

NORTHERN SAN DIEGO COUNTY

W6NWG

# Scope



VOL. XXIV, NO., 1

1936 - 1989

JANUARY 1989

W6NWG/R 146.730 (-)  
449.425 (-)  
145.050 (Pkt)

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276  
 VICE PRES: Mac McCarthy, NH6EW, Oceanside 945-7391  
 SECRETART: Nash Williams, W6HCD, Bonsall 728-3574  
 TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

#### - PRESIDENT'S MESSAGE -

No word is good word, and besides, I'm all messaged out.

CLUB MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. See!

#### JANUARY CLUB MEETING

The program for the first meeting of the new year will be presented by Bob Rose, KG6KU, who will tell us about radio wave propagation via the ionosphere. Bob is the developer of a MUF computer program. The Club via W9FQN will have some old ham radio magazines and some 12 and 24 drawer parts cabinets for sale at the meeting. Coffee by NH6EW. Tasties by those of us who remember to bring them - don't forget.

MEMBERSHIP IN THE PALOMAR AMATEUR RADIO CLUB is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. Membership matters, changes of address, subscription matters: P.O. Box 1603, Vista, CA 92083-0530. Ads and other material for Scope to PO Box 73, Vista 92083 by Wed. two weeks before the club meeting.

#### EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the officers of the Club and the Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting at the home of various of its members. The January meeting will be at the home of WB6IQS.

At the December meeting at the home of KB6NMK, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report. The Committee decided to hold the next club picnic at Dixon Lake in Escondido; reaffirmed the policy of providing an honorarium to non-member speakers; discussed the "grunge", intermod, and desense problems on the 146.730 repeater; reaffirmed and amplified the club policy on operation of the ad hoc Survivors' Assistance Committee; and enjoyed the tasties provided by the outgoing Secretary/hostess. A dandy time was had by all.

## AMATEUR RADIO POSTAGE STAMP REPLICA PINS

The Club still has for sale (\$5 a shot) some of the amateur radio postage stamp replica pins. For these attractive pins see Ron, WI6B or W9FQN.

## DECEMBER CLUB MEETING

At the December club meeting, committee reports were heard. No nominations were received from the floor, and the slate of officers listed in last month's Scope and in the masthead hereof was elected by acclamation. Lanny Goodman, N6CEJ, gave an excellent presentation on how to use rock climbing equipment for tower climbing. The coffee and tasties were courtesy of Mac, NH6EW, and all of us good guys who helped out by bringing the no-cal goodies. 59 members and 22 guests signed in.

## FROM THE ARRL LETTER

The ARRL has filed extensive comments with the FCC in response to the Commission's proposed reorganization of the Amateur Radio rules (PR Docket 88-139). Annexed to the League's comments was a complete rewrite of the rules developed by a committee of the ARRL Board of Directors. A copy of the ARRL filing and proposed text of the rewrite of the rules will be received by each ARRL Letter recipient. Others may request a copy by sending a 9" X 12" SASE with \$125 postage to ARRL HQ. The Club has a copy. Any club member wishing to inspect it may do so by contacting W9FQN.

Wayne Overbeck, N6NB, who was opposed by Carl Pagel, N6BVU, was reelected Vice Director of the ARRL S.W. Division.

\*\*\*\*\*  
THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R at the PARC site on Mt. Palomar; and, like W6NWG/R, has battery back up. Feel free to use it.  
\*\*\*\*\*

## VOLUNTEER EXAMINER PROGRAM

At the December tests our PARC VE team gave 10 test elements to six applicants, who passed a total of eight elements. Everyone got something!

Our test crew was: KI6JM reception; WA6HYB CW exams; W6SAX, W6KCB, and N6NNI VES. Paperwork by N6NNI and K6HAV.

Congratulations to club members Mal Douglas, N6CDA, who is now Amateur Extra Class; Dan Parnell, N6RKD, now Advanced; and new PARC member Walt Bloodgood from no license to Technician.

We miss VEs Jane Rice, AD6Z, a very recent silent key; and Mike Hoffman, KD3HN, off to a new duty station. de K6HAV

\*\*\*\*\*  
FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind the City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month starting at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and the last Saturday in Escondido. Applicants must send a S.A.S.E., a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

## EMPLOYMENT OPPORTUNITY

TV servicer needed for fast growing Encinitas company. Road position open (home service). Will consider full or part time positions. Light technical background required. Call Paul, KZ6X, 436-2900 .

**NEW MEMBERS, REENLISTMENTS, UP-GRADES, NEW CALL SIGNS**

**UPGRADE:** Mal Douglas, N6CDA, to Amateur Extra; Dan Parnell, N6RKP, to Advanced; Lane Arbuthnot, KC6AST, to Technician; Walt Bloodgood to Technician (first license). Congratulations.

**WELCOME GNU CLUB MEMBERS:** Ferman Blalock, W7RYF, La Mesa; Leonard Jacobson; Dave Richards, WA6AIW, Vista; Russ Warner, W6QQA, Escondido; Jerry Lounsbury, N6PKZ, Coronado; Arnold Senterfitt, W6ESV, San Diego; Dave Dombrowski, KO6Y, Chula Vista (2 yrs.); H.C. Chuck Pierce, W6MTX, Dana Point; Gerry Sandford, Del Mar; Jim Gesner, W6ZYW, San Clemente (2 yrs.); Ken Harvey, K6ICT El Cajon (2 yrs.); Ed Null, WB6WQI, Vista; Walt Bloodgood, Vista; Arnold Senterfitt, W6ESV, San Diego; O.C. Cartwright, Amarillo, Tx.

**RENUDE MEMBERS:** Kerry Banke, N6IZW (3 yrs.); Henry Kirschner, WB0YCQ; Don Clark, KB6QEWS; R.F. Krist, W6KTE; Joe LaPointe, WB6HMY (2 yrs.); Bob Rice, KS6S; Richard Payne, N6RKD; Jerry Lounsbury, N6PKZ.

**NEW CALLSIGNS:** Dave Dutcher, AA6KY from KB6ZIM. Leo Wagner, N6TUR from WB6ISV; Don Tippit N6TRS from KB6OXS. Lane Arbuthnot KC6AST, his first call. Congratulations.

**CHANGES IN MEMBER INFORMATION:** When you up-grade, get a gnu callsign, change your address or name, please let us know so that it may be noted in the Scope and in the Club records. Our crystal ball has never quite lived up to the glowing ads which enticed us to buy it in the first place.

**REPEATERS**

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**THREE REPEATERS**, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet repeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

**CO-LOCATED WITH W6NWG/R** is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It has no battery backup.

**THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS TO IGNORE IT!** Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. At the same time, try to hear the interfering signal on the input of the repeater and, if possible, determine the direction of the source.

\*\*\*\*\*  
**DONATE IT TO THE CLUB** if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

\*\*\*\*\*  
**POTTER JUNIOR HIGH SAYS THANKS PHIL, WE REALLY HAVE TO LOOK UP TO YOU**  
The students of Potter Jr. High School would like to thank Phil, WF6L, for his splendid installation of a new tri-band beam at the school. Assisted by Art, WA6IPD, who held the ladder, Phil single-handedly secured and adjusted this monstrous antenna. Phil's wife, Margaret, would have been proud to see Phil scale the ladder, no hands, slipjoint pliers in one hand and screwdriver in the other (Margaret had, just that morning, shown her hubby how to use the pliers). Phil's cool, calculated movements at the 60' level, without a belt (or a net!), was awe inspiring. At the school, Phil is now referred to as Margaret's first husband. Wayago Phil!

## FORESAIL

(That's the spirit, sail!)

Kenwood TS-820S HF xcvr w/DC module, D-104 Silver Eagle mike, manuals, \$375; Swan 500 w/AC supply, spare finals and driver, \$150. Call Russ, W6HZJ, 728-8925.

Auetek QF-1 audio filter, \$20. Call Art, WA6IPD, 728-6834.

Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866.

100+ feet of 1/2" alum. jacketed 72 ohm hardline, \$25. Call Dennis, N6KI, 271-6079.

IBM Correcting Selectric II typewriter, Collins R/E single wire ant. tuner 180S-1. Phone Allen, N7AMR, 434-5656.

6146 tubes. Call Glen Schmidt, 727-4004.

Swan Cygnet 260 HF xcvr, \$125; 2M 11-elm beams, \$30 & \$35; new panel meters, \$4 & up; Heathkit mike, \$5; Call Jerry, W6YLA, 758-1134.

Marygold 10W in 45W out 2M amplifier, \$40; AEA Model MBA-RO CW, RTTY, ASCII reader, \$150; RCA Senior Voltohmyst WV-98C w/new probes & book, \$20; BK 501A Semiconductor Curve Tracer, \$15; Sencore FE160 Senior Field Effect Meter (solid state VTVM), \$25. Call Ralph, K6HAV, 727-5866.

Various vacuum tubes, all tested; Probemaster X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Instant RTTY CW set upl. Just add rig up front and op on other end. Vic 20, Hamsoft, MFJ 1228 interface, NEP monitor, Datasette, manuals plus publications and programs on cassette. Reason for selling: Can't type! Trade or sell. Call Mick, W6FGE, 222-3912.

## WANTED

MFJ 949 Versatuner. Call Russ, W6HZJ, 728-8925

Flat pack Touch Tone keypad w/flex ribbon and 8-pin header, w/o tone osc. OK. Need pin out info. 12 button telephone format w/\* & # symbols req'd or can make do with a 16 button if pin out info available. PIPO type or look alike OK. Also want variometers and variocouplers and similar radio junk from the 20s. Call Mick W6FGE, 222-3912.

For Flying Samaritan honor student, reasonably priced word processor hardware/software. Call Nash, W6HCD, 728-3574.

Schematic for DSI 5612 freq. counter; Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079.

## CITY PROVIDES SPACE FOR AMATEUR RADIO IN CARLSBAD SAFETY CENTER

The city of Carlsbad has provided a room for amateur radio communications in its new Safety Center off of El Camino Real 3/4 of a mile north of Palomar Airport Road. The city will do the antenna installation on the roof top. W9FQN visited the Center to survey the situation during a city emergency exercise and found ample room for R.A.C.E.S., a packet installation, and 2M, 220 mHz, and HF (if required) for A.R.E.S. Antenna and coax requirements are being planned. The site is a good radio location, with a long distance, in all directions, to the horizon. Thanks to Frank, WB6HFE, for letting us know about it. The location and facilities could make this a most useful location in time of emergency.

\*\*\*\*\*  
OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is fussy enough to require, not only money but, that you let him in on your name and call sign if you want them on your VERY own badge - like the big guys have.

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JOIN THE ARRL - AND GIVE THE CLUB NUMBER WHEN YOU DO

The American Radio Relay League is the national Amateur Radio entity to which you should belong if you want to support your hobby. If you're not an ARRL member you should be! Who else do you have to lobby for your hobby?

When joining/re-joining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - and -- mo akai issen kakaranai!

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SURPLUS GOODIES of the electronic persuasion at HIGHWAY COMPANY in the plain, unmarked white building at 305 W. Wisconsin Ave., Oceanside. See their ad in this issue. Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has many batteries for HTs and other uses. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales at 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, nicads at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 4633 Convoy St. HIGHWAY CO. is our ONLY advertiser in this group.

ELECTRONICALLY ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham-computer-electronics swap meet at the Santee Drive-in theater on Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, starting at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in anhattan Beach on the last Saturday of the month at 0700.

THE PALOMAR AMATEUR RADIO CLUB SPONSORS THE FOLLOWING NETS:

THE NORTH COUNTY TRAFFIC NET is operated by the Club, and meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to the members of the Service. Visitors are welcome, when called for after the member roll call.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 1st Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, answers on any type PC.

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## THE FCC IN GETTYSBURG SAYS:

The last Amateur Radio licenses issued in the 6th call area as of 12/1/88 were: AA6LQ, KJ6OV, N6TUM, KC6AXI.

PLEASE DON'T USE THE HAM BANDS FOR PROGRAM PIRACY  
 FCC Rules and Regulation, 47 CFR  
 Part 97, Subpart E: Prohibited Practices  
 and Administrative Sanctions

"97.116 Amateur radiocommunication for unlawful purposes prohibited. The transmission of radio communication or messages by an amateur radio station for any purpose, or in connection with any activity, which is contrary to Federal, State or local law is prohibited."

The above quotation from Holy Writ is one of the rules and regulations which govern our radio service. Unlike the rule about business communications (97.110), it is rarely the subject of discussions or arguments on the air. Have you ever heard this rule violated? I have. In fact, I frequently hear amateurs on the air arranging to commit theft. In particular, software piracy: unauthorized copying of copyrighted commercial computer programs.

You may not think that copying software is wrong. You are entitled to that opinion, and I do not intend to try to change your mind. However, it IS "contrary to Federal law" when the program is copyrighted and the copyright holder has not specifically authorized you to distribute it. You are in violation of FCC Rules when you talk about it on the air. Please be aware of this, and think twice before you offer your buddy a copy of MS-DOS or WordPerfect. And if you must pirate software, give amateur radio a break and don't do it by packet radio file transfer!

Thanks for listening, and 73. Paul KB5MU

## DOWN THE TOOBE

Our sympathy to Guy, KB6AI, on the loss of his wife Norma who lost a long battle with cancer on December 1.

Thanks to Ivan, W6TET, for letting us know the outcome of his purchase of a scope we advertised in the Scope.

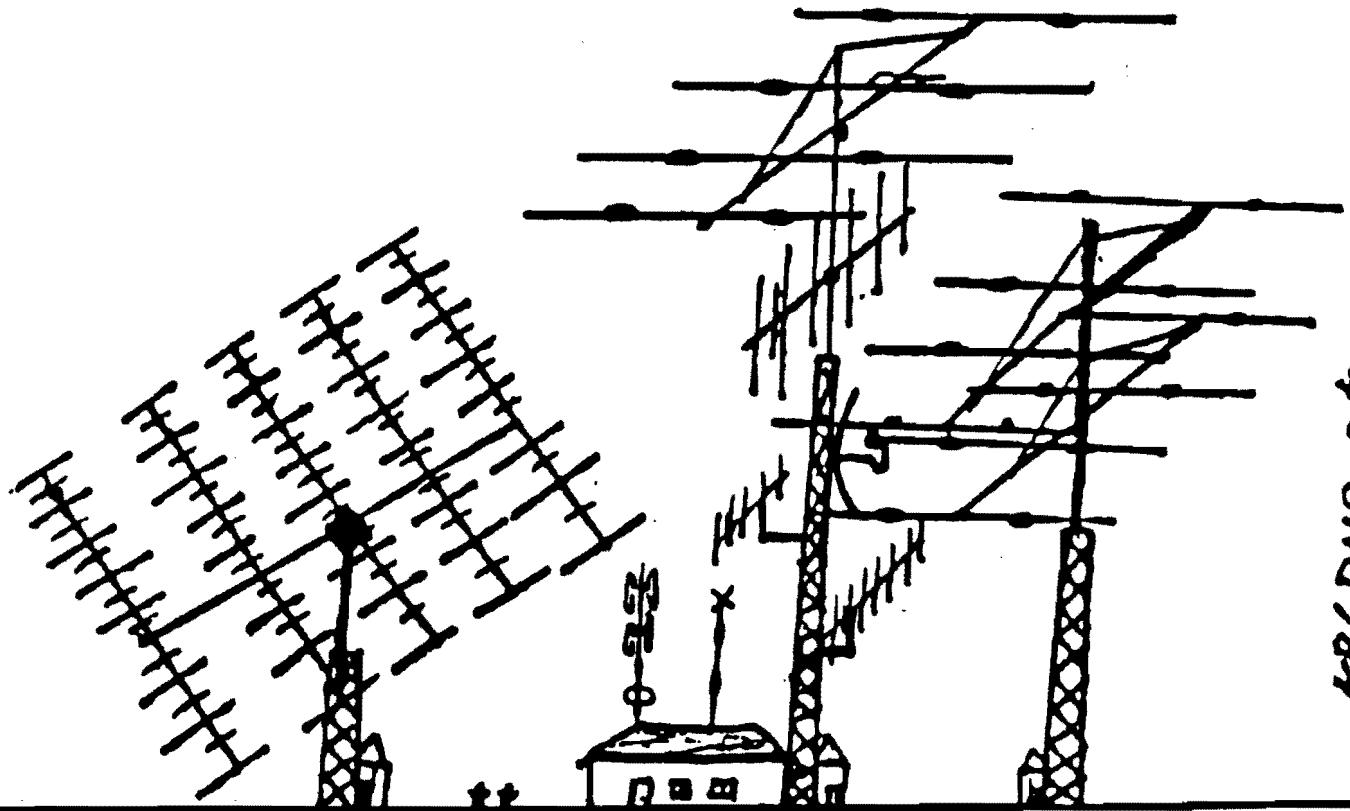
The Sunday morning 2M A.R.E.S. net, (0830 on 146.730 mHz), was started on 146.730 simplex around 1972 before W6NWG/R was put up. Activity on that frequency was encouraged to let folks know that the PARC had been assigned the frequency for its repeater. As W6NWG/R was put into operation the net was continued and has expanded to cover the county. The Club's public service philosophy was, and is, the basis of PARC's sponsorship of this net on W6NWG/R.

George Uminski, K6YKG, will be listed in the next edition of Who's Who in America according to a recent copy of the Technology Development Corp. newsletter DID YOU KNOW...?. George is already listed in Who's Who in the West. Waytago George!

We hope that everyone has a very happy and prosperous 1989; and that you all found that IC-781 under the Christmas tree. 1989 won't have any elections - that's the best gnu's of all!

The Scope's special thanks to Jo, KB6NMK, for the fine job she does in taking care of the ads which appear in Scope. Jo gets the current info from the advertisers and sdoes all of the ad makeup and layout work. It really is appreciated, Jo.

"That's all", she wrote!



SURE IT'S NICE BUT NOW I CAN'T AFFORD A RADIO.

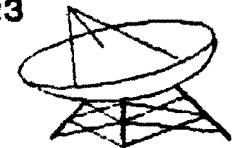
## HAM RADIO OUTLET

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OR PHONE US AT (619) 560-4900

WE ARE OPEN FROM 10:00 AM TO 5:30 PM  
MONDAY THRU SATURDAY



SEE TOM KM6K, GARY K6CAQ, BRUCE K6JYO, ED W6KUT

## HAPPY NEW YEAR

NEW CALLBOOKS ARE IN STOCK

WE STOCK ROHN 25G TOWER SECTIONS IN OUR NEW EXTENDED FACILITIES. WE ALSO PROUDLY SELL US TOWER. IT'S ALWAYS TIME TO UPGRADE. ASK US FOR HELP, WE ARE EXPERIENCED IN TOWER AND ANTENNA INSTALLATIONS. NOW IN STOCK THE NEW YAESU FT411 2METER WALKIE. IT HAS 49 MEMORIES AND MUCH MORE ...A GREAT BUY AT 359.95



**NEXT MONTH ..ICOM DAY**  
COME JOIN THE GALA AFFAIR ON FEBRUARY 18TH



# HAM STICKS

FOR  
HF Mobile Operation

When these mobile HF antennas were first designed and introduced by WD4BUM they created quite a stir in the amateur antenna industry because of their unique low profile design and outstanding performance. Since that time they have been copied and imitated by other manufacturers but none have improved upon the original HAM STICK design!

These two piece MONOBAND ANTENNAS consist of a hollow fiberglass base section approx. 1/2" dia. with the loading coil wound directly on the fiberglass and covered with PVC shrink tubing. The chrome plated brass base fitting has 3/8 x 24 male threads that fit most amateur mobile mounts.

The top section is a tapered, 17-7 tempered SS Steel, whip which telescopes into the base section for frequency adjustment. It is secured by two set screws.

The assembled, adjusted, antenna will be approx. 7' long. High mounting on the vehicle is desirable and not a problem as the antenna is VERY resilient and will withstand abuse that would destroy conventional metal antennas. No springer guy wiring is required.

USE OF A QUICK  
DISCONNECT SUCH  
AS OUR 009 IS  
RECOMMENDED

**\$15.00**

3 or more, 14.00

PEP RATING 600 WATTS		
MODEL	BAND	2:1 BAND WIDTH
9175	75 METERS	10 kc
9140	40 METERS	60 kc
9130	30 METERS	Band
9120	20 METERS	175 kc
9115	15 METERS	350 kc
9112	12 METERS	Band
9110	10 METERS	1 mc

FOR MARS AND CAP USE 9175  
FOR 11 METER (CB) USE 9110.

## COLINEAR ANTENNAS

### THE ULTIMATE PERFORMER

- Honest 4.5db gain
- 1000 watts DC
- Tunable
- 17-7 SS tapered top section
- Rugged fiberglass base section reduces flutter
- Length 7 ft. prss.
- 2 METERS -- MODEL 9007  
220MHz -- MODEL 9038

**\$16.00**

## 5/8 WAVE +3db GAIN MOBILE ANTENNAS

- A TRUE 5/8 WAVE - SHUNT FED ANTENNA
  - HONEST 3db GAIN
  - Prefocused to the band center
  - Below 1.5 to 1 SWR over the entire band
  - Can be tuned to other nearby frequencies
  - Stiff stainless steel whip
  - Extra strong 3" magnet
  - 15 ft. RG 58 coax PL259-Choice of mounts
- RATED AT 150 WATTS

### CATALOG NUMBERS

MOUNT	2 METERS	220 Mhz
Magnet	M-100	M-200
Trunk	T-100	T-200
Permanent	P-100	P-200

Add \$2.00 for BNC connector installed



**\$22.50**

## 1/4 WAVE MOBILE ANTENNAS

- MAX. GAIN POSSIBLE FOR A 1/4 WAVE ANTENNA
- Very stiff stainless steel whip
- Chrome plated 2" magnet
- Typical 1.25 to 1 SWR AT resonance Add \$2.00
- Prefocused to the center of the band For BNC Installed
- 15 ft. RG58 coax with PL259
- Available tuned 100mhz to 500mhz on special order

### CATALOG NUMBERS

MOUNT	2M	220Mhz	440Mhz
Magnet	M-300	M-301	M-302
Gutter	G-300	G-301	G-302

RATED AT 300 WATTS

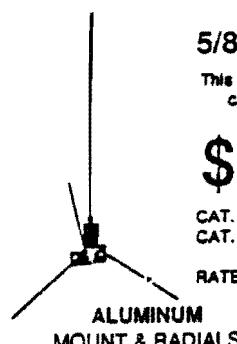
## 5/8 WAVE \*3db GAIN GROUND PLANE

This antenna, when mounted at the same height, will equal (and in many cases out perform) others selling for two and three times its cost!

**\$19.00**

CAT. #GP-1 FOR 2 METERS  
CAT. #GP-2 FOR 220Mhz

RATED AT 150 WATTS



ALUMINUM  
MOUNT & RADIALS

Over 4Mhz band width below 1.5 to 1 SWR  
DC grounded for static bleed off  
Shunt fed matching system for lowest SWR

GP-1 can be set for frequencies  
from 140 to 170Mhz

MONTS TO ANY MAST 1" TO 1.5"  
ALL MOUNTING HARDWARE INCLUDED

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# JOIN ARRL

## BENEFITS FOR YOU

QST, QSL Bureau, Awards, Low Cost Insurance, Operating Aids, Government Liaison and More.

## MEMBERSHIP APPLICATION

Send to:

**The American Radio  
Relay League, Inc.**  
225 Main Street  
Newington, CT 06111



\*Enter 4-digit code for  
sponsoring club, if any:

1 7 0 3

Name _____	Call _____
Street _____	
City _____	Prov./State _____
	PC/Zip _____

\*Note:

If you are joining the ARRL for the first time and you wish to thank the ARRL-Affiliated Club that introduced you to the ARRL, please enter its 4-digit code (club members can tell you what their code is) in the space provided at the top.

\$25 in U.S./\$30 in Canada/\$33 elsewhere (U.S. funds)

Persons, age 17 or under or age 65 or over, upon submitting proof of age, may request the special dues rate of \$20 in the U.S. (\$25 in Canada, \$28 elsewhere in U.S. funds)

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

Charge to AMEX, VISA or MC No. \_\_\_\_\_  
Valid from \_\_\_\_\_ Good through \_\_\_\_\_

### ELECTRONICS

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HIWAY COMPANY

305 Wisconsin Avenue  
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FULL-SERVICE TRAVEL PLANNING

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JAN 89

PALOMAR AMATEUR RADIO CLUB ENLISTMENT/REENLISTMENT BLANK

(Cut on dotted line, fill in, include \$\$ and mail to PARC, PO Box 1603, Vista, CA 92083-0530 or hand to Treasurer Ron at Club meeting)

Dues are \$12/year + \$9/year for each add'l family member. Scope included.  
Dues are prorated: Aug-Sep-Oct \$12, Nov \$9, Dec \$8, Jan \$7, Feb \$6, Mar \$5, Apr \$4, May \$3, Jun \$2, Jul \$1. Consider paying proration of \$\_\_\_\_ for balance of this year plus \$12 for next year for total of \$\_\_\_\_ or plus \$24 or \$36 for next two/three years for total of \$\_\_\_\_/\$\_\_\_\_

Name and Call \_\_\_\_\_

Ham Lic. expir. month and year \_\_\_\_\_ Address, phone nr., (or changes)

ARRL member? YES\_\_\_\_ NO\_\_\_\_ Remarks, appropriate/inappropriate \_\_\_\_\_

Include name(s), call(s), and dues of family member(s) residing at same address.

----- (Leopard) -----

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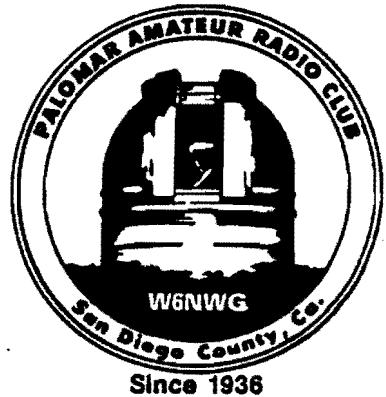
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# Scope

**W6NWG**

**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**



**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt).      KAGUAI / R 147.135 (+).      WD6HFR / R 224.900 (-)**

**VOL. XXIV, NO., 2**

**FEBRUARY, 1989**

PRESIDENT:	Stan Rohrer, W9FQN, Valley Center	749-0276
VICE PRES:	Mac McCarthy, NH6EW, Oceanside	945-7391
SECRETARY:	Nash Williams, W6HCD, Bonsall	728-3574
TREASURER:	Ron Wilhelmmy, WI6B, Rancho Santa Fe	756-3133

\*\*\*\*\*  
 CLUB MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome.  
 MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. So there!  
 \*\*\*\*\*

#### **FEBRUARY CLUB MEETING**

The program for February will be presented by Brian Comer, KF6C, who will tell us about a computer-controlled VLV-HFreceiver. Coffee by NH6EW; and tasties by those of us who remember to bring them - don't forget.

\*\*\*\*\*  
 MEMBERSHIP IN THE PALOMAR AMATEUR RADIO CLUB is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. Membership matters, changes of address, subscription matters: P.O. Box 1603, Vista, CA 92083-0530. Ads and other material for Scope to PO Box 73, Vista 92083 by Wed. two weeks before the club meeting.

#### **EXECUTIVE COMMITTEE MEETING**

The Executive Committee, consisting of the officers of the Club and the Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting at the home of various of its members. The February meeting will be at the home of WB6IQS.

At the January meeting at the home of WB6IQS, the Committee heard and approved the Minutes of the last meeting; and the Trea\$urer's Report. The Committee OKed the installation of coax for the amateur radio installation in the City of Carlsbad Safety Center. W9FQN reported that work is to start on the camping trailer. Further work on the repeater building was also discussed. It was a dandy meeting and the tasties were just that.

Feb 89

>>>>> President's Message <<<<<

\* = \* O N D E C K \* = \*

The following are "on deck" for the February meeting:

Coffee -> Leo-N6TUR  
Goodies-> Barbara-KA6FPS  
Vanessa-WB6BHE

###—CLUB OFFICERS—###

It takes many individuals to make a club this size run somewhat smoothly and I want to take this opportunity to thank all of you who have helped the club in any way during 1988. I especially want to thank Ted Demos, N6CKH, our past vice-president, and Jo Ashley, KB6NMK, our past secretary, for helping the club through a very busy year.

It appears as though the club is especially hard on Vice-presidents since the biggest turn-over among the officers appears in this position. This comes from their having responsibility for the club's programs and it is a real challenge to provide high quality programs such as our club has seen in the past. During the past four years that I have been president of PARC, the club has had as vice-presidents (program chairman) Larry de Montegre-WQ6V two years, Bob Brehm-KB6QC, and Ted-N6CKH. Usually our vice-president at the end of a year is so exhausted that the club "never" sees them again which is unfortunate.

This year we are attempting to turn the club programs over to a committee hoping that we will relieve some of the pressure on the vice-president. If anyone has suggestions for programs, please contact Mac-NH6EW who is our new vice president and he will consider your suggestion along with the recommendations of our program committee. Remember that it is difficult to get a quality program that appeals to everyone: Novice, Technician, General, Advanced, Extra, DXers, Technical, Traffic, Emergency (ARES/RACES), VHF, UHF, HF, LF, etc. We try to do our best to get programs that appeal to the majority of members or we try to inform you of another field of amateur radio in which you might

not be well versed. We need your help in suggesting programs of interest to you.

###— 1 4 6 . 7 3 0 —###

Several weeks ago while talking to a non-club member from San Diego I was told how at a meeting out East several of the committee who were amateurs started talking about the sad state of affairs with the repeaters in Southern California. The usual things were discussed: foul language, jamming, non-friendly repeaters, etc. One of the Eastern amateurs butted into the conversation and said that while that might be true with some repeaters, that it certainly was not true of the 146.730 repeater which he uses on Palomar Mountain when he has conferences in San Diego. It's nice to be recognized in such a positive way.

We need to remember club policy while using the repeaters: a) be friendly to all, b) don't correct someone on the air or be short with them, c) invite them to club meetings, and d) encourage them to check into any of our evening nets.

Several problem areas that we still have on the repeater are users acknowledging interference. Don't feed the ego of a jammer. We have also noticed several new and also old members "broadcasting" by including messages with their calls such as, 1) YOU DON'T NEED TO ANSWER THIS BUT I WILL BE HOME IN 10 MINUTES, or 2) IF YOU ARE LISTENING, I WILL BE COMING HOME LATER THIS EVENING. The FCC does not permit "broadcasting" by amateurs although they do permit QSTs where it is of general concern to amateurs. The clever ones (you) can find other ways of not violating FCC rules. Make your call and include your location or sign off with "this is W6XXX Escondido." I am sure your friend (wife?) can figure that one out. You could even make a contact with someone and just mention that your going to be headed home 30 minutes later than usual.

One of my personal pet peeves is the station calling: "W6XXX THIS IS W9XXX, ARE YOU OUT THERE FRITZ?" or the HF operator

who comes on and makes five calls within a one minute period for a friend not realizing that we are on a fixed frequency with no tuning required. Multiple calls on 20m SSB are necessary since your friend needs to look for you but not on 146.730.

PARC doesn't have the problems of the CB band because we care about proper operating procedures. With many new amateurs coming up on frequency, let us try to set good examples for the newly licensed as well as those of us who forget from time to time.

Remember, if you hear a club officer or control operator "playing into the jammer's hands," he is probably doing so for A GOOD REASON!

#### ###—REPEATER SITE GENERATOR—###

The Executive Committee has voted to look into converting the club's 3.5 kw gasoline AC generator over to propane and mounting it at the repeater site to use in case of emergencies. This would allow us to charge our 1,200 AHr of batteries. Does anyone know a company where we might be able to have this conversion done for us or could we do it ourselves?

This generator is a push button, battery started unit so we would be able to control it through our regular control system. We would also be able to use the generator with our house trailer since the trailer has two propane tanks. Propane would keep us from "messing around" with gasoline and allow us to operate for longer periods of time without needing to refuel.

We have considered solar cells but because of tall trees surrounding us we are afraid that we would receive limited energy from the sun and in bad weather we would receive practically nothing. Also the tower was not designed with the wind loading requirements of solar panels. We have looked at a wind generator and feel that this might be a possibility but we would have the added problems of limited wind loading, sound noise, electrical noise, and tower vibration. A gas generator is messy unless it is converted

to LP. At least it is independent of our tower and only functions on demand.

#### ##—SIMULATED EMERGENCY TEST(SET)—##

The SET messages were "dumped" before Thanksgiving and they landed on a Sunday night net with Ralph-K6HAV doing the honors. There were approximately 50 messages handled in less than 60 minutes with 146.730 and 147.135 both being used. I have the following comments about the test:

- A) Net control stations should be able to monitor both repeaters.
- B) Non-net members need more training in message handling.
- C) This test should be held each year.
- D) We need Packet outlets for traffic.

#### ###—POTPOURRI—###

NEED some information on an AEA CK-1 3x4 tone pad which has a volume control, speaker, a switch, and three plug sockets to be used on repeater control circuits. Contact me, W9FQN.

Don't forget that you get one ticket for each club event that you "sign-in" for: Club meetings, Field Day, Picnic, and other designated events. These free tickets are used for a prize drawing at the club Picnic each August.

**CABLE TV INTERFERENCE** - Larry-WQ6V has indicated that if you are getting into someone's cable TV, you should first listen to 145.250 on your HT. If you hear a signal, track it down with your HT using DFing techniques. You could find the leak in the complaining house, at a splice, underground, pre-wired box, or on a pole. Once you locate the leak(s), it is highly probable that your signal(s) are entering the cable at this leaking location. The 145.250 signal is video information on channel 18 (E). Once you locate the leak, call your local cable company and they will come out immediately to fix the problem.

Nash-W6HCD has suggested that we write letters to the "powers that are" indicating that we would like to see an initiative which states that the legislatures would have their salary cut a certain percent for

each initiative on the ballot above a certain level. Interesting! I could vote for that!

The club's assets are now nearing the \$40,000 mark: Property \$20,000, equipment \$18,000, trailers \$500 and assorted items \$1,500. Thanks for your support.

Please add Chuck-N6TEP to your list of German translators.

### ###—CLUB HOUSE—###

The club has many projects "on going" at present but not all club members are involved in these projects. One project which has been mentioned from time to time is the building of a house on our property at Palomar Mountain. We have about 1/3rd acre of land and a water share which would allow us to build a nice "Radio Shack" (no pun intended) for our members to use on weekends and during their vacations.

We could charge a modest fee for rent which would allow us to pay off the mortgage on the building plus leaving a little left over to finance improvements to the repeater site.

\$20/daX365da=\$7300/yr  
\$7300/yrX20%use=\$1460/yrx10yr=\$14,600  
\$7300/yrX40%use=\$2920/yrx10yr=\$29,200  
\$7300/yrX60%use=\$4380/yrx10yr=\$43,800

If we could get our membership to pledge renting for at least one day a year we would come close to renting it every day of the year! Just think, you could leave the sunny valley floor of San Diego County and spend 4-5 days in the cooler refreshing mountain air (or snow) on Palomar Mountain with your kids or grand children. There are fantastic views with three to four beautiful parks on Palomar Mountain for picnics and it is always fun visiting the Palomar Observatory.

We could set up an amateur radio station (HF, UHF, VHF, etc.) from equipment bought or donated to the club so that members living in "condominiums" or in restrictive deed areas could have access to a radio station and those members with HT's would at last be able to hit the repeater

full quieting! Have you ever used a beam or an 80 meter dipole on a 5,700 foot tower?

We might consider some of the following:

! Building cost	! Financing methods!
! Insurance costs	! Radio facilities!
! Site impact	! Radio Interference!
! Projected income	! Taxes
! Potential use	! Other _____ ? !

It would appear that the cost of any structure of this type could be reduced by club members' donation of TIME, LABOR, SERVICES, and MATERIALS. The club could raise money through special money raising projects, gifts, and/or a loan from "the Friends of PARC" as was done with the original purchase of the repeater site property.

A house would also give the club more space for repeater expansion. If we were to consider something like this, there would have to be a project manager who had responsibility for seeing that everything was properly supervised so that the Executive Committee only had to decide the "larger issues" and did not become involved in the "day to day" supervision of the project.

### ###—THANKS—###

THANKS to Dennis-N6KI for taking items donated up to the TRW swap meet and converting the items into \$\$\$ ... we really appreciate it Dennis.

THANKS to Frank-WB6HFE for getting us a room in the Carlsbad Safety Center for RACES/ARES communication equipment. The location of the Safety Center is: North of the intersection of Palomar Airport Road and El Camino Real, then West on Faraday past Beckman instruments to the Safety Center. Actually, just follow the Safety Center signs. Enter the south door near the flags, then down to room 180 near the restrooms.

73 de Stan W 9 F Q N

### AMATEUR RADIO POSTAGE STAMP REPLICA PINS

The Club still has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

### JANUARY CLUB MEETING

At the January club meeting, the minutes of the previous meeting and the Treasurer's report were heard and approved; committee reports were heard. W9FQN reported that KA6UAI/R was off the air pending replacement. Members were reminded that changes in address, names, call signs, class or date of license now need to get to the Membership Chairman, Jo, KB6NMK, and if you want credit for it in the Scope, let K6HAV know about it.

The program was presented by Bob Rose, K6GKU, of the Naval Ocean Systems Center, who gave us a very informative illustrated program on the effect of solar activity on radio wave propagation.

The coffee and tasties were courtesy of Mac, NH6EW, and all the good guys who brought the no-cal goodies. 75 members and guests signed in.

\*\*\*\*\*  
+ FRED ELSER, KH6CZ, FOUNDER OF PARC, SK +  
+ John Martin, W6SE, one of the Club's charter members has written to the +  
+Scope of the passing of Fred Elser, KH6CZ:  
+ "I noticed in the QST Silent Keys column that Fred Elser had passed +  
+away. As you know, he was the real founder of PRC. I first knew of him+  
+when he was 3AA, later KA3AA, out in the Philippines. During the twenties+  
+he did a number of articles for QST, among which there was an account of +  
+his trip through Europe in a model T Ford. He carried ham equipment with+  
+him. Later, he attended and graduated from Massachusetts Institute +  
+of Technology, after which he came to Carlsbad where his family had a+  
+considerable investment. It was there he lived when he was so instrument+  
+al in the founding of PRC. At that time his call was W6GVU. He left our +  
+area in the late thirties and followed a career in the army, occasionally+  
+hamming from remote parts of the world."  
+\*\*\*\*\*

### SURVIVORS' ASSISTANCE COMMITTEE

Through its Survivors' Assistance Committee, the Club provides aid to survivors of Silent Key amateur radio operators in the disassembly and disposition of the SK's radio station and associated equipment. The Committee is ad hoc, and is made up of two or more club members, one of whom who is hopefully known to the survivor. The Committee contacts the survivor and offers the Club's assistance in the sorrowful task when it is desired by the survivor.

Club members should make this information known to their family in order that the family will be aware of the Club's availability to assist. By letting the Club do it, the survivor is insured that the equipment will be disposed of in accordance with the wishes of the SK and the survivor(s); and that there is no need to listen to the many helpful "friends" so quick to arrive on the scene.

The Committee, when requested to do so, inventories the equipment, gives the survivor(s) a copy of the inventory, prices it for sale, disassembles the station and disposes of it as requested by the survivor. The Committee reports to the survivor(s) and to the Executive Committee.

\*\*\*\*\*  
THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900  
MHZ REPEATER, which is co-located with W6NWG/R at the PARC site on Mt.  
Palomar; and, like W6NWG/R, has battery back up. Feel free to use it.  
\*\*\*\*\*

Feb 89

#### VOLUNTEER EXAMINER PROGRAM

At the January tests our PARC VE team gave 15 test elements to nine applicants, who passed a total of 12 elements.

Congratulations to club members Steve Barry, no license to Technician; Walt Bloodgood, to General from waiting for his Technician license; Richard Payne, N6RKD, passed Element 1B (13 wpm) and is one element away from Advanced; and Gerry Sandford, KC6BJM, to Technician with credit for Element 3B from Novice.

Our test crew was: KI6JM reception; WB6R CW exams; W6KCB, AA6KY, and W6YYV VEs; and paperwork by N6NNI, N6KI, and K6HAV. de K6HAV

\*\*\*\*\*  
FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind the City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month starting at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and the last Saturday in Escondido. Applicants must send a S.A.S.E., a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

#### EMPLOYMENT OPPORTUNITIES

If you have an FCC 1st or 2nd class Radiotelephone license and are interested in a radio officer's job on a U.S. flag merchant ship, call the Manager, Marine Personnel, Maersk Line, Ltd (201) 514-5548 for more info. (From an ad in 12/88 QEX.)

TV servicer needed for fast growing Encinitas company. Road position open (home service). Will consider full or part time positions. Light technical background required. Call Paul, KZ6X, 436-2900.

#### NEW MEMBERS, REENLISTMENTS, UP-GRADES, NEW CALL SIGNS

UPGRADE: Ed Carry, K6ICG, to Amateur Extra Class; Walt Bloodgood to General; Steve Barry to Technician; and Gerry Sandford, KC6BJM, to Technician. Congratulations.

WELCOME GNU CLUB MEMBERS: Steve Barry, Escondido; George Lounsbury, KC6BGX, Escondido; Jim O'Hara, W4OYN, San Diego (2 yrs.); Dan Mullins, WL7BLM, Carlsbad; Charles Cohen, W3CRU, Encinitas; Charles Inskeep, K6ERW, Jamul - not to be confused with his dad, Chuck, W6IRM also a PARC member.

RENUDE MEMBERS: Tom & Wilma Healey, N6NNQ & N6NNP; Hark Harker, WB6WGT; Charles Miele, N6TEP.

CHANGES IN MEMBER INFORMATION: When you up-grade, get a gnu call sign, change your address or name, please let us know for the Scope and the Club records. Our crystal ball has never quite lived up to the glowing ads for which we bought it in the first place.

#### REPEATERS

KA6UAI/R on 147.135 was off the air for two weeks due to mouse damage to wiring. Eric left it off the air until he could get a recently purchased replacement, a Micor repeater, crystallized up. This repeater is the same general model as the very reliable 146.730 machine; and too is capable of battery operation.

The new 147.135 machine went on the air January 17th and will have emergency power battery backup when the batteries are available. First reports indicate good signals down Sam Dago way.

\*\*\*\*\*  
 THREE REPEATERS, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. At the same time, try to hear the interfering signal on the input of the repeater and, if possible, determine the direction of the source.

\*\*\*\*\*  
 DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

#### POWAY ARS 147.03-.09 MHZ HIGH-LEVEL REPEATER PAIR TO NEW "MANAGEMENT"?

We note in its January issue of The Call Letter, the Poway ARS has voted to trade its coordinated 147.03-.09 high-level repeater frequency pair to the East County Repeater Association (an "association" of one or two folks). In trade for which PARS members will have "unlimited privileges" on the ECRA system. PARS will also get a low-level repeater pair at 147.225. This will get PARS off of the hook and out of the "high rent" district (\$50/month or more) which was a tad steep for them.

#### FORESAIL

(That's the spirit, sail!)

Assorted tubes (transistor antecedents) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Collins 75S3-B rx, WE, mint condx, \$275. Call Krist, W6KTE, 941-3555.

Kenwood TH-215A, new, w/xtra btry, \$275. Call Tom, N6NNQ, 456-1910.

Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866.

Icom IC-u2AT 2M HT; IBM Correcting Selectric II typewriter, Collins R/E single wire ant. tuner 180S-1. Phone Allen, N7AMR, 434-5656.

6146 tubes. Call Glen Schmidt, 727-4004.

Swan Cygnet 260 HF xcvr, \$125; 2M 11-elm beams, \$30 & \$35; new panel meters, \$4 & up; Heathkit mike, \$5; Call Jerry, W6YLA, 758-1134.

AEA Model MBA-RO CW, RTTY, ASCII reader, \$140; BK 501A Semiconductor Curve Tracer, \$10. Call Ralph, K6HAV, 727-5866.

Various vacuum tubes, all tested; Probemaster X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Great DX location overlooking beautiful downtown Vista and environs. Call Bill, K6GJD, 726-2029.

Tempo 1 HF xcvr (80-10M), xlnt condx - recently aligned; DC & AC pwr supplies; Shure 404C mike; xtra parts & tubes incl finals. The whole package for \$200. Call Mike, W6IIS, 578-2957.

Instant RTTY CW. Vic 20, w/monitor & Datasette, Hamsoft, plus programs on cassette MFJ 1228 interface, manuals Can't type so it's for sale or trade. Call Mick, W6FGE, 222-3912.

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WANTED

Crystal stand w/cat's whisker for old timey crystal set. Call Al, W7HGS, 755-7347.

MFJ 949 Versatuner. Call Russ, W6HZJ, 728-8925

Flat pack Touch Tone keypad w/flex ribbon and 8-pin header, w/o tone osc OK. Need pin out info. 12 button telephone format w/\* & # symbols req'd or can make do with a 16 button if pin out info available. PIPD type or look alike OK. Also want variometers and variocouplers and similar radio junk from the 20s. Call Mick W6FGE, 222-3912.

For Flying Samaritan honor student, reasonably priced word processor hardware/software. Call Nash, W6HCD, 728-3574.

Schematic for DSI 5612 freq. counter; Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079.

\*\*\*\*\*  
OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is a stickler and requires, not only money but, that you let him in on your name and call sign if you want them on your VERY own badge - like the big guys.  
\*\*\*\*\*

JOIN THE ARRL - AND GIVE THE CLUB NUMBER WHEN YOU DO

The American Radio Relay League is the national Amateur Radio entity to which you should belong if you want to support your hobby. If you're not an ARRL member you should be! Who else do you have to lobby for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - and -- mo akai issen kakaranai!  
\*\*\*\*\*

SURPLUS GOODIES of the electronic persuasion at HIGHWAY COMPANY in the plain, unmarked white building at 305 W. Wisconsin Ave., Oceanside. See their ad in this issue. Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has many batteries for HTs and other uses. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales at 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, nicads at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 4633 Convoy St. HIGHWAY CO. is our ONLY advertiser in this group.

ELECTRONICALLY ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham-computer-electronics swap meet at the Santee Drive-in theater on Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, starting at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

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THE PALOMAR AMATEUR RADIO CLUB SPONSORS THE FOLLOWING NETS:

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to the members of the Service. Visitors are welcome, when called for after the member roll call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 1st Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, answers on any type PC.

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#### THE FCC IN GETTYSBURG SAYS:

The last Amateur Radio licenses issued in the 6th call area as of 01/1/89 were: AA6MB, KJ6PM, N6TYB, KC6BKJ.

#### DOWN THE TOOBE

Leona Wallace, WA6OHB, sends an "exceptional" postcard, taking exception to a remark in the Scope about "no one" reading the Scope since that makes her "no one" because she reads it cover to cover. Thanks, Leona.

Mary, KB6NZA, reports the passing, in mid-October, of former club member Nate Hassel, K2RTQ. Nate was in poor health for some time.

The January QST has all of the date, time, frequency information for contests and W1AW bulletin and code practice skeds in it. You might want to mark your calendar now - Field Day is 24-25 June.

Ann Middleton certainly did a nice article on ham radio in the Sunday, 8 Jan. Escondido Times-Advocate. She plainly did enough research to familiarize herself with the ham jargon. The only discrepancy I saw was flattering to me as I came out several years younger than the vital stats say I am. Ann took a lot of time and did plenty of asking and listening as she wrote. Thanks for the nice article and the time you took on it, Ann.

"That's all", she wrote!



# JOIN ARRL

## BENEFITS FOR YOU

QST, QSL Bureau, Awards, Low Cost Insurance, Operating Aids, Government Liaison and More.

## MEMBERSHIP APPLICATION

\*Enter 4-digit code for  
sponsoring club, if any:

1	7	0	3
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Send to:

**The American Radio  
Relay League, Inc.**

225 Main Street  
Newington, CT 06111



Name \_\_\_\_\_ Call \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ Prov./State \_\_\_\_\_ PC/Zip \_\_\_\_\_

\$25 in U.S./\$30 in Canada/\$33 elsewhere (U.S. funds)

Persons, age 17 or under or age 65 or over, upon submitting proof of age, may request the special dues rate of \$20 in the U.S. (\$25 in Canada, \$28 elsewhere in U.S. funds)

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

Charge to AMEX, VISA or MC No. \_\_\_\_\_

Valid from \_\_\_\_\_ Good through \_\_\_\_\_

\*Note:

If you are joining the ARRL for the first time and you wish to thank the ARRL-Affiliated Club that introduced you to the ARRL, please enter its 4-digit code (club members can tell you what their code is) in the space provided at the top.

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# O ICOM MONTH

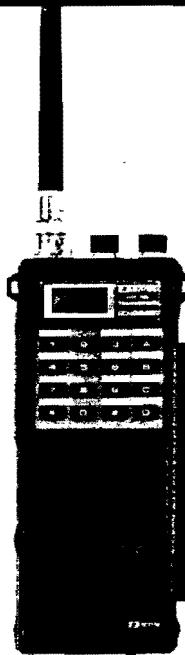


**Saturday, February 4, 1989**  
**10:00am til 5:30pm**  
**Oakland** (415) 534-5757

**Saturday, February 11, 1989**  
**10:00am til 5:30pm**  
**Phoenix** (602) 242-3515      **San Diego** (619) 560-4900

**Saturday, February 18, 1989**  
**10:00am til 5:30pm**  
**Anaheim** (714) 761-3033      **Burlingame** (415) 342-5757

**Saturday, February 25, 1989**  
**10:00am til 5:30pm**  
**Atlanta** (404) 263-0700      **Van Nuys** (818) 988-2212



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Drawing Each Hour!**

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### **IC-02AT**

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 32 Subaudible Tones /  
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 Digital Readout / DTMF /  
 5 Watts Standard



Grand prize will be selected  
during one of the in-store  
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your mailing label to win.

### **Refreshments**

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- Technical support available!

**Free ICOM GC-5 World Clock with  
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 Base Station Transceivers, IC-900 Mobile  
 and IC-R71A/IC-R7000 Receivers.

Feb 89

PALOMAR AMATEUR RADIO CLUB ENLISTMENT/RE-ENLISTMENT FORM

Mail form with \$\$ to PARC, P.O.Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK at Club meetings. Dues (including SCOPE) are \$12 a year plus \$9 a year for each additional family member. Dues are pro-rated for new members: Aug, Sept. Oct. \$12, Nov. \$9, Dec. \$8, Jan. \$7, Feb. \$6, March \$5, April \$4, May \$3, June \$2, July \$1. Consider paying for two or three years at a time. Call, name and complete address are important. Telephone can be unlisted in roster if requested. Any of the other information requested may be omitted if you feel uncomfortable giving it to us.

Call \_\_\_\_\_ Name \_\_\_\_\_  
Expires \_\_\_\_\_ Address \_\_\_\_\_  
Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Old Call \_\_\_\_\_ Telephone \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_  
Date 1st Licensed \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos. Bros. \_\_\_\_\_  
Other family members in PARC \_\_\_\_\_  
ARRL  RACES  ARES  Red Flag  Blood donor  Type \_\_\_\_\_

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VALLEY CENTER, CA. 92082



# Scope

**W6NWG**

**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**

**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)**

**VOL. XXIV, NO., 3**

**MARCH, 1989**

PRESIDENT:	Stan Rohrer, W9FQN, Valley Center	749-0276
VICE PRES:	Mac McCarthy, NH6EW, Oceanside	945-7391
SECRETARY:	Nash Williams, W6HCD, Bonsall	728-3574
TREASURER:	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
EDITOR:	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
**CLUB MEETINGS** are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome.  
**MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES.** So there!

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. Membership matters, changes of address, subscription matters: P.O. Box 1603, Vista, CA 92083-0530. Ads and other material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting, or by phone to the Editor, Ralph Crossman, K6HAV, 727-5866.  
\*\*\*\*\*

#### **MARCH CLUB MEETING**

The program for March will be presented by Frank Cathell, K3YAZ, who will talk to us about operating on Macro Wave (VLF). Coffee by NH6EW; and tasties by those of us who remember to bring them.

#### **EXECUTIVE COMMITTEE MEETING**

The Executive Committee, consisting of the officers of the Club and the Chairmen of its committees,

meets at 7:30 p.m. on the second Thursday after the club meeting at the home of various of its members. The March meeting will be at the home of K6HAV.

At the February meeting at the home of WB6IQS, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report. The Committee viewed the recently purchased Motorola Micor 2M units and the .9 GHz gear donated to the

Club. WB6IQS is readying the Micor units for installation on the mountain to up-grade the 146.730 and packet machines. The use of the .9 GHz equipment is still under discussion. The Committee is considering its use in packet, linking, and other types of service. A commercial repeater operator has indicated an interest in renting space in the Club's bunker. The Committee directed W9FQN to get further details. The Committee authorized reimbursement to WB6IQS for the Micor units and for the channel elements therefore. W9FQN was authorized to purchase new tires for the antenna trailer. A "For Sale" table will be available at each club meeting. It will be for any members with an item of gear for sale. Only one item per seller per meeting. W9FQN reported his Novice licensing class got underway with 10 members and several more on the way. KA6UAI reported horizontal icicles on the club's tower on Palomar Mtn. when he was at the site just after a recent storm. It was a dandy meeting and the tasties were just that.

\*\*\*\*\*

#### HAM POSTAGE STAMP REPLICA PINS

The Club still has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

\*\*\*\*\*

#### SURVIVORS' ASSISTANCE COMMITTEE

Through its Survivors' Assistance Committee, the Club provides aid to survivors of Silent Key amateur radio operators in the disassembly and disposition of the SK's radio station and associated equipment. The Committee is ad hoc, and is made up of two or more club members, one of whom who is hopefully known to the survivor. The Committee contacts the survivor and offers the Club's assistance in the sorrowful task when it is desired by the survivor.

Club members should make this information known to their family in order that the family will be aware of the Club's availability to as-

sist. By letting the Club do it, the survivor is insured that the equipment will be disposed of in accordance with the wishes of the SK and the survivor(s); and that there is no need to listen to the many helpful "friends" so quick to arrive on the scene.

The Committee, when requested to do so, inventories the equipment, gives the survivor(s) a copy of the inventory, prices it for sale, disassembles the station and disposes of it as requested by the survivor. The Committee reports to the survivor(s) and to the Executive Committee.

#### FEBRUARY CLUB MEETING

At the February club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. The program was presented by Brian Comer, KF6C, who showed us his computer-controlled 10 kHz-30 mHz receiver which will fit into a small cigar box. The receiver has no controls on it - all functions are controlled from the computer keyboard or "mouse".

Jack Hanthorn, KI6JM, showed us his 45-watt "walky-talky". Others brought their HTs to show us.

The coffee and tasties were courtesy of Mac, NH6EW, and all the good guys who brought the no-cal goodies. 69 members and guests signed in.

\*\*\*\*\*

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R at the PARC site on Mt. Palomar; and, like W6NWG/R, has battery back up. Feel free to use it.

\*\*\*\*\*

\* \* \*

"73" does not need an "s" after it when spoken since it already translates to "Best regards".

\* \* \*

#### THE FCC IN GETTYSBURG SAYS:

The last Amateur Radio licenses issued in the 6th call area as of 02/1/89 were: AA6MO, KJ6QQ, N6UHQ, KC6BTW.

## &gt;&gt;&gt;&gt;&gt; President's Message —&lt;&lt;&lt;&lt;&lt;

\* = \* O N D E C K \* = \*

The following members are "on deck" for the March meeting:

Coffee ->	Leo-N6TUR (last)
	Duane-WB6R (1st)
Goodies->	Vanessa-WB6BHE (last)
(cookies)	Pat-N6RHS (1st)

Please work out problems with VP Mac-NH6EW

## #— OSCILLOSCOPES—#

The club has the following oscilloscopes which appear to be in working condition:

DATA INSTRUMENTS MOD 536A  
5.5x7.5x12" \$ 25

HEATH SCOPE  
9x13x17 \$ 15

ALLEN DU MONT LABS 249  
9.5x15x16 \$ 10

TEKTRONIX TYPE 531, 53B(insert)  
13x16x22 \$ 50

## #— T R A I L E R —#

Revamping our emergency house trailer has started with Joe-N6RVO constructing an operating table with the able help of Norm-N6QQF where one the beds used to be located. The operating position will take 2-3 operators such as we had at Field Day when the trailer was used by the CW operators. Joe is also looking into the replacing of two broken louvers in one of the windows.

We have installed 200 AHr of 12 VDC batteries along with a solar panel that will charge the batteries at 1.8 to 2.2 Amps which should keep them charged and ready for emergency use. One of W60FT's mobile 80-10 meter antennas is ready to be installed on the trailer.

Some of the "little" things that still need to be done are: paint removal, painting, LP tank valves (2), antennas, pushup masts, curtains, emergency supplies, etc.

I will be calling on those who volunteered for some of the above as we progress with the additions. Our first objective is to be able to operate for 2-3

days in an emergency with moderate comfort and this phase is almost completed. The "nice little" things will come later.

## TRAILER NEEDS -&gt;

3-4 folding chairs	CB antenna
20-30' Ant. mast	2m antennas
Ant. ball mounts	450 antenna
HF antennas	scanner antenna
	charger cable

PARC has received a DRAKE TR-7 as a donation and this transceiver will be used in the trailer as soon as it is completely checked out for proper operation.

## #— DFing—#

On 2-8-89 the repeater was off the air for about one hour and 10 minutes because of a mobile microphone with touch tone pad jammed against a break lever. It took 1:09 to find the offending signal on Olive Hill in Fallbrook. Reliable beam headings were given by Ralph-K6HAV plus a reading from my QTH put us in the Fallbrook area. It took five readings with my HT outside of the car to locate the "hidden" transmitter and Craig-N6ATQ of the Escondido Amateur Radio Society (EARS) was about five minutes behind me. This is the first time I ever came in ahead of Craig so I am quite pleased. I used two HT's: one with a mobile whip and the other with various squelch settings and antennas: rubber duckie, long pin, short pin, tack, and no antenna at all. The HT in the belly method was used with great success and I was able to drive right up to the house. HT's with S-meters are nice but my IC-2AT doesn't have one.

Several members have proposed that we install an automatic direction finding system to give bearings of all signals using our repeaters. We would be able to get started for about \$1,000 per station but we need someone or group to head up the project. Because of the population concentrations in S.D. Co., one bearing would almost be sufficient to locate a station in a population area where regular DFing could then finish the job. Of

course, two bearings would give an intersection and three a search area.

JAMMING - most jamming stations know enough to use low power so that they are not easily found. Therefore, don't listen to them between your transmissions but cover them up immediately with your signal. When he sees that you are talking "over" him, he will give up or have to run higher power making it easier for us to locate the offending station.

#### ###—DONATED EQUIPMENT—###

From time to time PARC is given radio equipment and test gear which the club is allowed to keep or to sell with the money going into the club Equipment Fund. These items are always more easily sold for more \$\$\$ if they are in working condition. If you know which end of a soldering iron to pick up and know a little about tubes and transistors, we can probably use your talents. At present we have some of the following items that need to be checked out: oscilloscope, CW automatic keyer, grid dip oscillator, tube receiver, CW XTAL transmitter, Dick Smith direction finder, frequency counter, etc.

If you can help, please contact Dennis-N6KI or me (W9FQN) and we will see that you get the equipment. Dennis has been selling some club items at recent swap meets for \$\$\$ which helps us with the buying of new equipment for club use. Lou-N6CKQ has volunteered to check out any oscilloscopes that we might have.

Other items of possible interest which the club has for sale are: signal generator(s), frequency counter(s), tape recorder(s), Atlas RX-110, audio amplifier, etc. In addition there is a T-382 IBM Selectric II typing ribbon and there are two unfinished Heathkits: Freezer Failure Alarm and a Timing Light with Advance Meter and Tachometer.

For the "Old Timers" we have an RCA (Radiomarine Corporation of America) Model AR 8503 (Ser #3718) receiver which tunes from 15-600 KC in four steps - lots of knobs plus the "famous" REGENERATION control that you just can't find these days

in a modern receiver - sensitivity beyond your wildest dreams! This is a real collectors item.

#### ###—POTPOURRI—###

The Executive Committee has voted to buy three Micor MOTOROLA 2m units which will be turned into two reserve repeaters for 146.730 and 147.135. The 3rd unit will be used to replace the 145.050 packet digipeater with the present digi being retired to the club's emergency trailer. We have also accepted the donation of a 900 MHz repeater system thru a club member which includes two repeaters plus two more transmitters-receivers. We hope to receive two more systems sometime in the near future. Suggested uses for the 900 MHz units are: packet, auto patch, repeaters, automatic DFing with "talking" direction finders, control links, FAX, etc. It will be interesting to see what coverage these 2 watt units will have in San Diego County. Remember, 900 MHz does a lot of "bouncing" around so there will be a lot of reflections around buildings possibly giving better coverage than our other repeaters.

For those interested in getting into PACKET, PARC has a Heathkit HD-4040 and a Tucson Amateur Packet Radio (TNC-1) terminal node controller with instruction books for \$75 each. An easy and cheap way to get started on Packet.

#### ###—THANKS—###

THANKS to Chuck-N6TEP for letting me see the slides from the last antenna work party. We will try to show some of them at one of the upcoming meetings.

THANKS to all of you who are writing your name and call so neatly on the sign-in sheets at club meetings. It really helps in recording attendance.

THANKS to Mary-N6NOG for her friendly offers of information on the repeater to new users and visitors in the area.

73 de Stan W 9 F Q N

+++++  
+ RUSS KREBS, W6HZJ, PAST PRESIDENT, PARC, SK +  
+ Russ Krebs, W6HZJ, became a silent key on January 28. He was a past +  
+ president of the PARC who served in 1973, the year we first put W6NWG/R +  
+ on the air. Russ, who was retired, had suffered a heart attack several +  
+ years ago, but had made a successful recovery. He was active in the Eye+  
+ Bank net, and had been in recent good health. He will be missed by all +  
+ of us who knew him.  
+++++

#### VOLUNTEER EXAMINER PROGRAM

At the February tests our PARC VE team gave nine test elements to six applicants, who passed a total of seven.

Congratulations to club member Rusty Massie, N6SZH, who advanced to General.

Our test crew was: KI6JM reception; WB6R CW exams; WR7W, AA6KY, and NU6L VEs; and paperwork by WI6B and W6TFB (who told us he had pneumonia after we finished).

de K6HAV

**CORRECTION:** Last month, in this column, we inadvertently gave PARC member Gerry Sandford, KC6BJM, credit for having passed Element 3B. We credited Gerry for someone else's success. Sorry 'bout that.

\*\*\*\*\*  
**FCC LICENSE EXAMINATIONS** in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind the City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month starting at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and the last Saturday in Escondido. Applicants must send a S.A.S.E., a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

\*\*\*\*\*

#### EMPLOYMENT OPPORTUNITIES

If you have an FCC 1st or 2nd class Radiotelephone license and are interested in a radio officer's job

on a U.S. flag merchant ship, call the Manager, Marine Personnel, Maersk Line, Ltd (201) 514-5548 for more info. (From an ad in 12/88 QEX.)

TV servicer needed for fast growing Encinitas company. Road position open (home service). Will consider full or part time positions. Light technical background required. Call Paul, KZ6X, 436-2900.

#### ABOUT OUR CLUB MEMBERS

**UPGRADE:** Richard Payne, N6RKD, to Advanced from Tech; Don Tippit, N6TRS, and Rusty Massie, N6SZH, to General from Technician; P.J. Mead, N6UCJ, from Novice (KB6SQR) to Technician. Congratulations.

**WELCOME GNU CLUB MEMBERS:** Carmen Sinatra, N6BBB, Escondido; Cliff Loudon, W6KVF, La Jolla; Floyd Paul, W6THU, Glendale; Leonard Slayter, W6BNO, Independence; Todd Remington, WD6AHV, Camp Pendleton; David Van Nest, KC6AZY, Encinitas; Bernice Rosenberg, KB6TJW, San Luis Rey.

**RENUDE MEMBERS:** Tom Anderson, KJ6KP; Eleanore Call, N6QJE; Lane Arbuthnot, KC6AST.

**GNU CALL SIGNS:** Tom Anderson, KJ6KP from WD6AXN. Walt Bloodgood, N6TZS, first license. Congratulations.

**CHANGES IN MEMBER INFORMATION:** When you up-grade, get a gnu call sign, change your address or name, please let us know for the Scope and the Club records. Our crystal ball has never quite lived up to the glowing ads for which we bought it.

**LICENSE EXPIRATION DATE REMINDER:** We used to run reminders of license expiration in the Scope, but stopped doing it (except for the info on the Scope mailing labels) due to lack of input from club members. We still don't have any input from many

members - and we have no listings for anyone whose license is to expire in 1989. If you'd like to see a reminder in the membership information column in Scope, and your expiration date is not on your Scope mailing label, get the information to the Gi'nt Computer via Bill, N6COU, or Jo, KB6NMK.

\*\*\*\*\*

#### PARC REPEATERS

THREE REPEATERS, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. At the same time, try to hear the interfering signal on the input of the repeater and, if possible, determine the direction of the source.

\*\*\*\*\*

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

\*\*\*\*\*

#### CALCIFIED

#### FORESAIL

(Genoa that's a jib, son?)

Astro digital xcvr w/manual, pwr cords, mike, \$150; President Grant

CB rig converted to 10M w/mike, pwr cords, \$75. Call Steve, N5GZP, 433-3648 4-8 pm.

Assorted tubes (transistor antecedents) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866.

Icom IC-u2AT 2M HT; IBM Correcting Selectric II typewriter. Phone Allen, N7AMR, 434-5656.

Collins 75S3-B rx, WE, mint condx, \$275. Call Krist, W6KTE, 941-3555.

Swan Cygnet 260 HF xcvr w/built in AC/DC pwr, \$100. Call Jerry, W6YLA, 758-1134.

Various vacuum tubes, all tested; Probemaster X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

6146 tubes. Call Glen Schmidt, 727-4004.

Tempo 1 HF xcvr (80-10M), xlnt condx - recently aligned; DC & AC pwr supplies; Shure 404C mike; xtra parts & tubes incl finals. All for \$200. Call Mike, W6IIS, 578-2957.

Instant RTTY CW. Vic 20, w/monitor & Datasette, Hamsoft, plus programs on cassette MFJ 1228 interface, manuals for sale or trade. Call Mick, W6FGE, 222-3912.

#### WANTED

(Start houted men)

Crystal stand w/cat's whisker for old timey crystal set. Call Al, W7HGS, 755-7347.

Flat pack Touch Tone keypad w/flex ribbon and 8-pin header, w/o tone osc. OK. Need pin out info. 12 button telephone format w/\* & # symbols req'd or can make do with a 16 button if pin out info available. PIPO type or look alike OK. Also want variometers and variocouplers and similar radio junk from the 20s. Call Mick W6FGE, 222-3912.

For Flying Samaritan honor student, reasonably priced word processor hardware/software. Call Nash, W6HCD, 728-3574.

Schematic for DSI 5612 freq. counter; Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079. OFFICIAL CLUB BADGES are available.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is a stickler and requires, not only money but, that you let him in on your name and call sign if you want them on your VERY own badge - like the big guys.

John currently has on hand badges for: WD6AHX, KH6CN, W3CRU, N7EQU, KF6EX, N6RHF, N6LTV, WB6NVX, WA6QGC, N6RKP, WB6RWF, N6TUR, KE7VW, KB6YHY, KB6YHZ, WA6YOO. If you don't want to pay full tab for your own badge, an attractive price can be arranged for you on an unclaimed badge.

\*\*\*\*\*

#### JOIN THE ARRL

The American Radio Relay League is the national Amateur Radio entity to which you should belong if you want to support your hobby. If you're not an ARRL member you should be! Who else do you have to lobby for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - and -- mo akai issen kakaranai!

\*\*\*\*\*

SURPLUS GOODIES of the electronic persuasion at: Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has many batteries for HTs and other uses. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales at 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, nicads at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 4633 Convoy St. (If you know anyone in these stores and can get their ads for Scope, we'd appreciate it. We've been plugging them for free for years!)

ELECTRONIC ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham, computer, electronics swap meet at the

Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, starting at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

\*\*\*\*\*

#### PARC SPONSORED NETS:

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to the members of the Service. Visitors are welcome, when called for after the member roll call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 1st Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, answers on any type PC.

## THOUGHTS ON THE CLUB'S REPEATERS AND ASSOCIATED STUFF

de John Kuivinen, WB6IQS, Repeater Technical Committee Chairman

The ham "grapevine" is very effective for locating parts or building materials. Frank Ramme, WB6HFE, learned of the possible availability of surplus batteries. He stayed on the track until he got for the Club eight 4V 150 Ahr long life storage batteries to be put into use at the W6NWG/R site. Larry Ruegseger, WA6UTQ, was able to do the same thing for the Club, greatly improving our emergency power capability.

When Bob Gonsett, WA6QQQ, was able to steer our beautiful 70' tower our way when it became surplus to the needs of a commercial broadcast station, several of our members stepped forward with the know-how and/or materials to get it into place at the 5,600' level. The biggest single expense to the Club was the rental of a crane to get the top three section into place.

And on it goes. This is why we can get things done well and cheaply! It may take time, but in most cases it can be done better at less cost than when done commercially. Keep your ears to the ground (both of them simultaneously, John?) for donations. If we can't use it now, how about later?

## Projects , Planned, or Proceeding

1. Heavy duty automatic cutoff battery chargers. Max charge the batteries by the remotely controlled on-site generator. Battery chargers needed.
2. Need 150 Amp 250 VAC DPDT relay with 110 VAC coil for automatic transfer from mains power to generator. Keyed into the remote control system and generator control logic.

## QUESTION OF THE MONTH DE WQ6V

Is it legal to order a pizza over the autopatch if no price is mentioned? If not, what's the difference between that and arranging, on the air, to meet someone for lunch and asking him/her to order a pizza for you?? Or asking your spouse, on the air, to stop and pick one up??

3. Need propane tank for the generator. New concrete foundation, protective walls around tank, piping and regulators for generator. Need the know-how to do the gasoline to propane conversion.

4. 2M all solid state Motorola mobile unit use to replace the aged Japanese packet transceiver, upping the power level and improving the receiver sensitivity. Unit acquired and project underway. Addition of a dual-port TNC is under consideration. Need TNC. Present packet digi-peater to be retained for installation as needed in event of emergency.

5. Wind generator and/or solar panels at the site to charge batteries. Estimated minimum of 1 KW required. Voltage controller and power distribution panel for tying into the batteries. Nash, W6HCD, will survey.

6. Remote control and telemetry for the site. Possible to tie it into the packet system? Monitoring of temperature, voltage, current, signal levels, etc. Remote control of new equipment such as antenna transfer switches, generator, backup repeaters, etc. Improved security system with remote phone dialer and monitoring receiver? Have radios for transmitting and receiving telemetry, but need folks with know-how and time to design and build the telemetering system.

The Executive Committee determines what projects and what resources are to be used for them. Your input in the form of ideas, skills, equipment, is needed. Let your friendly Executive Committee hear from you.

## N6TJT IN ORGAN CONCERT

Chuck, N6TJT, will take part in an on-going organ dedication concert at the Escondido Community Church on the church's newly acquired organ. Chuck will appear on Sunday, March 12, at 2:00 p.m. and will play a program of popular music. Refreshments will be served. Donations \$5.

## AMER. INDIAN HAM RADIO ORGANIZATION

Native American members from the San Diego area are needed, according to PARC member Mick, W6FGE, 619 222-3912, 940 Temple St., San Diego 92106, who can give you all of the details on the Little Big Horn Amateur Radio Organization and its nets on 15 & 20M. Membership in the LBHARO is not limited to Native Americans.

## 17M BAND OPENED TO AMATEUR SERVICE

According to the ARRL Letter, the 18mHz band, from 18.068-18.168 mHz, is open to amateur use for General Class and above. A1A is permitted over the entire band; packet & RTTY F1B 18.100-18.110; analog & phone above 18.110, all on a not-to-interfere with U.S. government and foreign fixed service stations basis until 7/1/89 when the band becomes exclusively amateur.

## DOWN THE TOOBE

Please note: The membership application on the last page does not indicate it's time to regnu your membership in the PARC. The Trea\$urer and Membership Chairman are overjoyed when you do so early as it saves time at the end of the Club's membership year (July 31st), but your membership expiration date is on your Scope mailing label.

Hope you all noticed the revamped masthead on last month's issue. Jo, KB6NMK, did it. It's still nice and uncluttered and looks great, and not radically different. As many of you know, Jo also does the ads in Scope - calls the advertisers and gets the new prices, ads, etc. Thanks Jo.

We're trying something new with this issue too. Wordstar 3.3 was the previous WP system. We've now up-graded (I hope) to Wordstar Professional 5.0. The new one does it in columns now like "La Palabra del Presidente" has been for some time. Comments on the new format will be welcomed.

Marty, W9GNI, retired from the Navy at the end of his cruise as Division Chaplain, 1st Marine Division at Camp Pendleton; and has been called to Chicago. He (and we)

hoped he could remain and serve in this area, but it was not to be. We were fortunate to have been able to bid him goodbye as he rode off into the sunrise on 146.730. 73, Padre.

Highway Company, one of our long-time advertisers and supporters, has sold out and gone out of business. We're sorry to see it since it was one of the few old time surplus places left - and none of the newer ones advertise in Scope.

As you may have noticed in last month's Scope's calcified ads, Bill Salter, K6GJD, is another one who has "sold out". Bill has bought a house in Show Low, AZ, and says he has now sold his hilltop in Vista. He'll be riding off into the sunrise before you get this. 73 Bill. Happy trails and good DX.

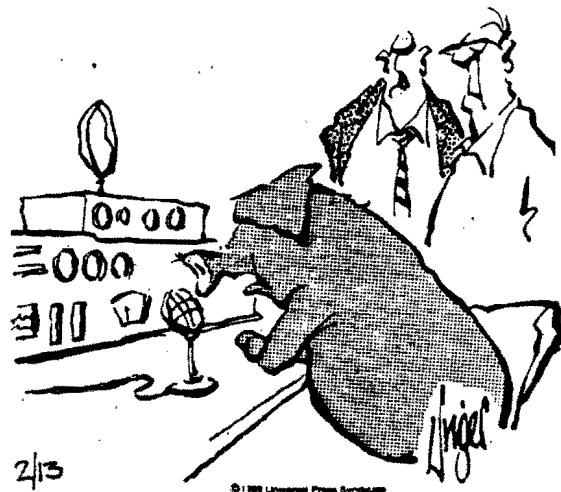
\* \* \*

That's all", she wrote!

## RECEIVED TOO LATE TO CALCIFY:

Foresail: Kenwood TS820-X HF xcvr w/Turner 252 mike, \$350. Call Bryan, WB6TJN, 727-0940, days.

**HERMAN** By Unger



"You never seen a ham operator before?"



# JOIN ARRL

## BENEFITS FOR YOU

QST, QSL Bureau, Awards, Low Cost Insurance, Operating Aids, Government Liaison and More.

## MEMBERSHIP APPLICATION

\*Enter 4-digit code for  
sponsoring club, if any:

1	7	0	3
---	---	---	---

Send to:

**The American Radio  
Relay League, Inc.**  
225 Main Street  
Newington, CT 06111



Name \_\_\_\_\_  
Call \_\_\_\_\_  
  
Street \_\_\_\_\_  
  
City \_\_\_\_\_ Prov./State \_\_\_\_\_ PC/Zip \_\_\_\_\_

\*Note:

If you are joining the ARRL for the first time and you wish to thank the ARRL-Affiliated Club that introduced you to the ARRL, please enter its 4-digit code (club members can tell you what their code is) in the space provided at the top.

\$25 in U.S./\$30 in Canada/\$33 elsewhere (U.S. funds)

Persons, age 17 or under or age 65 or over, upon submitting proof of age, may request the special dues rate of \$20 in the U.S. (\$25 in Canada, \$28 elsewhere in U.S. funds)

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

Charge to AMEX, VISA or MC No. \_\_\_\_\_  
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# —WESTCOM—

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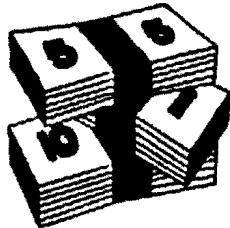
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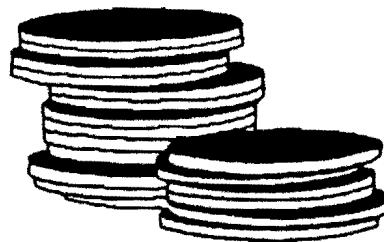
**LOREEN WILHELMY (N6RAO)**  
**(619) 756-2388**

**TRAVEL VISIONS • Encinitas, CA 92024**

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**ICOM SPECIALS CONTINUE FOR ALL OF FEBRUARY**

**KENWOOD HT SPECIALS ARE BACK**

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**TH-25AT WAS 319.95 NOW 299.95 AND A XTRA FREE BATTERY**

**THE NEW ICOM IC781 IS ON DISPLAY . COME SEE IT**

**WE HAVE ALL THE HAM PUBLICATIONS AVAILABLE**

**PLUS FREE COFFEE**



## PALOMAR AMATEUR RADIO CLUB ENLISTMENT/RE-ENLISTMENT FORM

Mail form with \$\$ to PARC, P.O.Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK at Club meetings. Dues (including SCOPE) are \$12 a year plus \$9 a year for each additional family member. Dues are pro-rated for new members: Aug, Sept. Oct. \$12, Nov. \$9, Dec. \$8, Jan. \$7, Feb. \$6, March \$5, April \$4, May \$3, June \$2, July \$1. Consider paying for two or three years at a time. Call, name and complete address are important. Telephone can be unlisted in roster if requested. Any of the other information requested may be omitted if you feel uncomfortable giving it to us.

Call \_\_\_\_\_ Name \_\_\_\_\_  
Expires \_\_\_\_\_ Address \_\_\_\_\_  
Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Old Call \_\_\_\_\_ Telephone \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_  
Date 1st Licensed \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos. Bros. \_\_\_\_\_  
Other family members in PARC \_\_\_\_\_  
ARRL  RACES  ARES  Red Flag  Blood donor  Type \_\_\_\_\_

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# Scope

**W6NWG**

**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**



**W6NWG**

**Since 1936**

**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)**

**VOL. XXIV, NO., 4**

**APRIL, 1989**

<b>PRESIDENT:</b>	Stan Rohrer, W9FQN, Valley Center	749-0276
<b>VICE PRES:</b>	Mac McCarthy, NH6EW, Oceanside	945-7391
<b>SECRETARY:</b>	Nash Williams, W6HCD, Bonsall	728-3574
<b>TREASURER:</b>	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
<b>EDITOR:</b>	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
**CLUB MEETINGS** are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome.  
**MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES.** So there!

**CLUB MEMBERSHIP** is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.  
\*\*\*\*\*

#### **APRIL CLUB MEETING**

The program for April will be presented by Ed Jankowski, W6KCB, who will show us what he and his boys at Laronix are doing with the computer in several amazing applications in the security/identification field and heaven only knows what else. Show and Tell will feature Ron Wilhelmy, WI6B, our Treasurer, who will tell us how he and Loreen, N6RAO, did not fall out of UA Flight

811 at 22K' above the Pacific - even though the chance presented itself.

A FOR SALE table will be set up for anyone who wants to bring one item for sale. The item must be tagged with name, call, and price. Ten percent of the sale price will go to the Club. Bring a goody and go home richer.

Coffee by NH6EW; and tasties by those of us who remember.

## &gt;&gt;&gt;&gt;&gt;— President's Message —&lt;&lt;&lt;&lt;&lt;

\* = \* O N D E C K \* = \*

###—ADVERTISING—##

The following members are "on deck" for the April meeting:

Coffee ->>	Duane-WB6R	(2nd)
Goodies->>	Mary-N6NOG	(1st)
(cookies) Pat-N6RHS		(last)

Please work out problems with our VP, Mac-NH6EW. Coffee helpers serve three meetings and goodie helpers two meetings.

###—F I E L D D A Y—##

The club is going to try to make Field Day this year the biggest event ever so be sure to set aside Saturday and Sunday (June 24-25) for 24 hours of emergency contesting.

At the last Executive meeting the following names were suggested to head up positions and operate stations. Nothing is set in concrete yet so please let Bud-KG6VX know if you are interested in helping out or would like to have your name added or replaced on one of the lists. We hope to run overlapping work schedules this year so your time of operating is known to you beforehand although if you just come out to do a little operating we will try to fit you in on 80-40M SSB or VHF/UHF. The 20M SSB and the CW stations (13++wpm) will run a "tight ship". We hope that the Marines from Camp Pendleton will be over to help us with the CW if we can get enough of them licensed by then. Most of them are graduating from class with certificates for 20wpm. CW is not dead in the Marine Corps!

80M=> open, KG6VX, K6HAV, ?  
 40M=> open, KS6S, WA6ZKC, ?  
 20M=> \*N6KI, WF6L, WQ6V, N6CDA,  
 15M=> \*W9FQN, KA6FPS, N6QDB, open, ?  
 10M=> open, ?  
 10M Novice/Tech=> open, ?  
 80-40mCW=> \*KB5MU, Marines(CP)  
 20-10mCW=> \*KB5MU, Marines(CP)  
 Packet=> open, ?  
 6M=> open, ?  
 2M=> open, ?  
 450MHz=> open, ?  
 MICROWAVE=> \*WD6FWE, open, ?

For those who would like to place a paid ad in the SCOPE but don't want to go with a business card (\$5/issue), you can place a business ad of two (2) lines per column (36 + 36 spaces) for the rest of the year (till July) at \$1 per issue - \$3 starting with the May SCOPE (\$12/year). Examples might be as follows:

Sample H A M B U S I N E S S A D S

Stan-W9FQN 749-0276 > avocados: Hass  
 70c/pound. RS-232 cable(7w) 10c/ft.  
 Jo-KB6NMK 741-2560 > printing, QSL's,  
 Ad layout, business cards, etc.

Decide how you want it worded and send in your \$3 for the rest of this club year to PARC.

###—POTPOURRI—##

PARC's Palomar Mountain repeater site (.3 acre) is one of the few lots on Palomar that owns a WATER SHARE and can receive water from the Water Company. We pay \$2 in annual dues and fixed costs of \$37.53 for a total of \$57.53 per year. At present we use no water and do not have a water meter. If we decide not to build on the property, we could possibly sell our membership for (\$\$\$) and save these annual fees. Our membership might be worth about \$1,000.

###—THANKS—##

ARES/RACES Comm TRAILER=> THANKS to Joe-N6RVO and Norm-N6QQF for the work they have been doing on the trailer. They have installed a table and shelves in place of a bed. THANKS to Ron-N6SKM for the donation of a 20' slip-up mast for VHF/UHF antennas and for the 5 gal propane tank. Also THANKS to Ralph-K6HAV for the folding chair and card table and to Lloyd-W6TFB for eight folding chairs. We still can use several card tables.

THANKS to Glenn-N6RKE for the heavy duty AC extension cord.

73 de Stan W 9 F Q N

## EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the officers of the Club and the Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting at the home of various of its members. The April meeting will be at the home of K6HAV.

At the March meeting at the home of K6HAV, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report (including how he did NOT fall out of UA Flight 811 though only one seat ahead of the impromptu "door"). The Committee heard WB6IQS cry over the lack of room in his garage for the donated .9 GHz repeaters of which he soon expects to get two more. John will complete the new packet digipeater before he finishes the .73 replacement machine. He has not yet received the channel elements for either. The Committee voted to spend up to \$40 for chairs for the trailer; and to expend additional funds to purchase battery boxes to house the batteries in the trailer. The Club will make a presentation on amateur radio to the graduating radio operator class at Division Schools, Camp Pendleton. (A note of passing interest: these operators are being trained as CW ops and must be able to handle 18 wpm. But CW is dead isn't it!)

\*\*\*\*\*

## HAM POSTAGE STAMP REPLICA PINS

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

\*\*\*\*\*

## MARCH CLUB MEETING

At the March club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. The program was presented by Frank Cathell, K3YAZ, who gave a very interesting illustrated exposition of the 1750M Experimental Radio Service where a 1/4 wave antenna would be a 1/4 mile antenna! No license is required and no amplifiers capable of more than one watt.

The coffee and tasties were courtesy of Mac, NH6EW, and all the good guys who brought the no-cal goodies. 63 members and guests signed in.

\*\*\*\*\*  
**THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R at the PARC site on Mt. Palomar; and, like W6NWG/R, has battery back up. Feel free to use it.**  
\*\*\*\*\*

## THE FCC IN GETTYSBURG SAYS:

The last Amateur Radio licenses issued in the 6th call area as of 03/1/89 were: AA6MW, KJ6RK, N6UMB, KC6BZK.

## NO CODE LICENSE DRUM AGAIN BEATEN

Seeing what's on the packet bulletin boards and reading QST, we again note the hoopla for a "no-code" license so that we can have more "sharp" young people in amateur radio and thus save it from a fate worse than death or some such.

It's an old story. If you can't get enough folks in who meet the current standards, lower the standards and let in those who don't presently measure up.. After nearly 30 years as a military professional, I can personally testify to what happens when this line of reasoning is followed. The caliber of the service is diluted, lowered, if you will, by lowering the standards.

I'm proud to be a member of an elite radio fraternity - the Amateur Service. The five word per minute code test doesn't take a mental giant to pass it, merely someone with the dedication and self discipline to do the job. Lots of sub-teens do it - and they aren't even Cal Tech graduates! So lets let the "sharp" folks in - after they pass Element 1A, the five wpm code test. Let it continue to keep out the "sharp" folks who do not have the self-discipline to get it done! (These views are not necessarily those of the PARC, but they sure are mine! de K6HAV)

## VOLUNTEER EXAMINER PROGRAM

At the April tests our PARC VE team gave 21 test elements to 15 applicants, 11 of whom passed a total of 15 elements.

Congratulations to club members Walt Bloodgood, N6TZV, and Rusty Massey, N6SZH, both of whom made Advanced; to A.J. Ashley, KB6NML, who made Technician; and to Gerry Sandford, KC6BJM, who got a leg up on General by passing Element 3B. Joanne, KB6WPT, XYL of Ed, W6KCB, also made it to Tech. It was a very busy day, made even more so by examiners who were scheduled and didn't show and didn't phone or write! Our short-handed test crew was: KI6JM reception; WB6R CW exams; N6NNI, W6TFB, and K6HAV VEs; and paperwork by W6KCB and K6HAV.

de K6HAV

\*\*\*\*\*  
FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind the City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month starting at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and the last Saturday in Escondido. Applicants must send a S.A.S.E., a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

\*\*\*\*\*

## ABOUT OUR CLUB MEMBERS

UPGRADE: Walt Bloodgood, N6TZV, and Rusty Massey, N6SZH, to Advanced; and A.J. Ashley, KB6NML, to Technician. Congratulations.

WELCOME GNU CLUB MEMBERS: Fred Young, W6UAP, San Marcos; Ernie Goguen, KA7BAZ, Encinitas; Jose "Felipe" Valadez, N6UIT, San Diego; Eric Barken, KB6ZUH, Escondido; Doug Grassey, N6TWO, San Diego.

RENUDE MEMBERS: George Todd, KI6ZM, (2 yrs.); Sam Burdette, W6YYV; Frank Ramme, WB6HFE; Wally Cook, N6JZB; Aubrey Stewart, W6ODG, Escondido; Becky Matros, N6KAL; Mark Salzarulo, WA6DOC.

GNU CALL SIGNS: Bill Christoph, N6TUP, and Dennis Ingebretsen, N6TUQ, both first license. Congratulations.

CHANGES IN MEMBER INFORMATION: When you up-grade, get a gnu call sign, change your address or name, please let us know for the Scope and the Club records. Our crystal ball never lived up to its glowing ads.

## LICENSE EXPIRATION DATE REMINDER:

If you'd like a reminder in the Scope, and your expiration date is not on your Scope mailing label, get the month/year info to the Gi'nt Computer via KB6NMK or N6COU.

\*\*\*\*\*  
PARC REPEATERS

THREE REPEATERS, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. At the same time, try to hear the interfering signal on the input of the repeater and, if possible, determine the direction of the source.

\*\*\*\*\*

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

\*\*\*\*\*

### FORESAIL

(Personal ads are free)

(That's a jib, son, see the onion!)

Yaesu FT-One HF xcvr w/ MD-1 desk mike, \$1100; J.W. Miller Auto Track AT2500 automatic ant. tuner, \$300; Yaesu 227R 2M xcvr, \$80. Call Harry, W6TCI, 724-3471.

MFJ 986 Differential 3KW PEP ant. tuner, \$250; Dentron Junior Monitor ant. tuner, \$45; Kenwood TS-430S w/mike, \$700; Kenwood TS-430 pwr supply, \$80; Tempo S-5 5W 2M HT w/charger, \$190; misc. sta. access. Call Frank, N6AT, 728-8003.

Garage sale: Remnants of estate of W6OFT misc. electronic equip. April 15 at N6QJE.

TenTec 580D HF SSB & CW xcvr in xlnt condx w/QSK, CW filter, matching pwr supply, and mike. Asking \$550. Call Vern, W6HW, 805 986-2036.

Astro digital xcvr w/manual, pwr cords, mike, \$150; President Grant CB rig converted to 10M w/mike, pwr cords, \$75. Call Steve, N5GZP, 433-3648 4-8 pm.

Assorted tubes (they're like big, glowing transistors) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866.

IBM Correcting Selectric II typewriter. Phone Allen, N7AMR, 434-5656.

Swan Cygnet 260 HF xcvr w/built in AC/DC pwr, \$100. Call Jerry, W6YLA, 758-1134.

Various vacuum tubes, all tested; Probemaster X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Tempo 1 HF xcvr (80-10M), xlnt condx - recently aligned; DC & AC pwr supplies; Shure 404C mike; xtra parts & tubes incl finals. All for \$200. Call Mike, W6IIS, 578-2957.

Collins 75S3-B rx, WE, mint condx, \$275. Call Krist, W6KTE, 941-3555. 6146 tubes. Call Glen Schmidt, 727-4004.

Instant RTTY CW. Vic 20, w/monitor & Datasette, Hamsoft, plus programs on cassette MFJ 1228 interface, manuals For sale or trade. Call Mick, W6FGE, 222-3912.

### WANTED

(Start houted men)

811As - at least one. Call Warren, W6EYP, 744-5097.

117V pwr supply for Swan 500.

Call Ray, W6VSG, 434-3959. Commodore 1541 disk drive for Flying Samaritan honor student. Call Nash, W6HCD, 728-3574.

Schematic for DSI 5612 freq. counter; Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079.

\*\*\*\*\*

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is a stickler and requires, not only money but, that you let him in on your name and call sign if you want them on your VERY own badge - like the big guys.

John currently has on hand badges for: WD6AHX, KH6CN, W3CRU, N7EQU, KF6EX, N6KHF, N6LTV, WB6NVX, WA6QGC, N6RKP, WB6RWF, KE7VW, WA6YOO. If you don't want to pay full tab for your own badge, an attractive price can be arranged for you on an unclaimed badge, saving countless \$\$!

\*\*\*\*\*

### JOIN THE ARRL

The American Radio Relay League is the national Amateur Radio entity to which you should belong if you want to support your hobby. If you're not an ARRL member you should be! Who else do you have to lobby for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - it won't cost a fat farthing more!

\*\*\*\*\*  
 SURPLUS GOODIES of the electronic persuasion at: Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has many batteries for HTs and other uses. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales at 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, nicads at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 9222 Chesapeake. (If you know anyone in these stores and can get their ads for Scope, we'd appreciate it. We've been plugging them for free for years!)

ELECTRONIC ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, starting at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.  
 \*\*\*\*\*

#### PARC SPONSORED NETS:

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to the members of the Service. Visitors are welcome, when called for after the member roll call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning

microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, answers on any type PC.  
 \*\*\*\*\*

#### VISIT TO USMC CW CLASS

On April 23, Stan, W9FQN, and Ralph, K6HAV, met P.J., N6UCJ, at Camp Pendleton at the 1st Marine Division's Radio Operators' Training Class. P.J. arranged the visit so that the graduating class of CW radio ops could learn about amateur radio and about how a license could be obtained. Most of the class of 18 are at the 14-18 wpm level and graduate as you read this. About half of the class indicated an interest in becoming radio amateurs (they're already professionals!) We will go back and try again with the next class too. Sure could be a fine source of new young hams!

#### EARTHQUAKE PREPAREDNESS MONTH

April is Earthquake Preparedness Month in California and in San Diego County. The Emergency Broadcast System (EBS) will be activated at 1000 on 4/14; and KFMB (760 kHz) will broadcast a simulated earthquake (shades of Orson Welles). RACES will conduct a general membership check in at 1400 on 147.195 mHz. There will be an ARES Simulated Emergency Test on Saturday, 4/22, commencing at 0830 and involving the Red Cross and communities, including San Diego

RECEIVED TOO LATE TO CALCIFY  
GI'NT ELECTRONIC GARAGE SAIL

From estate of W6OFT. April 15, 1000-1600, 2248 Jefferson St., Carlsbad. Lots of misc. electronic stuff and: Atlas 350XL w/pwr supply, \$450; Swan 500CX w/16-pole fil., \$450; Astron VS35-M pwr supply, \$115; Waters 374 1500W dummy load/watt meter, \$65; Heath SB-610 mon. Scope, \$80. Everything goes!. Call Eleanore, N6QJE, 729-0850.

MORE UNCALCIFIED  
FORESAIL THIS TIME

Azden PCS-4000 2M xcvr, \$175; AEA PK-64 PAKRATT TNC, \$50; AEA CP-1 Computer Patch, \$35; Westcom 2M6X40 2M amp., \$55; Yaesu YD-844 dynamic mike, \$25; Vanco MEC-380 dynamic mike, \$15; Astron RS-10A pwr supply, \$35; Viking phone patch, \$15; KE Electronic SQ auto. keyer, \$35; Autek QF-1A ssb/cw/am filter, \$30; Heath 1M-41A FM dev meter, \$35. Call Floyd, W6JSP, 741-8391.

R.A.C.E.S. - WHAT IS IT?

In California the Radio Amateur Civil Emergency Service (RACES) consists of amateur radio operators who have joined the State or a city or a county government to provide radio communications at no charge. Joining RACES is done by being sworn in as a Disaster Service Worker and meeting certain other requirements.

RACES is normally managed by local governments' emergency management or other designated agency.

RACES is used to provide emergency communications for a local government, supplement, augment or replace radio communications for a limited time.

RACES uses equipment provided by government and that which is personally owned. Modes used are: phone, RTTY, CW, packet, and ATV. Both packet and ATV are increasingly used by OES and in support of fire agencies. Packet is fast, accurate and provides hard copy. ATV is unique as it is only available via amateur radio - there is no non-amateur counterpart available to safety agencies. It provides scene-of-action pictures to the command post

from aircraft, vehicles or fixed locations.

Amateur Radio represents a large emergency communications resource at no cost to the taxpayer. Learn more about RACES in north county by talking to Frank, WB6HFE 757-9365; or Albert, N6GNB, 741-1840.

REWARD FOR INFORMATION OFFERED

A \$500 reward is offered for information leading to the identity of a witness to an accident involving a Ford Ranger pulling a trailer westbound on I-8 near the Campo turn off about 1200 on 12/18/88. Anyone with info can call Peter Gamer at 619 450-1991 collect.

\* \* \*

Do you suppose long calls (3 X 3 or 4 X 4) on an FM repeater are to give the called party a chance to tune the caller in? Say what?

\* \* \*

DOWN THE TOOBE

Vista Postmaster Jim Church, K6SLA, former PARC Treasurer, wound up with a big, old American-made car sharing his office with him one day recently as a driver backed up, stopped, put the transmission in drive and then mistook the throttle for the brake. Jim says he was sure surprised! I thanked him for giving up part of his office for more much-needed parking. Jim is not active in amateur radio, but can still remember it - somewhat.

"Publisher's Microphone" in April World Radio mentions the passing of Clint Call, W6OFT.

Bill Leach, KB7LX, is another, who like K6GJD, has ridden off into the sunrise (because they headed east, that's why). Bill was headed for Raleigh, NC driving a U-Haul when last contacted. Hope the trip was a smooth and unexciting one.

Note the FOR SALE table to be at each club meeting. One item per seller. Items must be tagged with name, call, and price (if any). The Club will rake in 10% of the sale price. Bring your stuff and go home richer and the club'll make a penny.

\* \* \*

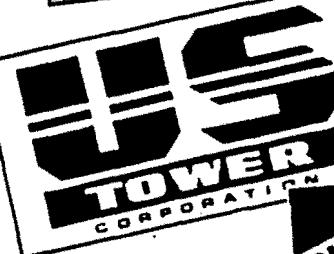
"That's all", she wrote!

\* \* \*

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## PALOMAR AMATEUR RADIO CLUB ENLISTMENT/RE-ENLISTMENT FORM

Mail form with \$\$ to PARC, P.O.Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK at Club meetings. Dues (including SCOPE) are \$12 a year plus \$9 a year for each additional family member. Dues are pro-rated for new members: Aug, Sept. Oct. \$12, Nov. \$9, Dec. \$8, Jan. \$7, Feb. \$6, March \$5, April \$4, May \$3, June \$2, July \$1. Consider paying for two or three years at a time. Call, name and complete address are important. Telephone can be unlisted in roster if requested. Any of the other information requested may be omitted if you feel uncomfortable giving it to us.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Telephone \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_

Date 1st Licensed \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos. Bros. \_\_\_\_\_

Other family members in PARC \_\_\_\_\_

ARRL \_\_\_\_ RACES \_\_\_\_ ARES \_\_\_\_ Red Flag \_\_\_\_ Blood donor \_\_\_\_ Type \_\_\_\_

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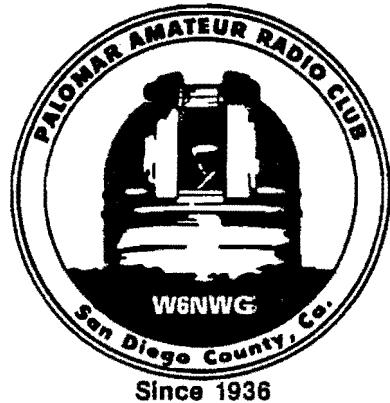
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# Scope

**w6nwg**

**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**



**Since 1936**

**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)**

**VOL. XXIV, NO., 5**

**MAY, 1989**

<b>PRESIDENT:</b>	Stan Rohrer, W9FQN, Valley Center	749-0276
<b>VICE PRES:</b>	Mac McCarthy, NH6EW, Oceanside	945-7391
<b>SECRETARY:</b>	Nash Williams, W6HCD, Bonsall	728-3574
<b>TREASURER:</b>	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
<b>EDITOR:</b>	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
 CLUB MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome.  
 MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. See!

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.  
 \*\*\*\*\*

#### **MAY CLUB MEETING**

The program for May will be presented be on Earthquake and Amateur Radio. Will will feature whatever you bring.

There will be a FOR SALE table up for anyone who wants to bring one item for sale. The item must be tagged with name, call, and price. Ten percent of the sale price will go to the Club. Bring a goody and go home richer.

Coffee by NH6EW; and tasties by those of us who remember.

#### **\*\*\*\*\* HAM POSTAGE STAMP REPLICA PINS**

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.  
 \*\*\*\*\*

#### **THE FCC IN GETTYSBURG SAYS:**

The last Amateur Radio licenses issued in the 6th call area as of 04/1/89 were: AA6ND, KJ6RY, N6URD, KC6COG.

## EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the officers of the Club and the Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting at the home of various of its members. The May meeting will be at the home of K6HAV.

At the April meeting at the home of K6HAV, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report.

The Committee heard WB6IQS relate the details of the working party which went to the repeater site on Sun., 9 April and changed antennas and feed lines for the .73 machine; and did tree trimming in front of the 220 Club's antenna. Lack of participation by the 220 Club was reported and the Committee commented on the \$25 monthly rent that club is paying. It was moved and approved to purchase new channel elements for KA6UAI/R if it is decided to move that repeater back to 147.735; to expend up to \$100 on Field Day; to expend up to \$300 to purchase a dual port TNC for the new packet repeater; and to expend up to \$100 for materials for the antenna trailer.

It was a very smooth meeting, but it wasn't all peaches and cream - it was strawberries and dryers!

## ABOUT OUR CLUB MEMBERS

**UPGRADE:** Wayne Dewey, WD6AHX, to Advanced; Mary Burgess, KB6NZA, to General. Congratulations.

**WELCOME GNU CLUB MEMBERS:** Andy Magnet, N6OSR, San Diego; Bill Poterala, WA6ILH, Poway; Steve Nash, WA6ZJD, San Diego; Victor Musil, N6OYG, Vista; Oscar Tupancy, W6BIH, Vista; Bill Fleischmann, KE4EY, Rancho Santa Fe; Gerald Boyd, WB6NJY, Ramona; John Tyler, Jr., N6URW, Leucadia; Bob Wagner, N6DUR, San Diego; Bill Dewey, WD6AHW., Fallbrook (3 1/2 yrs.). Welcome.  
**RENUDE MEMBERS:** Earl Schweizer, W6YJU; Jim O'Berry, WT7W; Hal Gorewit, KF6EX; Dirk Reschly, N6SUN; Herman Broom, WD6BRT.

**GNU CALL SIGNS:** Jim O'Berry, WT7W, from AB4JZ; Steve Barry, N6UIA, first license.

**CHANGES IN MEMBER INFORMATION:** When you up-grade, get a gnu call sign, change your address or name, please let us know.

## LICENSE EXPIRATION DATE REMINDER:

If you'd like a reminder in the Scope, and your expiration date is not on your Scope mailing label, get the month/year info to the Gi'nt Computer via KB6NMK or N6COU.

## APRIL CLUB MEETING

At the April club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. WB6IQS reported that a work party would convene at the repeater site on 9 April. W9FQN asked those using KA6UAI/R to reduce power to that required and back off on the audio as the SANDRA machine on 147.750 mHz is being interfered with by UAI users. Show and Tell featured Ron Wilhelm, WI6B, who told us of the fearful time he and his XYL Loreen, N6RAO, experienced aboard UA Flight 811 which they were aboard when a hole in the fuselage opened just one row of seats behind them! Don Tippit, N6TRS, showed us a home brew 2M J antenna.

Ed Jankowski, W6KCB, President of Loronics Information Systems, introduced PARC member Eric Barben, KB6ZUH, who gave us a demonstration of some of their efforts in the field of security/identification and a sophisticated "shoppers' helper" used in super markets.

The newly-initiated FOR SALE table was very successful (I sold my one permitted item!).

The coffee and pastries were courtesy of Mac, NH6EW, and all the good guys who brought the no-cal goodies. Attendance was 93 members and guests.

**THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS** to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source.

## &gt;&gt;&gt;&gt; President's Message —&lt;&lt;&lt;&lt;&lt;

## ###—F I E L D   D A Y—###

It has been suggested that the YL's in the club take over the 80 and 15 meter SSB stations. For some reason or another it seems to help to have a female voice during Field Day. Novices and Technicians can operate all frequencies during Field Day if there is a qualified control operator present.

## #1——SSB: YLs

80M=> KB6NMK, WA6ZKC, N6QJE, N6ELP 7pm-8am  
NOEVV, WBOWGU, K6AYJ, WB6BHE, KB6DGR  
and N6GWJ, N6INN, KB6MPZ, N6PQQ, KA7PPI  
15M=> KA6FPS, KB6SAE, N6NOG 12-7 & 8-12  
N6QDB, KB6NZA, N6RHS, KA6GHE, N6RAO  
KB6VFZ, KB6VUO, WA6WTZ, KB6YHZ, N6RLE ?

## #2——SSB: OMs

40M=> KG6VX, K6HAV, KI6JM, N6NZX, 8pm-7am  
and ?  
10M=> \_\_\_\_\_, ? 7am-8pm

## FREE POINTS

These station contacts contribute to our point total but we are not charged with another station of operation.

10M Novice/Tech=>\*WF6L & Pot.JrHS 7am-8pm  
Packet=> N6QBI, N6QDB, ? 18hrs on  
MICROWAVE=> \*WD6FWE, ? 8am-8pm

## #3——MISC

We have really never done too well on 6M to 450 MHz and we would certainly appreciate any help or suggestions that anyone could give us on how to make these bands work better for us. Is there someone or some group within the club that would like to take on this project for Field Day?  
6M=> \_\_\_\_\_, ? doubtful on  
2M=> \_\_\_\_\_, ? 18hrs on  
450MHz=> \_\_\_\_\_, ? 18hrs on

The following stations are invitational stations and you can check with the COP to see if they will accept you as an operator or logger.

## #4, #5——CW

80,40mCW=> KS6S, N6IE, W6TFB, 24hrs  
N6AT, AA6DI, KE6HI, ?  
20-15-10mCW=> WB6R, Art, 24hrs  
C.P.Marines, ?

## #6——SSB

20MSSB=> \*N6KI, WF6L, WQ6V, N6CDA, 24hrs  
WA6VNR, W6KCB, ?

\* Chief Operator(COP)

Don't be too shocked if you find your call on our planning list. We are still playing around with possible lineups for Field Day and will probably make quite a

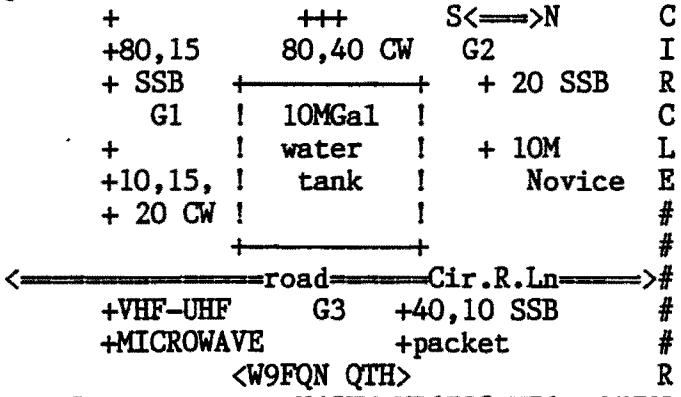
few changes right up until Field Day. If you would like to make any changes or additions, please contact Bud-KG6VX or Stan-W9FQN. Hours of probable operation are listed provided that the ionosphere holds up. We need your help!

Each position needs an operator and a logger for our contacts. Some positions intend to use computer logging but need an operator to type in the calls.

The 80-40CW will have dipoles, the 20-15-10CW a tri-band beam, and the 20SSB a 3el full size beam. We have 3el full size beams also for use on 10M and 15M SSB. On CW we hope to be using a CQ FD DE W6NWG keyer with an automatic CW report of our section.

Since our area of S.D. Co. is a retirement center, the average age of our club members is quite high so WE ARE TRYING TO GET AS MANY MOTORHOMES OR CAMPERS as possible for station operation. The club has two trailers which can probably house three stations. If you don't like the idea of working through the night, then consider Saturday afternoon or evening and Sunday morning.

Below is a possible station location plan:



G=generators: N6SKM, WB6IQS, WF6L, W6NWG  
##=WORK DAY ##=

On APRIL 9th we worked on the repeater site from 10am to about 3pm. Steve-N6UIA is an experienced tree cutter and trimmed the trees in front of the 220 antenna with help from Stan-W9FQN and Steve-WB6JJD. John-WB6IQS tried putting Erik's repeater (KA6UAI) from 147.135 to 147.130 to increase the frequency from the SANDRA 147.150 machine. The operation was a success but the patient died so John moved it back to 147.135 (we received a complaint relative to a Glendale machine). We might

try a longer test the next time we are on the hill or move KA6UAI to 147.735 again with antenna separation. Bob-KA6HZF worked on the generator door. Stan-W9FQN did the tower climbing.

The 146.730 repeater has been having some problems and in trying to isolate the problem(s) we have changed the four dipole antenna system and feedline over to the corner reflector which is headed out over San Marcos. We hope to go back to the four dipole antenna as soon as we can get the problem(s) isolated. When we go back to the dipole antenna we will probably rotate it along with the corner reflector 10-15 degrees more towards the south. Its nice to have extra antennas on the tower that we can change to in case of problems. THANKS to WB6IQS, KA6HZF, WB6ZJD, and N6UIA for all of your help. We were short workers and did not have time to check out the 146.730 antenna system.

The NEXT WORK DAY at the site will see us cutting into two more trees, cleaning up brush and hauling it away from the site, and attempting to find the trouble in the previous 146.730 cable/antenna system. The new packet system should be ready by then.

#### \*-\* O N D E C K \*-\*

The following members are "on deck" for the May meeting:

Coffee ->

Duane-WB6R(May) Fred-N6QJO(May-June-FD)  
Ken-N9AKB(FD)

Cookies->

Pat-N6RHS(May) Mary-N6NOG(May)  
Eleanore-N6QJE(June) Loreen-N6RAO(June)

Please work out problems with our VP, Mac-NH6EW. Coffee helpers serve three meetings and goodie helpers two meetings.

#### # #- P O T P O U R R I # #-

Mexican licenses now cost \$71,500 pesos (\$30.10 U.S.) and take several weeks through Tijuana or four hours in Mexicali. I have a step by step direction sheet for those taking the XE trip.

CONGRATULATIONS to Terry Ashley and George Salzberg the first two members of my novice class for passing their Tech licenses early and they did a good share of the studying on their own. The rest of the class is still working on their code.

I counted 95+ people at the last club meeting with only 93 signing in. Remember that your FREE tickets for the picnic prizes depend upon the number of meetings

that you have during the year. You get a ticket for coming to Field Day!

DO NOT PARK in the small parking lot behind the cafeteria without permission from Stan-W9FQN or Mac-NH6EW. This area is reserved for officers and committee chairmen who have things to carry into the meeting. We have also given special permission to several hams who have difficulty in walking to use this parking lot.

#### ###—THANKS—###

THANKS to Felix-N6IE for the donation of a TEN-TEC TRITON IV. This is a great CW rig with full break-in up to 50 wpm which should be ok for most of us at Field Day this year. Felix, you will have to come out and show us how to use it on Field Day. If anyone has a manual for this rig, please let us know so that we can make copies of it for our club records.

THANKS to Jack-KI6RF for the engineering of the donation of power supplies which can be converted to 12VDC for battery charging duties at the repeater site, trailers, and emergency centers. We really appreciate your looking out for our needs. Also THANKS to you and your son, Jeremy-N6QDB, for getting Todd-KI6ZM up and running with the new Digicom C-64 TNC/software which looks real neat.

THANKS to Joe-N6RVO for repairing the emergency trailer windows. It was a real pain. Joe is installing two more shelves in the trailer for additional equipment above the main operating desk.

THANKS to Kerry-N6IZW and the MICROWAVE group for taking a look at our four 900 MHz transceivers (eight more on the way?) to see what can be done with them: high speed packet, auto-DFing, links, autopatch(s) into specific calling areas, repeater site remote control, data collection, remote receivers for 146.730 so that all or specific areas of S.D. Co. can be covered equally well with just an HT, and we would be able to "turn off" any section of S.D. Co. where problems were coming from. If any of you are interested in any of the above projects, please contact W9FQN and get your name on the list along with the project that you are interested in supporting.

73 de Stan W 9 F Q N

**WANTED**

(A few good men)

Drake TR-6 6M rig in working condx. Call Lane, KC6AST, 484-2405. 811As - at least one. Call Warren, W6EYP, 744-5097.

117V pwr supply for Swan 500. Call Ray, W6VSG, 434-3959.

Commodore monitor, printer, & 1541 FDD for Flying Sams. honor student. Call Nash, W6HCD, 728-3574.

Schematic for DSI 5612 freq. counter; Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079.

**VOLUNTEER EXAMINER PROGRAM**

At the April tests our PARC VE team gave 31 test elements to 18 applicants, 16 of whom passed a total of 23 elements. The number tested was about five short of the number we handled at the National Convention! A busy day - even with a full crew of examiners.

Congratulations to Wayne Dewey, WD6AHX, to Advanced; Mary Burgess, KB6NZA, to General; Eleanore Call, N6QJE, who passed Element 3B, and Rusty Massie, N6SZH, who passed element 4B. Teresa Ashley, daughter Jo, KB6NMK, to Technician.

Our test crew was: KI6JM and KB6NMK reception/processing; WA6HYB CW exams; W6KCB, AA6KY, and W6YYV VEs; and paperwork by N6NNI, N6KI, and K6HAV.

de K6HAV

**FCC LICENSE EXAMINATIONS** in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind the City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and the last Saturday in Escondido. Applicants must send a S.A.S.E., a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

**PARC REPEATERS**

THREE REPEATERS, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

**THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER,** which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and help support it.

**DONATE IT TO THE CLUB** if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

**JOIN THE ARRL**

The American Radio Relay League is the national Amateur Radio entity to which you should belong if you want to support your hobby. If you're not an ARRL member you should be! Who else lobbies for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - it won't cost a farthing more!

## FORESAIL

Personal ads are free

Tempo S-5 5W 2M HT w/chgr, \$125.  
Call Frank, N6AT, 728-8003.

TenTec 580D HF SSB & CW xcvr in  
x1nt condx w/QSK, CW filter, matching  
pwr supply, and mike. Call  
Vern, W6HW, 805 986-2036.

Astro digital xcvr w/manual, pwr  
cords, mike, \$150; CB rig converted  
to 10M w/mike, pwr cords, \$75. Call  
Steve, N5GZP, 433-3648 4-8 pm.

Assorted tubes (they're like big,  
glowing transistors) all test good,  
\$1 ea. Call Dennis, N6KI, 271-6079.

Complete RTTY, CW, ASCII setup:  
AEA CP-1 Computer Patch, Vic-20  
computer w/monitor, Datasette,  
software, all manuals. Call Ralph,  
K6HAV, 727-5866.

IBM Correcting Selectric II. Call  
Allen, N7AMR, 434-5656.

Various vacuum tubes, all tested;  
Probemaster X10 attenuator kits,  
\$15. Call Sandy, K6HE, 745-6940.

Swan 500CX hf xcvr w/508 external  
VFO, 117CX pwr supply, \$300; Unique  
wire tuner \$50; Shure 444 mike, \$35.  
Call Krist, W6KTE, 941-3555.

Instant RTTY CW. Vic 20, w/monitor & Datasette, Hamsoft, programs  
on cassette MFJ 1228 interface,  
manuals Call Mick, W6FGE, 222-3912.

## ANSWERING THE CALL

Instances when no one responds to  
the call for assistance on the  
repeater happen. Don't be bashful.  
If there's a need for a phone call  
for assistance, step in and do it -  
don't wait for someone else. If  
you are the calling station, I'm  
sure you're as quick as I to resent  
those who will not respond.

When calling for assistance on the  
repeater, stay cool. Be specific  
about the problem from the outset.  
Be sure the responding station has  
your call sign and vice versa. When  
some one does respond, be clear and  
concise about **WHAT** the problem is  
(three-car accident with injuries),  
**WHERE** it is located (I-15 south-  
bound, number 1 & 2 lanes, one mile  
north of Gopher Canyon Road off  
ramp). Once your information has  
been received, **STAY ON THE FREQUENCY**  
in case of questions from the safety

service being phoned. HIGHWAY LANES  
ARE ALWAYS NUMBERED STARTING FROM  
THE LANE NEAREST THE CENTER (there's  
ALWAYS a number one lane!). If you  
are the calling station, don't be  
too quick to give up the ghost and  
go to another repeater - sometimes I  
have to go clear across the house to  
get to the rig - I don't always sit,  
poised, with mike in hand waiting  
for your emergency call! But if I'm  
home and listening, I'LL answer your  
call. I hope you'll do the same.

I DO hope your calls for help will  
be somewhat selective as we all  
rapidly tire of the promiscuous  
caller.

In phoning in an emergency requiring  
the CHP, 911 appears the fastest  
way to go as there is no more  
Zenith number and CHP responses to  
quasi-emergency calls on non-emer-  
gency numbers are not always happily  
responded to. 911 is supposed to be  
used for "felony in progress" or  
"life-threatening" emergencies, but  
the rule is: When in doubt, call  
911. When using 911 let the re-  
sponding party know you are an  
amateur radio operator reporting a  
fire, accident, felony in progress,  
etc. in a location OTHER THAN YOURS  
AS your phone number and address  
instantly appears on the monitor at  
the responding safety agency. If  
you are in Oceanside reporting a  
fire in Valley Center, the call will  
go to the O'side FD unless you make  
it clear at the outset WHERE the  
problem is located.

Have emergency numbers handy.  
DON'T get into the "Let Joe do it"  
mode. Your response may save a life.

SURPLUS GOODIES of the electronic  
persuasion at: Alexander Battery  
Co. West, 520 State St., Escondido,  
phone 480-4445. has many batteries  
for HTs and other uses. Aluminum,  
brass, copper, stainless steel, etc.  
at Escondido Sales at 1428 Mission  
Rd., Escondido. Electronic, mechan-  
ical, computer parts, nicads at  
Industrial Liquidators, 683 S.  
Rancho Santa Fe Rd., San Marcos; and  
4887 Convoy St., San Diego, and at  
Gateway Electronics, 9222 Chesa-  
peake.

## A WORD TO THE WISE IS TOO MUCH

Al, N6GNB, gives us a timely reminder and covers a point which most of us are aware of but needs to be reiterated for our newer hams and will make all of us more conscious of watching what we say on the air.

Al's point is: Not only the good guys (us) are listening to our daily chitchat on the repeaters and simplex. Anybody with a scanner (or a stolen ham rig) can monitor what we say. If it is announced on the air that you and your family are going to be away for a specific period of time it's simple enough for the bad guys to go and rip you off. So don't talk about it on the air. Friends and acquaintances should also remember not to be "Helpful Harrys" by telling those who call you on the air that you are gone for the day/week/month.

It has happened. The first W6NWG/R was stolen by a burglar who heard work crew members directed to the site on the air! There was no other way to find it except by luck as it was in the basement of a house and the antenna was hidden in the trees. At the burglar, KR0OK, drove to the site, broke into the house and stole the repeater and the homemade duplexer. To this day we are quick to veer away from the on-the-air question of the repeater location - even though we have a full time watchman in a near neighbor and have taken other security measures.

The point is: We have a lot of listeners out there and they are not all good guys! If you don't want the world to know, don't say it on the repeaters.

## KAISER HOSPITAL DISASTER NET

Michael Hamman, WB6CSH, would like to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net operating on 2M.

Details on becoming part of this disaster network and levels of participation may be obtained from Michael at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave a message if he is not available.

\* \* \*

## POTTER JR. HIGH SCHOOL ARC

Phil Leonelli, WF6L, who is an instructor at Potter Jr. High in Fallbrook sends along word as to how the schools ARC is getting along. Phil is the faculty advisor and Art Rideout, WA6IPD, is the club's community advisor, and instructs in electronic theory and antenna installation at school and at each student's home.

The Club has nine members who are very active at school and at home. They are: James Laszko, KB6UYM; Cayce Ramey, KC6CFG; and Shao Mifflen, Dan Prager, and Chad Dawson, all awaiting licenses; and John Liles, Mike Renshaw, John Shwartz, and Noel Rideout, all getting ready to take the license exams.

Due to the excellent 10M propagation and an improved antenna system at the school, this is the most successful year in the promotion of amateur radio at the school.

Students operate the club station between 0730 and 0800, during lunch hour 1100-1130 and after school from 1445 to 1515. The Club meets on Thursdays from 1500 to 1600. They can be heard on the air on 10M (28.3-28.5), on 40M CW (7.100-7.150), and on packet via W6NWG on 145.05.

The Club is working on obtaining a grant for satellite equipment. Phil says donations of all kinds are gratefully accepted.

\*\*\*\*\*

**OFFICIAL CLUB BADGES** are available from John Tentor, W6OLQ. John is a stickler and requires, not only money but, that you let him in on your name and call sign if you want them on your VERY own badge - like the big guys.

John currently has on hand badges for: KC6AST, KA7BAZ, KH6CN, W3CRU, N7EQU, N6KHF, N6LTV, WB6NVX, WA6QCG, N6RKP, WB6RWF, N6UIA If you don't want to pay full tab for your own badge, an attractive price can be arranged for you on an unclaimed badge, saving countless \$\$!

\*\*\*\*\*

MAY 89

ELECTRONIC ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

\*\*\*\*\*  
PARC SPONSORED NETS:

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to the members of the Service. Visitors are welcome, when called for after the member roll call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, informa-

tion, questions, solutions, answers on any type PC.

\*\*\*\*\*  
THE HONORABLE JEREMY SIMMONS, N6QBI  
(Don't mention it)

Jeremy Simmons, N6QBI, receive Honorable Mention at the Greater San Diego Science and Engineering Fair. His project concerned the trickle charging of alkaline batteries. Our congratulations, Jeremy.

DOWN THE TOOBE

If you didn't notice the picture of fellow PARC member Lane, KC6AST, on page 70 of the April 73, you might check it out.

Sure nice to hear the winter-long grunge and the internally-generated noise gone from the .73 machine in the wake of changing antennae and feed lines on 4/9. In use now is the new corner reflector put up last year. It does somewhat limit the repeater coverage to the southeast, but that will soon be corrected by reorienting the antenna or by finding and curing the problem in the 4-dipole array/feedline and putting it back into operation.

We're sorry to note the passing on 11 April, of a ham of note. Retired USAF LtGen. Butch Griswold, KØDWC, Butch was a WW II fighter pilot, and lived in Leisure World in Laguna Niguel. He commanded the 20th and 3rd Air Forces in Guam and England before becoming Deputy SAC Commander under Gen. Curtis LeMay, W6EZV, in 1954. His last active duty post was as Commandant, National War College. He retired in 1954; and was active in ham radio, both on HF and on the Laguna Beach 2M repeater. It was always a joy to talk to him, hear his cheery voice, and listen to his "old time aviator" stories.

Art Rideout, WA6IPD, liked our comments on no-code license proposals, and sent along his own sentiments which point out that lack of growth in the Amateur Radio Service is solvable by letting folks know there is an Amateur Service. Art is actively doing his part at Potter Jr. High School.

"That's all", she wrote!

**PARC LOGO SHIRT**

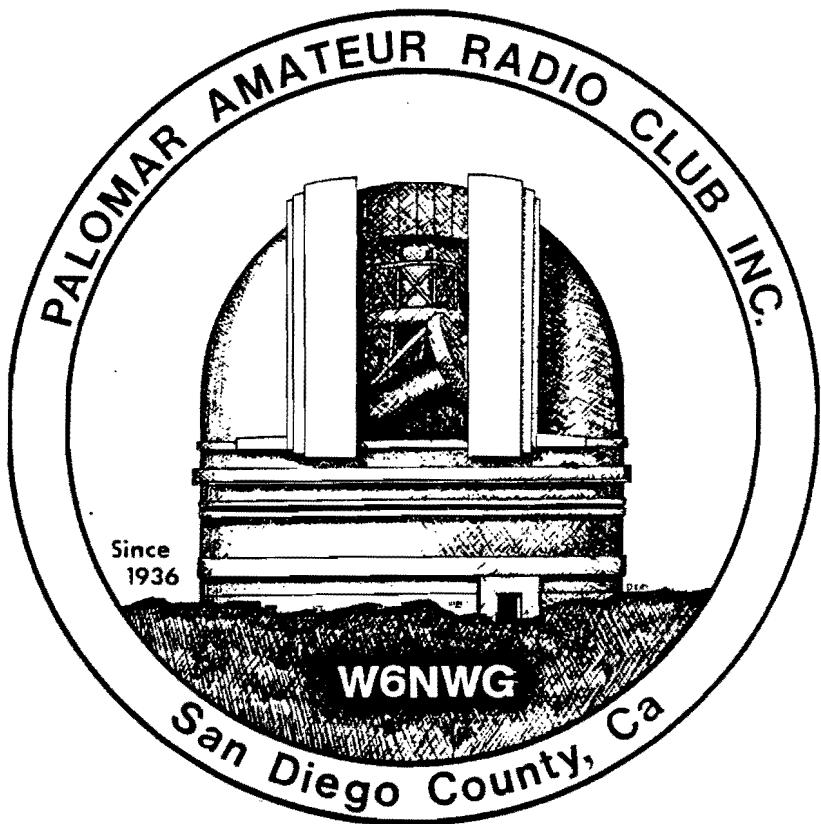
The Club is considering taking orders for a club shirt of the "polo" or "golf" type with a collar. The PARC logo, designed by Dan, WL6BLM, on the back and your name and call sign on the front. Prices depend on number of shirts ordered. Two dozen cost \$15.25/ea., four dozen \$14/ea., and 6 dozen \$13.50 each. The colors to be decided at our next meeting. Let a club official know your color preference before the meeting. Next month's Scope will have an order form to be completed and returned to Jo, KB6NMK, as soon as possible so they can be ordered before field day.

\* \* \*

**EARS T-HUNTS**

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Talk-in to the assembly point

starts at 0900 on 146.88 (-). The hunt frequency is 146.565 and the hidden tx is within 10 miles of the start. No experience necessary. All are welcome. New folks may want to ride with an old hand the first time.



# JOIN ARRL

**BENEFITS FOR YOU**

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**MEMBERSHIP APPLICATION**

\*Enter 4-digit code for  
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Name \_\_\_\_\_ Call \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ Prov./State \_\_\_\_\_ PC/Zip \_\_\_\_\_

\*Note:

If you are joining the ARRL for the first time and you wish to thank the ARRL-Affiliated Club that introduced you to the ARRL, please enter its 4-digit code (club members can tell you what their code is) in the space provided at the top.

\$25 in U.S./\$30 in Canada/\$33 elsewhere (U.S. funds)

Persons, age 17 or under or age 65 or over, upon submitting proof of age, may request the special dues rate of \$20 in the U.S. (\$25 in Canada, \$28 elsewhere in U.S. funds)

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

Charge to AMEX, VISA or MC No. \_\_\_\_\_

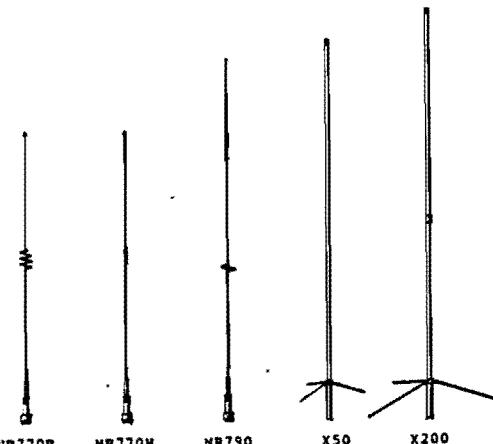
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X50	1-3/4	3-5/8	4.5	7.2	66 \$ 94.95
X200	2-5/8	4-5/8	6.0	8.0	98 139.95
<b>Dual-Band Mobile Antennas</b>					
NR770R	1-1/2	2-5/8	3.0	5.5	39 47.95
NR770S	1-1/4	1-1/2	unity	2.2	17 34.95
NR770H	1-1/2	2-5/8	3.0	5.5	39 49.95
NR790	1-3/4	3-5/8	4.5	7.2	57 76.95
<b>Dual-Band Duplexer</b>					
MX72D	(PL-259 connectors)		2-Meter Mobile Antennas		37.50
NR22L	2-5/8	-	6.5	-	96 74.95
<b>Mobile Mounting Kits w/ 17 ft. RG-58A cable &amp; PL259</b>					
PO-B	Mount only, no coax (3/4" hole reqd.)				
PO-K	Mounting Kit, complete w/ cable				
PO-MM	Magnetic Mount (not for NR22L/NR790)				
PO-TLM	Trunk Lip Mount				

## DUMMY LOAD

Model DL-60

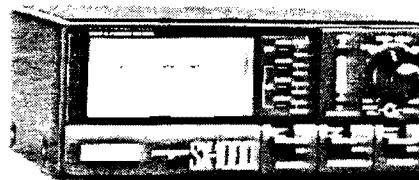
Ideal for bench tune-up of small transmitters.  
Quality built of the finest materials & workmanship  
Power Rating: 60 Watts intermittent  
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Provision for optional meter lighting is through a jack on the rear panel. (12V required, or use our AC adapter Model AC ADAP, \$6.95 ea.)

SX-100	PWR Meter F&R/SWR 3 KW	1.6-60 MHz	\$119.95
SX-200	PWR Meter F&R/SWR 200W	1.6-200 MHz	89.95
SX-400	PWR Meter F&R/SWR 200W	140-525 MHz	99.95
SX-600	PWR Meter F&R/SWR 200W	1.6-160 MHz & 140-525 MHz.	\$149.95
SX-1000	PWR Meter F&R/SWR 200W	1.6-160 MHz. & 430-1300 MHz.	\$219.95

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## PALOMAR AMATEUR RADIO CLUB ENLISTMENT/RE-ENLISTMENT FORM

Mail form with \$\$ to PARC, P.O.Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK at Club meetings. Dues (including SCOPE) are \$12 a year plus \$9 a year for each additional family member. Dues are pro-rated for new members: Aug, Sept. Oct. \$12, Nov. \$9, Dec. \$8, Jan. \$7, Feb. \$6, March \$5, April \$4, May \$3, June \$2, July \$1. Consider paying for two or three years at a time. Call, name and complete address are important. Telephone can be unlisted in roster if requested. Any of the other information requested may be omitted if you feel uncomfortable giving it to us.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Telephone \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_

Date 1st Licensed \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos. Bros. \_\_\_\_\_

Other family members in PARC \_\_\_\_\_

ARRL \_\_\_\_ RACES \_\_\_\_ ARES \_\_\_\_ Red Flag \_\_\_\_ Blood donor \_\_\_\_ Type \_\_\_\_

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# Scope

**W6NWG**

**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**



**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)**

**VOL. XXIV, NO., 6**

**JUNE, 1989**

<b>PRESIDENT:</b>	Stan Rohrer, W9FQN, Valley Center	749-0276
<b>VICE PRES:</b>	Mac McCarthy, NH6EW, Oceanside	945-7391
<b>SECRETARY:</b>	Nash Williams, W6HCD, Bonsall	728-3574
<b>TREASURER:</b>	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
<b>EDITOR:</b>	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
CLUB MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido - Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome.  
MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. See!

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.  
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#### **JUNE CLUB MEETING**

The program for May will be presented by Terry Dubson, W6MKD, who will tell us about a recent DXpedition to Siberia, a presentation that is reportedly very interesting.

Show & Tell: What you bring.

There will be a FOR SALE table for anyone who wants to bring one item for sale. The item must be tagged with name, call, and minimum price (if any). Ten percent of the sale price will go to the Club.

Coffee by NH6EW; and tasties by those of us who remember.

#### **VOLUNTEER EXAMINER PROGRAM**

At the May tests our PARC VE team gave 20 test elements to 14 applicants, eight of whom passed a total of 12 elements.

Congratulations to Rusty Massie, KJ6SZ, and Russ Lowell, WB6IOV, who both made it to Amateur Extra Class; and to Carl Burgess, N6NZX, who passed the Extra Class written exam.

Our test crew was: KI6JM, KE6VX, and WD6AHX, reception/processing; WA6HYB CW exams; W6TFB, W6YYV and NU6L VEs; and paperwork by WI6B, and K6HAV. de K6HAV

FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway. Applicants must send a S.A.S.E., a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

#### ABOUT OUR CLUB MEMBERS

UPGRADE: Russ Lowell, WB6IOV, and Rusty Massey, KJ6SZ, both to Amateur Extra Class. Congratulations.

WELCOME GNU CLUB MEMBERS: Walter Dau Jr., WA6INL, San Diego (16 mos.); Bill Anderson, KC6BIM, San Diego; Richard Currier, N6RXG, San Diego; Ellen Utschig, N6UWW, Vista (15 mos.); Bruce Krider, N8FVY, Carlsbad; Roger Jaffe, N6UUW, San Diego.

RENUDE MEMBERS: Bill Countryman, KE6BH, (2 yrs.); Chuck Inskeep, W6IRM; Dave Copley, WA6HQM; Sam Oran, WB4YQU.

GNU CALL SIGNS: Rusty Massie, KJ6SZ, from N6SZH, (keeps same place on "by call sign" roster).

CHANGES IN MEMBER INFORMATION: When you up-grade, get a gnu call sign, change your address or name, please let us know.

#### WANTED

(A few good men)

1950-60 era RCA 45 rpm (only) record player/changer w/ or w/o own spkr, amp., or basket case. Call Mick, W6FGE, 222-3912.

Drake TR-6 6M rig in working condx. Call Lane, KC6AST, 484-2405.

Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079.

\*\*\*\*\*

#### HAM POSTAGE STAMP REPLICA PINS

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

#### EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting. The June meeting will be at the home of W9FQN.

At the May meeting at the home of K6HAV, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report.

The Committee voted to put a club-owned HF xcvr in the Red Mountain Fire Station for use in the De Luz Canyon Red Flag Alert patrols. WB6IQS reported he had picked up the second .9 GHz set (one repeater and four xcvs) and had purchased for the club two .45 GHz cavities for \$20 apiece. There is one more .9 GHz set on the way. The Committee voted to reimburse WB6IQS for the equipment he purchased for the Club. WB6IQS told of the probable equipment failure in the .45 GHz repeater (the output power is way down, indicating the PA tube as a probable cause). WB6IQS also indicated he had purchased an MFJ 1270 TNC which will be used with the new packet digipeater. He has it all up and running and hopes to have it on the mountain soon. Field Day plans were discussed at length by and with KG6VX, FD Committee Chairman. KB6NMK told us of plans for the shirts with the PARC logo. N6UIA told the Committee of the .8 GHz equipment he is working with and indicated that it could be converted to the .9 GHz band. W9FQN will investigate the purchase of the trailer which carries the Club's pneumatic mast. The Committee voted to reenlist the Club in TASMA, the 2M frequency coordinating agency.

#### THE FCC IN GETTYSBURG SAYS:

The last Amateur calls issued in the 6th call area as of 05/1/89 were: AA6NP, KJ6TE, N6UY, KC6DIF.

>>>>>— President's Message —<<<<<

\*---\* O N D E C K \*---\*

The following club members are "on deck" for the June meeting:

Coffee ->>

Fred-N6QJO(Jun & FD)

Ken-N9AKB(FD & Jul)

Cookies->>

Eleanore-N6QJE(Jun)

Loreen-N6RAO(Jun & Jul)

Please work out problems with our VP, Mac-NH6EW. Coffee helpers serve three meetings and goodie helpers two meetings.

###— N 6 Q D B —###

Susan Rohrer, N6QDB, has just been notified by Congressman Packard that she has been appointed to the United States Naval Academy. It is believed that Susan's interest and participation in amateur radio activities certainly helped in her selection. There were approximately 17,000 applicants with about 1,500 being appointed. About 130 of those appointed were YL's. Yes, they do have an amateur radio club at the United States Naval Academy in Annapolis, Maryland.

###—VISITORS—###

Please remember to be extra polite to visitors in our area and to extend to them the courtesy of using our repeaters while they are in the area: W6NWG/R and KA6UAI/R. You might mention times of club meetings, 8 pm traffic nets, 9 pm technical nets, and our coverage area. Mary-N6NOG really does a good job of this for the club when she is on the air.

###—F I E L D D A Y—###

WE NEED SHELTERS FOR FIELD DAY ON 24TH AND 25TH OF JUNE. We could use CAMPERS, TRAILERS, MOTOR HOMES, and tents. Please let us know if you have some type of shelter that you could make available to us for FD. Since this is a retirement area, many of our members are alive and kicking but have gotten past the "camping" stage of life and of course we have the "NO SMOKING" sign for anyone that wants it posted in their shelter.

WE ALSO NEED 6M SSB for FD so if you have a unit and can help us out, please give Steve-N6UIA (CHOP of VHF-UHF), Bud-KG6VX (Field Day Chairman), or Stan-W9FQN a call. It could be a real hot band this FD. We need a packet station and some packet operators.

We will start setting up equipment Friday afternoon, June 23rd, and we will need help then and Saturday morning as well as operators and loggers from 11 am Saturday morning till 11 am Sunday morning. Clean up is after 11 am. Remember to come and SIGN-IN so that you get credit for our prized drawing at the August picnic. It looks as if we will be running 5A with the stations marked with an "\*" having shelters already spoken for: (80-15M-SSB-KG6VX), (40-10M-SSB-KB6NMK), (\*20M-SSB-N6KI), (\*80-40-20-WARC-15-10M-CW-WB6R), & (\*UHF-VHF-packet-KA6UIA). Microwave and Novice-Tech 10M do not count against us as stations in the 5A classification. There is a possibility that the CW could be broken up into two stations if enough of you are interested and then that would put us into 6A.

This could be our best year ever so plan on making it to Field Day this year.

###—TOWER CLIMBERS etc.—###

Over the past few years we have had quite a few tower climbers for our 80' tower which is set in 18 tons of cement. I would like to update my list and pick up any of you that I might have missed so that we are not calling on the same people all of the time for help.

\*ED-N6GZI Lanny-N6CEK Stan-W9FQN

\*Rick-WV6K Steve-N6UIA Dennis-N6KI

\*Larry-WQ6V Chuck-KI6TG Rusty-KJ6SZ

mark Mike-WA6WKE ← not members

\* on reserve at present

If I missplaced your name or you would like to be added to the list, please contact me ASAP via 146.730. We have several small tower projects coming up soon at the 50' level: cable check, 450 antenna, 900MHz antennas, and rotation of several antennas.

It has been suggested by some of our neighbors up the I-15 corridor that we might want to consider a 146.730 extension of coverage (TASMA approval of course) into that area since no other 146.730 repeater offers coverage and it is contiguous to our service area. Another possibility would be a link to low profile repeater serving that area that could be called up by tone control. If you think there is a need for something like this, please contact me. The I-15 area is along the Elsinor fault

line which does shake us up from time to time. The 145.522 (T-103.5) repeater covers that area nicely but it is highly used by everyone not in the San Diego area. At present our coverage area ends at the immigration check points on I-5 (thank goodness) and I-15 although in the past several years we have heard stations with beams making 146.730 in Palos Verdes, high in the hills of Cucamonga, San Bernardino Mountains, and a mobile high on the Eastern hills of the Palm Springs valley area - so give us a call when in the Eastern Palm Springs area! You just might make it as Floyd-W6JSP and Vanessa-WB6BHE did several weeks ago on two different occasions.

#### ###—EXECUTIVE COMMITTEE—###

The club's executive committee is composed of the four officers: WI6B, NH6EW, W6HCD, and W9FQN. In addition, any head of a committee is a executive committee member with their vote being equal to the officers vote: John-WB6IQS (repeater technical), Ralph-K6HAV (newsletter), Jo-KB6NMK (ads and membership), and any committee head attending for a special purpose.

The officers have 10 years of experience as club officers and the executive committee has about 38 years of executive committee experience. Ralph-K6HAV as been a member of the executive committee for 15+ years and John-WB6IQS is the next most senior member with 10 years. We certainly do thank them for their dedication and service to the club. The executive committee has seen the club grow each year and we now have 380 club members (a new record) with two months yet to go. We could possibly reach 400 by July 31st. Each of the above committee members spends hours doing their job plus attending a two hour committee meeting the second Thursday following the regular club meeting.

The Executive Committee makes all of the routine decisions and brings to the club only the more important items. This is why it is very important for you as members to be sure to let us know if we are moving in the right direction. You keep reelecting some of the same officers each year so we assume things are not going too badly. At each club meeting you are reminded to make suggestions to club officers of things that are important to you and we very seldom ever get any suggestions so we again assume that we are meeting your needs. For the

past five years we have conducted almost all club business in the executive committee and we only bring the larger general issues before the club so that club meetings can be reserved for programs and fellowship. We hope that this still meets with your approval.

We NEED YOUR HELP AND PARTICIPATION if we are to keep moving in the proper directions.

#### ###—TRAFFIC NET—###

We can use more stations checking into the North County Traffic Net from all of San Diego. Try to check in or listen at least once a week for traffic to your area. We need your support and you need the practice in handing messages for when the BIG ONE COMES. Remember that these nets are TRAINING NETS so feel free to participate. THANKS to the following net controls and their alternates for making our evening nets run so smoothly:

#### 146.730 MHz

	Net Control	Alternate
Sun	Charles-N6TEP	Stan-W9FQN
Mon	Marni-KB6PCF	Dave-WA6HQW
Tue	Paul-KB5MU	*Joe-N6RVO
Wed	Erik-KA6UAI	*Dave-WA6HQW
Thu	Warren-W6EYP	*Todd-KI6ZM
Fri	Chuck-N6TJT	Jo-KB6NMK
Sat	Carl-N6NZX	*Todd-KI6ZM

#### 147.645 MHz

	SCN/V Liaison	Alternate
Sun	Marni-KB6PCF	*Jack-KI6RF
Mon	Mickey-N6GWJ	*Todd-KI6ZM
Tue	Joe-N6RVO	*Todd-KI6ZM
Wed	Todd-KI6ZM	*Joe-N6RVO
Thu	*Todd-KI6ZM	*Joe-N6RVO
Fri	*Mickey-N6GWJ	*Todd-KI6ZM
Sat	Jack-KI6RF	*Marni-KB6PCF

\*Todd and Marni need replacements for these stations so that a few stations are not doing all of the work.

Everyone that is able should serve as a net control station sometime during their amateur radio experience. Alternate net control stations should take a net as practice at least once every two months or when the net control station is not available. If you are a new ham, this is an excellent way to get introduced to the National Traffic System without being required to be present for all the nets which are held on your assigned evening. Contact Todd-KI6ZM or Marni-KB6PCF for

possible assignments.

Many thanks to Fred-N6QJO for being the Friday night net control for the past eight months and the club thanks you for your dedication in passing traffic.

###—100 SECONDS—###

The timer for the 146.730 repeater is set at approximately 100 seconds for several reasons. First, to take care of the FCC requirements (under 300 seconds). Second, to promote shorter conversations so that stations can break into a contact each 100 seconds rather than each five minutes. We have noticed during the evening hours many stations now defeating the 100 second timer on purpose without turning the repeater over to another station which allows stations to break-in for emergency purposes. Some stations are talking many minutes beyond the 100 seconds which can prevent weaker emergency stations from breaking into the QSO every 100 seconds with emergency traffic. This is a NO NO. Only net control stations should defeat the 100 second timer during net activities but only where it is required. And lastly, long monologs invite jammers who are frustrated at long one sided conversations which keep them from making a call to someone.

We like to see you talking during the evening hours and have even encouraged it because this means that there is a base station on the air to take care of emergency traffic. Most emergency traffic can wait 100 seconds but will probably leave the frequency if we have a reputation of ten minute monologs. Some stations are talking so long that many forget who is in the roundtable or they turn it over to a station that went to bed 30 minutes ago. I understand that some have left their radios, made sandwiches, watched the next episode of "mud wrestling" and returned in time to pick up their next rotation without anyone being the wiser.

My wife tells me I exaggerate which is possibly true but I usually do it to make a point!

###—POTPOURRI—###

The club is looking for a 220 rig (can be crystal controlled) to be used on packet as a port on our 145.050 digi. We might even trade something or pay \$\$\$.

The club has the following manuals that are surplus to its needs. Please give me a

call if you are interested before I throw them out.

ESPcialist VHF-FM receiver

Johnson VFO

HEATH: condenser checker

electrostatic air cleaner

SWAN: SW-412 Pwr.Sup.(Swan?)

SWAN Catalog, 1972 Catalog

TB-3HA tri-band beam

Hybrid Phone Patch

510X crystal controlled Osc.

Mod 410 VFO, Mod 440 VFO

508 VFO, 500-CX xcvr

700-CX xcvr, 350 xcvr

ATLAS 180 xcvr

The club also has for sale some of the following items:

FREQUENCY COUNTERS:

Heath handheld IM-2400

Y and C Electronics

Optoelectronics 8010A 1GHz

UHF counter preamp

Ramsey Audio pre-scaler

OSCILLOSCOPES:

Tektronix 531w WB Preamp 53B

3" Du Mont Scope

Heath Scopes

Heath Monitor Scope

ASSORTED EARPHONES

If you are interested in any of these items, please contact me and I will bring them to the next meeting for you to see and drool over. I also have some ARC-5's, Model 15 & 19 RTTY machines and an SCR-522 with an 832 tube in the final that I would like to pass on to some new ham!

A quick perusal of the PARC roster indicates 30+ married couples that have licenses. Have you told your spouse lately that you love her and that she should get her license ASAP so you can hear her dainty voice even when you are far away from her?

A friend of mine is looking for an SX-28 receiver so if you have one you would like to sell, please contact W9FQN. If I were looking for equipment, it would probably be a Heathkit AT-1 and a S-38c. Ah sweet memories: ART-13's, BC-610's, BC-614E's, 250th's, 807's, 1626's, etc. My wife is still trying to get me to part with my ARC-5's, an SCR-522, and several Model 15 and 19's holding down one corner of the house. After 19 years I still have 47 boxes of radio junk still unpacked from a 1970 move!

In December I asked if one of our members, DAVID LIEN-W60VP, read the SCOPE

and was the author of several books that I own. Well, several days ago David got around to reading his December SCOPE and noted my comments. Yes, he reads the SCOPE and for some reason thinks it's great. He is the author of over 43 books which are printed in many foreign languages! The books I have of David's are instruction manuals for equipment or on basic computer language. He has a nack of making things interesting and fun to read. I especially like his THE BASIC HANDBOOK which is an encyclopedia of the BASIC computer languages which is now in its third edition. With it you can look up a basic command or function in one language and find out what the equivalent language is for the machine that you are using. Over 200 computers are covered!

###—147.135 => 147.735—###

In an attempt to resolve interference problems with SANDRA's 147.150 machine which has an input 15KHz away from Erik, we intend to run a test with Erik's-KA6UAI/R repeater reversed from what it now is to its original 147.735 configuration (-600). The test will run for about a month while we evaluate the results and report to TASMA our suggestions (hi Carl!). TASMA is the Two meter Area Spectrum Management Association which coordinates repeater frequencies in Southern California. So if you can't key up 147.135 in the next few weeks, try the reverse at 147.735. Please let us know what interference you note on this new frequency.

KA6UAI/R will be moved to the corner reflector for a test period headed out over Encinitas and this should cut down on the coupling between the two repeaters (147.135 & 147.150) by at least 10db. The packet might be moved to the 4-bay pointed down southwest and the 146.730 placed on the collinear on the South-west face of the tower. These movements are to better cover San Diego County without causing interference to other machines in our area and also to keep the interference down (to and from) "up north".

###—ANTENNA HEIGHT—###

Why is antenna height important on top of Palomar Mountain? Well, a medium area of foliage 250' thick at a point 100 feet in front of our antenna tower will absorb RF quite nicely. At 147MHz the absorption is about 10db for a circuit loss of 20db. At

220MHz the loss is about 17db or 34 db circuit loss. We need the 80' tower height to get above the tree level in front of the tower and it also explains why we should keep the trees pruned in front of the tower!

Tower height also increases your distance to the horizon according to  $D = 1.5(\text{sq root of } H)$  where D is in miles and antenna height (H) in feet. Our Palomar Mountain site should see the horizon 150 miles away although atmospheric bending and diffraction probably take us out to 200 miles. During an air inversion we were heard by the aircraft carrier Constellation 1,000+ miles out to sea!

When someone asks you where the repeater is located, you can tell them that it is on a south-west slope at an altitude of 5,600 feet just to the west of the observatory. We never give the exact location of the repeater to non-club members or discuss its location over the air for obvious reasons.

###—THANKS—###

THANKS to Ron-N6SKM who is an excellent welder. Ron welded up the hinge for our 40' tower so that it would fold over on top of the antenna trailer. He operates a speciality welding shop featuring saddle stands (floor and wall) and ingenious catalog items that every horse lover would find a need for someplace in the barn - I almost wish I had a horse!

THANKS to John-WB6IQS for bringing his air compressor out to my house to break the nuts on the club's antenna trailer. They were rusted so badly I never would have broken them loose without his air impact wrench. Also John has been putting in many hours on the new Motorola digipeater to replace the 145.050 and is now starting the building up of the new backup Motorola repeater for W6NWG/R and KA6UAI/R on 146.730 and 147.135.

THANKS to Jo-KB6NMK for taking the Sunday morning Amateur Radio Emergency Service (ARES) net for the past two months. If anyone would like to help with being a net control, please contact me (Stan-W9FQN) at the next meeting.

73 de Stan W 9 F Q N

## MAY CLUB MEETING

At the May club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. WB6IQS reported work would soon be undertaken to get the .73 machine back on its normal antenna. W9FQN told us KA6UAI/R would be switched back to 147.735. W6HCD and W6INI reported on the requirement for amateur radio support of Operation Fire Stop II at Camp Pendleton. Members present voted to make the color of the shirts with the PARC logo blue. W9FQN told us about earthquake potential and estimated casualties in California. N6RKJ talked about the use of packet radio for handling disaster traffic; and N6GZI told us how to survive a quake. 65 of us attended and had a great time. Sorry you didn't.

The recently-initiated FOR SALE table was again successful.

The coffee and tasties were courtesy of Mac, NH6EW, and all the good guys who brought the no-cal goodies.

## FOR PROSPECTIVE RADIO AMATEURS

If you're interested in becoming a radio amateur (ham) and in the Palomar Amateur Radio Club and would like to talk to someone in your own community about it, you might contact one of the folks listed below:

Bonsall	Nash Williams	728-3574
Camp Pend.	PJ Mead	941-9162
Cardiff	Duane Stedman	753-4821
Carlsbad	Eleanore Call	729-0850
Chula Vista	Betty Mahoney	420-2277
Del Mar	George Uminski	755-1014
Escondido	Jo Ashley	741-2568
Encinitas	Dave Copely	753-2605
Fallbrook	Art Rideout	728-6834
Lakeside	Mac McBride	561-2211
Leucadia	Bud Lincoln	436-9983
Oceanside	George Todd	439-8227
Poway	Mark Schlessinger	748-8391
Ramona	Mike Fisher	789-2892
Ran. Sta. Fe	Ron Wilhelmy	756-3133
San Diego	Dennis Vernacchia	271-6079
San Diego	John Tentor	672-3891
San Marcos	Floyd Harvey	741-8391
Solana Beach	Lou Broadbent	755-9179
Valley Center	Stan Rohrer	749-0276
ista	Ralph Crossman	727-5866

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THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source.

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## SURVIVORS' ASSISTANCE COMMITTEE

Through its Survivors' Assistance Committee, the Club provides aid to survivors of Silent Key amateur radio operators in the disassembly and disposition of the SK's radio station and associated equipment. The Committee is ad hoc, and is made up of two or more club members, one of whom is, hopefully, known to the survivor. The Committee contacts the survivor and offers the Club's assistance in the sorrowful task.

Club members should make this information known to their family in order that the family will be aware of the Club's availability to assist. By letting the Club do it, the survivor is insured that the equipment will be disposed of in accordance with the wishes of the SK and the survivor(s); and that there is no need to listen to the many helpful "friends" so quick to arrive on the scene.

The Committee, when requested to do so, inventories the equipment, gives the survivor(s) a copy of the inventory, prices it for sale, disassembles the station and disposes of it as requested by the survivor. The Committee reports to the survivor(s) and to the Executive Committee.

\*\*\*\*\*

## CHOOSE YOUR CALL SIGN, SI O NO?

The 5/8/89 ARRL Letter says no FCC action has been taken on the possible privatisation of amateur call sign assignments PRB-3, and that the likelihood of positive Commission action is waning with the passage of time. ARRL has reaffirmed its interest in, at minimum, finding a way to resume issuance of club and special event station call signs.

## PARC REPEATERS

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

**CO-LOCATED WITH W6NWG/R** is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and help support it.

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DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

## JOIN THE ARRL

You support your hobby by belonging to the Palomar ARC. Additionally, the American Radio Relay League is the national Amateur Radio entity to which you should belong to support your hobby. If you're not an ARRL member you should be! Who else lobbies for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - it won't cost a fat farthing more!

## FORESAIL

### Personal ads are free

If you have an item for sale, bring it to the club meeting and put it on the Sale Table tagged with your name and call and the minimum price if any. The Club will take 10% of the sale price and you will go home with \$\$ and you will have to buy something new to hold down the shelf or garage floor.

Translab linear amp., (mil. surplus), uses two 572Bs, 500-600W. Continuous coverage 3.1-30 mHz, great for WARC bands. Rack mount w/built in 110V pwr supply. Built to mil specs to last a life time. Call Joe, WA6VNR, 278-2752 8-8 daily and leave msg.

Tri-Ex W51 51' heavy duty, free-standing, crank-up tower w/Ham-M rotor (rotor control lost in divorce, but I got the manual), \$770; Mosely TA-33 beam w/40M kit installed, \$229; Swan 350 hf xcvr w/117XC pwr supply and 14-X for 12VDC opn, mike, works perfectly, \$300. Call Larry, W6QCA, 587-2226 work, 587-4324 home.

For Swan 350 or 400: Model 405 Crystal Controlled Oscillator, \$10. Two top-quality 4-drawer letter-size filing cabinets. Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866.

Bearcat 160 5-band, 16-channel programmable scanner, \$65 incl. UPS. Call Mick, W6FGE, 222-3912.

Tubes for old old-time radios. Call Joe, WA6VNR, 278-2752 8-8 daily and leave msg.

TenTec 580D HF SSB/CW xcvr in xlnt condx w/QSK, CW filter, pwr supply, mike. Vern, W6HW, 805 986-2036.

Assorted tubes (they're like big, glowing transistors) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Vacuum tubes, all tested; Probe-master X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Unique wire tuner \$50; Shure 444 mike, \$35. Krist, W6KTE, 941-3555.

Go RTTY, CW. Vic 20, w/mon., Datasette, Hamsoft, cassette programs, MFJ 1228 interface, manuals Call Mick, W6FGE, 222-3912.

## ARE YOUR VOLTS OHM ON THE RANGE?

(WA6VNR sez maybe not!)

On January 1, 1990, the legal value of the volt will change 9.26 parts per million (ppm) and the ohm will change 1.69 ppm. The changes will affect many high accuracy instruments and standards. The National Institute of Standards and Technology (NIST) - formerly NBS - is working with the calibration industry to make this change as easy as possible to the users of instruments and systems.

The changes, approved by the International Committee of Weights and Measures, will take effect on the above date. The changes are the result of consensus of the Consultive Committee on Electricity for the need for an international value for the Josephson frequency-voltage ratio and the quantum Hall effect for resistance. The changes will eliminate the discrepancies that have existed between the U.S. values as maintained by NIST and the International System of Units values.

## FIRESTOP II

The PARC provided communication support for the California Department of Forestry and Firestop II, a demonstration of the latest in fire fighting techniques and equipment, staged at Camp Pendleton 22-25 May. Club members actively involved were W6HCD and W6INI who ran the communications; K6CV, N6RVO, WB6HSZ, N6PEA, KC6BJM, KB6NMK, KS6S, and W9FQN provided mobile and portable communications; and KI6ZM took care of landline communications (four toll calls). W6NWG/R was used.

**OFFICIAL CLUB BADGES** are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign so he can put them on your VERY own badge - like the big guys have.

John has on hand badges for: KC6AST, KA7BAZ, W3CRU, N7EQU, N6LTV, WB6NVX, WA6QCG, N6RKP, WB6RWF. If you don't want to pay full tab for your own badge, John may make a deal on an unclaimed one.

## HELP WANTED!

Bob Chantrill, KE6VX, needs some folks to spell him at the Vista RACES station at the Melrose Fire Station on Monday nights. At least four of us should sign up and more would be better. Call Bob at 727-0606 and bear a hand once a month or so. You can do it, can't you.

Dee Crumpton, N6ELP, a former PARC member, needs folks to help provide public service communication support for the following events:

June 10th, Encinitas Flower Festival parade, 2M HTs in the a.m. only;

June 11th, Flower Festival 10K Run/Walk, 2M HTs & mobiles a.m. only;

July 9th Carlsbad Triathlon 2M & 220 mHz HTs & mobiles, all day.

Dee needs a hand on this. Call her at 753-5647.

Michael Hamman, WB6CSH, would like to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net on 2M.

Details on becoming part of this disaster network and levels of participation may be obtained from him at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave a message.

## EARS T-HUNTS

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Talk-in to the assembly point starts at 0900 on 146.88 (-). The hunt frequency is 146.565 and the hidden tx is within 10 miles of the start. No experience necessary. All are welcome. New folks may want to ride with an old hand the first time or two.

\*\*\*\*\*

**ELECTRONIC ORIENTED FLEA MARKETS ARE:** The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

ANTIQUE RADIO BOOK BY W6THU  
 Los Angeles Radio Manufacturing,  
 the First Twenty Years, by Floyd A.  
 Paul, W6THU, a fellow PARC member,  
 was published in December, 1988.  
 This is Floyd's second such book -  
 the first having been on antique  
 speakers. Floyd says he has nearly  
 sold out the first run of 500. The  
 book is a compendium of articles he  
 has written for the Southern  
 California Antique Radio Society  
 SCARS Gazette over the past years  
 plus up-dating and new material.  
 Floyd was able to interview many of  
 those involved in radio manufacturing  
 during the 30s and so had excellent  
 sources for much of his work.  
 Anyone interested can get a copy  
 from Floyd for \$10.50 plus \$1.50  
 +shipping (and \$.68 tax for a single  
 book if ordered in CA), at 1545  
 Raymond Ave., Glendale, CA 91201.  
 Floyd got a nice plug for the book  
 in the L.A. Times which got SCARS  
 125 members. (Total membership is  
 700+ and is has about 15% hams.)

\*\*\*\*\*

#### PARC SPONSORED NETS:

THE NORTH COUNTY TRAFFIC NET meets  
 nightly on 146.730 mHz (-600 kHz) at  
 2000 local to handle formal written  
 traffic. Visitors are welcome. Net  
 Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO  
 SECTION AMATEUR RADIO EMERGENCY  
 SERVICE (A.R.E.S.) NET meets on  
 146.730 mHz each Sunday at 0830 to  
 provide A.R.E.S. and emergency and  
 public service planning information  
 to members of the Service. Visitors  
 are welcome when called for after  
 the member roll-call.

THE SAN DIEGO COUNTY MICROWAVE NET  
 meets on 146.730 mHz each Monday at  
 2100. This net is to disseminate  
 microwave information and is open to  
 the old timer and the beginning  
 microwaver. All are welcome.  
 Kerry, N6IZW, is net control station.  
 If you can't check in, at  
 least give us a micro wave.

THE SAN DIEGO COUNTY PACKET RADIO  
 VOICE NET meets on 146.730 mHz each  
 Tuesday (except the 2nd Tues. of the

month) at 2100. This net is to  
 provide information on Packet Radio  
 for the beginner and the advanced  
 packeteer. All are welcome. Paul,  
 KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL  
 COMPUTER NET meets on 146.730 mHz  
 each Wednesday evening (except for  
 the 1st Wed. of the month) at 2100  
 to share information on computers.  
 Chuck, KI6TG, is NCS, and he wel-  
 comes those with problems, informa-  
 tion, questions, solutions, any PC.

\*\*\*\*\*

#### WORST SUNSPOT SEASON EVER

The 11-year sunspot cycle will  
 reach its peak in December, 1989,  
 says the National Oceanographic &  
 Atmospheric Administration. NOAA  
 researchers further predict the  
 activity will be the most severe in  
 250 years. This activity can be so  
 severe that radio networks switch to  
 land line transmission during such  
 periods.

#### DOWN THE TOOBE

Dick, W6OML, reports he is recov-  
 ering from a quadruple bypass and is  
 expecting more surgery to repair an  
 aneurysm.

Congratulations to Susan Rohrer,  
 N6QDB, on her appointment to the  
 U.S. Naval Academy. She's one of  
 just 124 YLs so chosen. A happy day  
 for the Rohrers. Anchors away.

We can't wait to hear Ellen,  
 N6UWW, and Roger N6UUW, in a QSO.  
 Mick, W6FGE, chides us for calling a  
 CHOP a COP. We know there's an "H"  
 of a difference in the two. So does  
 the writer of the column in which  
 the CHOP got the H CHOPped out of  
 it. We don't edit his stuff unless  
 we get it in time. It's delivered  
 "camera-ready". We noted the COP but  
 must take a COP-out since we got it  
 with no time to CHOP his COP.  
 (Maybe someday he'll become IBM  
 compatible and we'll get his stuff  
 via modem.) "It won't happen  
 again", he says but don't bet any  
 COPpers he doesn't come a cropper  
 again. Enuf! We'll CHOP it off  
 here.

"That's all", she wrote!  
 (Thank goodness!)

P.A.R.C. Shirts

Premium weight 50/50 cotton/polyester blend Jersey Golf Shirts can be ordered with the P.A.R.C. logo (done by Dan, WL7BLM) on the back. You may then get your name and call ironed on the front at your local Shirts-R-U or equivalent. The shirts will be light blue with a dark or navy blue logo on the back, the price will be \$15.25 plus tax, or \$16.32 each.

Name \_\_\_\_\_ Call \_\_\_\_\_ Telephone \_\_\_\_\_

Address \_\_\_\_\_

Write number of shirts in correct size space. [S] [M] [L] [XL]

Return completed form and \$16.32 per shirt ordered to Jo, KB6NMK at the next meeting or mail to P.O.Box 1603, Vista, CA 92083-0530 by June 12th, 1989.

THIS IS A ONE TIME OFFER, ONCE THE ORDER IS MADE WE WILL NOT ORDER AGAIN!!!



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Woulf Hong

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Ladies Program

NAME: \_\_\_\_\_ CALL: \_\_\_\_\_

NAME: \_\_\_\_\_ CALL: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Check here if you plan to stay at the LAX Hilton Hotel

How Many?

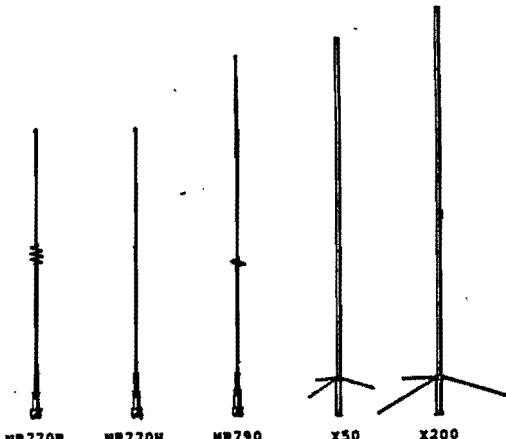
Advance Registration (To Aug. 11)	(\$12.00 at the door)	@ \$10.00
Banquet	(\$30.00 at the door - if available)	@ \$25.00
Ladies Luncheon		@ \$10.00
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MODEL NUMBER	ELEMENT PHASING	DB GAIN VHF	LENGTH INCHES	AMATEUR NET
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X200	2-5/8 4-5/8	6.0 8.0	98	139.95
Dual-Band Mobile Antennas				
NR770R	1-1/2 2-5/8	3.0 5.5	39	47.95
NR770S	1-1/4 1-1/2	unity 2.2	17	34.95
NR770H	1-1/2 2-5/8	3.0 5.5	39	49.95
NR790	1-3/4 3-5/8	4.5 7.2	57	76.95
Dual-Band Duplexer				
MX72D	(PL-259 connectors)		37.50	SX-1000 PWR Meter FAR/SWR 3 KW 1.6-60 MHz \$119.95
2-Meter Mobile Antennas				
NR22L	2-5/8	- 6.5	96	SX-200 PWR Meter FAR/SWR 200W 1.6-200 MHz 89.95
Mobile Mounting Kits w/ 17 ft. RG-58A cable & PL259				
PO-B	Mount only, no coax (3/4" hole reqd.)			SX-400 PWR Meter FAR/SWR 200W 140-525 MHz 99.95
PO-K	Mounting Kit, complete w/ cable			SX-600 PWR Meter FAR/SWR 200W 1.6-160 MHz
PO-MM	Magnetic Mount (not for NR22L/NR790)			4 140-525 MHz. \$149.95
PO-TLM	Trunk Lip Mount			& 430-1300 MHz. \$219.95

## DUMMY LOAD

Model DL-60

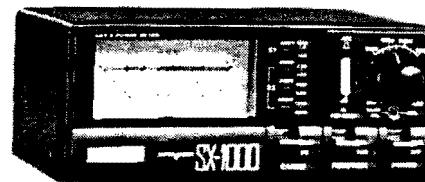
Ideal for bench tune-up of small transmitters.  
Quality built of the finest materials & workmanship  
Power Rating: 60 Watts intermittent  
20 Watts continuous  
Frequency: 500 MHz Max  
VSWR: Less than 1.2:1  
Connector: PL-259  
Warranty: One Year

List Price \$29.95

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The Diamond Antenna Precision Meter series covers the 1.6-1300 MHz spectrum with 5t typical accuracy. No competitive meter equals their quality and performance.

The large meter scale is calibrated for Forward and Reverse Power, and Standing Wave Ratio (SWR). Switch Selectable Average (R.M.S.) and Peak Envelope Power (P.E.P.).

The Diamond SX-600 is unique, as it has two directional couplers, each measuring a set of inputs. Selection is by a rear panel switch. Band 1 is 1.6-160 MHz, and Band 2 is 140-525 MHz. Typical accuracy 5t (10% Maximum). The SX-1000 combines features of the SX-600 with inclusion of the 903 MHz. & 1240 MHz. bands.

Provision for optional meter lighting is through a jack on the rear panel. (12V required, or use our AC adapter Model AC ADAP, \$6.95 ea.)

SX-100	PWR Meter FAR/SWR 3 KW 1.6-60 MHz	\$119.95
SX-200	PWR Meter FAR/SWR 200W 1.6-200 MHz	89.95
SX-400	PWR Meter FAR/SWR 200W 140-525 MHz	99.95
SX-600	PWR Meter FAR/SWR 200W 1.6-160 MHz & 140-525 MHz. \$149.95	
SX-1000	PWR Meter FAR/SWR 200W 1.6-160 MHz & 430-1300 MHz. \$219.95	

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Rugged Low Loss Switch, ideal for antenna switching at frequencies up to 500 MHz. Heavy Metal construction and large contacts will give many years of use.

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Connectors:	SO-239
Circuit:	1 pole / 2 output/automatic grounding
Warranty:	1 year
List Price	Our price
\$27.95	\$19.95

Phone 744-0799

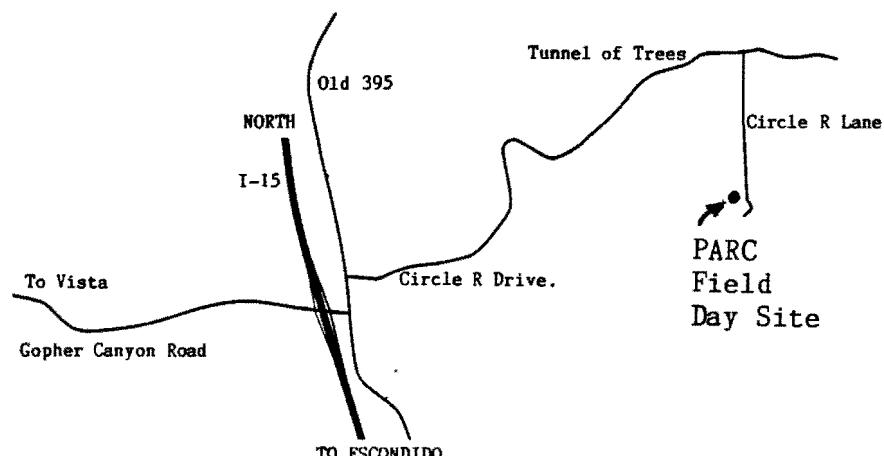
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2.7 Circle R Lane  
3.2 Field Day Site



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# PALOMAR AMATEUR RADIO CLUB ENLISTMENT/RE-ENLISTMENT FORM

Mail form with \$\$ to PARC, P.O.Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK at Club meetings. Dues (including SCOPE) are \$12 a year plus \$9 a year for each additional family member. Dues are pro-rated for new members: Aug, Sept. Oct. \$12, Nov. \$9, Dec. \$8, Jan. \$7, Feb. \$6, March \$5, April \$4, May \$3, June \$2, July \$1. Consider paying for two or three years at a time. Call, name and complete address are important. Telephone can be unlisted in roster if requested. Any of the other information requested may be omitted if you feel uncomfortable giving it to us.

Call \_\_\_\_\_ Name \_\_\_\_\_  
Expires \_\_\_\_\_ Address \_\_\_\_\_  
Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Old Call \_\_\_\_\_ Telephone \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_  
Date 1st Licensed \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos. Bros. \_\_\_\_\_  
Other family members in PARC \_\_\_\_\_  
ARRL \_\_\_\_ RACES \_\_\_\_ ARES \_\_\_\_ Red Flag \_\_\_\_ Blood donor \_\_\_\_ Type \_\_\_\_

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3716 Bluebird Canyon Rd., Vista, CA 92084.  
Subscription: \$3.00 per year. Second  
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# Scope

**W6NWG**

## Palomar Amateur Radio Club Inc.

POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530



W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)

VOL. XXIV, NO., 7

JULY, 1989

PRESIDENT:	Stan Rohrer, W9FQN, Valley Center	749-0276
VICE PRES:	Mac McCarthy, NH6EW, Oceanside	945-7391
SECRETARY:	Nash Williams, W6HCD, Bonsall	728-3574
TREASURER:	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
EDITOR:	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES . . . Wonder if that's good or bad?

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.  
\*\*\*\*\*

### JULY CLUB MEETING

The program for July will be on T-hunting and will be presented by Paul Bunnell, KE6VK, and Craig Tucker, N6ATQ. Craig's ability to find the ever-unpopular Radio Shack TV amps is well known to all.

Show & Tell: Whatever you bring.

There will be a FOR SALE table for anyone who wants to bring one item for sale. The item must be tagged with name, call, and minimum price (if any). Ten percent of the sale price will go to the Club.

Coffee by NH6EW, and tasties by those good folks who remember.

### CLUB ROSTER SOON

There will be a COMPLETE PARC ROSTER published as a part of the August or September Scope. It is being printed as of the end of our club year since our membership is at its peak then and all of our members for the year are listed. Only those who are club members for the new year will get the Scope with the roster. If you want a copy of the roster, check your mailing label on this issue and see if you need to re-give in time to get it. There will NOT be spare copies available at the club meeting.

**MEMBER INFORMATION**

GNU CLUB MEMBERS (8): Jim Barth, W6KCO, San Marcos; Mark Moskowitz, KC6COD, Carlsbad; Bill Howalt, Carlsbad; Dora Tuttle, KE7DR, Escondido; Paul McCluskey, W6BRF, Encinitas (27 mos); George "Doc" Saltzberg, N6UZG, Escondido (14 mos); George & Roberta Works, KC6DPM & KC6DPN, San Diego. Welcome.

RENUDE MEMBERS (50): Ray Harland, N6AMD; Paul Brouillet, WD6BRX; Mike Hamman, WB6CSH; Betty Mahoney, KB6DGR; Art & Edith Nichols, W6EVL & K6AYJ; Jerry Hauser, WB6FMT, (2 yrs); Don Johnson, WD6FWE; Don Beck, N6GOS; Ralph & Pat Crossman, K6HAV & N6INN; Nash Williams, W6HCD; Dan Pugh, WA6HYB; Bill Watt, WA6HYC; Jim Yacobucci, K6HZ; Russ Lowell, WB6IOV; John Kuivinen, WB6IQS; Bob Chambers, NC6J; Jack Hanthorne, KI6JM; Walt Huckabay, W6JRQ; Floyd & Vanessa Harvey, W6JSP & WB6BHE; Bob Heitger, WA6KZN; Art Pearce, K6LNJ, (3 Yrs); Will Nielsen, W6MFT; Will Nielsen II, N6MQV; Paul Williamson, KB5MU; Dick Dipert, N6MYN; Ted Pakaski, N6NAU; Jo & AJ Ashley, KB6NMK & KB6NML; Carl & Mary Burgess, N6NZX & KB6NZA, (2 yrs); Pete Mayes, WB6OBH; John Tentor, W6OLQ; Jack Crabtree, N6OPD (2 yrs); Dave Lien, W6OVP; Ed Munn, W6OYJ; Fred & Mary Barker, N6PDZ & N6PEA; Paul Heisman, KA6PPD; Larry Davis, W6QCA; John Egdahl, N6QMI, (2yrs); John Neuman, WB6RTY; Steve Barry, N6UIA; Mitch Kwietiewski, K6UL; Bob Chantrell, KE6VX; George Uminski, K6YGK; Art & Anita Nye, KB6YHZ & KB6YHY; Bill Denton, NG6Z; Tim Ames, WA1ZEN.

\*\*\*\*\*

**HAM STAMP PINS**

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

\*\*\*\*\*

**WANTED**

1950-60 era RCA 45 rpm (only) record player/changer w/ or w/o own spkr, amp., or basket case. Call Mick, W6FGE, 222-3912.

Drake TR-6 6M rig in working condx. Call Lane, KC6AST, 484-2405.

Working Icom IC-22A, Kenwood PC-1A & QF-1A. Dennis, N6KI, 271-6079.

**VE PROGRAM**

At the June tests our PARC VE team gave 13 test elements to nine applicants, six of whom passed a total of eight elements.

Our test crew was: KI6JM and KE6VX reception/processing; WB6R CW exams; AA6KY, KS6S, and W6YYV examiners; and paperwork by AA6KY and K6HAV. de K6HAV

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FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway. Applicants must send a SASE, a completed, signed FCC Form 610 (NO PHOTOCOPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

**JUNE CLUB MEETING**

At the June club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. WB6IQS reported on the work on the repeaters on June 4th; W9FQN told us the annual picnic would take place at Dixon Lake in Escondido at the same site as last year on August 20th. K6HAV reported on the VE program and the Air Pollution Control District's Smoking Vehicle Prevention Program. Terry Dubson, W6MKB, gave us another very interesting illustrated talk, this time on his April DXpedition to Siberia where he and other U.S. hams operated north of the Arctic Circle with USSR hams. 73 of us attended and had a great time.

The recently-initiated FOR SALE table was again in operation.

The tasties were courtesy of N6RA and all the other good folks who brought those no-cal goodies.

>>>>>— President's Message —<<<<<

\*\*\*\*\* O N D E C K \*\*\*\*\*

The following club members are "on deck" for the June meeting:

Coffee ->>

Ken-N9AKB(Jul,Aug)

Bud-KG6VX(Aug,Picnic,Sept)

Cookies->>

Loreen-N6RAO(Jul)

Caroline-KB6MPZ(Jul, Aug)

Please work out problems with our VP, Mac-NH6EW. Coffee helpers serve three meetings and goodie helpers two meetings.

###—DEL MAR FAIR—###

The following club members represented the club in the SANDARC amateur radio booth at the Del Mar Fair this year under the direction of Barbara-KA6FPS:

17th 10-2	PJ-N6UCJ	Doc-N6UZG
Sat 2-6	Dennis-N6KI	Phil-WF6L
6-10	Jerry-N6TCB	Harry-KA6YOO
18TH 10-2	Paul-KB5MU	Warren-W6EYP
Sun 2-6	Susan-N6QDB	Nash-W6HCD
6-10	Stan-W9FQN	Barbara-KA6FPS
19TH 10-2	Gerry-KC6BJM	Jo-KB6NMK
Mon 2-6	Benton-N6MVZ	Mac-NH6EW
6-10	John-WB6IQS	

Many THANKS to all who participated at the SANDARC booth.

###—RENEWAL JULY 15th—###

The club year ends July 30th and the new year starts August 1st. You will not receive a newsletter (SCOPE) in August unless you renew your membership by July 15th so that we will have time to get it into Bill-N6COU's GIANT COMPUTER. You will also not be eligible for our picnic prizes without a new membership for 89-90 and we do check our records! Old members still pay \$12 even if they forget to renew until sometime later in the year.

Remember that \$3.00 of your money goes towards the newsletter (SCOPE) and the remaining \$9.00 is left to take care of club activities: administration, insurance, telephone, electricity, Field Day, emergency programs, training, testing, meetings, repeaters (145.050, 146.730, 147.135\*, and 449.425) plus future planned projects of autopatches, direction finding, 900MHz repeater system, etc. (\*)We help support Erik's repeater in return for "overflow use". As you can see, the \$9.00 supports a lot of amateur radio activities and we encourage you to get your checks in

to Jo-KB6NMK before the 15th of July.

PLEASE RENEW BY JULY 15TH FOR CONTINUOUS MEMBERSHIP AND FOR RECEIVING ALL NEWSLETTERS.

###—AUTOPATCH—###

For the past several years the executive committee has listened to members suggesting the possibility of our installing an autopatch and we have looked at the "PRO" and "CON" of the idea:

CON	PRO
Expensive	Need Emergency 911
Its a headache	Other Emergencies
Can't control	Member convenience
Need links	Membership increase
Interference	Mobile use
Need control ops	Maritime mobile use
Cost of calls	

Steve-N6UIA who works with commercial 800 MHz has consented to set up a 900MHz repeater on Palomar Mountain at our site with autopatch capabilities. This repeater would first be tied into Escondido via 900MHz directly or through links with 146.730, 449.425, and possibly Erik's 147.135. It would be easy to link the 220 club of S.D. machine into the system if they were interested.

The first system will be based in Escondido and will only be able to call the following prefixes: 432, 480, 489, 740, 741, 743, 745, 746, 747, 486, 679, 748, 788, 789, 451, 485, 487, 592, 756, 471, 744, 749, 598, 724, 726, 727, 758, 940, 941, and 945. These 30 prefixes cover Escondido, Poway, Ramona, R.Bernardo, R.Santa Fe, San Marcos, Valley Center, and Vista. We have enough 900MHz gear to cover other areas of San Diego County so if you are interested in an autopatch in your area and are willing to help with the project, please give Steve a call sometime in the next few months. Another link to the costal area and one down San Diego way would cover most of the membership. We also have the possibility of a "reverse" patch where your spouse could use the phone to call you, but we aren't sure you would like this idea!

We will do the Escondido unit first with access to emergency numbers only. As we gain more experience we will probably open it up to local calls and other coverage areas. Unlimited local calls will cost us

about \$10 per month.

The purpose of the autopatch is to provide:

- 1) emergency coverage: police, fire, etc.
- 2) earthquake emergency communications.
- 3) "general info" to the family.
- 4) get hams "up on the air".

If we open up the patch for general use we would have to be careful of "business" related calls: late to work, ordering pizza, picking up or delivering equipment, etc., or any phone that answers with a business salutation.

#### ###—MEXICO CONNECTION—###

Mexican amateurs are attempting to install a repeater system from Tijuana all the way down the Baja Peninsula to Cabo San Lucas which can be used by travelers for chit chat and emergency traffic. I have been told that US amateurs would be able to use the system under EMERGENCY conditions with their own US calls and that this has been approved by the Mexican equivalent of our FCC.

They are in need of equipment which could be used in this system so if you run across any old Motorola receivers/transmitters, please contact me (W9FQN) immediately. The equipment does not need to be in working order since they have technicians that can probably get it going.

It would seem that amateurs in the United States might want to consider helping to support this Mexican project since it could benefit American travelers also.

Their system operates on 145.460 with the 1st repeater in TJ. This frequency is also used by the W6FXN Earthquake Informational Net which will have to move to another frequency soon since 145.460 was coordinated to the Mexicans many years ago. Most of the Mexican amateurs I have spoken with in TJ speak excellent English so if you are in upper Baja and have an emergency, don't be afraid to make a call on 145.460.

For anyone interested, I have a step by step sheet on how to get a Mexican license from TJ in two weeks or a half day from Mexicali.

#### ###—T-HUNTING(EARS)—###

The Escondido Amateur Radio Society (EARS) holds a T-hunt the 3rd Saturday of each month in Escondido and all amateurs are invited to participate. The T-hunt experience is one that all amateurs should

experience from time to time since we need to have the capability to locate "lost" or interfering transmissions.

Our next club meeting will be on T-hunting put on by members of EARS and we hope that we can have a good turnout for what should be an excellent program. On Saturday, SEPTEMBER 16th, I will be hiding the transmitters for everyone to locate. There will be a 20 watt transmitter which should be fairly easy to find and once it is located you will be given the frequency of the second 1/10th watt transmitter which should be a little more difficult to find. Try to form some "car groups" and participate in this club event in cooperation with EARS. All you need is a handitalkie and a little skill in its use which you should learn about at our next meeting.

#### ###—PICNIC AUG 20th—###

Our club picnic this year will be Sunday (9:30am), August 20th, at DIXON LAKE and we will again be using the shelters CHAMISE and MANZINITA. We will have several hidden transmitters for members to find as we have done the past two years. Remember that you receive one ticket for each PARC event: meetings, picnic, Field Day, and other designated events. These tickets are put into a hopper at the picnic and we draw for the prizes which this year amount to over \$400 so plan on attending and see if you can win something.

#### ###—CONTROL OPS—###

The control operators for our repeaters have the means to turn the repeaters ON or OFF depending upon the conditions as they see them. In the five years that I have been president, I can remember vaguely the turning off of the repeater(s) only a few times.

**FOUL LANGUAGE:** We need to tape it for the FCC and DF (direction finding) the signal which requires that the repeater be left on. If we shut it off, they will go away. It is the responsibility of every club member hearing interference to check the input to determine if it is coming from your area of listening. If possible, get us an area or a direction.

**DEAD CARRIER:** We need to DF the signal. If it is causing no problem that would be solved by turning off the 100 second time-out timer, we will probably leave the repeater turned on. It should be noted

that a control operator can turn the 100 second time-out timer off so that the repeater will not time-out under these conditions. If we feel that the final transistors are in danger of being lost, we will turn off the repeater.

**IMPROPER USE/DISCUSSIONS:** At some point we will turn off the repeater - heated religious, sexual, political discussions, and non-approved activities such as unauthorized nets.

The following are control operators and have control of the repeaters except for the 220 Club of San Diego repeater which has its own set of control operators:

\*Ron-WI6B \*Erik-KA6UAI Paul-KB5MU  
Kerry-N6IZW John-WB6IQS Ralph-K6HAV  
Stan-W9FQN Guy-KB6AI Larry-WQ6V

\*WI6B is the trustee of W6NWG/R and KA6UAI is the trustee of KA6UAI/R.

The person committing the illegal activity is responsible although we have the responsibility to help locate the offending transmissions and report our findings to the FCC office in San Diego. We are also guided by club policy as to what we will and will not accept on our repeater. There is nothing in FCC regulations which says that we need to make the repeaters available to anyone except during emergencies.

### ### 900 MHz ###

Our 900 MHz projects are progressing nicely with Kerry-N6IZW having checked the units now in our possession: two repeaters and two transceivers. We thank John-WB6IQS for buying these for the club and just recently obtaining the second group for a reasonable price. The club has been lucky to have amateurs in the club who seem to be able to scout out these "bargains" for the club and have the know-how to put them into operation cheaply.

Erik's-KA6UAI/R on 147.135 cost him a total of \$200 including the \$120 controller and John has spent about the same for the backup Motorola repeater for 146.730. We understand that new Motorola repeaters go for around \$3,500. The new 25 watt Motorola packet digi is costing us about \$200 INCLUDING the TNC and all are Motorola units which standardizes our repeaters.

The 900 MHz units (four repeaters, four transceivers plus assorted antennas) have cost us about \$100 total but it will take a few more \$\$ to get them into proper operat-

ion. John also bought some 450 MHz cavities for \$20 each. We hope to set up the 900 MHz units to support some of our proposed projects: repeater(s), autopatches, auto-DFing unit(s), remote receiver(s), remote control project(s), packet, etc.

If any club member finds any of the above projects interesting, please contact me ASAP and we will get your name on the project list. Steve-N6UIA has already expressed interest in the autopatch project.

### ### REPEATER WORK DAY ###

On June 4th another work party was at the repeater site. John-WB6IQS installed the new packet digipeater which he has spent the last few months putting together with Don-WD6FWE assisting the installing and the earthquake proofing of the repeaters in the repeater bunker. Jim-WB6NUV installed flooring and plastic acid barriers in the battery/generator shed. Steve-N6UIA was a jack of all trades helping with the installing of the ground rod in our cable junction box and helping Stan-W9FQN (tower climbing) install a new 7el 455-470 MHz beam on the face of the tower. They also rotated the new corner reflector to 220 degrees which is about 30 degrees or more to the south from where it used to be located.

We reversed Erik's KA6UAI/R frequencies for 30 minutes and because of inputs getting into outputs (147.150) we changed back to what we had before. Sometime in July we will again reverse Erik's 147.135 repeater and reduce power by 3db but place it on 147.730(-) so you might look for it there if you can't find it on 147.135. This is an approved TASMA test (S.D.TASMA mtg) and will last for a minimum of one week unless we see immediately that it is an impossible situation. Please report all interference to KA6UAI and W9FQN. SANDRA has consented to put their 147.150 system on frequency and we will adjust the corner reflector for minimum interaction.

At present 146.730 is on the 4-dipoles pointed out over Encinitas and 147.135 is on the corner reflector also out over Encinitas. Many THANKS to all those helping at the repeater site. If you have never been at the repeater site, please make sure to attend the next work party in July.

Marsh-W6SAX has indicated the following signal strengths before and after changes for W6NWG/R and KA6UAI/R with all readings relative to W6NWG/R before changes:

	W6NWG/R	KA6UAI/R
1350hrs	0 db	+5 db
1650hrs	+7 db	+2 db

This means that at Marsh's location with W6NWG/R on the corner reflector and KA6UAI/R on the 4-dipoles, KA6UAI/R was 5db stronger. We then put KA6UAI/R on the corner reflector and rotated it 35 degrees further south and switched W6NWG/R to the 4-dipoles that KA6UAI/R was using. As you can see W6NWG/R increased 7db while KA6UAI/R decreased 3db from his original strength but it was still 2db stronger than what W6NWG/R was in the beginning. We hope to check out the other 4-dipole antenna system soon so that we will have it as a reserve antenna.

#### ###—POTPOURRI—###

Ed Ross-N6GZI, who is our former PARC president is now operating ANTENNA SPECIALTIES which specializes in TV, Cable and Radio Antenna Systems, Installation, Repair and Removal of antenna systems. Ed used to be in charge of the SANDARC Interference Resolution committee and has done a majority of the PARC tower climbing at the repeater site. He now offers to the general public this same service through ANTENNA \$PECIALTIE\$. I am sure that Ed would appreciate any business that you could send his way. See Ed's ad in the SCOPE.

The RENTAL of the Lincoln Middle School cafeteria costs us nothing since we are being treated as a public service group but we do have to pay custodial time so please try to leave everything inside and outside of the cafeteria in number one shape. Custodial time is at \$11.50/hour and we are averaging \$4.66 per meeting which is equal to about 24 minutes of cleanup time each meeting. This amounts to about \$60/year for a meeting place. We are a secondary user of the facility and sometimes we are moved to other rooms. Our last meeting was in the school library and almost all agreed that this was a better meeting place than the cafeteria because of the lighting and acoustics. If you ever get there and can't find us, be sure to look around before you leave since we are meeting someplace in the school building!

If any of you are doctors or have access to any "free samples" which could be used in a first aid kit, please put the items that we could use in a pile and bring them to a meeting sometime. We are thinking of items that could be used to treat cuts, rashes, poison oak, etc. Anything that would not require a prescription.

COPYING articles and ideas from the SCOPE is sometimes referred to as the most sincere form of flattery. We see many items which are lifted directly from the SCOPE and reprinted in other newsletters verbatim with credit to the SCOPE ... and then we see "almost" verbatim items with no credit to the SCOPE or PARC which we are still happy to see since it confirms our judgment on the article in question which is meant to promote amateur radio. We have recently noticed items lifted and unacknowledged from the SCOPE by TRW in L.A. and one by the ARRL from a two year old SCOPE which has resulted in my receiving mail from all over the USA.

For those of you who are studying CW, if you would like a computer cut tape with special practice material in five letter code groups, please contact W9FQN. I can cut random practice material which emphasizes some letters, numbers, or punctuation more than others if you provide me with a blank tape and your requirements.

#### ###—THANKS—###

THANKS to Ken-N9AKB for consenting to work as the club's liaison with the Carlsbad safety center communications center.

THANKS to David-W60VP for the donation of approximately 400 electronic related books: basic electronics, computers, radio, etc. These books will be sold at club meetings and at the local swap meets.

THANKS to Art-W6INI (ARRL SCM) and to Nash-W6HCD (Red Flag Patrol) for the great job they did on Firestop II May 22-26 at Camp Pendleton along with their many helpers mentioned in last month's SCOPE.

THANKS to Art Rideout-WA6IPD for a very nice letter on "Why is Amateur Radio Growth Stagnant?" Art has done wiring for the club at the repeater site and has been helping Phil-WF6L with the Potter Jr.HS amateur radio group.

73 de Stan W 9 F Q N

## EXECUTIVE COMMITTEE

The Executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. the second Thursday after the club meeting. The July meeting will be at the home of W9FQN.

At the June meeting at the home of W9FQN, the Committee visited the Field Day site for W6NWG/6. The Committee then heard and approved the Minutes of the last meeting. The Treasurer's Report was not heard. The Committee discussed a prospective tenant UHF repeater and voted to accept the tenancy for a year's trial period. Field Day plans were finalized with FD Chairman KE6VX.

The Committee heard from N6UIA about a phone patch and the proposed .9 GHz repeater. \$700 was authorized for the project and N6UIA was directed to get authorization for two 900 mHz frequency pairs. He will work with WB6IQS and N6IZS on the project. The Committee authorized payment of \$120 to WB6IQS for parts for the new digipeater and repeater for 146.73. \$400 was authorized for prizes for the club's annual picnic.

## LATEST CALL SIGNS

The last Amateur calls issued in the 6th call area as of 06/1/89 were: AA6OI, KJ6VH, N6VIG, KC6ECG.

## JOIN THE ARRL

You support your hobby by belonging to the Palomar ARC. Additionally, the American Radio Relay League is the national Amateur Radio entity to which you should belong for the sake of your hobby. If you're not an ARRL member you should be! Who else lobbies for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - it won't cost a farthing more!

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## PARC REPEATERS

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and help support it.

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THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source.

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ELECTRONICS FLEA MARKETS ARE: The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

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DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. See any club officer.

**FREE - YOU HAUL IT!**  
Model 28 Teletype and RTTY terminal unit. Call Art, W6EVL, 728-1717.

### FORESAIL

(Personal ads are free.)

If you have an item for sale, bring it to the club meeting and put it on the Sale Table tagged with your name, call and minimum price if any. The Club takes 10% of the sale price and you go home with \$\$ and you'll have to buy something to hold down the shelf or garage floor.

Complete Atlas 210X home/mobile station, \$250. Call Gary, N7AS, 487-8353.

Tri-Ex W51 51' heavy duty, free-standing, crank-up tower w/Ham-M rotor (rotor control lost in divorce, but I got the manual), \$770; Mosely TA-33 beam w/40M kit installed, \$229; Swan 350 hf xcvr w/117XC pwr supply and 14-X for 12VDC opn, mike, works perfectly, \$300. MFJ-1270 TNC-2 clone for Packet Radio, \$50. Call Larry, W6QCA, 587-2226 work, 582-4324 (CORRECT NUMBER, WORKS GOOD) home.

IBM PC DOS 3.0, \$10; Word Star 3.3, \$45, both with orig. disks and documentation. Swan model 405 Crystal Controlled Oscillator w/xtals for Swan 350 or 400, \$10. Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/mon., Datasette, software, all manuals. Coax switches. Telex Procomm 300 headset w/hi-imp. boom mike and FS-1 foot switch. Heath HD-1250 solid state dip meter. Call Ralph, K6HAV, 727-5866.

AEA KT-1 CW keyer/code practice generator, \$45. Assorted tubes (If you've never seen one, they're like big, glowing transistors) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Vacuum tubes, all tested; Probe-master X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Unique wire tuner \$50; Krist, W6KTE, 941-3555.

Bearcat 160 5-band, 16-channel programmable scanner, \$65 incl. UPS. Go RTTY, CW. Vic 20, w/mon., Datasette, Hamsoft, cassette programs, MFJ 1228 interface, manuals Call Mick, W6FGE, 222-3912.

**OFFICIAL CLUB BADGES** are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign so he can put them on your very own badge - like the big guys have.

John has badges for: KC6AST, KH6CN, W3CRU, N7EQU, WB6NVX, WA6QCG, N6RKP, WB6RWF. If you don't want to pay full tab for your own badge, John can make you a real deal on an unclaimed one.

### HELP WANTED!

Bob Chantrill, KE6VX, needs some folks to help him man the Vista RACES station at the Melrose Fire Station on Monday nights. At least four of us should sign up and the more the better. Call Bob at 727-0606 and bear a hand once a month or less. You can do it, can't you.

Michael Hamman, WB6CSH, wants to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net on 2M.

Details on becoming part of this disaster network and on the various levels of participation may be obtained from him at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave msg.

Dee Crompton, N6ELP, a former PARC member, needs folks to help provide public service communication support for the following events:

June 10th, Encinitas Flower Festival parade, 2M HTs in the a.m. only;

June 11th, Flower Festival 10K Run/Walk, 2M HTs & mobiles, in the a.m. only;

July 9th Carlsbad Triathlon 2M & 220 mHz HTs & mobiles, a.m & p.m.

Call Dee at 753-5647.

## **ANSWERING THE CALL**

Instances when no one responds to the call for assistance on the repeater happen. Don't be bashful. If there's a need for a phone call or assistance, step in and do it - don't wait for someone else. If you are the calling station, I'm sure you're as quick as I to resent those who will not respond.

When calling for assistance on the repeater, stay cool. Be specific about the problem from the outset. Be sure the responding station has your call sign and vice versa. When some one does respond, be clear and concise about WHAT the problem is (three-car accident with injuries), WHERE it is located (I-15 south-bound, number 1 & 2 lanes, one mile north of Gopher Canyon Road off ramp). Once your information has been received, STAY ON THE FREQUENCY in case of questions from the safety service being phoned. HIGHWAY LANES ARE NUMBERED STARTING FROM THE LANE NEAREST THE CENTER (there's always a number one lane!). If you are the calling station, don't be too quick to give up the ghost and go to another repeater - sometimes I have to go clear across the house to get to the rig - I don't always sit, poised, with mike in hand waiting for your emergency call! But if I'm home and listening, I WILL answer your call. Please do the same.

Make your calls for help somewhat selective as we all rapidly tire of the "promiscuous caller".

In phoning in an emergency requiring the CHP, 911 appears the fastest way to go as there is no more Zenith number and CHP responses to quasi-emergency calls on non-emergency numbers are not always happily responded to. 911 is supposed to be used for "felony in progress" or "life-threatening" emergencies, but the rule is: When in doubt, call 911. When using 911 let the responding party know you are an amateur radio operator reporting a fire, accident, felony in progress, etc. in a location OTHER THAN YOURS & your phone number and address instantly appears on the monitor at the responding safety agency. If

you are in Oceanside reporting a fire in Valley Center, the call will go to the O'side FD unless you make it clear at the outset WHERE the problem is located.

Have emergency numbers handy. Your response CAN save a life.

## **WIDENING 78 - SLOWLY**

Isn't it neat, the widening of the 78 freeway is underway and will be completed soon. Oh yeah! The schedule outlined in Vol. 2, No.2 of Focus On Vista is: First Phase - widening and pavement improvements between San Marcos Blvd and Nordahl Rd, now under way, completion expected by end of year. Second Phase - from I-5 to College, to be advertised for construction bid September 1990. Third Phase - Beginning September '89 Melrose Dr. to San Marcos Blvd, restoring existing pavement and constructing concrete center medians. Work will begin on the third lane and five bridge widenings September '90. Forth Phase - from College to Melrose, bids in July '91. Want to bet by 1991 the new lanes won't be paved over the gridlocked vehicles.

## **FOR PROSPECTIVE HAMS**

Interested in amateur (ham) radio and in the Palomar Amateur Radio Club? Want to talk to someone about it? Contact:

Bonsall	Nash Williams	728-3574
Camp Pend.	PJ Mead	941-9162
Cardiff	Duane Stedman	753-4821
Carlsbad	Eleanore Call	729-0850
Chula Vista	Betty Mahoney	420-2277
Del Mar	George Uminski	755-1014
Escondido	Jo Ashley	741-2560
Encinitas	Dave Copely	753-2605
Fallbrook	Art Rideout	728-6834
Lakeside	Mac McBride	561-2211
Leucadia	Bud Lincoln	436-9983
Oceanside	George Todd	439-8227
Poway	Mark Schlessinger	748-8391
Ramona	Mike Fisher	789-2892
Ran. Sta. Fe	Ron Wilhelmy	756-3133
San Diego	Dennis Vernacchia	271-6079
San Marcos	John Tentor	672-3891
Solana Beach	Floyd Harvey	741-8391
Valley Center	Lou Broadbent	755-9179
Vista	Stan Rohrer	749-0276
	Ralph Crossman	727-5866

SURPLUS GOODIES of the electronic persuasion at: Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has HT batteries and others. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales, 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, etc. at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 9222 Chesapeake.

## **EARS T-HUNTS**

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Talk-in to the assembly point starts at 0900 on 146.88 (-). The hunt frequency is 146.565 and the hidden tx is within 10 miles of the start. No experience necessary. All are welcome. New folks may want to ride with an old hand the first time or two.

**CLUB-SPONSORED NETS**

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to members of the Service. Visitors are welcome when called for after the member roll-call.

THE SAN DIEGO COUNTY MICROWAVE NET  
meets on 146.730 mHz each Monday at  
2100. This net is to disseminate  
microwave information and is open to  
the old timer and the beginning mi-  
crowaver. All are welcome. Kerry,  
N6IZW, is net control station. If  
you can't check in, at least give us  
a micro wave.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for

the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, any PC.

\*\*\*\*\*

## **DOWN THE TOOBE**

Vanessa Harvey, WB6BHE, is home and doing nicely after cancer surgery, according to her OM Floyd, W6ISP.

Congratulations to all of the graduates. Andy Magnet N6OSR, and Terri Ashley, N6UZH, graduated from Muir College, UCSD; AJ Ashley, KB6NML, and Susan Rohrer, N6QD8, from high school, and Jeremy Simmons, N6QBI, from the Eighth Grade. Onward and upward! If we missed anyone, blame it on the Clairvoyant Crystal Ball Co. and their "On the Ball" crystal ball, a part of the Jim Dandy Editor's Kit, furnished to me by the Club.

Former PARC member and long-time Treasurer Jim Church, K6\$LA, has changed jobs from Vista Postmaster to Spring Valley Postmaster.

"That's all", she wrote!

Inside Out



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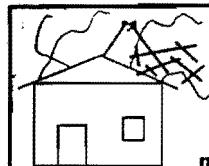
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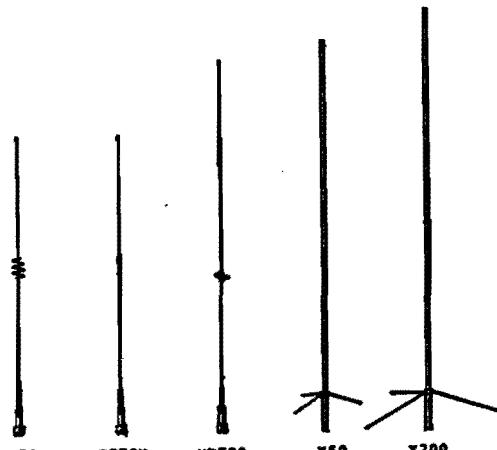
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X50	1-3/4	3-5/8	4.5	7.2	66 \$ 94.95
X200	2-5/8	4-5/8	6.0	8.0	98 139.95
<b>Dual-Band Mobile Antennas</b>					
NR770R	1-1/2	2-5/8	3.0	5.5	39 47.95
NR770S	1-1/4	1-1/2	unity	2.2	17 34.95
NR770H	1-1/2	2-5/8	3.0	5.5	39 49.95
NR790	1-3/4	3-5/8	4.5	7.2	57 76.95
<b>Dual-Band Duplexer</b>					
MX72D	(PL-259 connectors)				37.50
<b>2-Meter Mobile Antennas</b>					
NR22L	2-5/8	-	6.5	-	96 74.95
<b>Mobile Mounting Kits w/ 17 ft. RG-58A cable &amp; PL259</b>					
PO-B	Mount only, no coax (3/4" hole reqd.)				11.95
PO-K	Mounting Kit, complete w/ cable				19.95
PO-MM	Magnetic Mount (not for NR22L/NR790)				21.95
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SX-1000	PWR Meter F&R/SWR 200W 1.8-160 MHz. & 430-1300 MHz.	\$219.95

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Contact Res.:	Less than 20 milliohms
Connectors:	SO-239
Circuit:	1 pole/ 2 output/automatic grounding
Warranty:	1 year

List Price \$27.95 Our price \$19.95

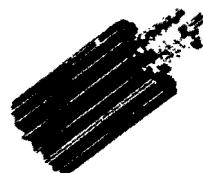
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Premium weight 50/50 cotton/polyester blend Jersey Golf Shirts can be ordered with the P.A.R.C. logo (done by Dan, WL7BLM) on the back. You may then get your name and call ironed on the front at your local Shirts-R-U or equivalent. The shirts will be light blue with a dark or navy blue logo on the back, the price will be \$15.25 plus tax, or \$16.32 each.

Name \_\_\_\_\_ Call \_\_\_\_\_ Telephone \_\_\_\_\_

Address \_\_\_\_\_

Write number of shirts in correct size space. [S] [M] [L] [XL]

Return completed form and \$16.32 per shirt ordered to Jo, KB6NMK at the next meeting or mail to P.O.Box 1603, Vista, CA 92083-0530 by July 13th, 1989.

THIS IS A ONE TIME OFFER, ONCE THE ORDER IS MADE WE WILL NOT ORDER AGAIN!!!

## PALOMAR AMATEUR RADIO CLUB ENLISTMENT/RE-ENLISTMENT FORM

Mail form with \$\$ to PARC, P.O.Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK at Club meetings. Dues (including SCOPE) are \$12 a year plus \$9 a year for each additional family member. Dues are pro-rated for new members: Aug, Sept. Oct. \$12, Nov. \$9, Dec. \$8, Jan. \$7, Feb. \$6, March \$5, April \$4, May \$3, June \$2, July \$1. Consider paying for two or three years at a time. Call, name and complete address are important. Telephone can be unlisted in roster if requested. Any of the other information requested may be omitted if you feel uncomfortable giving it to us.

Call \_\_\_\_\_ Name \_\_\_\_\_  
 Expires \_\_\_\_\_ Address \_\_\_\_\_  
 Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Old Call \_\_\_\_\_ Telephone \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_  
 Date 1st Licensed \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos. Bros. \_\_\_\_\_  
 Other family members in PARC \_\_\_\_\_  
 ARRL \_\_\_\_ RACES \_\_\_\_ ARES \_\_\_\_ Red Flag \_\_\_\_ Blood donor \_\_\_\_ Type \_\_\_\_

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**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**



**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)**

**VOL. XXIV, NO., 8**

**AUGUST, 1989**

<b>PRESIDENT:</b>	Stan Rohrer, W9FQN, Valley Center	749-0276
<b>VICE PRES:</b>	Mac McCarthy, NH6EW, Oceanside	945-7391
<b>SECRETARY:</b>	Nash Williams, W6HCD, Bonsall	728-3574
<b>TREASURER:</b>	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
<b>EDITOR:</b>	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. Tol' yez a hunnert times.

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.  
\*\*\*\*\*

## **AUGUST CLUB MEETING**

The program for August will presented by Jack Simmons, KI6RF, who will tell us about a very unique software-based packet radio terminal for the Commodore 64 computer.

Show & Tell: Whatever you bring.

There will be a FOR SALE table for anyone who wants to bring one item for sale. The item must be tagged with name, call, and minimum price (if any). Ten percent of the sale price will go to the Club.

Coffee by NH6EW, and tasties by those good folks who remember.

\*\*\*\*\*

THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source.

## **LATEST CALL SIGNS**

The last Amateur calls issued in the 6th call area as of 07/1/89 were: AA6OU, KJ6WP, N6VOJ, KC6EQG.

**ANNUAL PICNIC**

The Club's annual picnic will take place on Sunday, August 20, at Dixon Lake in Escondido - same place as last year. Dinner again will be a potluck affair (since we ALL like to sample what the good cooks cook!). Those with surnames beginning with A through F should bring a dessert; G through M a salad; and N through Z a casserole or meat dish. Bring enough to feed eight. If you'd like to come early for fishing or boating, do so and get a good parking place and as table. Arriving by 0900 is a fine idea. Parking costs \$1. Talk-in on 146.730. Take I-15 to El Norte Parkway (north of 78). Go east on El Norte to La Honda Drive. Turn left (north) and go to park entrance. Pay your \$1 and go .7 of a mile to the parking area adjacent to the Club's reserved area. A short walk if you come early. W9FQN is planning a T-hunt(s) (time(s) to be announced sooner or later). Dinner at 1200 and prize drawing thereafter at 1300.

Tickets for the drawing will be issued to club members at the August club meeting and at the picnic. Your ticket may be issued to your agent (must have a signed authorization from you). You or your agent must put your ticket(s) in the hopper at the piquenique; and must be present to claim your just desserts. The Club will not act as your agent. The number of tickets you receive is based on your attendance at club functions. You must be a current member to receive any tickets. Picnic prizes will be \$400 worth of gift certificates from some of our favorite advertisers plus whatever WI6B was able to wheedle from them.

Come with your loved ones (or your wife and kids) and have a wonderful time, but hold down the calories in all of that wonderful chow you're going to force me to eat. CU there.  
\*\*\*\*\*

**HAM STAMP PINS**

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.  
\*\*\*\*\*

**YLS ON FIELD DAY**

For the first time, the Club had a YL Station at Field Day. We operated 15 and 75M SSB. On our first try with inexperienced ops, we got 105 contacts on 15M and 124 on 75M. Ops were: Jo, KB6NMK; Ellen, N6UWW; Pat, N6RHS; Mary, N6PEA; Terri, N6UZH; and Barbara, KA6FPS. Others who helped with logging, etc. were: Bernice, KB6TJW; Mary, KB6NZA; Margaret, N6PHS; Anita, KB6YHY; and Susan, N6QDB. Special thanks to Bernice, KB6TJW, for the use of her TS-440S; Fred, N6PDZ and Mary, N6PEA, for the use of their van and Mary's staying all night and Fred for all his help including sneaking out and filling the generator so I only had to do it one time. Thanks to Stan, W9FQN, for his help; Carl, N6NZX, for the use of the mobile radio 'til we got our act together; and Jack, KI6JM, for his help in putting the antennas together on Friday. Thanks also to Larry, WQ6V; Vina, N6PQQ; and Don, WD6FWE; John, WB6IQS; and my husband, Norm and the kids, who let me have so much fun. de Jo, KB6NMK.

**EXECUTIVE COMMITTEE**

The Executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting. The August meeting will be at the home of ??.

At the July meeting at the home of W9FQN, the Committee heard and approved the minutes of the previous meeting and the Treasurer's report. The Committee discussed the auto-patch and heard from N6UIA as to the status of his work on it. Field Day was discussed and a motion was passed to: "Wait'l next year!" WI6B will proceed with the purchase of the picnic prizes. W9FQN reported on the meeting of SANDRA-TASMA's San Diego "chapter". N6KI is to check on the cost of antenna wire and coax for HF antennas for the Club and to purchase it.

**THINK ABOUT IT**

Rebates: Mother Nature's way of telling you you've been overcharged.

**MEMBER INFORMATION**

**GNU CLUB MEMBERS:** Teresa Ashley, N6UZH, Escondido; Steve Grant, N6RUV, Chula Vista; Steve Morris, KB6GKE, Oceanside; Karl Brandt, waiting Novice license, Oceanside. Welcome.

**UPGRADED LICENSES:** Mary Burgess, KB6NZA, to Advanced Class; Karl Brandt, Novice. Congratulations.

**RENUDE MEMBERS:** (93) Doc Burton, AH8AD; Ken Carlson, N9AKB; Allen Willett, N7AMR; Stan Shaut, W2AUO; David Van Nest, KC6AZY; Ron & Loreen Wilhelmmy, WI6B & N6RAO; John Reber, N6BAD (2 yrs); Ernest Goguen, KA7BAZ; Ray Dobler, W6BHF (2 yrs); Oscar Tupancy, W6BIH; Gerry Sandford, KC6BJM; Jack Williams, W6BLL; Lou Broadbent, N6CKQ; Bill Whipple, N6COU; Joe Bastow, Jr., K6CV; Carl Langjahr, W6DNX; Jack Swader, WA6DYV; Eric Johnson, KB6EPO (3 yrs); Ray Miller, N6EQB; Ed Castana, WA6ESG; Mac McCarthy, NH6EW (2yrs); Warren Lincoln, W6EYP; Ed Falls, W6FTV; Scott Belfield, KD6FY; Tim Hoy, KI6GI; Russ Folsom, N6GJW; Hal Esterly, Jr., K6GQS; Gordon Wenz, N6GW; Mac McBride, WB6GXR; Charles Edgson, W6HC; Phil Normington, WD6HFI (3 yrs); Joe Craig, W6HLB; John Campbell, WB6HSZ; Art Smith, W6INI; Art Rideout, WA6IPD (2 yrs); Ray Hickman, W6IZS; Harry Rouse, WB6JVS; Dennis Vernacchia, N6KI; R.F. Krist, W6KTE; Dave Dutcher, AA6KY 2 yrs); Phil Leonelli, WF6L; John Hammond, WB6MEI; Caroline & Bud Lincoln, KB6MPZ & KG6VX; Charles Littlefield, KI6MV; Benton Caldwell, N6MVZ; Al Doig, W6NBH; Bob Rivera, WA6NNC (3 yrs); Don Hulbert, W6NQZ; Fred Klein, KB6NRL; Walter Coates, KB6NUY; Bill Elder, KB6NYL; Howard Gates, W4NYU; Leona Wallace, WA6OHB; Dick Powell, W6OML (new QTH Sun City); Marni & Marsh Parker, KB6PCF & W6SAX; Jerry Lounsberry, N6PKZ; Doug Gordon, K6PUN; Jim Murdock, N6PYD; Maurice Horrell, KB6QF; Bob Gregory, KB6QH (2yrs); Mel Hanson, KB6QJ; John Moriarity, K6QQ; Norm Rath, N6QQF; Joe Martina, N6RVO; Richard Mirdas, KF6RX; Richard Curier, N6RXG; Art Mason, N6RYZ; Bob Rice, KS6S; Walt Bloodgood, KJ6SK; Herb Wandschneider, WA6SVN; Billy

McCord, WB6TBQ; Jerry Carter, N6TCB (3 YRS); Harry Bluestein, N6TE (2 yrs); Charles Miele, N6TEP (2yrs); Ivan Simpson, W6TET; Chuck Dowling, KI6TG; Bernice Rosenberger, KB6TJW; Ron Earl, W6TXK; Paul Buscema, KZ6X; Harry Hodges, WA6YOO (3 YRS); Leo Wagner, N6TUR (2 yrs); PJ Mead, N6UCJ; Larry Ruegseger, WA6UTQ, (3 yrs); Dick McKay, K6VGP; Georgia Griffiths, KB6VUO; Herb Patchell, KD6WX; Fred Frey, KD6WZ; Jerry Balke, W6YLA; Bill Howalt; Howard Lee.

**NEW CALL SIGNS:** Rusty Massie, AA6OM from KJ6SDZ.

**CHANGES IN MEMBER INFORMATION:** When you have a change let us know.

**VE PROGRAM**

At the July tests our PARC VE team gave 10 test elements to six applicants, five of whom passed a total of eight elements. Congratulations to Mary Burgess, KB6NZA, who passed the examination for Advanced Class.

Our test crew was: KE6VX and KI6JM reception/processing; WA6HYB CW exams; N6KI, W6YYV, and KB5MU examiners; and paperwork by WQ6V and K6HAV. de K6HAV

\*\*\*\*\*  
**FCC LICENSE EXAMINATIONS** in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway . Applicants must send a SASE, a completed, signed FCC Form 610 (NO PHOTOCOPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

**FREE - YOU HAUL IT!**

Model 28 Teletype and RTTY terminal unit. Call Art, W6EVL, 728-1717.

**SURPLUS?**

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. Contact any club officer.

**WANTED**

Liaison and Net Control Stations for the North County Traffic Net. Call Todd, KI6ZM, 439-8227.

2M base station, Kenwood 711-A, or equiv. Call Allen, N7AMR, 434-5656.

1950-60 era RCA 45 rpm (only) record player/changer w/ or w/o own spkr, amp., or basket case. Call Mick, W6FGE, 222-3912.

Drake TR-6 6M rig in working condx. Call Lane, KC6AST, 484-2405.

Working Icom IC-22A, Kenwood PC-1A & QF-1A. Dennis, N6KI, 271-6079.

**JULY CLUB MEETING**

At the July club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. WB6IQS told us of the next scheduled work on the repeaters. W9FQN told us of the SANBRA San Diego TASMA chapter meeting. Bob Chantrill, KE6VX, asked for help with the Vista RACES station. K6HAV reported on the VE program; and that a 14-page issue of SCOPE, like the July issue, cost just about \$.35 to print one copy. Mailing might add \$.05 so that if there were 12 such issues a year, the subscription cost of \$3.00 does not cover the \$4.80 cost of printing and mailing. He further indicated a new club roster would be forthcoming as a part of the September issue. Paul, Bunnell, KE6VK, and Craig, Tucker, N6ATQ gave a very interesting illustrated talk on radio direction finding, the best of any we've seen to date.

75 of us attended and had a great time.

The recently-initiated FOR SALE table was again in operation and did quite well for the Club and the sellers.

The tasties were courtesy of all the good folks who remembered and brought those no-cal goodies.

**JOIN THE ARRL**

You support your hobby by belonging to the Palomar ARC. Additionally, the American Radio Relay League is the national Amateur Radio entity to which you should belong for the sake of your hobby. If you're not an ARRL member you should be! Who else lobbies for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - it won't cost a fat farthing more!

\*\*\*\*\*

**PARC REPEATERS**

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and support it.

\*\*\*\*\*

**EARS T-HUNTS**

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Assembly point talk-in at 0900 on 146.88 (-). Hunt frequency is 146.565. The hidden tx is within 10 miles of start. All are welcome. New folks may ride along.

**FORESAIL**

(Personal ads are free.)

If you have an item for sale, bring it to the club meeting and put it on the Sale Table tagged with your name, call and minimum price if any. The Club takes 10% of the sale price and you go home with \$\$ and you'll have to buy something else to hold down the shelf or garage floor.

Complete Atlas 210X home/mobile station, \$250. Call Gary, N7AS, 487-8353.

Professional qual. OptiVISOR w/4X & 7X lens plates plus Optiloupe, \$30. Call Jerry, W6YLA, 758-1134.

Tri-Ex W51 51' heavy duty, free-standing, crank-up tower w/Ham-M rotor (rotor control lost in divorce, but I got the manual), \$770; Mosely TA-33 beam w/40M kit installed, \$229; Swan 350 hf xcvr w/117XC pwr supply and 14-X for 12VDC opn, mike, works perfectly, \$300. Call Larry, W6QCA, 587-2226 work, 582-4324, home.

C-64 W/color mon., 1541 DD, & AEA Pakratt PK-64 TNC; much software & all manuals. Add 2M rig, for complete packet station. IBM PC DOS 3.0, \$10; Word Star 3.3, \$45, both with orig. disks and documentation. Swan model 405 Crystal Controlled Oscillator w/xtals for Swan 350 or 400, \$5. Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/mon., Datasette, software, all manuals. Coax switches. Telex Procomm 300 headset w/hi-imp. boom mike and FS-1 foot switch. Heath HD-1250 solid state dip meter. Call Ralph, K6HAV, 727-5866.

AEA KT-1 CW keyer/code practice generator, \$45. Assorted tubes (Never seen one? They're like big, glowing transistors) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Vacuum tubes, all tested; Probe-master X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Unique wire tuner \$50; Call Krist, W6KTE, 941-3555.

Bearcat 160 5-band, 16-channel programmable scanner, \$65 incl. UPS. Go RTTY, CW. Vic 20, w/mon., Datasette, Hamsoft, cassette programs, MFJ 1228 interface, manuals Call Mick, W6FGE, 222-3912.

**FLEA MARKETS**

The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

\*\*\*\*\*  
**OFFICIAL CLUB BADGES** are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign so he can put them on your *very own* badge - like the big guys have.

John has badges for: KC6AST, KH6CN, N7EQU, WB6NVX, WA6QCG, N6RKP, WB6RWF. If you don't want to pay full tab for your *own* badge, John can make you a real deal on an unclaimed one.

**HELP WANTED!**

Net Control Stations and Liaison Stations for the North County Traffic Net. If you can help, call Todd, KI6ZM.

Bob Chantrill, KE6VX, STILL needs some folks to help him man the Vista RACES station at the Melrose Fire Station on Monday nights. At least four of us should sign up and the more the better. Call Bob at 727-0606 and bear a hand once a month or less. You can do it, can't you.

Michael Hamman, WB6CSH, wants to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net on 2M.

Details on becoming part of this disaster network and on the various levels of participation may be obtained from him at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave a message.

**FOR PROSPECTIVE HAMS**

Interested in amateur (ham) radio and in the Palomar Amateur Radio Club? Want to talk to someone about it? Contact:

Bonsall	Nash Williams	728-3574
Camp Pend.	PJ Mead	941-9162
Cardiff	Duane Stedman	753-4821
Carlsbad	Eleanore Call	729-0850
Chula Vista	Betty Mahoney	420-2277
Del Mar	George Uminski	755-1014
Escondido	Jo Ashley	741-2560
Encinitas	Dave Copely	753-2605
Fallbrook	Art Rideout	728-6834
Lakeside	Mac McBride	561-2211
Leucadia	Bud Lincoln	436-9983
Oceanside	George Todd	439-8227
Poway	Mark Schlessinger	748-8391
Ramona	Mike Fisher	789-2892
Ran. Sta. Fe	Ron Wilhelmy	756-3133
San Diego	Dennis Vernacchia	271-6079
San Marcos	John Tentor	672-3891
Solana Beach	Floyd Harvey	741-8391
Valley Center	Lou Broadbent	755-9179
Vista	Stan Rohrer	749-0276
	Ralph Crossman	727-5866

SURPLUS GOODIES of the electronic persuasion at: Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has HT batteries and others. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales, 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, etc. at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 9222 Chesapeake.

#### CLUB-SPONSORED NETS

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to members of the Service. Visitors are welcome when called for after the member roll-call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning mi-

crowaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave on your way by.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, any PC.  
\*\*\*\*\*

#### DOWN THE TOOBE

Sorry to note one of our long-time members, Dick Powell, W60ML, has left the area for Sun City. Hope your recovery from the surgery was complete, Dick, and 73.

We're also losing Steve "Zebras, Jumping and Dancing", WB6ZJD, to the Bay area where employment takes his XYL and, consequently, the family.

Thanks to Bob Bell, N6YX, for another donation to the Club. Bob has again given the Club a load of nice equipment to sell, with 25% of the profits to go to the Club. Want an ICom 720, VHS VCR, or other small goodies of the electronic persuasion? See N6KI. He's taking care of the sale of it.

Incidentally, Bob's got the neatest, most compact shack I've seen and with everything in it including a fine collection of keyers.

Orlando Vernacchia, N6QVW, has won the Volunteer of the Year Award from the Mira Mesa Town Council. He has been a member of the Council for 10 years as well as taking part in many other civic groups. He will be honored (and roasted) at the Awards Night Dinner (and Orlando Roast) on August 14. Congratulations to you, Orlando. A well deserved honor.

"That's all", she wrote.

## JUST SAY NO TO NO CODE LICENSES

I'm not seeing much objection to having the NO CODE license shoved down our throats. I wonder how many of us have let their ARRL Division Director know how they feel about the proposal to degrade the quality of the membership in our once elite hobby. The Directors names and addresses are listed in the front of QST. A copy of your letter should go to ARRL Headquarters, 225 Main St., Newington, CT 06111. It seemed open and shut when the FCC proposed the No Code license several years ago, but we let the Commission and the ARRL know how we felt about it and we triumphed by sheer weight of numbers - we won by (a) noes so to speak.

**WE CAN DO IT AGAIN!** But we have to get off the dime and get rid of the attitude that it's a *fait accompli* and go to work to let them know how we feel about it. It's our hobby, darn it, let's do it! Write your Division Director and the ARRL and make it clear how you feel. It needs to be talked up on the air too, so let's go to work.

Bob Ferrero, W6RJ, and Jim Rafferty, N6RJ, President and VP of HRO have written to all ARRL Division Directors and told them how they feel. They said in part:

"Actually is a No Code license necessary? Our members are GROWING at 3.3% per year; that is very controlled healthy growth. A No Code license is NOT going to attract thousands of teenagers. Today's youth is fascinated by the "high-technology" of the computer field, not ham radio. We all must accept the fact that our hobby has changed. The people attracted to ham radio today are the sailboater, the engineer types, SWL'ers and the retirees. Our hobby has simply matured, and as we see it there is no turning back. Please don't get caught up in the "HYPE" that our hobby is dying off, and we're going to lose all of our frequencies, and the end is near. An influx of 100,000 new "hams" (dreamer) will in all likelihood not sway the FCC one way or the another.

We are fearful that "selling-out" to those who are unwilling to take the time to learn the code would be a mistake. You would remove the one basic thing that has always held the amateur radio operator apart from the rest of the community, the knowledge of the Morse code. Please, don't be fooled into making a mistake that could change our hobby in a negative way forever."

(Following is a replay of a SCOPE editorial - written on a computer.)

### **NO CODE LICENSE DRUM AGAIN BEING BEATEN**

Seeing what's on the packet bulletin boards and reading QST, we again note the hoopla for a "no-code" license so that we can have more "sharp" young computor-oriented people in amateur radio and thus save it from a fate worse than death or some such.

It's an old story. If you can't get enough folks in who meet the current standards, lower the standards and let in those who don't presently measure up.. After nearly 30 years as a military professional, I can personally testify to what happens when this line of reasoning is followed. The caliber of the service is diluted, lowered, if you will, by lowering the standards.

I'm proud to be a member of an elite radio fraternity - the Amateur Service. The five word per minute code test doesn't take a mental giant to pass it, merely someone with the dedication and self discipline to do the job. Lots of sub-teens do it - and they aren't even Cal Tech graduates! So lets let the "sharp" folks in - after they pass Element 1A, the five wpm code test. Let it continue to keep out the "sharp" folks who do not have the self-discipline to get it done! de K6HAV

IT BOILS DOWN TO THIS:

IF YOU DON'T WANT A NO CODE LICENSE, WRITE AND TELL THE ARRL SO.

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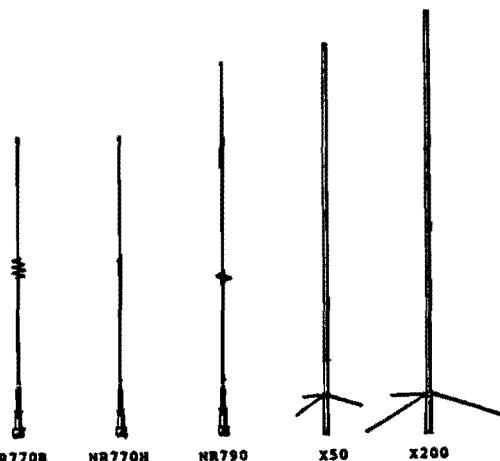
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NR770S	1-1/4	1-1/2	unity	2.2	17 34.95
NR770H	1-1/2	2-5/8	3.0	5.5	39 49.95
NR790	1-3/4	3-5/8	4.5	7.2	57 76.95
Dual-Band Duplexer					
MX72D	(PL-259 connectors)		2-Meter Mobile Antennas		37.50
NR22L	2-5/8	-	6.5	-	96 74.95
Mobile Mounting Kits w/ 17 ft. RG-58A cable & PL259					
PO-B	Mount only, no coax (3/4" hole reqd.)		PL259		11.95
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Provision for optional meter lighting is through a jack on the rear panel. (12V required, or use our AC adapter Model AC ADAP, \$6.95 ea.)

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SX-400	PWR Meter F&R/SWR 200W 140-525 MHz	99.95
SX-600	PWR Meter F&R/SWR 200W 1.6-160 MHz & 140-525 MHz.	\$149.95
SX-1000	PWR Meter F&R/SWR 200W 1.8-160 MHz & 430-1300 MHz.	\$219.95

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Mail form with \$\$ to PARC, P.O. Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK, at club meetings. Dues (including SCOPE) are \$12 a year plus \$9 for each additional family member. Dues are prorated for new members: Aug, Sep, Oct \$12; Nov \$9, Dec \$8, Jan \$7, Feb \$6, Mar \$5, Apr \$4, May \$3, Jun \$2, Jul \$1. Consider paying for two or three years at a time. Call, name, and complete address are required. Telephone number may be unlisted in roster if requested. Any other information requested below may be omitted if you feel uncomfortable proving it to the Club.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Phone # \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_

Date 1st lic. \_\_\_\_\_ Date of birth \_\_\_\_\_ Thos Bros loc. Pge \_\_\_\_\_ Coord \_\_\_\_\_

Name & call of family members in PARC \_\_\_\_\_

ARRL \_\_\_\_\_ RACES \_\_\_\_\_ ARES \_\_\_\_\_ Red Flag \_\_\_\_\_ Blood donor \_\_\_\_\_ Type \_\_\_\_\_ Comments: \_\_\_\_\_  
\_\_\_\_\_  
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# Scope

W6NWG

Palomar Amateur Radio Club Inc.

POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530



W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)

VOL. XXIV, NO., 9 SEPTEMBER, 1989

PRESIDENT:	Stan Rohrer, W9FQN, Valley Center	749-0276
VICE PRES:	Mac McCarthy, NH6EW, Oceanside	945-7391
SECRETARY:	Nash Williams, W6HCD, Bonsall	728-3574
TREASURER:	Ron Wifhefm#, WI6B, Rancho Santa fe	756-3133
EDITOR:	Ralph Crossman, K6HAV, Vista	727-5866

\*\*\*\*\*  
MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. Tol' yez a hunnert times.

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.

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## SEPTEMBER MEETING

The program for the September meeting will be presented by Kerry Banke, N6IZW, who will tell us about what's going on in the microwave field today.

Show & Tell: Whatever you bring. There will be a FOR SALE table for anyone who wants to bring one item for sale. The item must be tagged with name, call, and minimum price (if any). Ten percent of the sale price will go to the Club.

Coffee by NH6EW, and tasties by those good folks who remember.

## "WE WANT A NO-CODE LICENSE" SEZ ARRL

The ARRL Board of Directors, at its 21,22 July meeting, voted nine to six to recommend to the FCC that a codeless license be established in the Amateur Radio Service.

## HAM STAMP PINS

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

\*\*\*\*\*

**MEMBER INFORMATION**

GNU CLUB MEMBERS: Duane Wheeler, N6DSC, Escondido, (25 mos.); Craig & Susan Williams, N6OAM & N6AO; Charles & Charlotte Weber, N5HTC & N5NLV, La Jolla; Roy Martin, KC6BWS, Fallbrook; Pete Ziegler, W3ARU, Carlsbad; Jim Cooper, NE6O, Vista; Oscar Younglund, W7NVX, Escondido; Clover Jacobs, KC6ADV, San Juan Capistrano. Welcome.

RENUDE: (40) Bill Williams, WA0ABX; Guy Rowlett, KB6AI; George Swenson, KB6AQS; Gary Grant, N7AS; Carmen Sinatra, N6BBB; Robert Dean, WD6BNX; Lanny Goodman, N6CEK; Judy Ross, KB6DEM; Claude Kirkpatrick, W6DWE; Chuck Inskeep Jr., K6ERW; Al Goeppinger, W6FXL; Al & Mickey Fahnestock, N6GNB & N6GWJ; Ed Ross, N6GZI; Steve Sellers, N5GZP; Tom Brown, N6ICH; Joe Contogenis, NU6L; Betsy Ross, KB6MBL; Mike Fisher, N6MMP; Rusty Massie, AA6OM (3 yrs); Ken Seals, KA5Q; Jeremy Simmons, N6QBI; Susan Rohrer, N6QDB; Duane Stedman, WB6R; Jack Simmons, KI6RF; Pat Stedman, N6RHS; Glen Crossman, N6RKE; Dan Parnell, N6RKP; Mark Trapolino, N6QVA; Bob Rice, KS6S; Linda Sellers, KB6SAE; Ron Kizer, N6SKM; Bob Gates, WB6TBA; Bill Taylor, K6TQ; Mitch Kwietniewski, K6UL; Terri Ashley, N6UZH; Alice Contogenis, KB6VFZ; John Knight, WR7W; Sandy Williams, WB0WGU; Henry Kirschner, WB0YCQ.

UPGRADED LICENSES AND GNU CALL-SIGNS: Richard Currier, AA6PN from N6RKG, to Amateur Extra; Karl Brandt, KC6FEF first license, to Technician; Dick Felker, KJ6SN from KB6RYQ; Clover Jacobs, KC6ADV, to Technician. Congratulations to all.

WHEN YOU HAVE A CHANGE, PLEASE LET US KNOW.

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THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source.

**CELLULAR PHONE TRIPS SMOKE ALARM ON AIRPLANE**

According to the AP, a cellular phone in luggage aboard a plane tripped the aircraft's smoke alarm, causing an unscheduled landing in response thereto. The phone was found in the "on" condition and it was ascertained that a call had been received by the phone, causing the problem. Editor's note: Today cellular phones, tomorrow packet radio? Better be sure your portable packet gear/amateur radio is off.

**EXECUTIVE COMMITTEE**

The Executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting. The September meeting will be at the home of KB6NMK.

At the August meeting at the home of W9FQN, the Committee heard and approved the Treasurer's report. The Committee discussed work to be done at the repeater site including a cleanup job requiring several pickup trucks to haul material from the site. The failure of TASMA and SANDRA officials to respond to calls regarding the problems SANDRA believes are caused by the 147.135 machine are being documented. The publication of the club roster was discussed. KB6NMK has finished editing it. WB6IQS reported the 146.730 backup repeater is nearing completion. Problems encountered during the Palomar fire were discussed and the possibility of transportable remote base station use was considered. N6UIA indicated .9 GHz frequencies were requested of SCRRBA on 7/23/89. He estimated we may have an autopatch in operation by November. This is, of course, dependent on the assignment of 900 mHz frequencies by SCRRBA. (Our frequency request was received but action will be delayed while data base managers are changed - according to a post card received by N6UIA, since the Executive Committee meeting.)

## &gt;&gt;&gt;&gt;&gt;— P R E S I D E N T ' S M E S S A G E —&lt;&lt;&lt;&lt;&lt;

## # #- T-HUNTING(EARS) --- # #-

The Escondido Amateur Radio Society (EARS) holds a T-hunt the 3rd Saturday of each month in Escondido at 9:30 pm and all amateurs are invited to participate. All amateurs should experience T-hunting from time to time since we need to have the capability to locate "lost" or interfering transmissions. Yours truly, W9FQN, will be the Fox on September 16th for the Escondido Amateur Radio Society (EARS) T-hunt put on especially for the Palomar Amateur Radio Club. It will be a two stage hunt with the first fox running 10-20 watts and the 2nd stage fox running one watt or less. Hope to see many of you there for the hunt.

## # #- EQUIPMENT TAG ORDER --- # #-

As a service to club members we will be selling clear plastic equipment stick-on tags which you can put on your radio gear such as shown at the last club meeting. We will get the tags at a reduced price. You can have 3-4 lines such as the tag that Barbara and I have:

W9FQN / KA6FPS	
30311 Circle R Lane	
Valley Center, CA	
92082-9423	

We will be selling these tags \$9/100 and the lettering will be white on clear plastic. We will let you have additional 100's at \$8/100. Make the check out to PARC and give it to me at the next meeting.

These tags have adheared to my ICOM 2AT for several months which I carry on my belt most of the time but one did come off of my check book after sitting on it 4-5 times. I did not put my name on the labels since I thought that if stolen that the "bandito" might not remove the label thinking that it was an equipment label. There will be examples of these at the September meeting.

## # #- F I E L D D A Y --- # #-

THANKS to Bud-KG6VX for his taking care of the administration of Field Day and the sending in of the ARRL reports. I am sure that Dennis-N6KI was thankful for your efforts in obtaining a 20M SSB operating van for them so that he did not have to use

the TACO WAGON again this year. Dennis, we hope to have the taco wagon completed for next FD!

Another Field Day GONE! Our unofficial contact points are as follows:

Phone contacts	CW contacts
80M 117 x1= 117	80M 28 x2= 56
40M 136 x1= 136	40M 224 x2= 448
20M 1356 x1= 1356	20M 391 x2= 782
17M 5 x1= 5	17M 2 x2= 4
15M 107 x1= 107	15M 270 x2= 540
10M 179 x1= 179	10M 1 x2= 2
2M 64 x1= 64	2M 0 x2= 0
450 1 x1= 1	450M 0 x2= 0
Packet 20 x2= 40	
Tot= 1965 x1= 1965	Tot= 936 x2= 1872
TOT CONTACTS= 2901 TOT POINTS= 7674	

This score does not take into account the bonus points earned.

20 METER SSB STATION: Dennis-N6KI and his crew really pulled out the stops this year and set a club record for 20M SSB contacts: 1356. This is 150 contacts above our previous record in 1987 and only our second time to exceed 1000 contacts. Dennis has suggested that the club participate in the Sweepstakes competition for FD practice and that we hold a Field Day seminar several weeks ahead of FD for all operators where we work on the "do and don'ts" of FD contacts. They both sound like good ideas. Dennis' crew consisted of himself, Phil-WF6L, Larry-WQ6V and Stan-W9FQN operating and Don-WD6FWE logging with other operators logging for relaxation. Ellen-N6UWW sat in the hot seat for the 1,000th contact and for a first time FD operator really hung in there quite well. We hope that Ellen will get her next higher class license soon. The W6NWG signal on 20 SSB was so good that during my two hours of operation I did not change frequency once and I know that was the way it was with the other operators.

ALL BAND CW STATION: Duane-WB6R's CW station operators sure did a wonderful job on CW this year. Art-K6XT worked all bands (CW) with the aid of a computer which sent out the "canned" information which left Art with nothing to do but copy in his head the calls and section information. Most of the canned messages (ie. CW FD DE W6NWG) while I was in the trailer were going out at 25-30 wpm and many replies were coming in at 30-40 wpm which Art had no trouble copying.

Art's brother, Bill-NODSM, was the climber of the 50' tower system and installed a 40M dipole, tri-band beam, and two beams for the WARC bands. Their efforts and planning resulted in the greatest CW score we have every had: 900 QSO's. The best CW score before was last year with Paul-KB5MU and Wayne-N6KR who netted 600 QSO's. Wayne also again helped out during the evening hours and mastered the computer setup quickly. We also enjoyed seeing Wayne's minature 20M receiver and 80-10M receiver which could both fit into a matchbox. Hope he brings them to a meeting sometime.

80/10 METER SSB STATION: PJ-N6UCJ and Jack-KI6JM pulled most of the duty. You need a big signal on 80 meters and possibly we can use phased dipoles to pick up another 3 db next year.

40/15 METER SSB STATION: Jo-KB6NMK and her YL station learned a lot on their first time. Jo covered her operation in last month's SCOPE. Phased dipoles on 40 SSB would have helped.

VHF/UHF STATION: Steve-N6UIA and his crew were on their first outing and scored as well or better than previous FD groups.

The following amateurs signed in at Field Day: AA6OM, KB6NMK, N6UZH, N6RHS, KB6NML, WB6R, NODSM, K6AXT, KI6JM, N6UCJ, KF6YZ, N6UIA, N6URW, WF6L, N6RVO, KH6TL, N6TEP, WQ6V, N6QDB, W9FQN, N6NZX, KB6NZA, W6TFB, KG6VX, KB6MPZ, N6PEA, N6PDZ, KC6COD, N6UZG, N6KI, N6AMD, N6PHS, KB6TJW, N6QJE, WB6IQS, N6PQQ, WQ6V, N6KR, N6UWW, WD6FWE, KB6YHZ, KB6YHY, and KA6FPS as taken from the club sign-in sheet at the site. Sign-in was worth another ticket for the August picnic drawing. It seems as though I saw some others at FD but they neglected to sign the sheets at the FD site entrance.

Since the Field Day site has been next door to where I live the past six years, I have been able to closely observe set-up and take-down. This year the club set up the greatest amount of antennas with the greatest of ease and the site was cleaned up within two hours without hurrying. As the club moves along with its emergency antenna projects (trailers) I am sure that Field Day will become a breeze. Our objective is to have all antenna systems "canned" in five gallon cans ready for erection, beams (10,15,20, etc) strapped together, towers rotatable and crank-up, and push-up masts with cement tire supports

stored and ready to move.

We need for FD a bunch of pipes 1.5-2" in diameter and 18' long for making some more cemented tire supports. Please contact W9FQN.

Wait till next year!

### ###—POTPOURRI—###

I will have rope at the Sept. meeting.

The Space Shuttle can be found on 145.46, 224.04, and 449.0. NASA rebroadcasts on 169.4MHz. Hear the shuttle direct on 259.7 MHz AM when it comes into Edwards AFB. Also SANDRA's 145.625 will often carry some of the Space Shuttle audio.

Susan-N6QDB after successfully finishing seven weeks of Naval Academy Plebe Summer (boot camp) decided instead to attend college here in W6NWG/R land.

The Southern California DX Packet Cluster has again moved its frequency. It is now on 145.68 Mhz although San Diego seems to be on 144.360 Mhz with a link to the L.A. area on 441.500 Mhz. For those of you who are on packet you might want to check out these frequencies to see what the DX group is up to in this facet of packet.

### ###—THANKS—###

THANKS to Dennis-N6KI for his continued help in taking club equipment to the swap meets.

THANKS to Jo-KB6NMK for her tremendous effort in organizing the new membership cards, doing the SCOPE ADS, and taking care of the club shirt orders.

THANKS to Bill-N6COU for all of the additional work that he has done in getting the new roster and membership lists up to date in the giant computer.

THANKS to George-N6RTD for being an excellent "computer consultant" to the club.

THANKS to Ralph-K6HAV for his devotion in putting out the SCOPE each month, his picking up all club mail from the Vista post office, and seeing that the VE program conducted by the club functions properly.

THANKS to everyone who has donated items to the club. I have noted that several have "donated and run" so we can't thank you. Then there are those items which I get 2nd and 3rd hand with the donors' names getting lost in the process. THANKS.

73 de Stan W 9 F Q N

**FRED YOUNG, W6UAP, SK**

We are saddened to report the passing of Fred Young, W6UAP, on July 1. Fred was a PARC member since moving to the area in 1981.

**ANNUAL PICNIC**

The Club's annual picnic on Sunday, August 20, at Dixon Lake in Escondido was a rousing success. The weather was perfect - sunny but cool, the picnic was well attended, the food was deelicious, but the prize drawing was probably rigged since I didn't win any of the three big ones. The winners of the HRO gift certificates were Al Thiele, W7HGS, \$200; Anita Nye, KB6YHY, \$125; and Lloyd Hunt, W6TFB, \$75. HRO-donated books were won by WB6ZJD, WD6FWE, K6HAV, W6SAX, WB6R, KB6NMK, N6QVW, and KI6JM. A dandy time was had by all.

**LATEST CALL SIGNS**

The last Amateur calls issued in the 6th call area as of 08/1/89 were: 46PT, KJ6YA, N6VYC, KC6FBI.

**AMECO PREAMP BOOK**

Lee Miller, W6TDC, found the book for the Ameco preamp purchased from the FORESAIL table at the last club meeting. The purchaser of the preamp can get the book from W9FQN.

**VE PROGRAM**

At the August tests our PARC VE team gave a whopping 30 test elements to 19 applicants, 12 of whom passed a total of 18 elements. Congratulations to Karl Brandt, KC6fef, who up-graded to Technician, passed Element 3B, and got his first license all on the same day; and to Clover Jacobs, KC6ADV, who up-graded to Technician and joined the Club to Celebrate. Her OM, Malen, passed his Novice tests at the same exam session.

Our test crew was: KI6JM reception/processing; WB6R CW exams; W6TFB, KS6S, and WR7W examiners; and aperwork by WI6B, AA6OM, and K6HAV.  
de K6HAV

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FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway . Applicants must send a SASE, a completed, signed FCC Form 610 (NO PHOTOCOPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

**WANTED**

Antenna tuner capable of tuning end-fed wire. Call Nash, W6HCD, 728-3574.

Schematic or manual for Eico 460 o'scope. Call Marsh, W6SAX, 272-1409.

ICom IC-25A, Kenwood TR7800, or similar 2M synthesized radio. Call Jerry, WB6FMT, 758-4388.

Liaison and Net Control Stations for the North County Traffic Net. Call Todd, KI6ZM, 439-8227.

CP\ M software to run RTTY, packet, or CW on an old (1983 Kaypro IIX. Call P.J., N6UCJ, 941-9162.

1950-60 era RCA 45 rpm (only) record player/changer w/ or w/o own spkr, amp., or basket case. Call Mick, W6FGE, 222-3912.

Working Icom IC-22A, Kenwood PC-1A. Dennis, N6KI, 271-6079.

**JACK FORBES, W6QP, SK**

We are sorrowed to report the passing of another old-time PARC member and past president, Jack Forbes, W6QP, in late July. Jack owned and operated Vista Carpet Cleaners for years before suffering a stroke which put him into a rest home. 73, Jack.

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### SURPLUS?

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. Contact any club officer.

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### AUGUST MEETING

At the August club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved.

64 of us attended and had a great time.

The FOR SALE table was again in operation and did quite well for the Club and the sellers.

The tasties were courtesy of all who remembered and brought them.

### JOIN THE ARRL

You support your hobby by belonging to the Palomar ARC. Additionally, the American Radio Relay League is the national Amateur Radio entity to which you should belong for the sake of your hobby. If you're not an ARRL member you should be! Who else lobbies for your hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. If your new ARRL membership application includes the PARC number (1703), the Club will get \$5 from your membership - it won't cost a fat farthing more!

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### PARC REPEATERS

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.135 (+) which too is available to PARC members during its trial period in the PARC building. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and support it.

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### FREE, YOU HAUL IT!

Model 28 Teletype and RTTY TU. Call Art, W6EVL, 728-1717.

### EARS T-HUNTS

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Assembly point talk-in at 0900 on 146.88 (-). Hunt frequency is 146.565. Hidden tx is within 10 miles of start. All are welcome. New folks may ride along.

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### FLEA MARKETS

The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.

The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.

The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

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OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign so he can put them on your very own badge - like the big guys have.

John has badges for: KC6AST, KH6CN, N7EQU, WB6NVX, WA6QCG, WB6RWF. If you don't want to pay full tab for your own badge, John can make you a real deal on a unclaimed one.

## FORESAIL

If you have an item for sale, bring it to the club meeting and put it on the Sale Table tagged with our name, call and minimum price if any. The Club takes 10% of the sale price and you go home with \$\$ and you'll have to buy something else to hold down the shelf or garage floor.

Complete HF/VHF packet, RTTY, AMTOR, CW station (you add the rigs): Commodore 64, 1541 disk drive, mono monitor, printer, AEA PK-64A/HFM, \$300. Kenwood R-1000 gen.coverage rx, \$225; remote VFO for Kenwood TS-520, \$50; regulated pwr supply 12VDC @ 8A cont., \$25; floppy disk recorder FSD for C-64, \$50; Cobra reg. pwr supply 12VDC @ 2A, \$10; antenna mount for top of truck cab w/3 bases and coax installed - will take a Hustler & two VHF/UHF antennae, \$25. Call Bill, W6WPO, 727-4279.

Estate sale: Drake R-4A rx w/manual, \$70; Drake MS-4 spkr, \$15; Drake T-4X tx, \$70; Shure 444 mike, \$20; Turner Hi-Z 254C mike \$15; Mastercrafters 24-hr clock, \$7.50; Hustler 4BTB vert. ant., \$35; Hustler mobile resonators 10-20M, \$2.50 ea.; Allied GDO, \$20; RPC-3C speech compressor, \$20; two 110VAC six-outlet strips, \$3.50 ea. Call Leo, N6TUR, 941-6756 after 9/5/89.

Gas pipe 22' long 2 3/8" dia., 18" wall. Call Nash, W6HCD, 728-3574.

Professional qual. OptiVISOR w/4X & 7X lens plates plus OptiLoupe, \$30. Call Jerry, W6YLA, 758-1134.

Tri-Ex W51 51' heavy duty, free-standing, crank-up tower w/Ham-M rotor (rotor control lost in divorce, but I got the manual), and Moseley TA-33 beam w/40M kit installed, \$750; Swan 350 hf xcvr w/117XC pwr supply and 14-X for 12VDC opn, mike, works perfectly, \$250. Call Larry, W6QCA, 587-2226 work, 582-4324, home.

C-64 W/color mon., 1541 DD, & AEA Pakratt PK-64 TNC; much software & all manuals. Add a 2M rig, for a complete packet station. IBM PC DOS 3.0, \$7.50; Word Star 3.3, \$40, both w/orig. disks and documentation. Call Ralph, K6HAV, 727-5866.

Bearcat 160 5-band, 16-channel programmable scanner, \$65 incl. UPS. Go RTTY, CW. Vic 20, w/mon., Data-sette, Hamsoft, cassette programs, MFJ 1228 interface, manuals Call Mick, W6FGE, 222-3912.

Assorted tubes (Never seen one? They're like big, glowing transistors) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Vacuum tubes, all tested; Probe-master X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Unique wire tuner \$50; Call Krist, W6KTE, 941-3555.

## REPEATERS

REPEATER WORK DONE AND IN PROGRESS: KA6HZF cut an access panel in the lower part of the generator shed access cover and then welded hinges and hasps in place along with a reinforcing structure of steel braces.

On July 30 on the mountain, W9FQN cleaned old paint and corrosion from the metal and primed the generator shed. The door was then mounted and fitted. The shed now has lockable upper and lower doors, but still needs painting to match the repeater building.

WB6IQS and KI6RF ran tests on the W6NWG digipeater and determined there was no problem with the digipeater. Deviation and frequencies were checked on KA6UAI/R and all W6NWG repeaters. The 450 mHz repeater has a bad HV bypass capacitor in the screen supply of the PA. The complete PA assembly was removed and repair parts are on order. That repeater is currently operating on the exciter only and has about five watts output vs. the normal 30.

Using a low power signal, the new 1988 model DB-264 antenna was tested for noisy connections and was found to generate noise when one of the elements was tapped. The feedline is also suspect as it required 8 dB more signal to key up the repeater with the new antenna than with the original 1973 DB-264. The 146.730 machine was put back on the old antenna. Another trip is planned to lower the new antenna and verify the

hardline fittings.

**FUTURE WORK:** The batteries will go into the generator shed as soon as it's painted. Battery backup will be added for KA6UAI/R and possibly put in new batteries for the 220 Club. One of the spare hardlines has an "open" and needs repair. The present "aerial" hardlines need to come down and go into underground pipes similar to the existing conduit.

**TONE ENCODER:** A year or two ago, we reported the hum on the 146.730 machine being heard by folks with hi-fi speakers is a 3A (127.3 Hz) tone encoder. If you receive one of the other repeaters on 146.730 nearly as well as you do W6NWG/R, this tone, coupled with a de-coder in your rig will eliminate the interfering station. Most of the new mobile and base rigs have the provision for adding a tone decoder and for storing the tones in memory with the frequencies and offsets. This does not mean that it takes a sub-audible tone to access our repeater. It means a 127.3 Hz tone is needed for another station to access your receiver on 146.730 when you have the encoder turned on. The tone is on the repeater's transmitted signal for your use if you want to. Remember - when your decoder is on, you won't hear anyone on 146.730 simplex unless they are using a 3A encoder on their rig.

### PROSPECTIVE HAM?

Interested in amateur (ham) radio and in the Palomar Amateur Radio Club? Want to talk to someone about it? Contact:

Bonsall	Nash Williams	728-3574
Camp Pend.	PJ Mead	941-9162
Cardiff	Duane Stedman	753-4821
Carlsbad	Eleanore Call	729-0850
Chula Vista	Betty Mahoney	420-2277
Del Mar	George Uminski	755-1014
Escondido	Jo Ashley	741-2560
Encinitas	Dave Copely	753-2605
Fallbrook	Art Rideout	728-6834
Lakeside	Mac McBride	561-2211
Leucadia	Bud Lincoln	436-9983

Oceanside	George Todd	439-8227
Poway	Mark Schlessinger	748-8391
Ramona	Mike Fisher	789-2892
Ran. Sta. Fe	Ron Wilhelmy	756-3133
San Diego	Dennis Vernacchia	271-607
San Diego	John Tentor	672-3891
San Marcos	Floyd Harvey	741-8391
Solana Beach	Lou Broadbent	755-9179
Valley Center	Stan Rohrer	749-0276
Vista	Ralph Crossman	727-5866

### DOWN THE TOOBE

Interesting to see a nice, long segment on the Channel 8 evening news on July 26th on club member Larry de Montegre, WQ6V. It showed Larry and his sideline of making jewelry from coins. It was quite long and very well done. Didn't hear any mention of ham radio though, Larry.

Alma Bourhenne, KE6HI, and Nash Williams, W6HCD, are mentioned in the August-September issue of Modern Maturity. The article mentions them in connection with their involvement with the Flying Samaritans and their good works in the medical field in Mexico. Alma is pictured.

Thanks to Bill Priest, W6WPO for letting the Club sell some of his equipment and take 10% of the proceeds. Thanks also for the donation to the Club of other equipment. This helps the Club and the donor - except now he'll have to find something else to hold down his garage floor. Maybe Stan, W9FQN, can give him a hand in that regard.

We also greatly appreciate all of the work Dennis, N6KI, does in taking donated equipment, checking it out and getting it in shape to bring the best price and then selling it for the Club and for its donors. He's really doing a fine job. We also much appreciate the work Paul, KZ6X, does for the Club.

Sorry we left the "g" out of Ed Castagna, WA6ESG's, name last month. Better luck next time, Ed. Counter-acting, was an extra letter in Rusty Massie's old call. We made up for that, by getting Rusty's new call, AA6OM, correct - mostly.

**"That's all,"  
she wrote.**

## The original R-X Noise Bridge

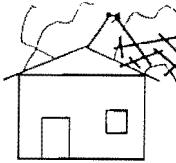
SWR AND POWER METER

The  
Tuner-Tuner™

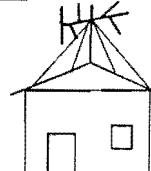
VLF CONVERTERS

## Palomar Engineers

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Escondido, CA 92025



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## August and September SPECIALS!



KENWOOD TH215 299.95 HANDY WITH BUILT IN PL  
KENWOOD TH25AT 279.95 MINI HANDY WITH TT PAD  
KENWOOD TH75A 479.95 NEW DUO BAND HANDY  
ALINCO DJ100T 259.95 MINI HANDY MINI PRICE  
ALINCO DJ500T 439.95 GREAT DUO BAND HANDY  
ALINCO DJ110T 379.95 LOWEST PRICE MOBILE 2M  
ALINCO DJ510T 549.95 LOW PRICE 2M/440 MBLE  
KENWOOD TM621A 579.95 ONLY 2M/220 MOBILE  
YAESU FT411 349.95 MINI HANDY WITH IT ALL  
YAESU FT470 479.95 MINI DUO BAND HANDY  
ICOM IC-2SA 364.95 THE SMALLEST HANDY YET

ICOM IC228H/TT 429.95...\$50.00 REDUCTION SUPER MOBILE  
ICOM IC228A/TT 399.95...\$50.00 REDUCION

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## PALOMAR AMATEUR RADIO CLUB, INC. Members By Call

07-31-1989

WA0ABX WILLIAMS, BILL	741-9901	1914 HOWE PL.	ESCONDIDO, CA.	92025
NOCPS PASCHKE, VERN	484-7581	9209 SAMANTHA CT.	SAN DIEGO, CA.	92129
WD0DLW HONTS, C.N. "JACK"	728-0258	244 N. STAGE COACH LN.	FALLBROOK, CA	92028
NOEW PASCHKE, MARY	484-7581	9209 SAMANTHA CT.	SAN DIEGO, CA.	92129
WB0WGU WILLIAMS, SANDY	741-9901	1914 HOWE PL.	ESCONDIDO, CA.	92025
WB0YCB KIRSCHNER, HENRY	722-5394	266 CARISSA DR.	OCEANSIDE, CA.	92056
WA1ZEN AMES, TIM	469-8519	2990-D FLETCHER PKWY	EL CAJON, CA.	92020
W2AUO SHAUT, STANLEY	485-9509	12850 CAMINO D LA BRECCIA	SAN DIEGO, CA.	92128
W3ARU ZIEGLER, PETE	943-8005	3482 SITIO BORDE	CARLSBAD, CA	92009
W3CRU COHEN, CHARLES A.	632-7790	1325 SANTA FE DR.	ENCINITAS, CA.	92024
KD3HN HOFFMAN, MIKE		133 WASHINGTON AVE.	BETHLEHEM, PA.	18018
K3PXX RUNYON, TERRY	726-0595	108 HANNALEI DR.	VISTA, CA.	92083
K4ACM LUTZ, EDWARD	487-2451	P O BOX 270744	SAN DIEGO, CA.	92128
KE4EY FLEISCHMANN, WM. (BILL)	756-2790	P O BOX 3908	RANCHO SANTA FE, CA	92067
W4NYU GATES, HOWARD	449-9841	10911 EDDINGTON RD.	SANTEE, CA.	92071
W4OYN O'HARA, JIM	281-1311	3672 ROSELAWN AVE.	SAN DIEGO, CA.	92105
WB4YQU ORAN, SAMUEL	726 2003	2361 VIA SUBRIA	VISTA, CA.	92084
WD5BRT BROOM JR., HERMAN W.	430-0626	229 LOS PADRES DR.	CAMP PENDLETON, CA.	92055
N5GZP SELLERS, STEVE	433-3648	4232 FIESTA WAY #8	OCEANSIDE, CA.	92054
NSHTC WEBER, JR, CHARLES E.	459-5105	5838 SOLEDAD RD.	LA JOLLA, CA	92037
KB5MU WILLIAMSON, PAUL T.	458-1238	6583 EDMONTON AVE.	SAN DIEGO, CA.	92122
NSNLV WEBER, CHARLOTTE	459-5105	5838 SOLEDAD RD.	LA JOLLA, CA	92037
KA5Q SEALS, KEN	944-7373	1521 JUNIPERHILL DR.	ENCINITAS, CA	92024
WD6AHU REMINGTON, TODD	724-4079	HQBHQ CO 2ND SSCT G2 1ST	CAMP PENDLETON, CA.	92055
WD6AHW DEWEY, WM. H. (BILL)	728-6912	4878 SAN JACINTO CIRCLE	FALLBROOK, CA.	92028
WD6AHX DEWEY, L. WAYNE	940-2074	1907 CHEYENNE CIR.	OCEANSIDE, CA.	92056
KB6AI ROWLETT, GUY	757-1745	2813 TURNBULL ST.	OCEANSIDE, CA.	92054
WA6AIW RICHARDS, DAVID L.	630-1734	1680 FOOTHILL DR.	VISTA, CA.	92084
N6AMD HARLAND, RAY	746-4584	2602 MARY LANE	ESCONDIDO, CA.	92025
KB6AQK SWENSON, GEORGE A.	569-0993	6460 CONVOY CT. #115	SAN DIEGO, CA.	92117
KC6AST ARBUTHNOT III, G. LANE	484-2405	13125 BAVARIAN DR.	SAN DIEGO, CA	92129
N6AT CASSEN, FRANKLIN	728-8003	3909 RECHE RD. SP-22	FALLBROOK, CA.	92028
K6AYJ NICHOLS, EDITH	728-1717	1473 WINTERWARM DR.	FALLBROOK, CA.	92028
KC6AZY VAN NEST, DAVID	436-1397	1715 HILL TOP LANE	ENCINITAS, CA.	92024
WI6B WILHELMY, RON	756-3133	P.O. BOX 244B	RANCHO SANTA FE, CA.	92067
N6BAD REBER, JOHN	453-4952	5968 TULANE ST.	SAN DIEGO, CA.	92122
N6BBB SINATRA, CARMEN J.	743-5448	2700 E. VALLEY PKWY #85	ESCONDIDO, CA.	92027
WD6BEZ GONSETT, JUDY	753-9133	518 NEPTUNE AVE.	ENCINITAS, CA.	92024
KC6BGX LOUNSBURY, GEORGE P.	741-6681	1530 N. ELM ST.	ESCONDIDO, CA.	92026
KE6BH COUNTRYMAN, BILL	757-2520	2806 MACDONALD ST.	OCEANSIDE, CA.	92054
WB6BHE HARVEY, VANESSA	741-8391	1195-33 LA MOREE RD.	SAN MARCOS, CA.	92069
W6BFH DOBLER, RAY	487-4423	17142 CLIQUOT CT.	POWAY, CA.	92064
W6BIH TUPANCY, OSCAR	726-0459	1535 SUNRISE DR.	VISTA, CA.	92084
KC6BIM ANDERSON III, WM. J. (BILL)	487-5044	11311 CALENDAR RD.	SAN DIEGO, CA	92127
KC6BJM SANDFORD, GERRY M.	755-5244	2734 CAMINITO VERDUGO	DEL MAR, CA.	92014
W6BLL WILLIAMS, JACK	729-5318	3820 MARGARET WY.	CARLSBAD, CA.	92008
W6BNO SLUYTER, LEONARD J.	878-2165	P.O. BOX 475 (430 N. JACKS	INDEPENDENCE, CA.	93526
WD6BNX DEAN, ROBERT K.	749-9468	13601 WOODSTOCK PL.	VALLEY CENTER, CA.	92082
K6BPT SKINNER, MURIEL 'SKIP'	728-6904	1422 LOS AMIGOS	FALLBROOK, CA.	92028
W6BRF MC CLUSKEY, PAUL		1718 BELLE MEADE RD.	ENCINITAS, CA.	92024
WD6BRX BROUILLET, PAUL	745-8070	3131 MARY LANE	ESCONDIDO, CA.	92025
WA6BSD LANG, STEVEN		P.O. BOX 611B	OCEANSIDE, CA.	92056
KC6BWS MARTIN, ROY E.	728-1546	2229 MARDAVIGO LN	FALLBROOK, CA.	90028
N6CDA DOUGLAS, MALCOLM	728-9059	533 HILLCREST LANE	FALLBROOK, CA.	92028
N6CEK GOODMAN, LANNY	755-3428	P. O. BOX 2469	DEL MAR, CA.	92014
N6CKH DEMOS, TED	296-5103	2218 MISSION AVE.	SAN DIEGO, CA.	92116
N6CKQ BROADBENT, LOUIS C.	755-9179	976 SANTA ESTELLA	SOLANA BEACH, CA.	92075
KH6CN HARPER, JIM	483-1648	5142 PROVIDENCE RD.	SAN DIEGO, CA.	92117
KC6COD MOSCOWITZ, MARK	944-0145	2301 LEVANTE ST.	CARLSBAD, CA	92009
N6COU WHIPPLE, BILL	758-7163	1605 WAGON WHEEL DR.	OCEANSIDE, CA.	92056
WB6CSH HAMANN, MICHAEL	481-0770	14169 HALF MOON BAY DR.	DEL MAR, CA.	92014
K6CV BASTOW, JR., J. G.	484-7035	8733 ELFORD COURT	SAN DIEGO, CA.	92129
KI6CX BOLLMAN, GEORGE	728-2755	1632 DOROTHEA AVE.	FALLBROOK, CA.	92028
KB6DEM ROSS, JUDY	297-7758	1419 GOLDEN GATE DR.	SAN DIEGO, CA.	92116
KB6DGR MAHONEY, BETTY	420-2277	121 ORANGE AVE. SP 84	CHULA VISTA, CA.	92011
AA6DI ALBRECHTSEN, LOUELLA	941-0725	845 HAMPTON COURT	VISTA, CA.	92083
W6DNX LANGJAHR, CARL	726-4010	4644 CORDOBA WY.	OCEANSIDE, CA.	92056
WA6DOO SALZARULO, MARK	945-1367	5649 ROANE DR.	OCEANSIDE, CA.	92056
KC6DPM WORKS, GEORGE A.	224-1814	P O BOX 6712	SAN DIEGO, CA	92106
KC6DPN WORKS, ROBERTA F.	224-1814	P O BOX 6712	SAN DIEGO, CA	92106
N6DSC WHEELER, DUANE W.	480-9506	P.O.BOX 1989	ESCONDIDO, CA	92025
KB6DSC BRUIN, BETTY	277-7142	5573 MT. ACARA DR.	SAN DIEGO, CA.	92111
N6DUR WAGNER, ROBERT G.	273-0789	3077 JUTLAND COURT	SAN DIEGO, CA.	92117
N6DVJ HART, JOHNNY		3235 ARMSTRONG ST #A7	SAN DIEGO, CA	92111
W6DWE KIRKPATRICK, CLAUDE L.	273-9735	1744 PACIFIC BEACH DR.	SAN DIEGO, CA.	92109

## PALOMAR AMATEUR RADIO CLUB, INC. Members By Call

07-31-1989

WA6DYV	SWADER, JOHN B.	1455 S. ALTURAS SP# 118	FALLBROOK, CA.	92028
WW6E	BUCKNER, BILL	941-0867 993 S SANTA FE AV #C	VISTA, CA.	92083
KF6EA	SMITH, RICHARD A.	483-9330 2245 FELSPAR ST.	SAN DIEGO, CA.	92109
WA6EEZ	HEERSEMA, BILL	154 ARAGON AVE.	SAN CLEMENTE, CA	92672
KB6EPO	JOHNSON, ERIC	575-7065 VRC-30 W/L 020 NAS NO ISL	SAN DIEGO, CA.	92135
N6EQB	MILLER, RAYMOND	728-3179 4658 S. MISSION RD.	FALLBROOK, CA.	92028
K6ERW	INSKEEP, CHAS. G.	589-0636 2375 WHITE WING DR.	JAMUL, CA.	92035
WA6ESG	CASTAGNA, ED	726-5236 273 MAR VISTA DR.	VISTA, CA.	92083
W6ESV	SENTERFIT, ARNOLD	1404 FRANCISCAN WAY	SAN DIEGO, CA.	92116
W6EVL	NICHOLS, ART	728-1717 1473 WINTERWARM DR.	FALLBROOK, CA.	92028
NH6EW	MC CARTHY, MAC	945-7391 2729 THUNDER DR.	OCEANSIDE, CA.	92056
KF6EX	GOREWIT, HAL	438-7569 6952 WHITECAP DR.	CARLSBAD, CA.	92008
W6EYP	LINCOLN, WARREN	744-5097 1286 DISCOVERY ST SP88	SAN MARCOS, CA.	92069
W6FGE	MC DANIEL, MICK	222-3912 940 TEMPLE ST.	SAN DIEGO, CA.	92106
N6FMK	BOWEN, BILL	941-9492 484 VALERIE DR.	VISTA, CA.	92084
WB6FMT	HOUSER, JERRY	758-4388 1073 CYPRESS DR.	VISTA, CA.	92084
W6FN	KLIPPEL, KEN	434-2350 4420 LA PORTALADA DR.	CARLSBAD, CA.	92008
KA6FPS	ROHRER, BARBARA	749-0276 30311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
W6FTV	FALLS, EDWARD L.	728-2729 3352 CANONITA DR.	FALLBROOK, CA.	92028
WD6FWE	JOHNSON, DON	758-4187 3140 LINCOLN ST.	CARLSBAD, CA.	92008
W6FXL	GOEPPINGER, ALBERT	745-4436 2161 SUNSET DR.	ESCONDIDO, CA.	92025
KD6FY	BELFIELD, SCOTT P.	487-7005 17083 ABRA WAY	SAN DIEGO, CA.	92128
W6GHD	CAREY, RICHARD	224-9300 4003 ORCHARD AVE.	SAN DIEGO, CA.	92107
KA6GHE	PATCHEL, JUDITH	272-5233 3634 JENNIFER ST.	SAN DIEGO, CA.	92117
KI6GI	HOY, TIM	469-2920 P.O. BOX 3734	LA MESA, CA.	92044
K6GJD	SALTER, BILL	1641 39TH DR.	SHOW LOW, AZ	85901
N6GJW	FOLSON, RUSS	789-8348 P.O. BOX 1308	RAMONA, CA.	92065
KB6GKE	MORRIS, STEVE	931-6149 1226 SOUTH PACIFIC #4	OCEANSIDE, CA	92054
N6GNB	FAHNESTOCK, ALBERT	741-1840 1499 E. WILSON AVE.	ESCONDIDO, CA.	92027
N6GOS	BECK, DONALD R.	756-2726 P.O. BOX 2372	RANCHO SANTA FE, CA.	92067
K6GQS	ESTERLY JR., HAROLD D.	274-4811 4633 EL PENON WY.	SAN DIEGO, CA.	92117
KA6GRG	CALVERT, CHUCK	726-2612 1570 GOODWIN DR.	VISTA, CA.	92084
N6GW	WENZ, GORDON	222-5575 1055 BANGOR ST.	SAN DIEGO, CA.	92106
N6GWI	FAHNESTOCK, MICKEY	741-1840 1499 E. WILSON AVE.	ESCONDIDO, CA.	92027
WB6GXR	MC BRIDE, WILLERT 'MAC'	561-2211 9493 EMERALD GROVE AVE.	LAKESIDE, CA.	92040
N6GZI	ROSS, ED	297-7758 1419 GOLDEN GATE DR.	SAN DIEGO, CA.	92116
K6HAV	CROSSMAN, RALPH	727-5866 P. O. BOX 73	VISTA, CA.	92083
W6HC	HODGSON, CHARLES	272-9778 P.O. BOX 178374	SAN DIEGO, CA.	92117
W6HCD	WILLIAMS, A. NASH	728-3574 32001 VIA ARARAT DR.	BONSALL, CA.	92003
K6HE	SANDBERG, SANDY	745-6940 1138 E. RUSTIC RD.	ESCONDIDO, CA.	92025
WB6HFE	RAMME, FRANK B.	757-9365 331 REDONDO DR.	OCEANSIDE, CA.	92056
WD6HFI	NORMINGTON, PHILLIPP B.	724-4736 1302 HERMANA CT.	VISTA, CA.	92084
KE6HI	BOURHENNE, ALMA	753-2542 2025 CAMBRIDGE AVE.	Cardiff by the sea, CA	92007
W6HLB	CRAIG SR., JOE	757-1272 412 S. BARNWELL ST.	OCEANSIDE, CA.	92054
WB6HMY	LA POINTE, JOE	722-6054 188 EVERGREEN PKWY.	OCEANSIDE, CA.	92054
WA6HQM	COPLEY, DAVE	753-2605 1727 GREENTREE RD.	ENCINITAS, CA.	92024
WB6HSZ	CAMPBELL, JOHN R.	724-1764 324 EAST DR.	VISTA, CA.	92083
W6HW	BAUMGARTNER, VERN	3700 OLDS RD. SP-86	OXNARD, CA.	93030
N6HJK	SMITH, N WHITNEY	223-3444 930 ARMADA TERR.	SAN DIEGO, CA.	92106
WA6HYB	PUGH, DANIEL C.	433-4445 4660-125 N. RIVER RD.	OCEANSIDE, CA.	92056
WA6HYC	WATT, BILL	439-8814 1733 S. DITMAR ST.	OCEANSIDE, CA.	92054
K6HZ	YACABUCCI, JAMES E.	223-3927 5015 SANTA CRUZ AVE #211	SAN DIEGO, CA.	92107
K6ICG	CARRY, EDWARD	5844 KENT PL.	SAN DIEGO, CA.	92120
N6ICH	BROWN, THOMAS F.	433-7600 4433 KITTIWAKE WAY	OCEANSIDE, CA.	92056
K6ICT	HARVEY, KEN	440-0644 328 ALDWYCH RD.	EL CAJON, CA.	92020
N6IE	FERRANTO, FELIX	277-8587 7280 TAIT ST.	SAN DIEGO, CA.	92111
K6II	HOLM, ED	726-4333 1851 ALTA VISTA DR.	VISTA, CA.	92084
WA6ILH	POTERALA JR., WM. E.	14831 ESPOLA RD	POLWAY, CA	92064
W6INI	SMITH, ARTHUR R.	273-1120 4515 MELISA WAY	SAN DIEGO, CA.	92117
WA6INL	DAU JR., WALTER K.	487-5249 12886 CIRCULO DARDO	SAN DIEGO, CA	92128
N6INN	CROSSMAN, PAT	727-5866 P. O. BOX 73	VISTA, CA.	92083
WB6IDV	LOWELL, RUSSELL A.	436-6714 7507 QUINTA ST.	CARLSBAD, CA.	92009
WA6IPD	RIDEOUT, ART	728-6834 2235 GUM TREE LN.	FALLBROOK, CA.	92028
WA6IPF	STACK, PAUL J.	753 POMELO DR.	VISTA, CA.	92083
W6IPQ	CHASE, HERBERT	422 7405 152 WHITNEY ST.	CHULA VISTA, CA.	92010
WB6IQS	KUIVINEN, JOHN	724-8380 P.O.BOX 1466	VISTA, CA.	92083
W6IRM	INSKEEP, CHUCK	722-2201 631 S. CLEMENTINE	OCEANSIDE, CA.	92054
N6ISC	LACKEY, PAUL	155 S. LAS FLORES #76	SAN MARCOS, CA.	92069
W6IUG	WEST, RICHARD O.	566-7089 10711 CHARBONO TERR.	SAN DIEGO, CA.	92131
WA6IWK	PATCHEL, HERBERT	272-5233 3634 JENNIFER ST.	SAN DIEGO, CA.	92117
W6IZS	HICKMAN, RAY F.	466 4702 6818 ROLANDO KNOLLS DR.	LA MESA, CA.	92041
N6IZW	Banke, KERRY	462-2220 6026 POPPY ST.	LA MESA, CA.	92041
NC6J	CHAMBERS, BOB	560-4560 2247 W. JEWETT ST.	SAN DIEGO, CA.	92111
KG6JA	BERG, PETER	729-8408 P.O. BOX 4207	CARLSBAD, CA.	92008
W6JJA	BIANCHI, GUIDO	353-0893 1020 W EVAN HEWES HWY #2B	EL CENTRO, CA.	92243

## PALOMAR AMATEUR RADIO CLUB, INC. Members By Call

07-31-1989

KI6JM	HANTHORN, JACK	598-0420	1211 HIDDEN OAKS TRAIL	VISTA, CA.	92084
W6JRC	HUCKABAY, WALT	722-3248	1047 SHAFER ST.	OCEANSIDE, CA.	92054
K6JSI	STOUFFER, JEFF "SHORTY"	724-4020	2040 HAWLEY DR.	VISTA, CA.	92084
W6JSP	HARVEY, FLOYD	741-6391	1195-33 LA MOREE RD.	SAN MARCOS, CA.	92069
WB6JVS	ROUSE, HARRY A.	757-2260	328 CROUCH ST.	OCEANSIDE, CA.	92054
N6JZB	COOK, WALLY	272-0304	4502 BANNOCK AVE.	SAN DIEGO, CA	92117
N6KAL	MATROS, BECKY	789-3103	452 E. WASHINGTON ST.	RAMONA, CA.	92065
W6KCB	JANKOWSKI, EDWARD	P O BOX 510		MARCO'S, CO.	81328
W6KCO	BARTH, JAMES	744-2240	1286 DISCOVERY - SP 53	SAN MARCOS, CA	92069
N6KGK	WILLIS, LEE	726-1097	3902 BROWN ST.	OCEANSIDE, CA.	92056
N6KI	VERNACCHIA, DENNIS	271-6079	8993 COVINA ST.	SAN DIEGO, CA.	92126
KJ6KP	ANDERSON, THOMAS	755-0319	13010 PORTOFINO DR.	DEL MAR, CA.	92014
W6KTE	KRIST, R.F.	941-3555	222 HAWTHORNE CIRCLE	VISTA, CA.	92083
W6KVF	LOUDON, CLIFFORD L.		409 PALOMAR AVE.	LA JOLLA, CA.	92037
N6KVY	WONG, DENNIS		10615-G TIERRASANTA BLVD.	SAN DIEGO	92124
AA6KY	DUTCHER, DAVID	465-0831	3958 ARDMORE DR	SAN DIEGO, CA	92111
WA6KZN	HEITGER, BOB	941-8835	P.O. BOX 399	VISTA, CA.	92083
NF6L	TAYLOR, MATT	727 1580	3744 BLUEBIRD CANYON RD.	VISTA, CA.	92084
NU6L	CONTOGENIS, JOSEPH P.	749-2699	13964 PALMA VISTA DR.	VALLEY CENTER, CA.	92082
WF6L	LEONELLI, PHIL	757-7008	3564 STRAWBERRY PL.	OCEANSIDE, CA.	92056
K6LNJ	PEARCE, ART	724-6155	3580 TWILIGHT LN.	OCEANSIDE, CA.	92056
N6LTU	HART, LANE	743-7532	1918 PAMELA LN.	ESCONDIDO, CA.	92026
N6LUQ	NIDA, TED H.	945-0677	1021 DEERHAVEN DR.	VISTA, CA.	92084
KB6MBL	ROSS, BETSY E.	272-6395	1252 DIAMOND ST.	SAN DIEGO, CA.	92109
KB6MCU	SMITH JR., BILLY J.	582-2313	3429 PAGE ST.	SAN DIEGO, CA.	92115
WB6MEI	HAMMOND, JOHN	560 9549	2909 SEGO PL.	SAN DIEGO, CA.	92123
W6MFT	NIELSEN, WILL D.	264-1100	1731 REPUBLIC ST.	SAN DIEGO, CA.	92114
KB6MI	SMITH, GEORGE	477-7287	1325 ROSELAWN ST.	NATIONAL CITY, CA.	92050
N6MP	FISHER, MICHAEL D.	789-2892	P.O. BOX 1757	RAMONA, CA.	92065
WA6MOS	PEWNEY, JOE	826-1662	4134 SKYLINE RD.	CARLSBAD, CA.	92008
KB6MPZ	LINCOLN, CAROLINE	436-9983	1345 HYMETTUS AVE.	LEUCADIA, CA.	92024
N6MQV	NIELSEN II, WILL D.	726-4328	3585 PRESTWICK CIRCLE	OCEANSIDE, CA.	92056
W6MTX	PIERCE, H.C.		33056 SEA LION DR.	DANA POINT, CA.	92629
KI6MV	LITTLEFIELD, CHARLES	721-7176	3378 TOURNAMENT DR.	OCEANSIDE, CA.	92056
N6MVZ	CALDWELL, BENTON	729-5161	4150 ADAMS ST.	CARLSBAD, CA.	92008
N6MYN	DIPERT, STEPHEN "DICK"		PO BOX 127	SANTA YSABEL, CA.	92070
NA6AU	PAKASKI, TED		3731 PARK DR.	CARLSBAD, CA.	92008
W6NBH	DDIG, AL	741-1320	419 EL DORADO DR.	ESCONDIDO, CA.	92025
N6NEH	NEIGER, RALPH	489-6292	1337 PARK HILL LN.	ESCONDIDO, CA.	92025
N6NHW	MC KINNEY, STEPHEN B.	756-2649	BOX 1266	RANCHO SANTA FE, CA.	92067
WB6NJJ	BOYD, GERALD G.	789-2653	1542 WILSON RD.	RAMONA, CA	92065
KB6NMK	ASHLEY, JO	741-2560	2655 LAS PALMAS AVE.	ESCONDIDO, CA.	92025
KB6NML	ASHLEY, A. J.	741-2560	2655 LAS PALMAS AVE.	ESCONDIDO, CA.	92025
WA6NNC	RIVERA, BOB	724-2383	2233 VISTA GRANDE DR.	VISTA, CA.	92084
N6NNI	SCHLESINGER, MARK M.	748-8391	13633 CATAWBA DR.	POWAY, CA.	92064
N6NNP	HEALEY, WILMA		416 BONAIR ST.	LA JOLLA, CA.	92037
N6NNQ	HEALEY, THOMAS		416 BONAIR ST.	LA JOLLA, CA.	92037
N6NOG	BUCKNER, MARY	941-0867	993 S SANTA FE AV #C	VISTA, CA.	92083
W6NQZ	HULBERT, DONALD	724-5431	1022 OLD TAYLOR ST.	VISTA, CA.	92084
KB6NRL	KLEIN JR., FRED	727-5429	3505 BADILLO RD	SAN MARCOS, CA.	92069
N6NSU	SCHMIDT, WILLIAM	753-0987	920 STRATFORD DR.	ENCINITAS, CA.	92024
WB6NUV	MC CONAHAY, JIM C.		14120 DURHULLEN DR.	POWAY, CA.	92064
KB6NUY	COATES, WALTER	439-2165	730 PEARWOOD ST.	OCEANSIDE, CA.	92056
KB6NZA	BURGESS, MARY		PO. BOX 271543	ESCONDIDO, CA.	92027
N6NZX	BURGESS, CARL W.		P.O. BOX 271543	ESCONDIDO, CA.	92027
NE6O	COOPER, JIM	727-B446	2012 APPLEWOOD LANE	VISTA, CA	92083
N6OAM	WILLIAMS, CRAIG R.	486-4101	12882 FRANCINE TERRACE	POWAY, CA.	92064
N6OAO	WILLIAMS, SUSAN J.	486-4101	12882 FRANCINE TERRACE	POWAY, CA.	92054
WB6OBH	MAYES, PETE	744-6213	1700 KINGLET RD.	SAN MARCOS, CA.	92069
W6ODG	STEWART, AUBREY L.	745-4077	196 CALLE GUERNICA	SAN MARCOS, CA.	92069
WA6OHB	WALLACE, LEONA	569-4566	5666 LA JOLLA BLVD - 102	LA JOLLA, CA.	92037
N6OIQ	GRANT, ROD	672-1402	37 GOLDEN SHOWER LN	FPO SAN FRANCISCO	96630
W6OLB	TENTOR, JOHN	672-3891	11012 AVENIDA MARIA	SAN DIEGO, CA.	92129
AA6OM	MASSIE, L.B. "RUSTY"	747 5B72	1249 NORDAHL RD.	ESCONDIDO, CA.	92026
W6OML	POWELL, RICHARD A.	672-3871	27250 MURIETTA RD #95	SUN CITY, CA	92381
N6OPD	CRABTREE, JACK	434-2217	3601 LAREDO ST.	CARLSBAD, CA.	92008
KB6OQE	CHANDLER, LARRY	469-8044	6380 FALMOUTH	LA MESA, CA.	92042
N6OSR	MAGNET, ANDREW DEAN	587-6742	9648 CAMINITO DEL VIDA	SAN DIEGO, CA	92121
W6OVP	LIEN, DAVID A.	485-1538	18215 CORTE DE CASARES	SAN DIEGO, CA.	92121
N6OYG	MUSIL, VICTOR	598-8772	1577 ROMA DR.	VISTA, CA	92083
W6OYJ	MUNN, R. E. (ED)	453-4563	6255 RADCLIFFE DR	SAN DIEGO, CA.	92122
KS6P	STUART, RODGER	741-4002	375 WOODLAND HILLS DR.	ESCONDIDO, CA.	92025
KB6PCF	PARKER, MARNI	272-1409	4166 TAOS DR.	SAN DIEGO, CA.	92117
N6PDP	BROWN, JEFF	742-3536	15080 HWY 76	PAUMA VALLEY, CA.	92061
N6PD2	BARKER, FRED	726-2616	1341 PHILLIPS ST.	VISTA, CA.	92083

## PALOMAR AMATEUR RADIO CLUB, INC. Members By Call

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KI6PE	MC CARTNEY, DOUGLAS B.	753-9320	3535 SITIO BAVA	CARLSBAD, CA.	92009
N6PEA	BARKER, MARY	726-2616	1341 PHILLIPS ST.	VISTA, CA.	92083
N6PKZ	LOUNSBURY, JERRY	437-8456	357 ALAMEDA BLVD.	CORONADO, CA.	92118
KB6PLG	HUNTER, HARLO	273-8966	2605 LORING ST.	SAN DIEGO, CA.	92109
AA6PN	CURRIER, RICHARD E.	271-8326	10880 POINTED OAK LANE	SAN DIEGO, CA.	92131
W6PNT	OLSEN, FRED	566-9152	10680 CAMINITO DERECHO	SAN DIEGO, CA.	92126
K6PP	HORRALL, GENE	442-3716	620 ECKEN RD.	EL CAJON, CA.	92020
KA6PPD	HEISMAN, PAUL	726-1657	1008 TOROLE CIR.	VISTA, CA.	92084
N6PQQ	DE MONTEGRE, VINA	726-0353	750 CRESTVIEW RD.	VISTA, CA.	92083
K6PUN	GORDON, DOUGLAS	729-0239	3915 TRIESTE DR.	CARLSBAD, CA.	92008
N6PYD	MURDOCK, JIM		10942 SAN ANTONIO WAY	VALLEY CENTER, CA	92082
N6PYL	CLASSEN, NEIL	729-0031	4931 LOMA LAGUNA DR.	CARLSBAD, CA.	92008
N6QBI	SIMMONS, JEREMY	222-4209	4637 ORCHARD AVE.	SAN DIEGO, CA.	92107
WA6QBO	WILLIAMS, RICHARD	757-3734	P.O. BOX 177	SAN LUIS REY, CA.	92068
KB6QC	BREHM, BOB	931-8759	2610 EL AGUILA LN.	CARLSBAD, CA.	92008
W6QCA	DAVIS, LARRY	582-4324	6578 CRYSTALAIRES DR.	SAN DIEGO, CA.	92120
N6QDB	ROHRER, SUSAN	749-0276	30311 CIRCLE R LN.	VALLEY CENTER, CA.	92082
N6QDK	PAIGE JR., CHARLES	967-8767	737 ARTHUR AVE.	OCEANSIDE, CA.	92056
KB6QE	CLARK, DONALD C.	756-9672	P.O. BOX 3807	RANCHO SANTÉ FE	92067
KB6QF	HORRELL, MAURICE	726-7111	1906 ALTA VISTA DR.	VISTA, CA.	92084
KA6QFF	MC CORMICK, MATT	724-6361	1010-134 E. BOBIE DR.	VISTA, CA.	92084
KB6QH	GREGORY, ROBERT	461-0124	6365 CASSELBERRY WY.	SAN DIEGO, CA.	92119
KF6QH	FRANKLIN, JIM	726-4022	2174 FOOTHILL DR.	VISTA, CA.	92084
KD6QJ	HANSON, MELVIN R.	569-5054	3872 CAMINITO DE TATAN	SAN DIEGO, CA.	92111
N6QJE	CALL, ELEANDRE	729-0850	2248 JEFFERSON ST	CARLSBAD, CA.	92008
N6QJO	FERGUSON, FRED	726-9234	29814 MARGALE LANE	VISTA, CA.	92084
KB6QJR	DUFFIE, JOSEPH T.	581 1803	5306 MT. BLANCA DR.	SAN DIEGO, CA	92111
N6QMI	EGDAHL, JOHN	729-2156	4208 HIGHLAND DR.	CARLSBAD, CA.	92008
K6QQ	MORIARITY, JOHN	742-3050	P.O. BOX 88	PALOMAR MTN, CA	92060
W6QQA	WARNER, RUSS	489-0280	1402 WESTWOOD PLACE	ESCONDIDO, CA.	92025
N6QQF	RATH, NORMAN H.	721-1653	1096 TURNSTONE WAY	OCEANSIDE, CA.	92056
WA6QQQ	GONSETT, BOB	753-9133	518 NEPTUNE AVE.	ENCINITAS, CA.	92024
N6QVA	TRAPOLINO, MARK	632-1264	7727 CAMINITO MONARCA 107	CARLSBAD, CA.	92009
N6QWW	VERNACCHIA, ORLANDO	578-0427	8946 HILLERY DR.	SAN DIEGO, CA.	92126
WB6R	STEDMAN, DUANE J.	753-4821	1614 EDILEE DR.	CARDIFF, CA.	92007
N6RA0	WILHELMY, LOREEN	756-3133	P.O. BOX 2448	RANCHO SANTA FE, CA.	92067
N6RBS	OLSON, KEN	741-0040	1406 VIA VALENTE	ESCONDIDO, CA.	92025
KI6RF	SIMMONS, JACK	222-4209	4637 ORCHARD AVE.	SAN DIEGO, CA.	92107
N6RHS	STEDMAN, PATRICIA	753-4821	1614 EDILEE DR.	CARDIFF, CA.	92007
KB6RI	LIPPERT, GEORGE	727-6650	1228 LUPINE HILLS RD.	VISTA, CA.	92083
N6RKD	PAYNE, RICHARD E.	436-0160	366 ANDREW AVE.	LEUCADIA, CA.	92024
N6RKE	CROSSMAN, GLEN	728-8431	P O BOX 3142	FALLBROOK, CA.	92028
N6RKJ	HUDSON, JOHN R.	727-8115	3427 CAPALINA RD. #24	SAN MARCOS, CA.	92069
N6RKP	PARNELL, DAN	789-4032	P.O. BOX 1903	RAMONA, CA.	92065
N6RLE	HYPNAROWSKI, NANCY	560-4601	3785 MT BLACKBURN AVE.	SAN DIEGO, CA.	92111
KA6RSI	SELLÉ, SANDRA		2438 CATATINA	OCEANSIDE, CA	92056
K6RTD	MAYNARD, GEORGE 'SKIP'	727 2374	643 PLUMOSA AVE.	VISTA, CA	92083
WB6RTY	NELMAN, JOHN S.	471-0034	822 LAURELWOOD CT.	SAN MARCOS, CA.	92069
N6RUV	GRANT, STEPHEN R.	422-4415	434 JAMES CT	CHULA VISTA, CA	92010
N6RV0	MARTINA, JOSEPH F.	433-6885	4462 IBIS WAY	OCEANSIDE, CA.	92056
WB6RWF	BROWN, JIM	758-4794	3201 MIRA MESA AVE.	OCEANSIDE, CA.	92056
KF6RX	MIRDAS, RICHARD	942 5497	1733 GREENTREE RD.	ENCINITAS, CA.	92024
N6RYZ	MASON, ART J.	283-7457	P.O. BOX 23555-204	SAN DIEGO, CA	92123
KS6S	RICE, BOB	724-3558	3130 MORNINGSIDE DR.	OCEANSIDE, CA.	92056
K86SAE	SELLERS, LINDA E.	433-3648	4232 FIESTA WAY #8	OCEANSIDE, CA.	92056
W6SAX	PARKER, MARSH	272-1409	4166 TAOS DR.	SAN DIEGO, CA.	92117
W6SE	MARTIN, JOHN	753-3345	1135 CREST DR.	ENCINITAS, CA.	92024
WA6SGK	MARTIN, ALAN	753-3345	1135 CREST DR.	ENCINITAS, CA.	92024
N6SHB	PARTRIDGE, KELLEY	695 9790	10675 RED CEDAR DR.	SAN DIEGO, CA.	92131
KJ6SK	BLOODGOOD, WALT T.	758-3276	219 POND PL.	VISTA, CA.	92083
N6SIK	KIZER, RON	941-0057	1252 WOODRAIL DR.	VISTA, CA.	92083
WB6SML	HORGAN, JOHN		2430 GALAHAD RD.	SAN DIEGO, CA.	92123
KJ6SN	FELKER, RICHARD G.	728-5795	1616 DICKEY ST.	FALLBROOK, CA.	92028
N6SUB	CROSSEY, ERIC T.	579 0455	5350 JACKSON DR. #196	LA MESA, CA.	92042
N6SUN	RESCLY, DIRK	743-0404	3518 PRINCE ST.	ESCONDIDO, CA.	92025
WA6SVN	WANDSCHNEIDER, HERB	722-2803	1029 S. NEVADA	OCEANSIDE, CA.	92054
WM6T	TILLEY, AUBRA	742-3735	P.O. BOX 429	PAUMA VALLEY, CA.	92061
WB6TBA	GATES, BOB	729-1976	1777 BUTTERS RD.	CARLSBAD, CA.	92008
WB6TBQ	MC CORD, BILLY	724-3837	222 WASHINGTON ST.	VISTA, CA.	92084
N6TCB	CARTER, JERRY A.	743 4212	2435 OUR COUNTRY RD.	ESCONDIDO, CA.	92025
W6TCI	WILLIAMS, HARRY		10 MORNING GLORY AVE.	DURANGO, CO	81301
W6TDC	MILLER, LEE	724-7460	630 CORTEZ AVE.	VISTA, CA.	92084
N6TE	BLUESTEIN, HARRY	454-1098	5533 MOONLIGHT LN.	LA JOLLA, CA.	92037
N6TEP	MIELE, CHARLES	471 0439	856 REDBERRY CT.	SAN MARCOS, CA.	92069
W6TET	SIMPSON, IVAN	273-0219	3669 JEWEL ST.	SAN DIEGO, CA.	92109

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W6TFB	HUNT, LLOYD	757-9374	3747-102 VISTA CAMPANA S.	OCEANSIDE, CA.	92056
KI6TG	DOWLING JR., CHUCK	276-6435	3356 APACHE AVE.	SAN DIEGO, CA.	92117
WA6THC	SPANGLER, RAY	729-2001	3774 SKYLINE RD.	CARLSBAD, CA.	92008
W6THU	PAUL, FLOYD A.	242-8961	1545 RAYMOND	GLENDALE, CA	91201
WB6TJN	SELLÉ, BRYAN		2438 CATATINA	OCEANSIDE, CA	92056
N6TJT	KRAMARICH, CHUCK	741 1827	880 E WASHINGTON AV UN. A	ESCONDIDO, CA.	92025
KB6TJW	ROSENBERG, BERNICE	433-0711	P.O. BOX 372	SAN LUIS REY, CA	92068
K6TQ	TAYLOR, WILLIAM H.	727-1580	3744 BLUEBIRD CANYON RD.	VISTA, CA.	92084
N6TRS	TIPPIT, DON	723-8319	2233 S STAGECOACH LANE	FALLBROOK, CA.	92028
N6TUP	CHRISTOPH, WILLIAM R.	941 5720	400 SOUTH MELROSE DR.	VISTA, CA.	92083
N6TUQ	INGEBRETSÉN, DENNIS	672-0775	10645 MATHIESON ST.	SAN DIEGO, CA.	92129
N6TUR	WAGNER, LEO F.	941-6756	1441 PHIL MAR LN.	VISTA, CA.	92083
N6TWO	GRASSEY, DOUGLAS J.	273-6959	4781 LAKE FOREST AVE.	SAN DIEGO, CA	92117
W6TXK	EARL, RONALD C.	566-1959	11372 IRONWOOD RD.	SAN DIEGO, CA.	92131
W6TZV	CRISPELL, HAL	223-9925	4261 SANTA CRUZ AVE.	SAN DIEGO, CA.	92107
WD6U	PENNINGTON, WALTER	433-1056	3529 PEAR BLOSSOM DR.	OCEANSIDE, CA.	92056
KA6UAI	THOMPSON, ERIK	436-5550	962 HYMETTUS AVE.	ENCINITAS, CA.	92024
N6UCJ	MEAD, PATRICK (P.J.)	941-9162	5333 DARWIN DR.	OCEANSIDE, CA.	92056
WA6UGG	WILSON, WESLEY	724 0193	2227 THUMBNAIL LANE	VISTA, CA.	92084
N6UIA	BARRY, STEVE	746-9208	954 CIMMARRON TR.	ESCONDIDO, CA.	92025
N6UIT	VALADEZ, JOSE "FELIPE"	271-6079	8993 COVINA ST.	SAN DIEGO, CA	92126
K6UL	KWIETNIOWSKI, MITCHELL Z.	274-1434	3728 1/2 A INGRAHAM ST.	SAN DIEGO, CA.	92109
N6URW	TYLER, JR., JOHN E.	753-9545	853 SUNRICH LANE	LEUCADIA, CA.	92024
WA6UTQ	RUEGSÉGER, LARRY	758-5820	1450 HEDIONDA AVE.	VISTA, CA.	92083
N6UW	JAFFE, ROGER	697-6025	7185-M NAVAJO ROAD	SAN DIEGO, CA	92119
N6UWJ	UTSCHIG, ELLEN E.	630-0950	1050-19 LA TORTUGA DRIVE	VISTA, CA	92083
N6UZG	SALTZBERG, GEORGE H. (DOC)	743-6353	1150 MARY LANE COURT	ESCONDIDO, CA	92025
N6UZH	ASHLEY, TERESA ANN	741-2560	2655 LAS PALMAS AVE.	ESCONDIDO, CA	92025
WB6V	DE MONTEGRE, LARRY	726-0353	750 CRESTVIEW RD.	VISTA, CA.	92083
W6VDA	ULYKEN, BILL	466-4234	4850 JESSIE AVE.	LA MESA, CA.	92041
K86VF2	CONTOPENIS, ALICE	749-2699	13964 PAUMA VISTA DR.	VALLEY CENTER, CA.	92082
K6VGP	MC KAY, DICK	377-2789	27532 ELMBRIDGE DR.	RANCHO PALOS VERDES, CA.	90274
WA6UNR	HYPNARÓWSKI, JOE	560-4601	3785 MT BLACKBURN AVE.	SAN DIEGO, CA.	92111
KB6UO	GRIFFITHS, GEORGIA	942-5082	2207 SERENO VIEW LANE	OLIVENHAIN, CA.	92024
KE6UX	CHANTRILL, ROBERT	727-0606	1961 PINEWOOD RD.	VISTA, CA.	92083
K66UX	LINCOLN, CHESTER 'BUD'	436-9983	1345 HYMETTUS AVE.	LEUCADIA, CA.	92024
WA6UYC	CHAMBLESS, BURR JR.	757-6070	P.O. BOX 190	SAN LUIS REY, CA.	92068
WA6UYD	CHAMBLESS, BURR	757-6070	P.O. BOX 190	SAN LUIS REY, CA.	92068
KA6UYF	POTTER, EDWARD R.	485 7230	12272 PASEO PASIDO	SAN DIEGO, CA.	92128
NW6W	KENT, JOHN L.	729-5254	3920 HOLLY BREA LN.	CARLSBAD, CA.	92008
WB6WGT	HARKER, HARLAND "HARK"	724-2111	607 VIA DEL MAR	VISTA, CA.	92083
W6WPO	PRIEST, BILL	727-4279	3535 LINDA VISTA DR - #62	SAN MARCOS, CA.	92069
WB6WQI	NULL, ED B.	940-9403	P.O. BOX 3020	VISTA, CA.	92083
WA6WSZ	HARRY, JOSEPH P.	726-9526	2438-2 E. VISTA WAY	VISTA, CA.	92084
WA6WTZ	FRANKLIN, OLIVIA	726-4022	2174 FOOTHILL DR.	VISTA, CA.	92084
KD6WX	PATCHEL SR., HERBERT O.	274-6045	4920 DELLA PL.	SAN DIEGO, CA.	92117
KD6WZ	FREY, FREDERICK	729-2991	3449 CORVALIS ST.	CARLSBAD, CA.	92008
K26X	BUSCEMA, PAUL	436-2537	343 WHITEWOOD PL.	ENCINITAS, CA.	92024
KI6XJ	ALBRECHTSEN, JOHN	941-0725	845 HAMPTON COURT	VISTA, CA.	92083
K06Y	DOMBROWSKI, DAVE	427-4675	682 ASH AVE.	CHULA VISTA, CA.	92010
K6YGK	UMINSKI, GEORGE	755-1014	13776 MIRA MONTANA DR.	DEL MAR, CA.	92014
KB6YHY	NYE, ANITA M.	758-0234	1869 ALESSANDRO TRAIL	VISTA, CA.	92084
KB6YHZ	NYE, ARTHUR PAUL	758-0234	1869 ALESSANDRO TRAIL	VISTA, CA.	92084
W6YJU	SCHWEIZER, EARL	753-8096	P.O. BOX 532	CARDIFF, CA.	92007
W6YLA	BALKE, JERRY	758-1134	746 HONEYDEW LN.	VISTA, CA.	92084
KB6YLA	KROHN, KARL	224 5126	4710 PT. LOMA AVE.	SAN DIEGO, CA.	92107
KB6YNL	ELDER, BILL	481-7967	2529 VIA PISA	DEL MAR, CA	92014
WA6YOO	HODGES, HARRY	743 4212	2435 OUR COUNTRY RD.	ESCONDIDO, CA.	92025
N6YX	BELL, BOB	745-3722	1926 ALEXANDER DR.	ESCONDIDO, CA.	92025
W6YYV	BURDETTE, SAM	726-2624	4718 WESTRIDGE DR.	OCEANSIDE, CA.	92056
NG6Z	DENTON, WILLIAM H.	443-8775	9633 FARMINGTON DR.	LAKESIDE, CA.	92040
WV6Z	PARTRIDGE, DELMAR E.	695-9790	10675 RED CEDAR DR.	SAN DIEGO, CA.	92131
WB6ZJD	NASH JR., F. STEPHEN	278-7544	6425 CAMINITO LISTO	SAN DIEGO, CA	92111
WB6ZJZ	GIBBS, CHARLEY	758-3666	3213 WARING RD.	OCEANSIDE, CA.	92056
KI6ZM	TODD, GEORGE	439-8227	822 LA SALINA PL.	OCEANSIDE, CA.	92054
KB6ZUH	BARBEN, ERIC R.		132 TIMBER DR.	DURANGO, CO	81301
W6ZYW	GESNER, JIM	492-2338	1215 VIA LA JOLLA	SAN CLEMENTE, CA.	92672
N7AMR	WILLETT, ALLEN	434-5656	4722 BIRCHWOOD CIR.	CARLSBAD, CA.	92008
N7AS	GRANT, GARY		17634 PLAZA ARICA	SAN DIEGO, CA.	92128
KA7BAZ	GOGUEN, ERNEST J.	749-5289	1018 W EL NORTE PKWY 117	ESCONDIDO, CA	92026
WA7BIA	LEWIN, A. A.	753-2298	1166 WOTAN DR.	ENCINITAS, CA.	92024
WL7BLM	MULLINS, DAN	434-4741	230 PACIFIC AVE.	CARLSBAD, CA.	92008
KE7DR	TUTTLE, DORA	747-6089	1601 E GRAND AVE - APT B	ESCONDIDO, CA	92025
W7EAJ	STEELE, WILLIAM	453-3860	4444 EASTGATE MALL #7	SAN DIEGO, CA.	92121
N7EQQ	LOAR, CHRISTINE	484-3494	13073 SUNDANCE AVE.	SAN DIEGO, CA.	92129

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WA7GRW	TRAYNOR, BOB	578-7425	12414 SEMILLON BLVD.	SAN DIEGO, CA.	92131
W7HGS	THIELE, AL	755-7347	3444 LADY HILL RD.	SAN DIEGO, CA.	92130
KB7LX	LEACH/SORRENTO, BILL		100 E WOODWINDS IND.CT.	CARY, NC	27511
WB7OCR	EVANS, LEE	749-9113	1821B-150 PARADISE MTN RD	VALLEY CENTER, CA.	92082
WA7OWU	LOAR, DAVID	484-3494	13073 SUNDANCE AVE.	SAN DIEGO, CA.	92129
KA7PII	TRAYNOR, JUDY	578-7425	12414 SEMILLON BLVD.	SAN DIEGO, CA.	92131
W7RYF	BLALOCK, FERMAN		6370 SEVERIN DR.	LA MESA, CA.	92042
WT7W	KNIGHT JR., JOHN A.	530-0355	11224 POLARIS DR.	SAN DIEGO, CA.	92126
WT7W	D'BERRY, JAMES A.		2501 WOODLAND BLUFF DR.	CLEB.CO.-HEBER SPRNGS, AR	72543
K7WLX	FELTON, BOB	729-5519	4803 NEBLINA DR.	CARLSBAD, CA.	92008
AH8AD	BURTON, LIONEL "DOC"	744-6904	637 RICHLAND RD.	SAN MARCOS, CA.	92069
N8FVY	KRIDER, BRUCE G.	438-3932	6719 ANTILOPE ST.	CARLSBAD, CA.	92009
N9AKB	CARLSEN, KENNETH	434-3256	4904 PARK DRIVE	CARLSBAD, CA.	92008
W9FQN	ROHRER, STAN	749-0276	30311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
W9BNI	WITTING, OSB, REV. MARTIN J.		1000 BUTTERFIELD RD.	AURORA, IL.	60504
KA9HDI	AZMANN, FRANK	434-4494	1270 STRATFORD LANE	CARLSBAD, CA.	92008
ASSOC	ANDERSON, FRED	452-1928	4050 ROSENDA CT. APT 238	SAN MARCOS, CA.	92122
ASSOC	HOWALT, BILL	729-6787	3640 CATALINA DR	CARLSBAD, CA.	92008
ASSOC	STEWART, F. BRUCE	941-3804	867 EVERGREEN LANE	VISTA, CA.	92084
ASSOC	BRANDT, KARL H.	945-8819	161 HARRISON ST.	OCEANSIDE, CA.	92056
ASSOC	COURTNÉY, B.C. "RED"		5209 COLONIAL WAY	OCEANSIDE, CA.	92056
ASSOC	HELMS, CLIFF	676-6651	PO BOX 1773	TEMECULA, CA.	92390
ASSOC	CARTWRIGHT, D.C.		P.O. BOX 372	AMARILLO, TX.	79105
ASSOC	LEE, HOWARD E.	471 7133	909 RICHLAND RD. #145	SAN MARCOS, CA.	92069
ASSOC	SCHREWSBERRY, VARNA	728 8196	909 LA VONNE AVE.	FALLBROOK, CA.	92028

Members By Last Name 07-31-1989

AA6DI	ALBRECHTSEN, LOUELLA	W6YYV	BURDETTÉ, SAM	W6QCA	DAVIS, LARRY
KI6XJ	ALBRECHTSEN, JOHN	KB6NZA	BURGESS, MARY	WQ6V	DE MONTEGRE, LARRY
WA1ZEN	AMES, TIM	N6NZX	BURGESS, CARL W.	N6PQQ	DE MONTEGRE, VINA
KJ6KP	ANDERSON, THOMAS	AH8AD	BURTON, LIONEL "DOC"	WD6BNX	DEAN, ROBERT K.
ASSOC	ANDERSON, FRED	KZ6X	BUSCEMA, PAUL	N6CKH	DEMOS, TED
KC6BIM	ANDERSON III, WM. J. (BILL)	N6MVZ	CALDWELL, BENTON	NG6Z	DENTON, WILLIAM H.
KC6AST	ARBUTHNOT III, G. LANE	N6QJE	CALL, ÉLÉANORE	WD6AHW	DEWEY, WM. H. (BILL)
N6UZH	ASHLEY, TERESA ANN	KA6GRG	CALVERT, CHUCK	WD6AHX	DEWEY, L. WAYNE
KB6NMK	ASHLEY, JO	WB6HSZ	CAMPBELL, JOHN R.	N6MYN	DIPERT, STEPHEN "DICK"
KB6NML	ASHLEY, A. J.	W6GHD	CAREY, RICHARD	W6BHF	DOBLER, RAY
KA9HDI	AZMANN, FRANK	N9AKB	CARLSEN, KENNETH	W6NBH	DOIG, AL
W6YLA	BALKE, JERRY	K6ICG	CARRY, EDWARD	KO6Y	DOMBROWSKI, DAVE
N6IZW	BANKE, KERRY	N6TCB	CARTER, JERRY A.	N6CDA	DOUGLAS, MALCOLM
KB6ZUH	BARBÉN, ERIC R.	ASSOC	CARTWRIGHT, D.C.	KI6TG	DOWLING JR., CHUCK
N6PDZ	BARKER, FRED	N6AT	CASSEN, FRANKLIN	KB6QJR	DUFFIE, JOSEPH T.
N6PEA	BARKER, MARY	WA6ESG	CASTAGNA, ED	AA6KY	DUTCHER, DAVID
N6UIA	BARRY, STEVE	NC6J	CHAMBERS, BOB	W6TXK	EARL, RONALD C.
W6KCO	BARTH, JAMES	WA6YD	CHAMBLESS, BURR	N6QMI	EGDAHL, JOHN
K6CV	BASTOW, JR., J. G.	WA6YVC	CHAMBLESS, BURR JR.	KB6YNL	ELDER, BILL
W6HW	BAUMGARTNER, VERN	KB6DQE	CHANDLER, LARRY	K6GQS	ESTERLY JR., HAROLD D.
N6GOS	BECK, DONALD R.	KE6UX	CHANTRILL, ROBERT	WB7OCR	EVANS, LEE
KD6FY	BELFIELD, SCOTT P.	W6IPQ	CHASE, HERBERT	N6GNB	FAHNESTOCK, ALBERT
N6YX	BELL, BOB	N6TUP	CHRISTOPH, WILLIAM R.	N6GWI	FAHNESTOCK, MICKEY
KG6JA	BERG, PETER	KB6GEW	CLARK, DONALD C.	W6FTV	FALLS, EDWARD L.
W6JJA	BIANCHI, GUIDO	N6PYL	CLASSEN, NEIL	KJ6SN	FELKER, RICHARD G.
W7RYF	BLALOCK, FERMAN	KB6NUY	COATES, WALTER	K7WLX	FELTON, BOB
KJ6SK	BLOODGOOD, WALT T.	W3CRU	COHEN, CHARLES A.	N6QJO	FERGUSON, FRED
N6TE	BLUESTEIN, HARRY	NU6L	CONTOGENIS, JOSEPH P.	N6IE	FERRANTO, FELIX
KI6CX	BOLLMAN, GEORGE	KB6VFZ	CONTOGENIS, ALICE	N4MMP	FISHER, MICHAEL O.
KE6HI	BOURHENNE, ALMA	N6JZB	COOK, WALLY	KE4EY	FLEISCHMANN, WM. (BILL)
N6FMK	BOWEN, BILL	NE6O	COOPER, JIM	N6GJW	FOLSOM, RUSS
WB6NJI	BOYD, GERALD G.	WA6HQW	COPLEY, DAVE	KF6QH	FRANKLIN, JIM
ASSOC	BRANDT, KARL H.	KE6BH	COUNTRYMAN, BILL	WA6WTZ	FRANKLIN, OLIVIA
KB6QC	BREHM, BOB	ASSOC	COURTNÉY, B.C. "RED"	KD6WZ	FREY, FRÉDERICK
N6CKQ	BROADBENT, LOUIS C.	N6OPD	CRABTREE, JACK	W4NYU	GATES, HOWARD
WD5BRT	BROOM JR., HERMAN W.	W6HLB	CRAIG SR., JOE	WB6TBA	GATES, BOB
WD6BRX	BROUILLET, PAUL	W6T梓	CRISPELL, HAL	W6ZYW	GESNER, JIM
WB6RWF	BROWN, JIM	N6SUB	CROSSER, ERIC T.	WB6JZJ	GIBBS, CHARLEY
N6ICH	BROWN, THOMAS F.	N6RKE	CROSSMAN, GLEN	W6FXL	GOEPINGER, ALBERT
N6PDP	BROWN, JEFF	K6HAV	CROSSMAN, RALPH	KA7BAZ	GOGUEN, ERNEST J.
KB6DSC	BRUIN, BETTY	N6INN	CROSSMAN, PAT	WA6QQQ	GONSETT, BOB
W6JE	BUCKNER, BILL	AA6PN	CURRIER, RICHARD E.	WD6BEZ	GONSETT, JUDY
N6NOG	BUCKNER, MARY	WA6INL	DAU JR., WALTER K.	N6CEK	GOODMAN, LANNY

## PALOMAR AMATEUR RADIO CLUB, INC. Members By Last Name

07-31-1989

K6PUN	GORDON, DOUGLAS	W6EYP	LINCOLN, WARREN	N6RKD	PAYNE, RICHARD E.
KF6EX	GOREWIT, HAL	KG6UX	LINCOLN, CHESTER 'BUD'	K6LNJ	PEARCE, ART
N6RUV	GRANT, STEPHEN R.	KB6MPZ	LINCOLN, CAROLINE	W06U	PENNINGTON, WALTER
N7AS	GRANT, GARY	KB6RI	LIPPERT, GEORGE	WA6MOS	PEENEY, JOE
N6DQ	GRANT, ROD	KI6MV	LITTLEFIELD, CHARLES	W6MTX	PIERCE, H.C.
N6TWO	GRASSEY, DOUGLAS J.	N7EQQ	LOAR, CHRISTINE	WA6ILH	POTERAJA JR., WM. E.
KB6QH	GREGORY, ROBERT	WA7QWU	LOAR, DAVID	KA6VYF	POTTER, EDWARD R.
WB6VUD	GRIFFITHS, GEORGIA	W6KVF	LOUDON, CLIFFORD L.	W6OML	POWELL, RICHARD A.
WB6CSH	HAMANN, MICHAEL	N6PK2	LOUNSBURY, JERRY	W6WP0	PRIEST, BILL
WB6MEI	HAMMOND, JOHN	KC6BGX	LOUNSBURY, GEORGE P.	WA6HYB	PUGH, DANIEL C.
KD6QJ	HANSON, MELVIN R.	WB6IOV	LOWELL, RUSSELL A.	WB6HFE	RAMME, FRANK B.
KI6JM	HANTHORN, JACK	K4ACM	LUTZ, EDWARD	N6QQF	RATH, NORMAN H.
WB6WGT	HARKER, HARLAND "HARK"	N6DSR	MAGNET, ANDREW DEAN	N6BAD	REBER, JOHN
N6AMD	HARLAND, RAY	KB6DGR	MAHONEY, BETTY	WD6AHV	REMINGTON, TODD
KH6CN	HARPER, JIM	W6SE	MARTIN, JOHN	N6SUN	RESCHLY, DIRK
WA6WSZ	HARRY, JOSEPH P.	WA6SGK	MARTIN, ALAN	KS6S	RICE, BOB
N6DVJ	HART, JOHNNY	KC6BWS	MARTIN, ROY E.	WA6AIW	RICHARDS, DAVID L.
N6LTU	HART, LANE	N6RV0	MARTINA, JOSEPH F.	WA6IPD	RIDEOUT, ART
K6ICT	HARVEY, KEN	N6RYZ	MASON, ART J.	WA6NNC	RIVERA, BOB
WB6BHE	HARVEY, VANESSA	AA6DM	MASTÉ, L.B. "RUSTY"	N6QDB	ROHRER, SUSAN
WB6JSP	HARVEY, FLOYD	N6KAL	MATROS, BECKY	KA6FPS	ROHRER, BARBARA
N6NNP	HEALEY, WILMA	WB6OBH	MAYES, PETE	W9FQN	ROHRER, STAN
N6NNQ	HEALEY, THOMAS	K6RTD	MAYNARD, GEORGE 'SKIP'	KB6TJW	ROSENBERG, BERNICE
WA6EEZ	HEERSEMA, BILL	WB6GXR	MC BRIDE, WILLERT 'MAC'	KB6DEM	ROSS, JUDY
KA6PPD	HEISMAN, PAUL	NH6EW	MC CARTHY, MAC	N6GZI	ROSS, ED
WA6KZN	HEITGER, BOB	KI6PE	MC CARTNEY, DOUGLAS B.	KB6MBL	ROSS, BETSY E.
ASSOC	HELMS, CLIFF	W6BRF	MC CLUSKEY, PAUL	WB6JVS	ROUSE, HARRY A.
W6I2S	HICKMAN, RAY F.	WB6NUV	MC CONAHAY, JIM C.	KB6AI	ROWLETT, GUY
WA6Y00	HODGES, HARRY	WB6TBQ	MC CORD, BILLY	WA6UTQ	RUEGSEGGER, LARRY
W6HC	HODGSON, CHARLES	KA6QFF	MC CORMICK, MATT	K3PXX	RUNYON, TERRY
KD3HN	HOFFMAN, MIKE	W6FGE	MC DANIEL, MICK	K6GJD	SALTER, BILL
K6II	HOLM, ED	K6VGP	MC KAY, DICK	N6UZG	SALTZBERG, GEORGE H. (DOC)
WD0DLW	HONTS, C.N. "JACK"	N6NHW	MC KINNEY, STEPHEN B.	WA6DOC	SALZARULO, MARK
WB6GML	HORGAN, JOHN	N6UCJ	MEAD, PATRICK (P.J.)	K6HE	SANDBERG, SANDY
K6PP	HORRALL, GENE	N6TEP	MIELE, CHARLES	KC6BJM	SANDFORD, GERRY M.
KB6QF	HORRELL, MAURICE	W6TDC	MILLER, LEE	N6NNI	SCHLESINGER, MARK M.
WB6FMT	HOUSER, JERRY	N6EQB	MILLER, RAYMOND	N6NSU	SCHMIDT, WILLIAM
ASSOC	HOWALT, BILL	KF6RX	MIRDAS, RICHARD	ASSOC	SCHREWSBERRY, VARNA
KI6GI	HOY, TIM	K6QQ	MORIARITY, JOHN	W6YJU	SCHWEIZER, EARL
W6JRC	HUCKABAY, WALT	KB6GKE	MORRIS, STEVE	KA5Q	SEALS, KEN
N6RKJ	HUDSON, JOHN R.	KC6COD	MOSCOWITZ, MARK	WB6TJN	SELLE, BRYAN
W6NQZ	HULBERT, DONALD	WL7BLM	MULLINS, DAN	KA6RSI	SELLE, SANDRA
W6TFB	HUNT, LLOYD	W6OYJ	MUNN, R. E. (ED)	N6GZP	SELLERS, STEVE
KB6PLG	HUNTER, HARLO	N6PYD	MURDOCK, JIM	KB6SAE	SELLERS, LINDA E.
WA6UNR	HYPNAROWSKI, JOE	N6OYG	MUSIL, VICTOR	W6ESV	SENTERFITT, ARNOLD
N6RLE	HYPNAROWSKI, NANCY	WB6ZJD	NASH JR., F. STEPHEN	W2AU0	SHAUT, STANLEY
N6TUQ	INGEBRETSEN, DENNIS	N6NEH	NEIGER, RALPH	N6QBI	SIMMONS, JEREMY
K6ERW	INSKEEP, CHAS. G.	WB6RTY	NEUMAN, JOHN S.	KI6RF	SIMMONS, JACK
W6IRM	INSKEEP, CHUCK	K6AYJ	NICHOLS, EDITH	W6TET	SIMPSON, IVAN
N6UUW	JAFFE, ROGER	W6EVJ	NICHOLS, ART	N6BBB	SINATRA, CARMEN J.
W6KCB	JANKOWSKI, EDWARD	N6LUQ	NIDA, TED H.	K6BPT	SKINNER, MURIEL 'SKIP'
KB6EPQ	JOHNSON, ERIC	W6MFT	NIELSEN, WILL O.	W6BND	SLUYTER, LEONARD J.
WD6FWE	JOHNSON, DON	N6MDV	NIELSEN II, WILL O.	KF6EA	SMITH, RICHARD A.
NJ6W	KENT, JOHN L.	WD6HFI	NORMINGTON, PHILLIPP B.	N6HWK	SMITH, N WHITNEY
W6DWE	KIRKPATRICK, CLAUDE L.	WB6WQI	NULL, ED B.	W6INI	SMITH, ARTHUR R.
WB6YCQ	KIRSCHNER, HENRY	KB6YHZ	NYE, ARTHUR PAUL	KB6MI	SMITH, GEORGE
N6SKM	KIZER, RON	KB6YHY	NYE, ANITA M.	KB6MCU	SMITH JR., BILLY J.
KB6NRL	KLEIN JR., FRED	WT7W	O'BERRY, JAMES A.	WA6THC	SPANGLER, RAY
W6FN	KLIPPEL, KEN	W4OYN	O'HARA, JIM	WA6IPF	STACK, PAUL J.
WR7W	KNIGHT JR., JOHN A.	W6PNT	OLSEN, FRED	WB6R	STEDMAN, DUANE J.
N6TJT	KRAMARICH, CHUCK	N6RBS	OLSON, KEN	N6RHS	STEDMAN, PATRICIA
NBFVY	KRIDER, BRUCE G.	WB4YQU	ORAN, SAMUEL	W7EAI	STEELE, WILLIAM
W6KTE	KRIST, R.F.	N6QDK	PAIGE JR., CHARLES	ASSOC	STEWART, F. BRUCE
KB6YLA	KROHN, KARL	N6NAU	PAKASKI, TED	W6ODG	STEWART, AUBREY L.
WB6IQS	KUIVINEN, JOHN	W6SAX	PARKER, MARSH	K6JSI	STOUFFER, JEFF "SHORTY"
K6UL	KWIETNIEWSKI, MITCHELL Z.	KB6PCF	PARKER, MARNI	KS6P	STUART, RODGER
WB6HMY	LA POINTE, JOE	N6RKP	PARNELL, DAN	WA6DYV	SWADER, JOHN B.
N6ISC	LACKEY, PAUL	WV6Z	PARTRIDGE, DELMAR E.	KB6ABS	SWENSON, GEORGE A.
WA6BSD	LANG, STEVEN	N6SHB	PARTRIDGE, KELLEY	K6TQ	TAYLOR, WILLIAM H.
W6DNX	LANGJAHN, CARL	N6CPS	PASCHKE, VERN	NF6L	TAYLOR, MATT
KB7LX	LEACH/SORRENTO, BILL	NOEW	PASCHKE, MARY	W6OLQ	TENTOR, JOHN
ASSOC	LEE, HOWARD E.	KA6GHE	PATCHEL, JUDITH	W7HGS	THIELE, AL
WF6L	LEONELLI, PHIL	WA6IWK	PATCHEL, HERBERT	KA6UAI	THOMPSON, ERIK
WA7BIA	LEWIN, A. A.	KD6WX	PATCHEL SR., HERBERT O.	WM6T	TILLEY, AUBRA
W6OVP	LIEN, DAVID A.	W6THU	PAUL, FLOYD A.		

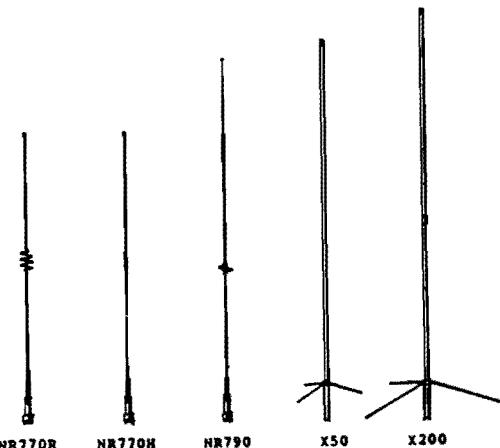
PALOMAR AMATEUR RADIO CLUB, INC. Members By Last Name 07-31-1989

KI6ZM TODD, GEORGE	WA6OHB WALLACE, LEONA	W6TCI WILLIAMS, HARRY
I6QVA TRAPOLINO, MARK	WA6SVN WANDSCHNEIDER, HERB	N6OAM WILLIAMS, CRAIG R.
JA7GRW TRAYNOR, BOB	WA6QDA WARNER, RUSS	W6HCD WILLIAMS, A. NASH
KA7PII TRAYNOR, JUDY	WA6HYC WATT, BILL	WA6ABX WILLIAMS, BILL
W6BIH TUPANCY, OSCAR	NSNLV WEBER, CHARLOTTE	N6AOA WILLIAMS, SUSAN J.
KE7DR TUTTLE, DORA	N5HTC WEBER, JR. CHARLES E.	KB5MU WILLIAMSON, PAUL T.
N6URW TYLER, JR., JOHN E.	N6GW WENZ, GORDON	N6KGK WILLIS, LEE
K6YGK UMINSKI, GEORGE	W6IUG WEST, RICHARD O.	WA6UGG WILSON, WESLEY
N6UWW UTSCIG, ELLEN E.	N6DSC WHEELER, DUANE W.	W9GNI WITTING, QSB, REV. MARTIN J.
N6UIT VALADEZ, JOSE "FELIPE"	N6COU WHIPPLE, BILL	N6KVY WONG, DENNIS
KC6AZY VAN NEST, DAVID	N6RAO WILHELMY, LOREEN	KC6DPM WORKS, GEORGE A.
N6QW VERNACCHIA, ORLANDO	WI6B WILHELMY, RON	KC6DPN WORKS, ROBERTA F.
N6KI VERNACCHIA, DENNIS	N7AMR WILLETT, ALLEN	K6HZ YACABUCCI, JAMES E.
W6UDA ULYMEN, BILL	WA6QBO WILLIAMS, RICHARD	W3ARU ZIEGLER, PETE
N6TUR WAGNER, LEO F.	WB0WGU WILLIAMS, SANDY	
N6DUR WAGNER, ROBERT G.	W6BLW WILLIAMS, JACK	

TOTAL 400

### DIAMOND VHF & UHF ANTENNAS

DUAL BAND ANTENNAS FOR 144-146 & 430-450 MHZ



MODEL NUMBER	ELEMENT	PHASING	DB GAIN VHF	LENGTH INCHES	AMATEUR NET
	VHF	UHF	VHF	UHF	
<b>Dual-Band Vertical Base Station Antennas</b>					
X50	1-3/4	3-5/8	4.5	7.2	66 \$ 94.95
X200	2-5/8	4-5/8	6.0	8.0	98 139.95
<b>Dual-Band Mobile Antennas</b>					
NR770R	1-1/2	2-5/8	3.0	5.5	39 47.95
NR770S	1-1/4	1-1/2	unity	2.2	17 34.95
NR770H	1-1/2	2-5/8	3.0	5.5	39 49.95
NR790	1-3/4	3-5/8	4.5	7.2	57 76.95
<b>Dual-Band Duplexer</b>					
MX72D	(PL-259 connectors)				37.50
<b>2-Meter Mobile Antennas</b>					
NR22L	2-5/8	-	6.5	-	96 74.95
<b>Mobile Mounting Kits w/ 17 ft. RG-58A cable &amp; PL259</b>					
PO-B	Mount only, no coax	(3/4" hole reqd.)			11.95
PO-K	Mounting Kit, complete w/ cable				19.95
PO-MM	Magnetic Mount (not for NR22L/NR790)				21.95
PO-TLM	Trunk Lip Mount				21.95

### DIAMOND ANTENNA POWER/SWR METERS



The Diamond Antenna Precision Meter series covers the 1.8-1300 MHz spectrum with 5% typical accuracy. No competitive meter equals their quality and performance.

The large meter scale is calibrated for Forward and Reverse Power, and Standing Wave Ratio (SWR). Switch Selectable Average (R.M.S.) and Peak Envelope Power (P.E.P.).

The Diamond SX-600 is unique, as it has two directional couplers, each measuring a set of inputs. Selection is by a rear panel switch. Band 1 is 1.6-160 MHz, and Band 2 is 140-525 MHz. Typical accuracy 5% (10% Maximum). The SX-1000 combines features of the SX-600 with inclusion of the 903 MHz. & 1240 MHz. bands.

Provision for optional meter lighting is through a jack on the rear panel. (12V required, or use our AC adapter Model AC ADAP, \$6.95 ea.)

SX-100	PWR Meter F&R/SWR 3 KW 1.6-60 MHz	\$119.95
SX-200	PWR Meter F&R/SWR 200W 1.6-200 MHz	89.95
SX-400	PWR Meter F&R/SWR 200W 140-525 MHz	99.95
SX-600	PWR Meter F&R/SWR 200W 1.6-160 MHz & 140-525 MHz.	\$149.95
SX-1000	PWR Meter F&R/SWR 200W 1.8-160 MHz. & 430-1300 MHz.	\$219.95

**WESTCOTM**

### DUMMY LOAD

Model DL-60

Ideal for bench tune-up of small transmitters. Quality built of the finest materials & workmanship. Power Rating: 60 Watts intermittent  
20 Watts continuous. Frequency: 500 MHz Max. VSWR: Less than 1.2:1. Connector: PL-259. Warranty: One Year.

List Price  
\$29.95

SPECIAL!  
\$17.95



### COAX SWITCH

Rugged Low Loss Switch, ideal for antenna switching at frequencies up to 500 MHz. Heavy Metal construction and large contacts will give many years of use.

Power Rating: 2.5 KW P.E.P.  
Impedance: 50 Ohms  
Insertion Loss: Less than 0.2 dB  
VSWR: 1.2 : 1  
Max. Frequency: 500 MHz.  
Isolation: 60 dB Min/300 MHz, 50 dB Min/450 MHz  
Contact Res.: Less than 20 milliohms  
Connectors: SO-239  
Circuit: 1 pole/ 2 output/automatic grounding  
Warranty: 1 year

List Price  
\$27.95 Our price  
\$19.95

SEP 89

## PARC ENLISTMENT/REENLISTMENT FORM

Mail form with \$\$ to PARC, P.O. Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK, at club meetings. Dues (including SCOPE) are \$12 a year plus \$9 for each additional family member. Dues are prorated for new members Aug, Sep, Oct \$12; Nov \$9, Dec \$8, Jan \$7, Feb \$6, Mar \$5, Apr \$4, May \$3, Jun \$2, Jul \$1. Consider paying for two or three years at a time. Call, name, and complete address are required. Telephone number may be unlisted in roster if requested. Other information requested below may be omitted if you feel uncomfortable providing it to the Club.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Phone # \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_ others?

Date 1st lic. \_\_\_\_\_ Birth Date \_\_\_\_\_ Thos Bros loc. page # \_\_\_\_\_ coord \_\_\_\_\_

Name & call of family members in PARC \_\_\_\_\_

ARRL \_\_\_\_\_ RACES \_\_\_\_\_ ARES \_\_\_\_\_ Red Flag \_\_\_\_\_ Blood donor \_\_\_\_\_ Type \_\_\_\_\_ Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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VALLEY CENTER, CA. 92082

# Scope

**W6NWG**

**Palomar Amateur Radio Club Inc.**

POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530



W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)

**VOL. XXIV, NO., 10**

**OCTOBER, 1989**

PRESIDENT:	Stan Rohrer, W9FQN, Valley Center	749-0276
VICE PRES:	Mac McCarthy, NH6EW, Oceanside	945-7391
SECRETARY:	Nash Williams, W6HCD, Bonsall	728-3574
TREASURER:	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133
EDITOR:	Ralph Crossman, K6HAV, Vista	727-5866

MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. Tol' yez a hunnert times.

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.

## OCTOBER MEETING

The program for the October meeting will be on Ni-Cad, Lithium, & Lead-acid Batteries by Alexander Battery. Paul, KB5MU, will tell us the latest on the satellites. Show & Tell: A demonstration of surveying equipment and the Kenwood TM-2570A w/DCL.

There will be a FOR SALE table. One item per member. The item must be tagged with name, call, and minimum price (if any). Ten percent of the sale price will go to the Club.

Refreshments by NH6EW, and those good folks who remember.

## MEMBER INFORMATION

GNU CLUB MEMBERS: Peter Heid, K6JQE, Solana Beach. Welcome.

RENUDE: (11) George Swenson, KB6AQS; Dan Mullins, WL7BLM; Mick McDaniel, W6FGE; Hal Esterly, K6GQS; Ed Holm, K6II; Chuck Pierce, W6MTX; Rodger Stuart, KS6P; Terry Runyon, K3PXX; Jim Franklin, KF6QH; Eric Thompson, KA6UAI (2); Olivia Franklin, WA6WTZ.

UPGRADED LICENSES AND GNU CALL-SIGNS: Ray Miller, N6EQB; and to Bernice Miller, KB6TJW, who upgraded to General and Technician, respectively. Congratulations. LET US KNOW ABOUT CHANGES, PLEASE.

**KEN KLIPPEL, W6FN, SK**

We are saddened to note the passing of Ken Klippel, W6FN, on August 22. Ken was a good club member who will be missed by all of us who knew him.

**EXECUTIVE COMMITTEE**

The executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting. The October meeting will be at the home of KB6NMK.

At the September meeting at the home of KB6NMK, The Committee discussed the lack of anyone to run the annual auction.

Friction arising from SANDRA's allegations of interference from KA6UAI/R were discussed. A lack of understanding of repeater fundamentals and the state of the art of remote frequency and deviation measuring techniques in use by engineers like Bob Gonsett, WA6QQQ, is apparent. (The FCC accepts Bob's remote measurements of the frequency and deviation of commercial broadcast stations in Southern California.) The solution to the problem is made more difficult by SANDRA's refusal to cooperate.

KA6UAI/R will have its output moved down to 147.130 per TASMA's request by the end of September. KA6UAI was informed of the requirement to make certain improvements to his repeater. Habitual use of KA6UAI/R by non-members was also discussed.

WB6IQS outlined the work to be done on the repeaters before the winter sets in - mostly involving antenna and feedline problems and the movement of the emergency power batteries out of the repeater bunker. W9FQN is again looking into the use of a shipping container as an Rstorage building at the repeater site.

The tea and no-cal crumpets were deelightfull.

**VE PROGRAM**

At the August tests our PARC VE team gave 18 test elements to 16 applicants, eight of whom passed a total of nine elements. Congratulations to Ray Miller, N6EQB, who passed the 13 wpm code test to make General; and to Bernice Rosenberg, KB6TJW, who up-graded to Technician.

Our test crew was: KI6JM reception/processing; WA6HYB CW exams; KB5MU, W6TFB, and N6RUV examiners; and paperwork by N6RUV and K6HAV. de K6HAV

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FCC LICENSE EXAMINATIONS in north county are conducted by PARC examiners, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway . Applicants must send a SASE, a completed signed FCC Form 610 (NO PHOTOCOPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

**HAM STAMP PINS**

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

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THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to IGNORE IT! Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source. DON'T TALK TO THOSE WHO ARE INTOXICATED.

## &gt;&gt;&gt;&gt;&gt;— P R E S I D E N T ' S M E S S A G E —&lt;&lt;&lt;&lt;&lt;

###—902 MHz—###

The "Torrance" band plan approved by the ARRL for the 902 MHz band is as follows:

902.0 - 903.0	Weak signal
(902.1)	calling frequency)
903.0 - 906.0	Digital (packet???)
(903.1)	calling frequency)
906.0 - 909.0	FM repeater Inputs Outputs
909.0 - 915.0	Amateur TV (interested?)
915.0 - 918.0	Digital (packet???)
918.0 - 921.0	FM Repeater Outputs Inputs
921.0 - 927.0	Amateur TV (interested?)
927.0 - 928.0	FM Simplex & Links

The club has been collecting 902 MHz equipment for future use. If you are interested in any of the 902 MHz projects, please contact Steve-N6UIA during commute times or give him a call on the land line. Some of the suggested projects are: automatic DFing, autopatch units in various calling areas, remote 146.730 receivers to help our HT owner-members, packet distribution systems, amateur TV, remote base units, etc. The sky is the limit or was it the ionosphere is the limit?

We are still waiting for SCRRA to assign us some frequencies. We sent in our request back months ago and still have not received any frequency assignments in a "wide open" band here in the San Diego area. Without frequency assignments, we cannot order the crystals for the transmitters and receivers.

###—147.135 =&gt; 147.130—###

By the time you read this we will have probably changed 147.135, Erick's repeater, to 5kc lower (147.130) to move his machine further from SANDRA's 147.150 machine. It seems as though TASMA-SD doesn't keep good records since we were told at the last meeting that we were to move it to 147.730(-600). SANDRA seems to have interference while Erick has not noticed any problems which says a lot for the old Motorola equipment versus the new "state of the art" being sold. Our last repeaters have cost us \$65 plus \$150 controllers while new repeaters like SANDRA's cost \$1,500 to \$3,000. SANDRA has under 1,000 members and operates four 2m repeaters (250:1). Our membership in August was almost 400 (400:1) and we have one repeater plus the use of Erick's 147.130 (200:1)

which seem to be busy most of the day while other high profile repeaters are silent. It makes us happy when you are using one of our repeaters since it means that emergency traffic will probably have a higher chance of getting someone to help. The planned new autopatches should help when the repeaters are not being monitored.

PARC members need to be reminded that PARC is supporting Erick's 147.130 machine: technical advice and help, rent free space, tower, feedline, antennas, test equipment, electricity, batteries, crystals, etc. Operating a repeater is expensive business. Our repeater is 146.730 but feel free to use 147.130 whenever 73 is busy by having your contact "move up one". You "THANK" and support Erick by BEING A MEMBER OF PARC! It's like the ARRL says in its repeater directory, "if you use a repeater, you have an obligation to support it" and new users should be reminded of this. Erick owns his repeater, controller, and filters.

THANKS to Erick-KA6UAI for all of the effort he has been putting into his 147.130 repeater: 10M link and proposed autopatch. Erick will soon be adding some special control circuits, a local microphone and speaker, and battery backup for emergency use.

###—E L E C T I O N S —###

Club elections will be held at the December meeting for the 1990 club year which runs January to December in contrast to the membership year which runs from August to July.

Nominations will be presented from the floor at the November meeting by the nominating committee and at that time we will also accept nominations from the floor. If the nominating committee contacts you between now and then, please consider running for the office that they suggest.

It should be noted historically that the offices of the treasurer and the secretary are many times held for 5-10 years while that of Vice President and president are seldom held for more than a year because of the demands and the pressure of the office. The Vice President has charge of the programs and he sometimes can only take one

year of getting good programs for the club. The president has the responsibility of keeping everyone happy (no easy job) and seeing that some progress is made towards improving the club's many activities. Usually the old VP and President depart the club and are never more seen at club meetings again with the possible exception of Ed-N6GZI. If more people volunteered to help the officers or accepted appointed committees, then the officers might last a little longer than they have been doing in some of our positions.

#### ##### M E M B E R S H I P ---###

Many of our members are also members of more local clubs or special interest groups but use our repeaters for communication throughout the county. It needs to be remembered that when using the PARC 146.730 repeater and Erick's 147.130 repeater that it is only fair to PARC to invite visitors to first investigate membership in PARC. If at a later date you find that their needs are different than what PARC can supply easily, then by all means, invite them to join another group. PARC is and has been for supporting amateur radio. We have no membership restrictions on the traffic nets, packet nets, microwave nets, computer nets, ARES nets, etc.

#### ##### T-HUNTING---###

The Escondido Amateur Radio Society (EARS) T-hunt was a two stage hunt with Barbara-KA6FPS and Susan-N6QDB serving as FOX-#1 up on the rim of the Escondido valley and FOX-#2 was Stan-W9FQN at Lawrence Welk's Village. The FOXes were running 22 watts and 0.1 watts respectively.

Points were accumulated at the rate of ten points per mile to the first Fox and one point per minute from starting point to the finding of the 2nd Fox. As usual, Craig-N6ATQ was at the top of the pile with a low score of 79.0, Paul-KE6YK was second with 79.3, Jo-KB6NMK was third with 112, Chuck-N6IJT was 4th with 116 points, Bill-WB6ILH was 5th with 224 points, and Steve-N6UIA was 8th with 324 points. The rest of the scores were greater than 400 points. The first and second place winners found BOTH transmitters within 35 minutes. Normal driving time is about 20 minutes so you can see that Craig and Paul really zero in quickly on their targets. Craig and

Paul were the DFers who put on our July DFing club program.

We need to have more club members who are experienced in DFing and all repeater users should go on a T-hunt at least once a year. If you use the repeater, it would be wise to support and protect it by being able to identify unauthorized signals on the repeater. Fortunately, we seldom have any problems with unidentified signals on the repeater which is probably the reason that many of us do not see the importance of having DFing skills.

#### ##### H E L P N E E D E D ---###

- 1) Tower climbers.
- 2) 450 repeater technician.
- 3) 4 to 5 pipes 18-24" L, 1.5-2" dia.  
These are for FD tire stands.
- 4) 40+' Al. tower or crankup for FD.
- 5) Painter for inside of trailer.
- 6) Painters for outside of trailer.
- 7) Our ARES/RACES house trailer now has new tires and is ready to roll as soon as we can find a universal way of connecting up turn lights to all types of vehicles. Anyone have any ideas?

#### ##### THANKS---##

THANKS to Steve-N6UIA for his continued efforts on 902MHz and the autopatch.

THANKS to Larry-WQ6V for keeping the PARC 35' air mast in proper operation and for giving Novice tests for local prospective hams.

THANKS to Mac-NH6EW for his faithful attention to supplying coffee at the club meetings and seeing that we also have goodies to eat.

THANKS to George-K6YCK for bringing magazines to the club meetings for members to browse through. Remember, please take them home and NEVER bring them back. The magazines I bring to meetings come from various sources: magazines received by PARC, donations by Ralph-K6HAV, and Dennis-N6KI.

THANKS to John-WB6IQS and his friend, a non-club member, for doing the welding on the generator door for the mountain site and for the almost impossible job of cutting a hole in the steel generator shed for the emergency battery power cables.

73 de Stan W 9 F Q N

## SEPTEMBER MEETING

At the September club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. Steve, N6UIA, reported on the status of the autopatch. Frequencies are soon to be forthcoming from SCRBBAA and once the crystals are ordered and received, the rigs can be set up on their frequencies and the control system tied in. Steve still hopes to have something going by November. For Show and Tell, Ron, WI6B, showed us his watch charm HT (ICom IC2SAT); Stand, W9FQN, showed us a pocket-calculator-size autodialer; and Steve, N6UIA, topped him with a wrist watch auto-dialer. 52 of us attended and had a great time.

The tasties were courtesy of all of us who remembered and brought them and by Mac, NH6EW.

**SURPLUS GOODIES** of the electronic persuasion at: Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has HT batteries and others. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales, 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, etc. at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 9222 Chesapeake.

## WANTED

10M FM xcvr. Gotta work w/o "kick start." Call Mick, W6FGE, 222-3912.

Antenna tuner capable of tuning end-fed wire. Call Nash, W6HCD, 728-3574.

ICom IC-25A, Kenwood TR7800, or similar 2M synthesized radio. Call Jerry, WB6FMT, 758-4388.

Liaison and Net Control Stations for the North County Traffic Net. Call Todd, KI6ZM, 439-8227.

CP\M software to run RTTY, packet, or CW on an old (1983 Kaypro IIX. Call P.J., N6UCJ, 941-9162.

Working Icom IC-22A; Sony Pro-80. Call Dennis, N6KI, 271-6079.

## CLUB-SPONSORED NETWORKS

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to members of the Service. Visitors are welcome when called for after the member roll-call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave on your way by.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share in-formation on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, any PC.

## SURPLUS?

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new repeater, antenna, or feedline. Contact any club officer.

## FORESAIL

If you have an item for sale, bring it to the club meeting and put it on the Sale Table tagged with your name, call and minimum price if any. The Club takes 10% of the sale price and you go home with \$\$ and you'll have to buy something else to hold down the shelf or garage floor.

ICom 202 five watt 2M ssb xcvr w/batteries, \$100; Azden PCS 3000 2M FM xcvr, \$100. Novice starter station: Heath SB-300 rx w/HS24 spkr, SB-400 tx w/desk mike, HD-10 keyer, Ameco DLF-2 preamp, Autec 1C active filter as a package \$100. 55' crank up tower w/new HD base, \$90. Live dangerously in the past! Home brew 500W CW, 200W AM rig, \$60. Call Mick, W6FGE, 222-3912.

Kenwood TS-670 quad-bander. Ten whatts on 40, 15, 10, and 6M all modes. Gen. cov. rx. Call Ron, WI6B, 756-3133.

Hustler 18AVT vert. 75-10M antenna, \$50. Call Ray, W6BHF, 487-4423.

Complete HF/VHF packet, RTTY, AMTOR, CW station (you add the rigs): Commodore 64, 1541 disk drive, mono monitor, printer, AEA PK-64A/HFM, \$300. Kenwood R-1000 gen.coverage rx, \$225; remote VFO for Kenwood TS-520, \$50; floppy disk recorder FSD for C-64, \$50; Cobra reg. pwr supply 12VDC @ 2A, \$10; antenna mount for top of truck cab w/3 bases and coax installed - will take a Hustler & two VHF/UHF antennae, \$25. Call Bill, W6WPO, 727-4279.

Estate sale: Drake R-4A rx w/manual, \$70; Drake MS-4 spkr, \$15; Drake T-4X tx, \$70; Shure 444 mike, \$20; Turner Hi-Z 254C mike \$15; Mastercrafters 24-hr clock, \$7.50; \$30; Hustler 4BTM vert. ant., \$35; Hustler mobile resonators 10-20M, \$2.50 ea.; Allied GDO, \$20; RPC-3C speech compressor, \$20; two 110VAC six-outlet strips, \$3.50 ea. Call Leo, N6TUR, 941-6756 after 9/5/89.

Gas pipe 22' long 2 3/8" dia., 18" wall. Call Nash, W6HCD, 728-3574.

Professional qual. Optivisor w/4X & 7X lens plates plus Optiloupe, \$30. Call Jerry, W6YLA, 758-1134.

Tri-Ex W51 51' heavy duty, free-

standing, crank-up tower w/Ham-M rotor w/control, and Mosely TA-33 beam w/40M kit installed, \$750; Swan 350 hf xcvr w/117XC pwr suppl. and 14-X for 12VDC opn, mike, works perfectly, \$250. Call Larry, W6QCA, 587-2226 work, 582-4324, home.

Bearcat 160 5-band, 16-channel programmable scanner, \$65 incl. UPS. Call Mick, W6FGE, 222-3912.

Assorted tubes (Never seen one? They're like big, glowing transistors) all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Vacuum tubes, all tested; Probe-master X10 attenuator kits, \$15. Call Sandy, K6HE, 745-6940.

Unique wire tuner \$50; Call Krist, W6KTE, 941-3555.

## LATEST CALL SIGNS

The last amateur call signs issued on 9/1/89 were: AA6QE, KJ6ZE, N6WET, KC6FOP.

## PARC REPEATERS

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.130 (+) which too is available to PARC members. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and support it

## HELP WANTED

Bob Chantrill, KE6VX, STILL needs two to four Vista hams to help him man the Vista RACES station at the Melrose Fire Station on Monday nights. Call Bob at 727-0606.

Michael Hamman, WB6CSH, wants to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net on 2M.

Details on becoming part of this disaster network and on the various levels of participation may be obtained from him at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave a message.

## EARS T-HUNTS

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Assembly point talk-in at 0900 on 146.88 (-). Hunt frequency is 146.565. Hidden tx is within 10 miles of start. All are welcome. New folks may ride along.

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OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign so he can put them on your very own badge - like the big guys have.

John has badges for: KC6AST, N7EQU, N6GZI, WB6NVX, WA6QCG, WB6RWF, N6UZG. If you don't want to pay full tab for your own badge, John can make you a real deal on an unclaimed one.

## VAIL FIRE

According to Jo, KB6NMK, of the 45 hams providing communications support at the Vail Fire (near the Riverside County line at the north End of Palomar), only eight were from the PARC, the biggest club in north county. A mighty poor showing for a club of 300+ members. The faithful few from PARC were Art Smith, W6INI; Jo Ashley, KB6NMK; Fred Barker, N6PDZ; Steve Barry, N6UAI; Doug Grassey, N6TWO; Larry Ruegsegger, WA6UTQ; Gerry Sandford, KC6BJM; and Duane Wheeler, N6DSC. Sure would be nice if we could have a better representation next time.

<><><><><><><><><><>

## PROSPECTIVE HAM?

Interested in amateur (ham) radio and in the Palomar Amateur Radio Club? Want to talk to someone about it? Contact in:

Bonsall	Nash Williams	728-3574
Camp Pendleton	PJ Mead	941-9162
Cardiff	Duane Stedman	753-4821
Carlsbad	Eleanore Cali	729-0850
Chula Vista	Betty Mahoney	420-2277
Del Mar	George Uminski	755-1014
Escondido	Jo Ashley	741-2560
Encinitas	Dave Copley	753-2605
Fallbrook	Art Rideout	728-6834
Lakeside	Mac McBride	561-2211
Leucadia	Bud Lincoln	436-9983
Oceanside	George Todd	439-8227
Poway	Mark Schlessinger	748-8391
Ramona	Mike Fisher	789-2892
Rcho. Sta. Fe	Ron Wilhelmy	756-3133
S. Diego	Dennis Vernacchia	271-6079
San Diego	John Tentor	672-3891
San Marcos	Floyd Harvey	741-8391
Solana Beach	Lou Broadbent	755-9179
Valley Center	Stan Rohrer	749-0276
Vista	Ralph Crossman	727-5866

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## DOWN THE TOOBE

Please note that pages 9 and 10 of this issue are the EQUIPMENT INVENTORY & DISPOSITION PLAN W9FQN promised you. Sorry it took so long - that was my fault. The form is for each of us to record an inventory of our amateur radio and associated equipment so we will know what is on hand. It should be kept with other important papers so that it will be available in the event it is needed and you are not available to help. It's existence and location should be known to your spouse.

As this was being written, Erik, KA6UAI, moved the KA6UAI/R output to 147.130. So if it sounds garbled, try turning off the five kHz switch on your rig.

Remember, no one is completely useless, even the worst of us can serve as a horrible example.

---

"That's all,"  
she wrote.

**EQUIPMENT INVENTORY & DISPOSITION PLAN**

**OF**

(Name, callsign, and date)

This form is for club members to maintain an equipment inventory. It provides space to indicate the original cost and intended disposition. When completed it should be kept with your important papers in a location known to your spouse.

The Palomar Amateur Radio Club will assist in disposing of estate amateur radio and associated electronic equipment. A phone call to any club officer will make this assistance available. Be sure your spouse knows how to contact a club officer.

Palomar Amateur Radio Club, Inc., P.O. Box 1603, Vista, CA 92083

Page \_\_\_\_\_ of \_\_\_\_\_

**EQUIPMENT INVENTORY & DISPOSITION PLAN  
OF**

(Name, callsign, and date)

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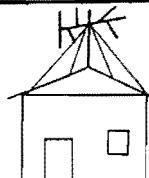
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COURTESY OF WESTCOM      1320 GRAND AVENUE, SAN MARCOS PHONE 744-0799

### HELP WANTED

Paul Buscema, KZ6X, repairs TVs, Hi-Fis, VCRs, etc at his North County Service Center. Paul has done lots of work for the Club. Now Paul needs help. He needs someone for the front desk, who is strong enough to move TVs and Hi-Fis and can meet and deal with the public in person and on the phone, and can run the front desk with its paperwork. Must be dependable, loyal reverent, brave, trustworthy and help little old ladies across the street.

Paul also needs someone to help out in the back room with service work and to make house calls. Again, must be able to meet and deal with the public as well as have some background in service work. The benefits offered at the North County Service Center are very good. Call Paul at 436-2900.

### ANNUAL AUCTION AT NOVEMBER MEETING

Dennis, N6KI, is trying to put together the people and the paperwork for the annual auction so that it can come to fruition at the November club meeting. He plans to use our favorite Escondido auctioneer, who sold everything but the benches we sat on last year. If Dennis gets it worked out, you can bring whatever you want (the "big-ticket" items don't sell very well). You must sign in and get a tag for each item. Each item must be tagged with your call and the minimum bid, if any. The Club takes 10% of the selling price. More rules in next months Scope.

## PARC ENLISTMENT/REENLISTMENT FORM

Mail form with \$\$ to PARC, P.O. Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK, at club meetings. Dues (including SCOPE) are \$12 a year plus \$9 for each additional family member. Dues are prorated for new members Aug, Sep, Oct \$12; Nov \$9, Dec \$8, Jan \$7, Feb \$6, Mar \$5, Apr \$4, May \$3, Jun \$2, Jul \$1. Consider paying for two or three years at a time. Call, name, and complete address are required. Telephone number may be unlisted in roster if requested. Other information requested below may be omitted if you feel uncomfortable providing it to the Club.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Phone # \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_ Other \_\_\_\_\_

Date 1st lic. \_\_\_\_\_ Birth date \_\_\_\_\_ Thos Bros loc. page # \_\_\_\_\_ coord \_\_\_\_\_

Name & call of family members in PARC \_\_\_\_\_

ARRL \_\_\_\_\_ RACES \_\_\_\_\_ ARES \_\_\_\_\_ Red Flag \_\_\_\_\_ Blood donor \_\_\_\_\_ Type \_\_\_\_\_ Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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# Scope

**W6NWG**

**Palomar Amateur Radio Club Inc.**

**POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530**



**W6NWG / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KA6UAI / R 147.135 (+). WD6HFR / R 224.900 (-)**

VOL. XXIV, NO. 11

NOVEMBER, 1989

▲	PRESIDENT:	Stan Rohrer, W9FQN, Valley Center	749-0276	▼
▼	VICE PRES:	Mac McCarthy, NH6EW, Oceanside	945-7391	▲
▲	SECRETARY:	Nash Williams, W6HCD, Bonsall	728-3574	▼
▼	TREASURER:	Ron Wilhelmy, WI6B, Rancho Santa Fe	756-3133	▲
▲	EDITOR:	Ralph Crossman, K6HAV, Vista	727-5866	▼

► MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. Tol' yez a hunnert times.

► CLUB MEMBERSHIP is \$12 per year with **no** initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.

## NOVEMBER MEETING

The November meeting will feature the Club's annual auction. Sellers should come early (1830±) so that they may sign in and get and complete the required tags for their gear and log it in. Buyers should arrive about 1900 and sign in and get the required bidders identification. The Club will take 10% of the sale price. All monies will be paid to the Club. The Club will then pay the sellers by check. High ticket items don't usually sell well at these auctions, so plan accordingly.

Refreshments by NH6EW, and those good folks who remember.

## HAM STAMP PINS

The Club has for sale (\$5 a shot) some of the attractive amateur radio postage stamp replica pins. See Ron, WI6B or Stan, W9FQN.

## MEMBER INFORMATION

- ⊗ GNU CLUB MEMBERS: Lou de Beer, ND6W, Coronado. Welcome.
- ⊗ RENUDE: (6) Herb & Judy Patchell, WA6IWK & KA6GHE; Dennis Wong, N6KVV; Leona Wallace, WA6OHB; Fred Olsen, W6PNT.
- ⊗ UPGRADED LICENSES: Ray Miller, N6EQB, and Mark Moskowitz, KC6COD, to Advanced; and Roy Martin, KC6BWS, to Technician. Congratulations.

## W6RO/MM GOES UNDER

According to an article in the TRW ARC Crosstalk, ARS W6RO in the wireless room of the Queen Mary is no longer, after 10 years of operation there. This is a result of a disagreement with the QE's management, which reportedly wanted to direct some of the activities of W6RO's operators - in essence making them unsalaried employees.

## EXECUTIVE COMMITTEE

The executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting. The November meeting will be at the home of WI6B.

At the October meeting at the home of KB6NMK, The Committee heard and approved the minutes of the previous meeting and the Treasurer's report.

The Committee heard WB6IQS's plans for a work party at the repeater site on 10/22 and discussed the possibility of a 6M and/or 10M repeater or digi-peater. N6UIA reported the receipt of coordinated .9 GHz frequencies from SCRRBA. Crystals for these frequencies have been ordered by N6IZW and the work on the autopatch will continue. The frequency and deviation anomalies measured in the SANDRA 147.150 repeater were discussed. The requirement for an additional or larger building at the repeater site was discussed and will be further investigated. K6HAV was appointed Chairman of the Nominating Committee.

The mulled cider and no-cal crumpets were "deelightfull".

► THE CLUB'S POLICY REGARDING INTERFERENCE ON THE REPEATERS IS to *IGNORE IT!* Don't give the jammer what he or she craves - notice and attention. Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. Try to hear the interfering signal on the input of the repeater and determine the direction of the source. DON'T TALK TO THOSE WHO ARE INTOXICATED.

## VE PROGRAM

At the October tests our PARC VE team gave 16 test elements to 11 applicants, eight of whom passed a total of 13 elements. Congratulations to Ray Miller, N6EQB, and Mark Moskowitz, KC6COD, who up-graded to Advanced. Mark also passed the 20 wpm CW element. Roy Martin, KC6BWS, is likewise to be congratulated for moving up to Technician.

Our test crew was: KI6JM, KE6VX, and KB6NZA reception/processing; WB6R CW exams; AA6KY, WR7W, and W6YYV examiners; and paperwork by WI6B, AA6OM, and K6HAV.

We were dispossessed from Joslyn Senior Center and were supposed to use City Hall, but wound up in the Red Barn in a kiddies play/lunch room. Despite a late start, we were through by 12:00 thanks to a very good examining team who knew what to do and got the job done in spite of the conditions and delays. de K6HAV

► FCC LICENSE EXAMINATIONS in north county are conducted by the PARC VE Team, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 121 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway.

Applicants must send a SASE, a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2446, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates.

CLAUDE KIRKPATRICK, W6DWE, SK  
We are saddened to report the passing on August 16 of W6DWE. Claude was a long-time member of the PARC. He will be missed by all of us who knew him. He was 86 and was a ham for about 75 years.

## OCTOBER MEETING

At the October club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. A former member, N6ELP, reported on the 1990 SW Division ARRL Convention to be held in San Diego. WB6IQS reported the repeater battery heater blankets are ready to install. A working party will be required to handle the 150 lb. batteries. A "new" used commercial 2M corner reflector antenna was purchased and is being readied for the mountain top. He also told us the status of the new repeater, and of the "up one" machine, which is now on 147.130 vice 147.135, and the plans for further work at the site and on the equipment. K6HAV told of the passing of Claude Kirkpatrick, W6DWE; and said the October FCC exams would be held in San Marcos City Hall instead of Joslyn Senior Center. N6KI told of the plans to conduct the annual equipment auction at the November meeting.

Paul Williamson, KB5MU, gave a very interesting and comprehensive slide-illustrated presentation on the state of amateur radio satellites. Paul is helping in the preparation of the new all-digital micro-satellites.

The tasties were courtesy of all of the good people who remembered and brought them and Mac, NH6EW who does all of the work. 72 of us attended and had a great time.

## &gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt; PRESIDENT'S MESSAGE &lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;

# # # --- K0JPK/R AGAIN --- # # #  
(and again, and again)

I monitor 146.730 many times when I am not able to get to a transmitter so I was not able to comment to several of our newer members on the probable cause of some of the QRM they were experiencing. K0JPK/R is located in Industrial Hills at the intersection of the 605 and 60 freeways in southwest Covina and is also on 146.730. Their use of the frequency has not been coordinated by TASMA because they refuse to adjust their antenna pattern to E-W and thus limit their intrusion into the San Diego area. It looks as if it is only the "good guys" who *have* to follow TASMA's directions. TASMA has no enforcement powers and the FCC is out back somewhere doing something important.

## SAMPLE PROBLEMS

- 1) You hear talking on the channel after W6NWG/R drops out. You are probably hearing K0JPK/R 95% of the time.
- 2) You hear a low frequency heterodyne (growl) during a transmission. It is probably K0JPK/R beating against W6NWG/R. It sometimes sounds like another PL tone on W6NWG/R.
- 3) You hear two "kerchunks" at end of a transmission. The first one is W6NWG/R and the second is K0JPK/R although they are almost together.
- 4) You hear what you think is W6NWG/R but not at its normal strength. It's probably K0JPK/R. You can tell by the distorted audio.
- 5) You answer someone on 146.730 but for some reason they don't hear you and yet you know you are making our repeater. It's really K0JPK/R that you hear but can't key up.
- 6) You hear "one sided" conversations with poor audio. K0JPK/R is being keyed up by someone working the Ventura or Lancaster machines (both on 146.730).

JPK's transmitter coverage has been reported to be much different from its receive coverage because of the reported use of an omni transmitter antenna and remote receivers. This means that they probably "tailor" their receive coverage but dump "RF garbage" all over Southern California when transmitting as reported by various amateurs in the SoCal area. We use the same antenna for our transmitter and receiver so if you can hear us, you can work us with 5-10 watts.

You can eliminate listening to K0JPK/R all of the time by installing a PL decoder to decode the W6NWG/R PL tone of 3A (127.32 Hz) which is on our repeater at all times. This way you will only hear W6NWG/R when it comes on the air but

remember to turn the decoder off when you change frequency or the band will seem "dead". The decoder will not eliminate the heterodyne warble between the repeaters but it will prevent you from hearing K0JPK/R's bad audio when W6NWG/R is not on the air. You can talk to Ralph-K6HAV about how his PL works.

I seldom hear K0JPK/R at my QTH when my beam is pointed at Palomar Mountain since the null of the beam is in the direction of JPK. I have the best of both worlds: a null on K0JPK/R and a peak on W6NWG/R all at the same time!

I do hear K0JPK/R with my HT in the truck outside of my QTH but for some reason I can no longer key up K0JPK/R with the HT from the truck. We are required to supply TASMA with complete system diagrams of our repeater installation (done) and I assume that K0JPK/R still has not provided TASMA with theirs. So TASMA probably does not know what type of transmitter, remote receivers, and antenna configuration K0JPK/R is using. There are sections of San Diego Co. where K0JPK can be keyed up easily with an HT at one watt into a "rubber duck". We really are fortunate that very few people use that repeater so it is not on the air much except when we key it up. At this QTH I hear only kerchunks, repeater CW ID, heterodynes, and occasional users who sound quite distorted. There are W6NWG/R users in the San Diego area who key up K0JPK/R on almost every transmission without trying. I guess the K0JPK/R users don't mind these "one sided" conversations on their repeater since few people apparently listen to it anyway. Since their RF garbage has been reported to the North and South of them, we wonder what this non-club, seldom-used repeater, is doing for amateur radio.

The moral is: If you want to get rid of K0JPK/R you can 1) Install a PL decoder, 2) Buy a good beam or, 3) Shut off your radio. I fortunately have forgotten the 4th suggestion.

Well, I hope that this will explain some of the "grunge" that you hear on 146.730 and also let you know that the "other" signal and the poor audio is not coming from us but from our *friend* up North.

## # # # --- F L A S H --- # # #

Fried Heyn, WA6WZO, our Southwest Division Director, called me this week and said that PARC placed third in the United States out of approximately 100 stations in the FIELD DAY CONTEST this past summer in Category 5A. It looks as if we were 1st in California with 8,574 points. I can't wait to see the QST for November

to confirm this. We missed 1st place (W4DOC) by about 1,000 points and 2nd place (N2OO) by about 200 points. Congratulations to our FD crew for a job "well done". Wait 'til next year!

#### ####-EXECUTIVE MEETINGS---###

For the past 4-5 years it has been club policy to conduct the majority of its routine business at the Executive Committee meetings with the larger decisions being decided at club meetings. All decisions and actions are announced at club meetings and/or through the club newsletter, the SCOPE. Anyone wanting to attend the executive meetings can check the latest copy of the SCOPE for the location of the next meeting. Executive meetings are the 2nd Thursday following the Wednesday club meeting which would make it eight days later.

If you cannot attend club meetings or the executive meetings, please drop me a letter with your comments or suggestions as to what you think the club should be doing and how you think that you would be able to help us.

#### ####- HOBBY DAY ---###

On November 24-26th there will be many hobbies displayed at the new San Diego Convention Center which will serve as the inauguration of this brand new facility. The San Diego Amateur Radio Council (SANDARC) will have a booth at this event and will need two PARC members to man the booth on Friday, November 24th, from 12:00 p.m. to 3:00 p.m. The operation will be something similar to the Del Mar Fair operation. Please contact me (W9FQN) if you are interested in filling this time slot for the club. If three or four of you can get together, you could man the booth and have one or two of you walking around looking at the other booths. It should prove to be an interesting display to visit.

#### # #-S.W. DIVISION CONVENTION-# #

SANDARC has requested that PARC have charge of the 1990 Southwest Division Convention exhibitors booths during the convention in San Diego August 23-26th. This will mean that we will need to have club members help the day before the convention in telling exhibitors where their booths are located on the main exhibition floor and the remaining three days we will need to staff the exhibitors booth where SANDARC will provide them with soft drinks and a place to relax from the rigors of manning their booths.

We need amateurs Thursday and Friday (August 23-24th) who can work during the day and others who can work day and evening shifts Friday evening, Saturday the 25th and all day Sunday the 26th. Those who work during the day

on Thursday will have to do some walking around and will need HTs for communication while on the exhibition floor. This will be a good chance for club members to meet representatives of all of the major manufacturers and to help with the SW Division Convention. Please contact me, W9FQN, if you would like to be a part of this group.

#### ####- REPEATER USE ---###

The purpose of our repeaters is to provide communications in case of emergencies and to allow club members to communicate with each other. To this end we try to have emergency antennas at the repeater site and emergency power in the form of reserve batteries and generator(s).

We also use the repeaters for traffic nets, special interest groups (microwave, packet radio, computers, ham help nets, code practice, etc.), public service activities (athletic type events), and emergency organizations (ARES and RACES). The traffic nets allow us to keep in practice for "The Big One" that is coming sometime soon and it will be larger and more destructive than this last San Francisco quake (7.0). It will probably be about 15 times the amplitude with about 400 times the destructive energy. Our public service activities allow us to provide communications similar to what we might possibly be doing during emergency type operations.

#### ####- HELP NEEDED / WANTED ---##

- 1) Another NCTN traffic manager to be a co-manager with Todd-KI6ZM.
- 2) A copy of the BEARCAT 101 manual to be copied.
- 3) Fire extinguisher(s) for trailers.
- 4) Tower climbers.
- 5) Members who can send computer generated CW for tapes and code practice.
- 6) 450 repeater technician to help WB6IQS.
- 7) 4-5 pipes 18-24" L, 1.5-2" Dia. These are for FD support stands.
- 8) 40+ Al. tower or crankup for FD.
- 9) Painters for inside and outside of trailer.
- 10) Our ARES/RACES house trailer now has new tires and is ready to roll as soon as we can find a universal way of connecting up the turn lights to all types of vehicles. Have any ideas?

#### ####- POTPOURRI ---##

The Carlsbad Emergency Communications Center has one whole room dedicated to radio use by emergency groups of which ARES and RACES are participating. RACES has installed a packet station and on the roof a 2m antenna. ARES has an 80-40M trap dipole and a 2M

antenna. This is a new building and we are lucky to have our "foot in the door". We have been offered the use of their meeting room which would easily seat 100 in a well lighted room. We hope to have one or more of our meetings there next year so that more of us can see the facility.

Reference the 902 MHz TORRANCE BAND PLAN in the October 1989 SCOPE. The 906.0-909.0 FM repeater INPUT should be OUTPUT and the 918.0-921.0 FM repeater OUTPUT should be INPUT. The ARRL publication had it listed wrong and Karl Pagel of SCRRBA called my attention to the error. Thanks Karl.

We are a good GENERAL PURPOSE CLUB and have one of the "cleanest" repeater operations in SoCal so it hurts a little when we hear people failing to mention to new users of 146.730 and 147.130 that PARC is "available" for membership.

The Wednesday evening COMPUTER NET still appears to be functioning but needs alternate net controls to make life a little easier for Chuck-KI6TG. We hope to start next month a HAM HELP NET Thursday evenings and a sample VE CODE TESTS (CW) Friday evenings before the Saturday morning VE code examinations. We are looking for members who can help with these two new nets at 9:00 p.m. each week.

David Lien-W6OVP, author of some 36 computer books, has donated to the club a lot of surplus computer books. I will have some of them at the Christmas meeting for sale. What is not sold at club meetings will go to a swap meet.

There are lots of good CW/RTTY programs for Apple and Commodore computers. I will bring info sheets on these to the next meeting.

#### ##### THANKS to ---#####

THANKS to Paul-KBSMU for the great program on Satellites at the last club meeting. I am very interested in the future of amateur radio relative to satellites and Paul really filled us in on the direction amateur radio satellites will be taking in the near future. Paul prepared the program on short notice and expanded it from a Show and Tell to a full program after Alexander Battery Company canceled out two days before the meeting. We hope to hear from them sometime next year.

THANKS to Ed-N6GZI for picking up a 450 MHz Motorola unit for the club.

THANKS to Floyd-W6JSP for running the A.R.E.S. Net each Sunday morning for the past several months. We have openings for several more net controls if anyone is interest in helping us out. We are working towards each net control doing the net for two months every two years which should not be a hardship for anyone.

73 de Stan W 9 F Q N

## ANSWERING THE CALL

There are instances when no one responds to a call for assistance on the repeater. Don't be bashful. If there's a need for assistance, step in and do it - don't wait for someone else. If you are the calling station, I'm sure you're as quick as I to resent those who do not respond.

When calling for assistance on the repeater, stay cool. Be specific about the problem at the outset. Be sure you and the responding station have each others call signs. When some one responds, be clear and concise about WHAT the problem is (three-car accident with injuries), WHERE it is located (I-15 southbound, number 1 & 2 lanes, one mile north of Gopher Canyon Road off ramp). Once your information has been received, STAY ON THE FREQUENCY in case of questions from the safety service being phoned. Highway lanes are always numbered from the lane nearest the center (there's always a number one lane!). If you are the calling station, don't be too quick to give up the ghost and go to another repeater - sometimes I have to go clear across the house to get to the rig - I don't always sit, poised, mike in hand waiting for your call! But if I'm home and listening, I WILL answer your call. You too, please. Make your calls for help selective as the "promiscuous caller" soon gets old.

In phoning in an emergency to the CHP, 911 seems the fastest way to go. CHP responses to quasi-emergency calls on non-emergency numbers are not always happily responded to. 911 is supposed to be used for "felony in progress" or "life-threatening" emergencies, but the rule is: When in doubt, call 911. When using 911 let the responding party know you are an amateur radio operator reporting a fire, accident, felony in progress, etc. in a location other than yours as your phone number and address appears on the monitor at the responding safety agency. If you are in Oceanside reporting a fire in Vista, the call will go to the O'side FD unless you make it clear at the outset where the problem is located. Your response CAN save a life.

## JOIN THE ARRL

You support your hobby by belonging to the PARC. The American Radio Relay League is the national entity to which you should belong. Who else lobbies for our wonderful hobby?

When joining/rejoining the ARRL, do it via the Club which will receive a modest stipend otherwise going to the ARRL. Make your check payable to the Club and get it, with your membership application, to Treasurer Ron, WI6B. New ARRL membership application which include the PARC number (1703), garner the Club \$5 - and it doesn't cost you a fat farthing more!

► SURPLUS GOODIES of the electronic persuasion at: Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445, has HT batteries and others. Aluminum, brass, copper, stainless steel, etc. at Escondido Sales, 1428 Mission Rd., Escondido. Electronic, mechanical, computer parts, etc. at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 9222 Chesapeake.

### WANTED

10M FM xcvr. Gotta work w/o "kick start." Call Mick, W6FGE, 222-3912.

Schematic for KDK 2015R. Call LOU, ND6W, 437-8351.

ICom IC-25A, Kenwood TR7800, or similar 2M synthesized radio. Call Jerry, WB6FMT, 758-4388.

Liaison and Net Control Stations for the North County Traffic Net.

Working Icom IC-22A; Sony Pro-80. Call Dennis, N6KI, 271-6079.

### UMBRELLA ANTENNA

The October issue of Bob Gonsett's CGC Communicator tells of an innocent looking patio table and umbrella which is actually an antenna for receiving TV satellite signals that works on both C and K<sub>u</sub> bands. It is environmentally attractive, solves local zoning and restrictive ordinances, and the umbrella material even sheds rain and snow. Umbrella Antenna is manufactured by Schudel of Encinitas, CA. Phone 944-9332.

### PARC REPEATERS

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.130 (+) which too is available to PARC members. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it would be nice to join the 220 Club and support it.

### FORESAIL

MEMBER ADS IN THE SCOPE ARE FREE.

Butternut HF2V 40 & 80M vertical ant., brand new (no sales tax!). Call Ed, N6GZI, 542-1405.

Tempo One 100W HF xcvr, pwr supply & Yaesu YD-844A desk mike, looks & works good, \$240. Call Mark, KC6COD, HP 944-0145 or OP 576-4400.

ICom 202 five watt 2M ssb xcvr w/batteries, \$100; Azden PCS 3000 2M FM xcvr, \$100. Novice starter station: Heath SB-300 rx w/HS24 spkr, SB-400 tx w/desk mike, HD-10 keyer, Ameco DLF-2 preamp, Autec 1C active filter as a package \$100. 55' crank up tower w/new HD base, \$90. Live dangerously in the past! Home brew 500W CW, 200W AM rig, \$60. Call Mick, W6FGE, 222-3912.

Kenwood TS-670 quad-bander. Ten whatts on 40, 15, 10, and 6M all modes. Gen. cov. rx. Call Ron, WI6B, 756-3133.

Kenwood TS-520 hf xcvr w/MC-50 mike & PC-1 phone patch; Drake LB-4 amplifier w/pwr supply; ATB-34 tri-band beam; Alliance HD-73 rotor; coax switch; and coax. Call Rose Lewis, N6DAB, 746-5796.

Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/mon., Data-sette, software, all manuals. Coax switches. Heath HD-1250 solid state dip meter. C-64 W/color mon., 1541 DD, & AEA Pakratt PK-64 TNC; much software & all manuals. Add a 2M rig, fc complete packet station. Call Ralph, K6HAV, 727-5866.

Hustler 18AVT vert. 75-10M antenna, \$50. Call Ray, W6BHF, 487-4423.

Complete HF/VHF packet, RTTY, AMTOR, CW station (you add the rigs): Commodore 64, 1541 disk drive, mono monitor, printer, AEA PK-64A/HFM, \$300. Kenwood R-1000 gen.coverage rx, \$225; floppy disk recorder FSD for C-64, \$50; antenna mount for top of truck cab w/3 bases and coax installed - will take an HF & 2 VHF/UHF antennae, \$25. Call Bill, W6WPO, 727-4279.

Gas pipe 22' long 2 3/8" dia., 18" wall. Call Nash, W6HCD, 728-3574.

Assorted tubes all test good, \$1 ea. Call Dennis, N6KI, 271-6079.

Unique wire tuner, \$50. Call Krist, W6KTE, 941-3555.

Tri-Ex W51 51' heavy duty, free-standing, crank-up tower w/Ham-M rotor w/control, and Mosely TA-33 beam w/40M kit installed, \$750; Swan 350 hf xcvr w/117XC pwr supply and 14-X for 12VDC opn, mike, works perfectly, \$250. Call Larry, W6QCA, 587-2226 work, 582-4324, home.

Bearcat 160 5-band, 16-channel programmable scanner, \$65 incl. UPS. Call Mick, W6FGE, 222-3912.

## CLUB-SPONSORED NETWORKS

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers are KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to members of the Service. Visitors are welcome when called for after the member roll-call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give us a micro wave on your way by.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, any PC.

## FLEA MARKETS

- The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Woodside Ave at Hwy 67 in Santee at 0700 on the first Saturday of the month.
- The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.
- The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

## LATEST CALL SIGNS

The last amateur calls issued by the FCC on 10/1/89 were: AA6QX, KK6AG, N6WKV, KC6FYH.

## SURPLUS?

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund to buy that new re-peater, antenna, or feedline. Contact any club officer.

<> <> <> <> <> <> <> <> <> <>

## ARE YOU APROSPECTIVE HAM?

\* Interested in amateur (ham) radio and in the Palomar Amateur Radio Club? Want to talk to someone about it? Contact in:

Bonsall	Nash Williams	728-3574
Camp Pendleton	PJ Mead	941-9162
Cardiff	Duane Stedman	753-4821
Carlsbad	Eleanore Call	729-0850
Chula Vista	Betty Mahoney	420-2277
Del Mar	George Uminski	755-1014
Escondido	Jo Ashley	741-2560
Encinitas	Dave Copley	753-2605
Fallbrook	Art Rideout	728-6834
Lakeside	Mac McBride	561-2211
Leucadia	Bud Lincoln	436-9983
Oceanside	George Todd	439-8227
Poway	Mark Schlessinger	748-8391
Ramona	Mike Fisher	789-2892
Rcho. Sta. Fe	Ron Wilhelmy	756-3133
S. Diego	Dennis Vernacchia	271-6079
San Diego	John Tentor	672-3891
San Marcos	Floyd Harvey	741-8391
Solana Beach	Lou Broadbent	755-9179
Valley Center	Stan Rohrer	749-0276
Vista	Ralph Crossman	727-5866

<> <> <> <> <> <> <> <> <> <>

## HELP WANTED

Bob, KE6VX, needs 3-4 Vista hams to man the Vista RACES station at the Melrose fire house on Monday nights. Call Bob at 727-0606.

Michael Hamman, WB6CSH, wants to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net on 2M.

Details on becoming part of this disaster network; and on the various levels of participation may be obtained from him at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave a message.

## EARS T-HUNTS

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Assembly point talk-in at 0900 on 146.88 (-). The hunt frequency is 146.565. Hidden tx is within 10 miles of start. All are welcome. New folks may ride along a to see how the big kids do it.

~~~~~  
iEARTHQUAKES!

The Santa Cruz (Los Gato?) Earthquake caused me to dig out something I copied from the L.A. Times after some previous quake. It vividly displayed the magnitude of earthquakes vs. the Richter Scale.

It was a vertical graph which ran from 0 at the bottom to Richter 8.3 at the top. It showed some of the major earthquakes of recent times plotted along the scale.

The top of the scale (Richter 8.3) was 21" above the bottom (0). Richter 6 was 3/32" above 0. Richter 7 was 1" above 0. Earthquakes below Richter 7 are earthquakes. Those from 7 to 8 are Major Earthquakes, and those 8 and above are Great Earthquakes.

The graph listed Frisco '06 (8.3) and Mexico City '85 (8.1) as Great Earthquakes; and Kern County '52 (7.7) and Eureka '80 (7.0) as Major Earthquakes; and Coalinga '83 (6.7), Imperial Valley '79 (6.6), San Fernando '71 (6.4), Santa Barbara '25 and Long Beach '33 (both 6.3) as just plain vanilla quakes.

Each whole number on the Richter Scale represents an increase of 10 times in measured wave amplitude and an increase of 31 times in the amount of energy released by the Quake.

I hope all of this gives you some picture of the forces involved and leads you to strap your water heater to the wall and take down the pretty dust-catching, skull-splitting, bric-a-brac from high places. If you have seen pictures of the damage done in the bay area .....

*Maybe you should stash some water and canned/dried foodstuffs away for a quaky day. Maybe you should get your generator fixed up and gasoline set aside for it. Are the batteries for the HT charged up? Does your family have a designated assembly point and plan? Clothes, medications, candles, 1st aid gear, list of ARRL abbreviated text messages, battery-operated gear, animal food, and most important - water? We've been warned - again!*

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign so he can put them on your very own badge - like the big guys have.

John has badges for: KC6AST, N7EQU, N6GZI, WB6NVX, WA6QCG, WB6RWF, N6UZG. If you don't want to pay full tab for your own badge, John can make you a real deal on an unclaimed one.

## A WORD TO THE WISE TOO MUCH

Not only the good guys (we) listen to the chitchat on the repeaters (and simplex). Anybody with a scanner (or a stolen ham rig) can monitor. Announce on the air that you and your family will be away, it's simple enough for the bad guys to rip you off. Don't talk about it on the air. Friends and acquaintances shouldn't be "Helpful Harrys" by telling those who call you that you are gone for the day/week/month.

It has happened. The first W6NWG/R was stolen by a burglar who was directed to the site on the air! The burglar, KRØOK, drove to the site, broke in and stole the repeater and the homemade duplexer. We still don't talk about the repeater location on the air - even with a full time watchman/neighbor and other security measures.

The point: We have a lot of listeners out there and they are not all good guys! If you don't want the world to know, don't say it on the repeaters.

## SURVIVORS' ASSISTANCE

Through its Survivors' Assistance Committee, the Club provides aid to survivors of Silent Keys in the disassembly and disposition of the SK's radio station and equipment. The Committee is made up of two or more club members, one of whom, preferably, is known to the survivor. The Committee makes contact and offers the Club's assistance.

Club members should make the Club's availability to assist known to their family. By letting the Club do it, the survivor is insured that the equipment will be disposed of in accordance with the wishes of the SK and the survivor(s); and that there is no need to listen to the many oh so helpful "friends" who are quick on the scene.

The Committee, will inventory the equipment, price it for sale, disassemble the station and dispose of it as requested by the survivor. The Committee reports to the survivor(s) and to the Club.



## DOWN THE TOOBE

We hope we see you at the club meeting and auction. Even if you're not buying or selling, you get to see me and a flock of other good folks and you will also see the boat anchors masquerading as radios. Bring your friends and watch the fun, join in and get rid of your own long-prized clunker, or buy new ones to keep your shack/garage from blowing away in the next typhoon. Auctions are social occasions and great for the wallet when you sell all you brought - as I did!

KI6ZM has also been on the binnacle list with respiratory problems.



"That's all," she wrote.

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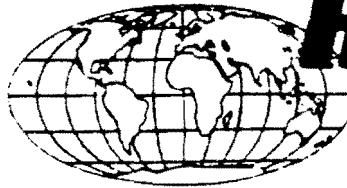
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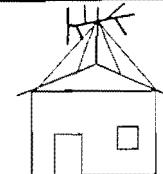
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## PARC ENLISTMENT/REENLISTMENT FORM

Mail form with \$\$ to PARC, P.O. Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK, at club meetings. Dues (including SCOPE) are \$12 a year plus \$9 for each additional family member. Dues are prorated for new members: Aug, Sep, Oct \$12; Nov \$9, Dec \$8, Jan \$7, Feb \$6, Mar \$5, Apr \$4, May \$3, Jun \$2, Jul \$1. Consider paying for two or three years at a time. Call, name, and complete address are required. Telephone number may be unlisted in roster if requested. Other information requested below may be omitted if you feel uncomfortable providing it to the Club.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Phone # \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_ Other \_\_\_\_\_

Date 1st lic. \_\_\_\_\_ Birth date \_\_\_\_\_ Thos Bros loc. page # \_\_\_\_\_ coord \_\_\_\_\_

Name & call of family members in PARC \_\_\_\_\_

ARRL \_\_\_\_\_ RACES \_\_\_\_\_ ARES \_\_\_\_\_ Red Flag \_\_\_\_\_ Blood donor \_\_\_\_\_ Type \_\_\_\_\_ Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
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# Scope

W6NWG

**Palomar Amateur Radio Club Inc.**

POST OFFICE BOX 1603, VISTA, CALIFORNIA 92083-0530



W6NWQ / R 146.730 (-), 449.425 (-), 145.050 (Pkt). KAUAI / R 147.135 (+). WD6HFR / R 224.900 (-)

VOL. XXIV, NO. 12

DECEMBER, 1989

|   |            |                                     |          |   |
|---|------------|-------------------------------------|----------|---|
| ▲ | PRESIDENT: | Stan Rohrer, W9FQN, Valley Center   | 749-0276 | ▼ |
| ▼ | VICE PRES: | Mac McCarthy, NH6EW, Oceanside      | 945-7391 | ▲ |
| ▲ | SECRETARY: | Nash Williams, W6HCD, Bonsall       | 728-3574 | ▼ |
| ▼ | TREASURER: | Ron Wilhelmy, WI6B, Rancho Santa Fe | 756-3133 | ▲ |
| ▲ | EDITOR:    | Ralph Crossman, K6HAV, Vista        | 727-5866 | ▼ |

MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the CAFETERIA at Lincoln Middle School between East Vista Way and Eucalyptus on Escondido Ave. in Vista. Parking in the main lot accessible from East Vista Way; and in the City Hall parking lot across Escondido from the School. Talk in on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE SCHOOL DISTRICT BOARD OF TRUSTEES. Tol' yez oncen, tol' yez a hunnert times.

CLUB MEMBERSHIP is \$12 per year with no initiation fee, and includes a subscription to SCOPE. Family memberships are \$12 for the first family member, and \$9.00 for each subsequent member at the same address. See application on last page. Membership/subscription matters, changes of address, P.O. Box 1603, Vista, CA 92083-0530. Material for Scope to PO Box 73, Vista 92083 by Wednesday, two weeks before the club meeting.

## MEMBER INFORMATION

★ GNU CLUB MEMBERS: Jim Ward, WA3AAJ, San Diego; Don Saba, N6SYF, San Diego; Graden Wright, KC6ELD, Camp Pendleton; Jerry Wiggle, WB4VPJ, Vista; John Reinicke, W6BAW, Oceanside; Marcel Gallegos, W6NKB, Vista; Mark Ross, KC6CZO, Pala; Robert & Bonnie Tapley, KD0WE & KA0UPI, San Diego; Duane Heise, AA6EE, Ramona; Daniel Fitterer, KD7HQ, Ramona; and Nancy Harris, KC6FZN, San Marcos. Welcome to all and congratulations to Nancy Harris on her first license, which arrived after she became a PARC member.

★ RENUDE: Jack Honts, WD0DLW; Frank Cassen, N6AT (7/92); Becky Matros, N6KAL; Jim Brown, WB6RWF, (2 yrs.).

★ UPGRADED LICENSES: Mark Moscowitz, KC6COD, to Amateur Extra; John Tyler, N6URW, to General. Congratulations.

## DECEMBER MEETING

The December meeting will feature Selected Short Subjects (Show & Tell Reinforced) and a Christmas social with music by Phil Leonelli, WF6L. Please bring some goodies so that we can all overeat while having a good time meeting one another for perhaps the last time in the '80s. Come on out, bring the family and make it an enjoyable social evening. Liquid refreshments by NH6EW - no-cal goodies by the rest of us.

## LATEST CALL SIGNS

The last amateur calls issued for the Sixth Call Area by the FCC on 11/1/89 were: AA6SA, KK6BZ, N6WUU, KC6GQO.

We publish these for your information and so "bootleggers" may be more easily spotted.

## EXECUTIVE COMMITTEE

The executive Committee, consisting of club officers and Chairmen of its committees, meets at 7:30 p.m. on the second Thursday after the club meeting. The January meeting will be at the home of WI6B.

At the November meeting at the home of WI6B, The Committee heard and approved the Treasurer's report. A wide-ranging discussion of topics too humorous to mention ensued which resulted in more heat than light (or is it vice versa?). W9FQN reported on the status of the Club's two trailers; and WB6IQS reported on donated equipment from which he was able to liberate several rack cabinets for the mountaintop, and on the work completed and yet to be done on the repeater systems. The Committee voted not to meet in December.

The no-cal goodies were deelicious.

## VOLUNTEER EXAMINER PROGRAM

At the November tests our PARC VE team gave 17 test elements to 10 applicants, six of whom passed a total of seven elements. Congratulations to members Mark Moscowitz, KC6COD, who passed the final element for Amateur Extra; and to John Tyler, N6URW, who passed his General Class exams.

New test question pools and test material have been in use since November 1st for Novice and Technician. Older study material in hands of club members should be destroyed.

Our test crew was: KI6JM, and KB6NZA reception/processing; WA6HYB CW exams; AA6OM, W6TFB, and N6RUV examiners; and paperwork by KB5MU, AA6KY, and K6HAV. de K6HAV

► FCC LICENSE EXAMINATIONS in north county are conducted by the PARC VE Team, under the auspices of SANDARC-VEC at the Joslyn Senior Center, (behind City Hall) 111 Richmar Ave., San Marcos on the second Saturday of the month at 10:00 a.m.

► Examinations are also given on the 1st Saturday in El Cajon, the 3rd in Normal Heights, the 4th in Chula Vista, and by EARS on the last Saturday in Escondido at Coast S&L, 1540 E. Valley Parkway.

► Applicants must send a SASE (Self-Addressed Stamped Envelope), a completed, signed FCC Form 610 (NO PHOTO-COPIES) and copies of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2446, La Mesa, CA 92044 10 days before the test date. Bring ORIGINAL licenses and Certificates as well as a copies which you mailed. Questions: Call Ralph Crossman, K6HAV, 727-5866.

## NOVEMBER MEETING

At the November club meeting, the minutes of the previous meeting and the Treasurer's report were read and approved. Committee reports were heard. K6HAV gave the report of the Nominating Committee: Stan Rohrer, W9FQN, President; Jack Hanthorn, KI6JM, Vice President; Nash Williams, W6HCD, Secretary; and Ron Wilhelm\*, WI6B, Treasurer. K6HAV placed the foregoing "slate" of club officers for 1990 in nomination.

Art Smith, W6INI, our ARRL San Diego Section Manager presented W9FQN with the Club's charter as a Special Services Club for 1990.

The Club's annual auction was held with the old maestro, Steve Kerrin, WA6CDU, (he could be a top-notch refrigerator salesman in Antarctica!) doing the auctioneer's job for the Club. Helping with the auction were N6KI, KG6VX, N6GZI, WB6R, WB6ZJD, and N6QVW. Understand W9FQN has had to fill sand bags and put them in his garage to keep the floor from coming right out of the ground. Steve sold so much of the Club's stuff KA6FPS has been tripping over all of these years that Stan has had to locate the sand bags where the gear used to be so that Barbara and the girls won't be confused by all the empty space.

The tasties were courtesy of all of the good people who remembered and brought them and by Ray, N6EQB, who did all the work. 65 of us attended and had a great time.

## PARC REPEATERS

Three repeaters, two W6NWG/R, are owned and operated by the Club. One has an input of 146.130 mHz and an output of 146.730 mHz. Input for another is 444.425 mHz and output is 449.425 mHz. The third, W6NWG, is a packet digipeater on 145.050 mHz. All are on the Club's property on Mount Palomar at about 5,600'; and are open repeaters for club members and occasional and transient users.

CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.130 (+) which too is available to PARC members. Its use as a W6NWG/R overflow machine is encouraged. It will have battery backup - reeeel soon.

THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900 MHZ REPEATER, which is co-located with W6NWG/R and has battery back up. Feel free to use it. If you find it useful, it wouldn't hurt to help support it by joining the 220 Club. Many of us have.

## &gt;&gt;&gt;&gt;&gt;--- PRESIDENT'S MESSAGE ---&lt;&lt;&lt;&lt;&lt;

## # # # --- FIELD DAY --- # # #

Well, it's official. We did place 3rd in the 5A category out of 65 other 5A stations and we were only 238 points out of 2nd place which is about 119 phone contacts or about 60 CW contacts. We missed 1st place by 942 points which is about 471 phone contacts or 235 CW contacts. Since we made most of our contacts on CW and 20m phone, we can sort of compare our scores with several other classes. In 2A we would have been 8th, 3A-9th, 4A-13th, and 6A-10th. This is the first time in recent years that we have been 1st in California in 4A or 5A. Congratulations to all who participated and especially to those station heads who made everything happen.

We should do better next year at FD if we can have:

- Two CW stations at the same location & rotate their use of 80-10 antennas.
- Improve our SSB operation(s) on 40 & 15.
- Grouping of lower contact stations.
- Train our operators before FD in proper FD operation and use of their stations.
- A NOVICE station gives us "free" points.  
(does not count as another station)

This was the first time out for some of our operators and so I'm sure that this experience will pay off next year in knowing what needs to be done. We will again make a special effort to have more women operators for SSB since their voices on SSB are a real asset. A successful station operation has:

- GOOD ANTENNAS, rigs, shelters with everything easily set up (working on this).
- Experienced/trained operators who know how to hold a frequency.
- Use computer/canned messages on CW.
- Use boom mikes on SSB and foot switches.
- Computer logs to check for duplications.
- Comfortable operating positions.

While Field Day is a contest, it needs to be remembered that this is our one opportunity each year to "show the world" that we can operate under emergency conditions and make contacts all over the United States when the BIG ONES COME. HOW ABOUT 10,000 POINTS NEXT YEAR! Plan on being there and helping!

## # # # --- CONTROL FUNCTIONS --- # # #

The control operators of our repeaters

are always very reluctant to turn off the repeater even though at many times we would like to turn it off for 1-2 minutes when members/non-members misuses the repeater system. Some of the things we do not like to see are: 1) Monopolizing the repeater for long times during commute times (6-8 a.m. and 4-6 p.m.), 2) A "BREAK" into a conversation already "BROKEN", 3) "BREAKING" without listening for several minutes, 4) using impolite talk to other amateurs regardless of whether "they started it", 5) trying to help a motorist who is already being helped (unless the instructions are wrong), and 6) not being considerate of others. If you feel that a conversation is deteriorating, THEN GET OFF THE REPEATER IMMEDIATELY whether you are at fault or not. We are lucky that we don't experience these types of problems to any great degree and it is because we keep reminding people of their responsibilities BEFORE problems get out of hand.

## # # # --- WORK PARTY OCT 22 --- # # #

Nancy-KC6FZN (new PARC member), and Steve-N6UIA served as ground crew; Ed-N6GZI and Stan-W9FQN were on the tower; John-WB6IQS, and Bob-KA6HZF were working in and on the repeater building. Nancy was able to walk into a Radio Shack store, buy their Ham radio test materials, and pass the Novice-Tech tests after studying the test questions and listening to the code tapes while she drove to work. Nancy is presently looking for a different job in the electronics field.

We picked up one load of branches, lowered the "new" 4-bay dipole which had a noisy element, found the problems with several coax lines (did not have time to repair them), raised another corner reflector (spare antenna), installed a 902 MHz collinear for the autopatch system, made the battery cable hole in the building larger, installed the 450 PA amplifier (but not connected up), and did all of the little things that need to be done on each of our visits. We arrived around 10 a.m. and left around 3 p.m. after the rains forced us off of the tower.

We still have several truck loads of small branches to haul away from the site and I will be contacting those who

volunteered their trucks sometime soon. We need to get the coax cables repaired sometime when we have good weather and we also need to connect up the 902 MHz antenna to the building. We always have something to do so please let us know if you can give us a hand on some of our repeater projects.

John has talked to DB Products about the problems with the NEW 4-bay dipole (DB-264) and he reports that they are going to give us a brand new antenna even though we are out of warranty. The first DB-264 we bought in the early 70's (used) and it has been in continuous use except for a minor repair several years ago. It is a 9db antenna which performs great as long as it is clamped at the top to prevent whipping in the wind.

#### NOV 12 WORK PARTY

Jo-KB6NMK, Nancy-KC6FZN, Art-KB6YHZ and Anita-KB6YHY really cleaned up the area around the repeater building and cut down on the burnable material. They hauled away five loads of brush and branches and we still have more to go. John-WB6IQS and Nancy worked inside the the bunker on the 450 repeater with Nancy untangling connecting wires for John. The bunker really looks much better inside and quite clean. Steve-N6UIA put the new replacement DB-264 four dipole antenna together and we hoisted it up to the old mounts on the left side of the tower. Lanny-N6CEK had the honors of being top man on the tower at the windy and cool 70' level and Stan-W9FQN took the 50' level clamping spot.

We now have five two meter antennas: two DB-264's (9DB), one Stationmaster collinear (9DB), and 2 corner reflectors (8.1DB). We have four 450 yagis, one 902 Mhz, one 10M, and one 10GHz antenna. Our objective is to have spares of everything so that if we have problems in the winter we will only need to visit the bunker and change feedlines INSIDE of the building. THANKS to Ed-N6GZI and Bob-WA6QQQ for seeing to it that we were able to obtain our commercial grade 70' radio/TV tower some years ago. It really gives us a solid platform from which to work and attach antennas. The base has 18 tons of cement with metal guys at the 30' level and rope guys at the 70' level. About a year ago Ed and crew added 10' more of donated tower from Clint-W60FT (SK) so we are now at the 80' level.

A good time was had by all.

#### NOV 19 WORK PARTY

Erik-KA6UAI, John-WA6ZJC, and Stan-W9FQN installed Erik's new 450 control antenna on a pole next to the bunker with his 29.6 MHz antenna on top of the pole. We installed a rack of equipment to replace some items which were in the building several years ago.

#### ###--REPEATER SITE--##

John-WB6IQS reminds me of the following projects at the repeater site which need to be addressed sometime soon:

Buy and bury more coax and hardline, install 2m beam and rotator at 80' for emergency use, cut top out of pine tree, cement roof, new building(block or container), locate property corners, fence in tower better, autopatch\*, complete auto-DFing, remove ground material (fire)\*, new alarm system, new control system(s), 10m Packet, 220 Packet, and emergency antennas\*.

Please let us know if you can help us with any of the above projects. The ones marked with an (\*) we are presently working on.

#### ###--POTPOURRI--##

CHRISTMAS MEETING - bring XMAS goodies: cookies, cake, pie, desserts, etc.

There will be no Executive meeting in December as a present to all of the faithful officers who diligently attend these meetings each month.

Erik-KA6UAI has a LINK on his 147.130 repeater with an outlet to 10 meter FM (29.600) which is in the GENERAL portion of the band. Remember that only general class and above can call up this link (FCC rules). If you are a Tech, you must have a General Class or above call it up for you and then have them shut it down for you when you are finished. At present you MUST use the W6NWG call when using this link. Do not use the link during mobile hours (6-8 a.m./4-6 p.m.) or during the first 15 minutes of the 8 p.m. and 9 p.m. nets on 146.730 since 147.130 is used as an "overflow" for 146.730. Remember that 29.6 MHz is a calling frequency so don't "rag chew" longer than 4-5 minutes. Contacts have been made all over the USA, Japan, etc. The autopatch on 147.130 is Erik's own personal autopatch so don't use it

without his direct permission. Erik might be looking for a 3-4 element 10M beam for this link so if you know of one not being used, please let us know about it. More on these items later.

The club has a 432 MHz SSB TRANSVERTER from 28MHz made by Microwave Modules in Liverpool, England. The unit requires 12vdc. Anyone want to make an offer for it or suggest how the club could use it.

We are reviving the 4-items for \$1.00 and will have buckets of hard to find items at the Christmas meeting.

Kerry-N6IZW and Steve-N6UIA have received the CRYSTALS for the 902 MHz rigs and these should be on frequency soon which should get us a step closer to installing the auto-patch.

I have sent away for an IBM PC program to keep track of casualties and resources in case of emergencies. The program is used in conjunction with packet and I understand that it operates a message bulletin board plus other goodies. If interested, please contact me for a copy of the program.

The TACO WAGON now has three six foot long tables with six shelves and space for five operators. The 40' crankup tower is attached and all we need are inside and outside operating lights, painting, several windows, a DMV license and we will be ready to roll. Can anyone help with the lights, painting, or windows.

Looks like George-K6YGK has stopped using 146.730 because of the KOJPK/R on the .73 frequency. You can now find YGK on the "up one", 147.130.

The club has a Dick Smith DIRECTION FINDING unit that needs to have the antennas connected to the finished electronics. This requires more mechanical skill than electronic. It would be fun to watch the little red lights rotate around in a circle and blink in the direction of the hidden transmitter. Anyone like to finish putting it together?

I have an old GONSET instruction manual for the Gonset Sidewinder, Model 900A (2M), if anyone wants it.

The club has the following HAND MICROPHONES: Swan up-dwn 6pin; Lafayette 5pin; "P" 4pin; Midland 4pin; & Mura DX-114 3ring phono plug. Also C-20 computer with mono-monitor, cassettt recorder, CW/RTTY programs, and games. If any of these items

interest you, please give me a call, W9FQN.

###-- HELP NEEDED / WANTED ---###  
jpp Take a good look at this list and see if there is anyway that you can HELP the club out with these items:

- NCTN traffic managers to replace Marni-KB6PCF and Todd-KI6ZM.
  - 4 to 5 pipes 18-24" L, 1.5-2" dia. These are for FD tire stands.
  - The TACO WAGON (Twr Trailer) needs severals windows, inside lights, outside running lights,some inside AC & DC wiring, & leveling jacks.
  - Members who can send computer generated CW for tapes and practice.
  - A 220 rig for a packet port. Xtal is ok.
  - A copy of the BEARCAT 101 manual.
  - Fire extinguisher for trailers.
  - 450rptr technician to help WB6IQS.
  - 40+' Al. tower or crankup for FD.
  - Painter for inside of trailer.
  - Painters for outside of trailer.
  - Our ARES/RACES house trailer now has new tires and is ready to roll as soon as we can find a universal way of connecting up the turn lights to all types of vehicles.
- Anyone have any good ideas?

###-- THANKS to ---###  
THANKS to all of the club members who helped with repeater site projects these past two months. One or two more trips up to Palomar Mountain should put things to bed for the winter.

THANKS to Marni for being a co-net manager with Todd-KI6ZM for the past two years. We will miss your 150 wpm taking of messages but we hope that you keep showing up from time to time so the nets will be shorter.

THANKS to Ed-N6GZI for seeing that Todd-KI6ZM had a good 2m vertical up and working before he died. Also THANKS to Ron-WI6B and Mark-N6NNI for offering to help Todd with his antenna problems.

THANKS to Steve-N6UIA for picking up a "surplus" keyer and we hope it ends up with the correct call on CW (W6NWG).

THANKS to John Campbell-WB6HSZ for locating a 3KW generator for the club. Now all we need is a motor (non-electric).

73 de Stan W 9 F Q N

**FORESAIL**

MEMBER ADS IN THE SCOPE ARE FREE.  
TA33JR tri-band beam, \$125. Call Art,  
WA6IPD, 728-6834.

Datong FL-1 audio filter, \$30; Jennings UCSL  
1000 vacuum variable capacitor, \$40. Call Dennis,  
N6KI, 271-6079.

Clegg FM-DX synthesized 35W 2M xcvr, \$135,  
Call Ray, W6BHF, 487-4423.

Butternut HF2V 40 & 80M vertical ant., brand  
new (no sales tax!). Call Ed, N6GZI, 542-1405.

Tempo One 100W HF xcvr, pwr supply &  
Yaesu YD-844A desk mike, looks & works good,  
\$240. Call Mark, KC6COD, HP 944-0145 or OP  
576-4400.

Kenwood TS-670 10W all-mode quad-bander,  
40, 15, 10, and 6M, general coverage rx. Call Ron,  
WI6B, 756-3133.

Kenwood TS-520 hf xcvr w/MC-50 mike &  
PC-1 phone patch; Drake LB-4 amplifier w/pwr  
supply; ATB-34 tri-band beam; Alliance HD-73  
rotor; coax switch; and coax. Call Rose Lewis,  
N6DAB, 746-5796.

Gas pipe 22' long 2 3/8" dia., 1/8" wall. Call  
Nash, W6HCD, 728-3574.

Assorted tubes all test good, \$1 ea. Call  
Dennis, N6KI, 271-6079.

**NOVICE SPECIAL!** Instant 220 mHz station:  
Icom 37A 25W xcvr; Cushcraft 11-elm. beam &  
coax; CDR AR22 rotor w/contl. and cable; roof-  
top tripod w/10' mast; manuals and instructions;  
\$300 for the works. Butternut SC3000 scanner  
antenna, \$20. Bearcat 160 programmable scanner  
\$50. Call Mick, W6FGE, 222-3912.

Kenwood TS-830S xcvr w/2 CW filters, mint,  
\$625; SP-230 spkr w/audio filters, \$55; Dentron  
GLA-1000B 1 KW 80-10M amp, \$225; Diawa CS-  
201 2-psn coax sw., \$25; MFJ 300W dry dummy  
load, \$20. Call Duane, AA6EE, 789-3674.

Tri-Ex W51 51' heavy duty, free-standing, crank-  
up tower, Ham-M rotor w/control, and Mosely  
TA-33 beam w/40M kit installed, \$750; Swan 350  
hf xcvr w/117XC pwr supply and 14-X for 12VDC  
opn, mike, works perfectly, \$250. Call Larry,  
W6QCA, 587-2226 WP, 582-4324, HP.

► **THE CLUB'S POLICY REGARDING  
INTERFERENCE ON THE REPEATERS** is to *IGNORE IT!* Don't give the jammer  
what he or she craves - notice and attention. Carry  
on your QSO or sign off or move to simplex, but  
do NOT acknowledge the crazies. Try to hear the  
interfering signal on the input of the repeater and  
determine the direction of the source. DON'T  
TALK TO THOSE WHO ARE INTOXICATED.

## ★ ARE YOU A PROSPECTIVE HAM? ★

Interested in amateur (ham) radio and in the  
Palomar Amateur Radio Club? Want to talk to  
someone about it? You do? Well -

## CONTACT IN:

|                |                   |          |
|----------------|-------------------|----------|
| Bonsall        | Nash Williams     | 728-3574 |
| Camp Pendleton | PJ Mead           | 941-9162 |
| Cardiff        | Duane Stedman     | 753-4821 |
| Carlsbad       | Eleanore Call     | 729-0850 |
| Chula Vista    | Betty Mahoney     | 420-2277 |
| Del Mar        | George Uminski    | 755-1014 |
| Escondido      | Jo Ashley         | 741-2560 |
| Encinitas      | Dave Copley       | 753-2605 |
| Fallbrook      | Art Rideout       | 728-6834 |
| Lakeside       | Mac McBride       | 561-2211 |
| Leucadia       | Bud Lincoln       | 436-9983 |
| Oceanside      | George Todd       | 439-8227 |
| Poway          | Mark Schlessinger | 748-8391 |
| Ramona         | Mike Fisher       | 789-2892 |
| Rcho. Sta. Fe  | Ron Wilhelmy      | 756-3133 |
| San Diego      | Dennis Vernacchia | 271-6079 |
| San Diego      | John Tentor       | 672-3891 |
| San Marcos     | Floyd Harvey      | 741-8391 |
| Solana Beach   | Lou Broadbent     | 755-9179 |
| Valley Center  | Stan Rohrer       | 749-0276 |
| Vista          | Ralph Crossman    | 727-5866 |

**FLEA MARKETS**

- The El Cajon ARC ham, computer, electronics swap meet at the Santee Drive-in theater, Wood side Ave at Hwy 67, Santee at 0700, first Saturday.
- The General Dynamics ARC swap meet on the 2nd Saturday in Cucamonga in the Gen. Dyn. parking lot east of Haven on Fourth Ave, at 0700.
- The TRW ARC flea mart at the corner of Compton and Aviation Blvd. in Manhattan Beach on the last Saturday of the month at 0700.

**REDUCED PRICE CALLBOOKS**

Duane Heise, AA6EE, has 1990 Callbooks at a group discount for club members. The North American edition is \$22.75 vice \$28 retail; the International edition is \$24.75 vice \$30 retail; both for \$45. With trade-in of '89 Callbooks, prices are N.Amer. \$13, Int. \$15. Also available are: 1990 ARRL Handbook \$18.75 vice \$23 retail; ARRL Antenna Book \$15 vice \$18; ARRL Operating Manual \$12 vice \$15; new FCC Rule Book \$7.25 vice \$9. Add 7% sales tax. For shipping add \$1.95 for first book, \$.95 for each additional book. Mail check to Duane Heise, AA6EE, 16832 Whirlwind Ln., Ramona 92065. Phone 789-3674.

**HAM STAMP PINS**

The Club has amateur radio postage stamp replica pins for sale. See Ron, WI6B or W9FQN.

## CLUB-SPONSORED NETWORKS

THE NORTH COUNTY TRAFFIC NET meets nightly on 146.730 mHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Managers: KI6ZM & KB6PCF.

THE NORTHERN DISTRICT, SAN DIEGO SECTION AMATEUR RADIO EMERGENCY SERVICE (A.R.E.S.) NET meets on 146.730 mHz each Sunday at 0830 to provide A.R.E.S. and emergency and public service planning information to members of the Service. Visitors are welcome when called for after the member roll-call.

THE SAN DIEGO COUNTY MICROWAVE NET meets on 146.730 mHz each Monday at 2100. This net is to disseminate microwave information and is open to the old timer and the beginning microwaver. All are welcome. Kerry, N6IZW, is net control station. If you can't check in, at least give them a micro wave on your way by.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 mHz each Tuesday (except the 2nd Tues. of the month) at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul, KB5MU, is net control station.

THE SAN DIEGO COUNTY PERSONAL COMPUTER NET meets on 146.730 mHz each Wednesday evening (except for the 1st Wed. of the month) at 2100 to share information on computers. Chuck, KI6TG, is NCS, and he welcomes those with problems, information, questions, solutions, any PC.

»»»»»»»»»»»»»»

### WANTED

Yaesu FL-110 1000 watt 80-10M amplifier or equivalent. Call Dan, KD7HQ, 789-0943.

10M FM xcvr. Gotta work w/o "kick start." Call Mick, W6FGE, 222-3912.

Liaison and Net Control Stations for the North County Traffic Net.

Working Icom IC-22A; Sony Pro-80 or Panasonic RFB-65. Call Dennis, N6KI, 271-6079.

»»»»»»»»»»»»

### SURPLUS?

DONATE IT TO THE CLUB if you can't sell it or aren't up to hauling it to the flea markets. The Club will sell it and put the money in the Equipment Fund for that new repeater, antenna, or feedline. Contact any club officer.

## SURPLUS GOODIES of the electronic persuasion at:

- Alexander Battery Co. West, 520 State St., Escondido, phone 480-4445. has HT batteries and others.
- Aluminum, brass, copper, stainless steel, etc. at Escondido Sales, 1428 Mission Rd., Escondido.
- Electronic, mechanical, computer parts, etc. at Industrial Liquidators, 683 S. Rancho Santa Fe Rd., San Marcos; and 4887 Convoy St., San Diego, and at Gateway Electronics, 9222 Chesapeake.

## HELP WANTED

- Bob, KE6VX, needs 3-4 Vista hams to man the Vista RACES station at the Melrose fire house on Monday nights. Call Bob at 727-0606.
- Michael Hamman, WB6CSH, wants to hear from hams interested in becoming part of a SoCal-wide Kaiser Hospital Disaster Net on 2M. Details on becoming part of this disaster network; and on the various levels of participation may be obtained from him at 528-5300, 436-4411 X 5300, or 741-3445 X 5300. Leave a message.

## THINK YOU'VE GOT RFI PROBLEMS?

According to the Los Angeles Times, KDAY-AM, with its six-tower antenna on a hill between the Silverlake and the Echo Park districts of L.A. is buying toroids by the barrel trying to solve the RFI problems in the plumbing, hi-fis, telephones, wiring in walls, chain link fences, etc. of its neighbors. KDAY is a 50KW station which the FCC says is "clean" and doing an excellent job of trying to help complainants solve their RFI problems. Wonder if they could use my spare low-pass filter?

## EARS T-HUNTS

The Escondido ARS (EARS) sponsors a T-hunt on the 3rd Saturday of the month at 0930. Assembly point talk-in at 0900 on 146.88 (-). The hunt frequency is 146.565. Hidden tx is within 10 miles of start. All are welcome. New folks may ride along a time or two to see how the big kids do it. All are welcome

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ, who is very finicky and requires, not only money but, that you let him in on your name and call sign for your *very* own badge - like the big guys have.

John has badges for: KC6AST, N7EQU, N6GZI, WB6NVX, WA6QCG, WB6RWF, N6UZG.

If you don't want to pay full tab for your *very* own badge, John can make you a real deal on one of the unclaimed ones.

## COMPUTER HOOKUP?

By Chuck Dowling Jr, KI6TG

So, you've got your computer home, unpacked all that styrofoam and don't quite know what comes next. If you've got a VIC20 or C64, you need to plug in the power supply to the wall, and then the computer, hook up your monitor, and connect your floppy disk unit or Datasette tape recorder. That's about all there is to get up and running...the operating system is built in. Turn it on, load your program, and you're computing.

Now, if you purchased an IBM compatible, it may take a bit more work, depending on what was done for you at the store. Let's assume you just have boxes of stuff - nothing is configured. First, choose a place for your machine to live and set everything in place - the monitor at or just below eye level. You need a little space for things like manuals, a mouse, etc. Try to keep the computer itself away from enclosed spaces, as they too need to breath. Now, hook it up. Open it up and install any optional cards that you have bought. Video cards, serial (RS232) cards, and parallel (usually for a printer) cards plug into empty slots in the machine which connects them to the bus. The connectors on these cards then project through the back of the computer. It doesn't matter which card goes where, but if you only have 1 or 2, I try to space them for heat dissipation. If you need more serial ports, you can use a multi-position switch box instead of buying more serial cards. You will eventually run out of computer slots. To show you how you can use up ports, I have connected to my system 1 mouse, 1 modem, 1 multi-mode data controller (TNC), 1 remote control cable to the Ham rig, and 1 software security device. That's 5 devices requiring a serial port. I have three cards in the computer, one of which hooks to an RS232 2-position switch box. I label the connectors.

Anyway, now everything's together so it's time to finish connecting things. Plug your video monitor in to the video card connector. Hopefully you have connectors that match each other. If not, it will be Friday night at 5:30 PM, and the stores have all closed for the weekend. (This is a little known corollary of Murphy's law). Next plug in your keyboard. Some keyboards have switches on the bottom to switch between XT and AT style computers. Plug your printer into the parallel "port" in back of the machine. (not all printers use the parallel port, but 99% do). Now, plug in any other devices, such as a mouse, joystick, or modem. A Bus mouse has its own card in the machine. Plug the mouse into that card. A serial mouse plugs into a serial (RS232) port. This type of mouse may have a little power cube you also need to plug in. See your manual for specific info.

A joystick plugs into a "Game adapter" port.

To hook up a modem, plug an RS232 cable into the modem, then into a serial port connector. You may or may not need the full 25 pins on the connector. Check your manuals for specific info. Internal modems just plug in a slot inside the machine. I prefer an external modem for a couple because you can use it with another computer, the internal only works with a PC. Also, you can see what's happening with the external, because you can monitor the indicator lights on the modem. I must say that getting a modem up and running is not a simple affair if you've never used one. Once you get the hardware hooked up, you then usually have to configure your communications software to "talk" to it. This involves setting some parameters and initialization information that is beyond the scope of this article. **BUY A MODEM THAT IS COMPATIBLE WITH HAYES STANDARD COMMAND FORMAT (HST).** Now plug a phone line into the modem. Most modems have two phone jacks so you can also plug in your phone. That way, you can use the phone when the modem is not in use. Call waiting can, and usually does, crash data transfers. It can be disabled with the correct modem initialization or dialing prefix.

Well, I think you can turn the computer on now. If you have a hard disk and it was formatted for you, the machine should boot to a DOS prompt, and you're ready to compute. If your disk is not formatted, your work's just begun. I won't go into formatting hard disks, as every situation seems different - a subject for a couple of thick books. If you've never done it before, and you are in a big hurry, get a friend or someone with experience to help you. If you're feeling ambitious, get out those DOS books and try it. Disk Manager from Ontrack can help here. If you don't have a hard disk, the system is booted from a floppy disk that has an operating system on it. Put the diskette in the drive, close the door, and turn the computer on. If it was already on, CTRL-ALT-DEL keys pressed at the same time resets most machines.

Well, now that you have the thing booted up, you have just begun. Now you have to get DOS on the system, and set up things like paths and Autoexec and Config files. This too is a subject for a future article. Everyone runs their system a little different, and you will develop your as you learn. People are always ready to yell and scream at you about *how* you really should be doing things (I too am guilty of this) but frankly, some of them don't have a clue! In a future article, I will discuss my approach to hard disk and floppy disk management. Good luck, and happy computing!

**GEORGE TODD, KI6ZM, SK**

George Todd, KI6ZM, became a silent key on Thanksgiving Day at the age of 83. He had served in the navy as a radioman, and was a retired Navy communications officer. He later served at the Livermore Laboratories. Todd passed his first amateur exam in May, 1987 and the Extra Class exam in July of '87. He was a Volunteer Examiner and one of the Club's Net Managers. Todd was in and out of the hospital during the last few weeks of his life. He was a gentle person and will be missed by all of us whose life was brightened by him.

**POINT LOMA NOVICE INSTRUCTION**

Mick McDaniel, W6FGE, says he's part of a small group of hams on Pt. Loma who give Novice instruction. The instruction is two hours per day, daytime only, five days a week, one-on-one. Novice testing is also done. Call Mick at 222-3912.

**DOWN THE TOOBE**

We're glad to let our members know more about what you know, so if you know more, let us know.

Steve, WB6ZJD, pulled up the final stakes and headed for the Quakey Shakeville 7/11. 73 Steve.



If your antenna system looks like these and you want it repaired, replaced or removed, please call for a free estimate!



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Something different about the November Scope? It was done with a new proportional spacing type face (Times Roman) which crams the words into 70% of the space used by the previous face (Courier). It looks more like printing and less like a typing because it is a printer's face and Courier is a typewriter face. The original November issue of 14 pages was reduced to 12 by switching type faces and taking out some "boiler plate" items to make it come out even. We're having fun with new fonts and printer.

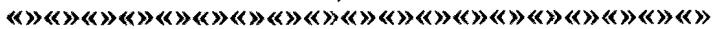
Thanks to Larry, W6QCA, and Ray W6BHF, for their efforts in getting new club members. Wish someone would do it for some of the perennials on the two 2M machines. Some used to be club members. Others act as if they are, making no effort to stop freeloading. Cheap Bashful, I guess.

Bill Leach, KB7LX, in N. Carolina, is up to his hubs in ham radio - with Hurricane Hugo and all. He's also doing his bit for glasnost by helping with the visiting parents of a Russian ham who was involved in the recent joint US/USSR DXpedition to an island in beautiful downtown Siberia.

Hope you like the "getting started in computers" article by Chuck, KI6TG, NCS for the Wed. night Personal Computer on 146.730. (See Page 8.) We appreciate his time and effort to put his knowledge onto paper and get it to us. There's more coming.



"That's all," she wrote.



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## 2 METER HANDY-TALKIE ANTENNA TESTS

On August 4, 1985, Bob Gonsett (WA6QQQ) and Dee Crumpton (N6ELP) set up a homebrew antenna range and used professional test gear to determine the relative gains of various handy-talkie antennas. Simply put, they pooled their collection of HT antennas, chose one at random as a "standard" (a stock Icom IC-2A rubber duck) and tested each of the remaining antennas on two radios and in two environmental settings (antenna ranges "A" & "B"). The results of their tests are attached.

HT antenna gain measurements are difficult to make because of the variations in the ways the radios (and therefore the antennas) are held and the way individual radios tend to load into a given antenna. Indeed, the operator is part of the antenna system and imparts directional characteristics to the radiated pattern. Keeping this in mind, an attempt was made to "average out" any directional properties by having the HT operator (N6ELP) transmit continuously while walking around the perimeter of a 10-foot diameter circle. The receiving antenna (a 20' AGL quarter wave ground plane about 100 feet away) was thus exposed to all sides of the transmitted signal. Two HTs were used to test the idea of PA loading variations.

The ground plane receiving antenna was connected to half inch diameter hardline coax and terminated in a Potomac Instruments Type FIM-71 field strength meter which in turn was connected to an Esterline Angus Model MS401BB servo driven strip chart recorder. WA6QQQ supervised the measuring program and analyzed the data in order to determine the median strength of each antenna tested. The gain of the reference IC-2A antenna was measured at the beginning, middle and end of each series of measurements and the median of these values was defined as 0 dB gain (against which the other antennas were compared). This procedure also permitted the HT's output powers to be checked for stability (no significant variations were found).

Finally, two supplemental tests were run. First, when the reference ICOM IC-2A antenna was used, the apparent antenna gain dropped by 11 to 27 dB when the HTs were belt mounted. (Don't belt mount your HT and expect to be able to transmit any distance!) However, when the antenna was clipped to a metal headband and connected to a belt mounted HT with a short length of coax (this assembly made by a company in Dayton, Ohio), near normal antenna gain was restored. In both cases, however, increased multipath was noted on the strip chart recorder.

Enjoy the results of the measurements. While they're not elaborate, they will help you separate fact from fiction in a field where rumors abound.

HANDY-TALKIE ANTENNA GAIN MEASUREMENTS, XMIT MODE (LOW POWER), 146.55 MHz  
AUGUST 4, 1985 - WA6QQQ & NGELP

|                      |                                                                                           |        |              | dB GAIN RELATING TO STOCK IC-2A ANTENNA |         |                         |         |                                 |
|----------------------|-------------------------------------------------------------------------------------------|--------|--------------|-----------------------------------------|---------|-------------------------|---------|---------------------------------|
|                      |                                                                                           |        |              | PERFORMANCE ON IC-2A                    |         | PERFORMANCE ON TR-2600A |         | INTERPOLATED MEDIAN OF ALL RUNS |
|                      |                                                                                           |        |              | RANGE A                                 | RANGE B | RANGE A                 | RANGE B |                                 |
| ANT #                | — ANTENNA TESTED —                                                                        | LENGTH | WEIGHT (OZ.) |                                         |         |                         |         |                                 |
| 1                    | STUBBY DUCK, TUNED ANT. CO.                                                               | 4"     | 1.1          | -0.4                                    | +0.4    | 0.0                     | -2.9    | -0.2                            |
| 2                    | STUBBY DUCK, TUNED ANT. CO. (LOOKED LIKE AN OLDER MODEL)                                  | 4"     | 1.1          | -0.4                                    | +1.0    | -2.1                    | -3.1    | -1.6                            |
| 3                    | LARSEN SHORT CUT                                                                          | 10½"   | 1.8          | -0.4                                    | -0.8    | -0.4                    | -1.0    | -0.6                            |
| 4                    | LARSEN KÜL DUCKIE                                                                         | 7½"    | 1.4          | -2.9                                    | -3.3    | -1.7                    | -2.5    | -2.7                            |
| 5                    | STOCK ANT. FOR KENWOOD TR-2600A                                                           | 7"     | 0.8          | -2.9                                    | -2.9    | -4.6                    | -3.7    | -3.3                            |
| RUBBER DUCKIES       |                                                                                           |        |              |                                         |         |                         |         |                                 |
| 6E                   | MODUBLOX SP-146 SKY PROBE                                                                 | 43"    | 3.3          | +13.3                                   | +13.7   | +10.8                   | +10.8   | +12.1                           |
| 7E                   | AEA HOT ROD (RED SHRINK TUBING ON COIL) <small>MODEL HR-1</small>                         | 40½"   | 1.8          | +13.7                                   | +13.3   | +10.0                   | +10.0   | +11.7                           |
| 8E                   | SUPER-STICK II (5/8-WAVE), TUNED ANT. CO.                                                 | 55"    | 4.0          | +7.9                                    | +7.5    | +7.9                    | +7.5    | +7.7                            |
| 9E                   | SUPER STICK II WITH MODIFIED COIL: SHRINK TUBING REPLACED WITH #33 SCOTCH ELECTRICAL TAPE | 54"    | 4.0          | +6.4                                    | +7.5    | +7.9                    | +6.6    | +7.1                            |
| 6C                   | MODUBLOX SP-146 SKY PROBE                                                                 | 8½"    | 3.3          | -1.7                                    | -2.9    | -9.1                    | -7.5    | -5.2                            |
| 7C                   | AEA HOT ROD (RED SHRINK TUBING ON COIL) <small>MODEL HR-1</small>                         | 8½"    | 1.8          | -5.0                                    | -3.7    | -1.7                    | -1.7    | -2.7                            |
| 8C                   | SUPER-STICK II (5/8-WAVE), TUNED ANT. CO.                                                 | 10"    | 4.0          | -4.6                                    | -4.6    | -3.7                    | -3.3    | -4.2                            |
| 9C                   | SUPER STICK II WITH MODIFIED COIL: SHRINK TUBING REPLACED WITH #33 SCOTCH ELECTRICAL TAPE | 10"    | 4.0          | -4.2                                    | -5.0    | -1.7                    | -4.2    | -4.2                            |
| SWEEPING ANTENNAS    |                                                                                           |        |              |                                         |         |                         |         |                                 |
| 10E                  | SUPER STICK III (5/8 WAVE FOR 220MHz), TUNED ANT. CO.                                     | 34½"   | 3.4          | +4.6                                    | +4.2    | +6.2                    | +5.8    | +5.2                            |
| 10C                  | SAME AS ABOVE, BUT COLLAPSED                                                              | 9"     | 3.4          | -7.9                                    | -7.9    | -4.6                    | -5.8    | -6.9                            |
| 11                   | BEARCAT 101 SCANNER ANTENNA                                                               | 6½"    | 1.5          | -8.3                                    | -9.5    | -4.6                    | -7.9    | -8.1                            |
| 12                   | ICOM 3AT (220MHz) STOCK DUCK                                                              | 7"     | 1.1          | -12.5                                   | -12.0   | -9.5                    | -10.0   | -11.0                           |
| OUT-OF-BAND ANTENNAS |                                                                                           |        |              |                                         |         |                         |         |                                 |

# PARC ENLISTMENT/REENLISTMENT FORM

Mail form with \$\$ to PARC, P.O. Box 1603, Vista, CA 92083-0530 or hand to Jo, KB6NMK, at club meetings. Dues (including SCOPE) are \$12 a year plus \$9 for each additional family member. Dues are prorated for new members: Aug, Sep, Oct \$12; Nov \$9, Dec \$8, Jan \$7, Feb \$6, Mar \$5, Apr \$4, May \$3 Jun \$2, Jul \$1. Consider paying for two or three years at a time. Call, name, and complete address are required. Telephone number may be unlisted in roster if requested. Other information requested below may be omitted if you feel uncomfortable providing it to the Club.

Call \_\_\_\_\_ Name \_\_\_\_\_

Expires \_\_\_\_\_ Address \_\_\_\_\_

Class \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Old Call \_\_\_\_\_ Phone # \_\_\_\_\_ home \_\_\_\_\_ work \_\_\_\_\_ Other \_\_\_\_\_

Date 1st lic. \_\_\_\_\_ Birth date \_\_\_\_\_ Thos Bros loc. page # \_\_\_\_\_ coord \_\_\_\_\_

Name & call of family members in PARC \_\_\_\_\_

ARRL \_\_\_\_\_ RACES \_\_\_\_\_ ARES \_\_\_\_\_ Red Flag \_\_\_\_\_ Blood donor \_\_\_\_\_ Type \_\_\_\_\_ Comments: \_\_\_\_\_  
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