updated at that time. Checks are generally deposited soon after the monthly club meeting. (Your chance to "play the float!" Please be sure to check your SCOPE mailing label each month, you may find your expiration date has been updated, even before your check has cleared.

Especially watch for the Green "Please renew now" and avoid the dreaded Red "Last Issue" on your label. "Last Issue" means your membership expires within a few days. Al W6GNI

Fold & Staple Crew



KR6BT Merle
KB6NMK Jo &
KB6YHZ Art
W6GNI Al &
W6YOO Harry
N6UZH Terri

KG6AEW Bill
Toby
K6ML Jim
Kathy
KE6DUG Rich

For Sale

(9.10) Hustler Mobile Antenna Mast with resonators for 11, 20, 40, & 80 Meters. \$30. Tokyo Hi Power Manual Antenna Tuner, HC-150 \$75. Wanzer Co "Z" Match Tuner, 300W \$75. Atlas DL-300 52 Ohm Dummy Load (like small Cantenna)

w/cooling oil \$15.00. Low Pass Filter (great for 6 Mtr Ops), Yaesu FL-2100B Linear Amplifier, \$300.00. All From Estate of KF6QQ. Call Harry, W6YOO at 760-743-4212

(9.10) For Sale: 2 each, Kenwood 144 MHz FM Transceivers, Model TM-241A \$100.00 each (they include mobile mounting brackets). 2 each Astron Power Supplies, Model RS-20A, \$70.00 each. 1 Kenwood external speaker for mobile radio, \$25.00 Call Harry, W6YOO, 760-743-4212

((9.3) WWII Military surplus HF receiver, transmitter and power supply (three separate units) to go to a good home or to be salvaged for parts. The transmitter puts out about 30 Watts, and all gear work last time it was fired up. Runs off 115 VAC. Frank Burns W6KGG 723-1792.

(9.4) Wilson Hand Held Mark IV Transceiver. Good radio to monitor channels on. Asking \$25. 4 Element 10 Meter YAGI beam. All stainless hardware with W2 DU beam balun. Like new works great \$75. Please contact Bayard K6GAO 858-755-5507

(9.5) Drake C Line T4CX with DX Eng RF Speech Proc, R4C with all filters and NB, MS4/AC4 Speaker/Power Supply, L4-B 2 KW Amp. Contact Dennis N6KI. N6KI@earthlink.net for details and price 858-271-6079

Personal equipment ads are free to members and could be "bumped" after 3 mo. Make up your ad like the ones below and send to the email address below **before the 18th of each month.**

Commercial Ads in big boxes: \$2/col. inch/mo. We will "squash" your copy to the number of inches bought.

SCOPE@palomararc.org

(9.6) Wilson TT-45 45' Tower, free standing galvanized, raising and tiltover fixture, rotor bracket, \$250. Qubex 4 el. Quad, 10,15,&20m, \$150. HY-GAIN Rotor, w/control and manual, \$100. Remote switch, 6 pos, \$100. SwanLinear 1500Z, 1500w, \$400. Heath Tuner SA-2040w pep, w/manual, \$150, Kenwood 2M TR-7330, w/ARX2 ant. \$200, Astro PS7A ps, \$30. Palomar SWR/PWR meter \$50, 1KW Dummy Load \$10, Swan SWR meter, \$20,

Sigma 5 portable multi-band vertical, used very little, \$125. Spider HF multiband portable/mobile, with attachment claw, \$50. Hustler mobile with 17, 20, 40M resonators, \$40, 2M mag. mount, \$5. W3LFR, 858-774-0733 days, 858-780-9593 eves.

(8.3) Hallicrafters HA6 (6 Meters Transverter) \$30.00, CushCraft AR-2 2 Meter Ringo Antenna \$15.00, Knight Kit R55a Receiver \$45.00, Knight Kit Span Master Receiver \$35.00. Jerry Kopack, KF6MYE 760-436-6238 or JKopack@DIRECPC.COM

(8.5) FREE - QST 1994 to present. Ivan, W6TET (858) 273-0219

(7.1) Yaesu VX-5 for sale. Like new. I have programmed in all of the S. D. repeaters I know. For scanning I also programmed the aircraft freq's and the Boating channels. Still have the box etc. \$200.00 firm. K6ROQ - - Paul

(7.4) Astron AS-7 Power Supply \$20.00, Celestron C8 Catadioptric Telescope with Heavy Duty Tripod, Planetary motor drive, X2 Barlow Lens - Spotting Scope w/manuals & misc oculars \$800.00, 2 B&W security monitors (New) \$10.00 each, Galaxy Electronics Phone Patch PR550 w/manual \$25.00, Cushcraft R-7000 Vertical \$140.00, Panasonic Stereo Earphones Model RP-HT12 (New) \$3.00 each, Panasonic Super Compact Blank Video Tape ST-C30 (New) \$3.50 each, Tape Head cleaners, Camera power supply's ETC., other items too numerous to list. Micronta Large display clock w/battery backup \$15.00, Miniature TV Camera \$30.00, Treadmill ¾ HP \$60.00, Avenger 4000 Commercial alarm system, 6 PIR's Digital Pad, Ultrasonic, 2 Sirens, \$200.00. Realistic DX-400 General Coverage Receiver - digi-

The NiCad Lady Co. O.E.M. Assembly Rebuilds Batteries-Lead Acids Replacement Packs

20585 Camino Del Sol Unit B (909)653-8868
Riverside, CA 92508 Fax (909)653-5189
www.nicdlady.com email: nicdlady@nicdlady.com

PACE coax 3 pos sw \$5, DAIWA 2 pos sw \$5, Low Pass filter \$5, CUBIC AS-TRO 103 Xcvr.w/ps \$300, CUBIC AS-TRO 150A, 100w 10-160m ext ps \$300, Kris W6KTE 760-941-3555.

(8.1) !COM-756 PRO II HF/6m all mode, Like New in original box. Manual and accessories included. A real Bargain at \$1,750, Allan AE6AN (w) 858-566-9829 (h) 858-481-1880

(8.2) Cushcraft MA5B 5 band mini HF beam. Never installed, partially assembled/painted, \$250. Force 12

(Continued on page 7)

(Continued from page 6)

tal Tuning \$100.00, Rotating Amber 12 volt Emergency Vehicle Light, \$20.00, Contact K7DCG @ 858-748-9046 or K7DCG@ARRL.COM.

(10.18) I have a vx-7r with ext antenna and mic for sale for 150.00 can this be put in the scope my ph # is 619-251-6104 Craig Beresh 1 877 777-5492 Team San Diego

(Repeater Interference Continued from page 1)

All of those approaches require that we document the conditions. To do so, the PARC Board requests that members assist us in gathering factual material supporting the concerns expressed concerning interference to any of our repeaters.

To that effect, we've established an email address to receive information that gives us a record of specific interference events.

We ask that any amateur who experiences unusual interference when using any of our repeaters collect data indicating: date of the interference; hour of the interference; frequency and mode that was in use when the interference was experienced; location of the receiver that experienced the interference; specific data about the interference. The latter information should try to describe the kind of interference experienced. For example: complete loss of the repeater signal while knowing a signal remained on the air; intermod sounds; hearing other repeaters on our repeater frequency; etc.

If you desire to assist in collecting this information, the Board requests that such data be sent to the Board.

You may do so either in person at one of the Club meetings, by correspondence to the Club's snail mail address, or through the PARC website by sending email to *the new interference email address that is:* PARCinterference@palomararc.org
73 de NN3V

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 160 m).

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" diameter.
\$15.00 + tax + \$6 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 + \$6 S&H

See catalog at www.Palomar-Engineers.com
Please check our complete ads in **QST**, **73**,
CQ, and **World Radio** magazines.

Web Pages

PARC's Home Page -
<http://www.palomararc.org>

Rod's - AC6V
<http://www.ac6v.com>

ARES Alert Publication
<http://sanarrl.org/alert.htm>

Tom's Hiker's - KF6PAZ
<http://www.fanciful.org/san-diego-hiker>

Echolink
<http://www.echolonk.org>

IRLP
<http://www.irlp.net>

The Friday "Lunch Bunch" de KA6K
www.KA6K.com

Treasurer \$\$\$\$\$

Jo Ashley	KB6NMK@amsat.org
Balance Sheet as of	August 31, 2004
Assets	
B of A Checking	\$2,244.29
CD	\$2,707.85
CD	\$3,423.21
CD	\$2,858.14
CD	\$2,858.20
Post Office	\$97.93
Total	\$14,189.62
Liabilities	
Property Insurance	\$1,800.00
Total	\$9,382.00
Equity	
Total Liabilities & Equity	\$4,807.62

PARC Testing

Carlsbad - 2nd. Saturday at 9:30 am in the Carlsbad Safety center.

Contact Rusty **AA6OM**
760-747-5872 or
dunedancer@cox.net

EARS Testing

Escondido - LAST Saturday at 9:00 am Fire Station #1
Escondido Fire Department
310 North Quince Street
Escondido, CA 92025

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

Register 5-7 days in advance for tests.

de AB6QT

I would like to thank Dan K6NKC for his assistance on Oct 19th at the repeater site. He has shown an interest in learning the technical parts of the equipment at the PARC repeater site. In the past he has been involved with some of the tower work at the site and I look forward to passing on to him my knowledge of the PARC systems.

VoIP and Amateur Radio

Reprinted with permission of the author Steve WB8IMY and the ARRL.

An increasing number of amateurs are putting the Internet to work as a bridge for long-distance voice communication. Discover what the Voice Over Internet Protocol buzz is all about!

From February 2003 QST © ARRL

Continued from October 2004 Scope

Is It Legal?

By Brennan Price, N4QX and ARRL General Counsel Chris Imlay, W3KD

What Part 97 regulations govern VoIP-assisted Amateur Radio?

All of them or none of them, depending on whether you're asking about the "VoIP-assisted" or the "Amateur Radio" part of VoIP-assisted Amateur Radio. Many callers to the ARRL's Regulatory Information Branch over the last few years have focused on the novelty of the Internet when asking questions about the legal uses of certain systems. Such focus is misdirected. Part 97 does not regulate systems; it regulates stations. The Commission doesn't care what a ham has feeding his or her station; it cares that the station—not the Internet, but the station—is properly operated. And all the rules that apply to any Amateur Radio station apply to one that retransmits audio fed to it by VoIP.

Fine, so the Commission doesn't care about the VoIP part. Are there any particular rules a ham considering such an operation should be aware of?

The obvious answer is all of them, but we'll focus on a few that are easy to overlook, particularly for stand-alone, single channel operations. The main points to remember:

- All stations must be controlled.
- Only certain types of stations may be automatically controlled.
- Simplex voice operations do not qualify for automatic control.
- Any station that is remotely controlled via radio must utilize an auxiliary station to execute said control, and auxiliary stations are restricted in frequency. It's not as hard as it sounds. All you have to do is think about the type of station you're operating and how it's controlled. Let's look at a few examples.

Two automatically controlled repeaters are linked via VoIP. Is this legal?

Forget the VoIP linking, because that's the Internet. We're talking about two repeaters. Are repeaters legal? Yes. May repeaters be automatically controlled? Yes. There is no difference between this setup and two repeaters linked by another wired mechanism or by auxiliary stations. Assuming the two linked stations are repeaters, it is difficult to conceive of a situation where a VoIP link would not pass

regulatory muster. The only caveat is that the VoIP software must prevent nonhams from accessing the repeaters from the Internet. The key here is to avoid any configuration that would (1) permit a nonham to key an amateur transmitter without the presence of a control operator, and (2) prevent the initiation by a nonham of a message via an Amateur Station without the presence of a control operator.

Is it permitted to enable automatically controlled simplex nodes?

No. Only certain types of Amateur Radio stations may be operated unattended, under automatic control. This means that there is no human control either at the station location or at a distance. These types of stations are space stations, repeaters, beacons, auxiliary stations and certain types of stations transmitting RTTY or data emissions.

Simplex VoIP nodes are neither repeaters, beacons nor auxiliary stations. Presumably, most are within 50 kilometers of the Earth's surface and are therefore not space stations. The VoIP technology implies a voice transmission, not RTTY or data. Therefore, none of the stations that qualify for automatic control describe a simplex VoIP node, and such a station must be locally or remotely controlled (as any Amateur Radio station is allowed to be).

Locally or remotely controlled—what does that mean?

A simplex VoIP node may be locally controlled by an operator who is present at the node. Such a node may also be remotely controlled at some other point, with the operator issuing commands via a wireline or radio control link. If a radio control link is used, it must utilize an auxiliary station, and such stations are restricted in frequency to 222.15 MHz and above (with the exception of the CW, SSB and amateur satellite portions of the 70-cm band). It's this remotely controlled aspect that allows VoIP simplex nodes to operate legally—as long as they are on the right bands.

Let's consider seven scenarios:

- A control operator is stationed and active at the VoIP node on any frequency. This is a locally controlled station, not at all unlike a typical operation on FM simplex. **This is legal.**
- A control operator communicates with and controls a simplex VoIP node with a handheld, transmitting and listening to the node on 223.52 MHz. This is wireless remote control. Such control must be executed by an auxiliary station and 223.52 MHz is an allowed frequency for such a

(Continued on page 9)

(Continued from page 8)

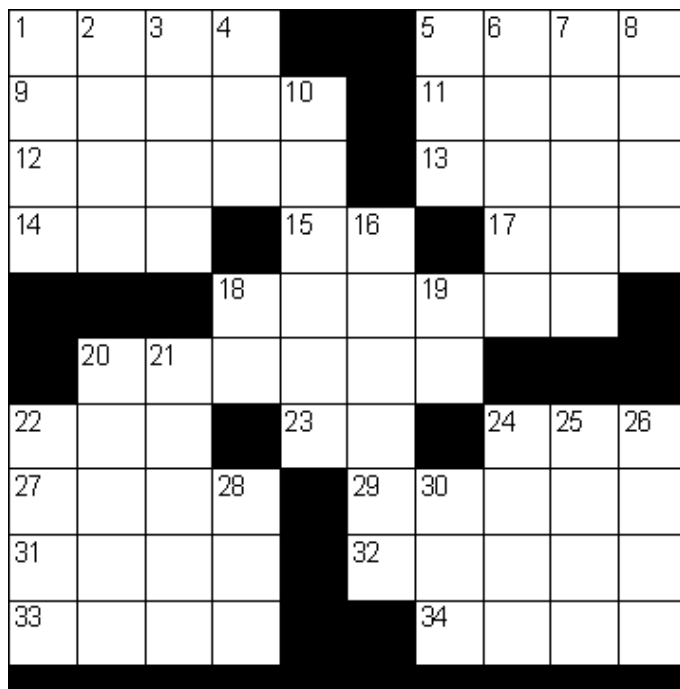
station. **This is legal.**

- A control operator communicates with and controls a simplex VoIP node with a handheld, transmitting and listening to the node on 147.41 MHz. This is wireless remote control. Such control must be executed by an auxiliary station, but 147.41 MHz is not an allowed frequency for such a station. **This operation is not legal.** It may be made legal by locally controlling the node, choosing a control frequency on which auxiliary station operation is permitted, or controlling the node via a wireline link. The next three examples show each option in action.
- A control operator operates a simplex VoIP node at 147.41 MHz and is stationed at the node's transmitter. User stations access the node on the same frequency. **This is legal.** The VoIP node is being locally controlled, and any station may be locally controlled.
- A control operator operates a simplex VoIP node at 147.41 MHz. The control operator continually monitors the node's transmissions and can call a dedicated telephone line or use a dedicated Internet connection to turn the node on and off. User stations access the node on the same frequency. **This is legal.** The VoIP node is being remotely controlled via a wireline connection, and any station may be controlled in this manner.
- A control operator communicates with and controls a simplex VoIP node with a multiband handheld, transmitting to and continuously monitoring the node on 147.41 MHz. He or she sends power on/off commands with the same handheld on 223.52 MHz. This is wireless remote control. Such control must be executed by an auxiliary station, and 223.52 MHz is an allowed frequency for such a station. **This is legal.** The VoIP node is being remotely controlled via an auxiliary station of appropriate frequency, and any station may be controlled in this manner.
- Same configuration as either of the above two situations, except the control operator does not continuously monitor the VoIP node's transmissions. **This operation is not legal.** When a simplex VoIP node is enabled, it must be continually attended, either locally or remotely. A simplex VoIP node is no different than other FM simplex operations, and such operations may not be automatically controlled.

Participation Points 2003 vs. 2004

In 2004, the total Participation Points earned by club members was 1504. This compares with 1358 earned in 2003. This is encouraging, as there were actually fewer members in 2004. So it is apparent that the members are doing more for the club.

At the 2003 Picnic, 37 members signed in, and 456 tickets were given out for the drawing. In 2004, 27 members signed in, and claimed 354 tickets. In each year, a number of family members attended the picnic, but only actual club members signed in to collect drawing tickets. As you can see, the chance of winning something at the drawing at the Picnic is pretty good. Besides, it is a fun function!



Across

- 1 A Ham Digital Mode
5 Finger feeling after a CW contest
9 Computer memory enhancer
11 QRS! horse
12 EchoLink is one of the latest
13 An amplifier has this
14 Telex over radio.
15 Printed Circuit
17 Mark and Space
18 Anti blonde
20 Fall behind in the DX ladder
22 Prepare for triggering
23 WØ State
24 Also known as a Clari fier
27 VEC Question ____
29 The best
31 Reserve Officers Training Corps.
32 Add
33 Hurried
34 In __ (phase)

Down

- 1 Account (abbr.)
2 Old west card game
3 Old wound
4 1,000,000 millihertz
5 Used for wire sizes
6 Gall
7 Raise the tower
8 USA Ham
10 A type of ROM
16 Delete from the log
18 Bachelor of Music
19 WØ State
20 Long Yagi elements tend to do this
21 Express emotions
22 Newer Ham Digital Mode
24 Old Ham Digital Mode
25 Near Iraq
26 Baby powder
28 A type of display propagation in a straight line directly from one station to another.

Crossword courtesy of Rod AC6V

Solution to the puzzle will be available on the PARC Website.
www.palomararc.org
Anyone that does not have internet access can get the solution in next month's Scope.

PARC Hiker's Net News

By Bernie – N6FN

Hiking Garnet Peak

This month, Ed Butler, KF6DXX posted on the hiker net email reflector that he was leading a day-hike to Garnet Peak, which overlooks the desert, from near Mt Laguna. The email reflector is where Hiker Net members post messages and provide details for upcoming hikes.

Mary, Nance and John, all non-hams, joined Ed on October 9th for the hike. Starting at the Pioneer Mail picnic area, just off Sunrise Highway, they followed the Pacific Crest Trail through the area burned by the Laguna fire of three years ago. Plenty of charred trees near the trailhead bear testimony that it will take many years for the area to recover.

By noon they reached the summit of Garnet Peak, which offers impressive views of the desert and surrounding mountains. While there, Ed gave a brief ham radio demonstration to the group. Nance and Mary bravely made contact with a mobile station in Oceanside using the 146.730 repeater. Needless to say they were very impressed with ham radio and KF6DXX's hike.

Kayaking the Colorado River

In early October, Stan-W9FQN and John-KT6E kayaked through the scenic Topoc Gorge area of the Colorado River. The unusual thing about their trip is that they paddled 22 miles UP-river for two days before turning around and coming back.

Starting at Lake Havasu their intent was to paddle nine miles to the first campsite, but since the paddling was fairly easy in the lake area, they took their time, making side excursions along the way. According to Stan's GPS they paddled 12 miles that day and saw lots of birds, beavers and fish 3 feet long.

The second day was almost a repeat of the first, even though they were out of the lake and under the influence of the river, they made good time allowing for plenty of side excursions. Since the area along both shores is part of a game refuge, and camping is not allowed in the refuge, they had to hike inland beyond the boundary of the reserve to camp each night.

The following morning they got up early and paddled north three miles to Moabi Park, near I40, where they met up with some kayaking friends who they accompanied back downstream for the return trip. Whenever John and Stan were separated, they used 147.555 simplex to keep in touch with each other. Over the three days they had a great adventure, paddling 52 miles.

Hiker Net hams get together every Friday evening at 9pm on our 147.630 machine to discuss trip ideas, reports of recent trips and other outdoor related topics.

The net is open to everyone and new participants are always welcome.

(Minutes Continued from page 4)

with MARA and was well received.

For the Christmas meeting, AL W6GNI will contact some of the vendors that advertise in the Scope to determine if they would be interested in setting up a presentation area at the meeting.

Old Business

There was a review of a request submitted by Steve, AD6VI about a written policy on repeater usage for distribution to emergency service groups. After a brief discussion, no further action was taken at this time.

Mike, AB6QT questioned the progress of Charlie, NN3V and was he able to complete the Trustee documentation for the repeaters. Al, W6GNI had an article on what forms were required, and where they may be obtained. Charlie will follow up.

New Business

There was no new business presented at this meeting.

Membership report

Al, W6GNI notes that the club now has 431 members.

Repeater Technical

Mike, AB6QT reported that progress on the Echo Link project is moving ahead, slowly. Mike will be checking the 147.130 machine, which has had an intermittent problem, which may have rendered it 'off the air'.

Repeater Site

The site report and status was discussed above.

Next Board Meeting

The November board meeting will be held at the home of Merle, KR6BT at 7:00 PM on November 10th.

Dick, K6KAL made the motion to adjourn the meeting, and was seconded by Steve, AD6VI. The meeting was adjourned at 8:25 PM.

Respectfully submitted,
Dick Kalkofen, K6KAL, Secretary

November meeting will feature:
"Handi Ham"

December meeting will be the: "Christmas Social"

POSTMASTER:
Send address changes to:
Palomar Amateur Radio Club
P.O.Box 73, Vista, CA 92085-0073

Periodicals
Postage Pd.
at Vista CA
92085-9998

Scope

Address Label Here

Palomar Amateur Radio Club Inc.

Scope (USPS #076530) Vol. XXXI No.11, November 2004, published monthly by PARC
1651 Mesa Verde Dr., Vista, CA 92084. *Periodicals postage pd. At Vista, CA 92085*
Dues \$18/yr or \$30/family/yr (*includes newsletter subscription*)

Editor: Michelle Poirier W6MYP, 2969 Valley Street, Carlsbad, CA 92008
Scope address for newsletter submissions: **scope@palomararc.org**

146.73-, 147.13+, 147.075+, 447.000-, 52.68-; Pkt 146.7-, 145.05 & ATV, 4 Autopatches

