

NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

Repeaters for use by PARC members:
W6NWG: 145.050(P), 146.730-, 449.425-
KA6UAI: 147.735-, SARG
WD6HFR: 224.900-, 220 club of S.D.

W6NWG
Scope

VOL. XXII, NO. 1
JANUARY, 1988

1936-1988

Editor: K6HAV

PRESIDENT: Stan Rohrer, W9FQN, Valley Center, 749-0276 ! Control Ops:
VICE PRES: Ted Demos, N6CKH, San Diego, 296-5103 ! WB6IQS, K6HAV
SECRETARY: Jo Ashley, KB6NMK, Escondido, 741-2560 ! W9FQN, KB5MU, WA6KZN
TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe, 756-3133 ! KA6UAI, WI6B, KB6AI

These officers are your 1988 representatives. Call them if you have a question, comment, or suggestion about our club. They need your input and support to be effective. The next Executive Committee meeting at 7:30PM: WB6IQS, January 14th, Vista.

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

###---THANKS---###

THANKS to WA6IPF-Paul Stack, author of many fine books, for donating autographed books to the club to sell. Many THANKS to the loyal and faithful traffic handlers who passed all of those RADIOGRAMS at Christmas. We appreciate your efforts. We THANK W6MOS-Joe Pevney for his donation of equipment. Some of it can be used on our emergency packet network. THANKS to WF6L-Phil Leonelli for serving 3 years as our club secretary and KB6QC-Bob Brehm for serving as our club VP for 1 year and providing us with excellent club programs. The club appreciates your dedication and good works.

would install 147.360(+) and 446.750(-) tied into the L.A. basin for DARN members to use but we in San Diego would have control of the two machines for San Diego use by using a single PL. DARN members in S.D. or L.A. would use double PL and have full access to each area. We could hear DARN members talking in L.A. but we would not be able to talk to them without being DARN members(\$\$). As soon as we transmit a single PL tone, we could disconnect the system from L.A. and gain control of it for transmissions in S.D. (+5 seconds). In case of emergencies, we would be able to use the system into L.A. for emergency traffic.

###---REPEATER SITE NEWS---###

K6UAI-Eric's 147.735 repeater in our blockhouse is still suffering about 14 DB of desense from PARC's 146.730 repeater but is usable by stations running above 5-10 watts to an average base or mobile antenna. We hope to have the desense problem taken care of within a month or so by installing the proper filters. Keep us advised as to the usefulness of this repeater. Remember to put 146.730(-) and 147.735(-) in adjacent memories for easy switching of these frequencies.

For those of you who know our situation on Palomar Mountain, you know that we could not consider acting upon the DARN proposal until several things are done: 1) obtain more space for equipment, 2) complete our test with KA6UAI, and 3) modify our antenna mounting system on the 70' tower. Please keep us advised of your comments and feelings concerning the adding of more club and emergency frequencies for our use. Our goal is to provide emergency communications for San Diego County, to help all of Southern California during emergencies, and to provide communication channels to our members for their use.

The DARN group from Los Angeles has re-submitted their proposal to PARC for installing several repeaters in the block house. They now are indicating that they

73 de Stan, W 9 F Q N

 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 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. Tol' ya a hunnert times.

JANUARY CLUB MEETING

The program for the first meeting of 1988 will be DX and the Galapagos DX-pedition presented by Terry Dubson W6MKB - he of the giant antenna farm in Escondido.

+++++
 ACHTUNG! Club meetings are now BACK in the CAFETERIA instead of the gymnasium at Linclon Middle School.
 +++++

 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. Annual SCOPE subscriptions are \$3.00. 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.

DECEMBER CLUB MEETING

At the December club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report.

W9FQN informed the Club of the trial installation of KA6UAI's repeater in the PARC building on Mt. Palomar and its status on 147.735 (-). Stan also told us of the difficulties with the packet digipeater due to its antenna change. K6HAV reported that the Nominating Committee's slate of officers for the new year is: President, Stan Rohrer, W9FQN; Vice President, Ted Demos, N6CKH; Secretary, Jo Ashley, KB6NMK; and Treasurer, Ron Wilhelmy, WI6B, and placed their names in nomination. There were no nominations from the floor, and they were elected unanimously. Terry, K3PXX, gave us a very interesting and amusing "magic" show. Lu, AA6DI, who was obviously tired of all of the "no-cal" goodies we have mentioned in the Scope, brought a beautifully decorated no-cal cake for the Editor. It was a TRUE no-cal goodie since it was cardboard decorated with regular cake decorating material. A masterpiece of deception, it said: "K6HAV NO-CAL".

N6OPP's coffee, and all of the home-made and purchased HI-CAL goodies which were brought looked wonderful, and the ones I tasted were! A grand time was had by a whole flock (66) of us.

 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 radio 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 transient users.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the officers of the Club and the airmen 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 John, WB6IQS.

At the December meeting the Committee heard and approved the minutes of the previous meeting and the Treasurer's report. WF6L reported attendance at the December club meeting had been 66. The Committee authorized expenditure of up to \$300 to buy the cavity filter needed to eliminate desensitization of the receiver of the 147.735 repeater. W9FQN was authorized to purchase the Gordon West Novice book/tape sets previously to be purchased by WF6L. The Committee discussed further the possible tenant repeaters for the Club's site. WB6IQS reported uncertainty of the possible commercial tenant. W9FQN was directed to further explore the buying of a steel shipping container for use as an additional repeater building on the Club's Mt. Palomar site. A grand time was had by all.

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

UP-GRADES: John Egdahl, N6QMI, to Advanced from Tech; Bert Hall, KB6QOF, from Novice to General; Linda Sellers, KB6SAE, to Technician from Novice; Dan Parnell (awaiting first license) to Technician from Novice.

GNU CLUB MEMBERS: Bert Hall, KB6QOF, Fallbrook; Dan Parnell, (awaiting first license), Ramona; Dick McRay, K6VGP, Rancho Palos Verdes; Jeff "Shorty" Stouffer, K6JSI, Vista; B.C. "Red" Courtney, Oceanside; Ken Olson, WB6WON, Escondido; Norman Rath, N6QQF, Oceanside; Peter Berg, KG6JA, Carlsbad; Dennis Dauben, WB6WYR, La Mesa; Jack Crabtree, N6OPD, Carlsbad; George Lippert, KB6RI, Vista. Welcome, we're glad you're with us.

RENUDE MEMBERS: Merit Arnold, W6NLO; Gene Horrall, K6PP (through 7/90).

THOUGHTS ON HANDLING BOOTLEGGERS

de Dennis, N6KI

From time to time we have all heard suspicious sounding folks on the repeaters. In one situation the possible bootlegger uses a callsign. Do not try to scare this one away. Give him your phone number and ask him to call you or, if possible and better yet, try to get his phone number. If you don't want to use your phone number, give him mine (271-6079). Once you are on the landline with the suspect, find out who and where he is, and what rig he is using. Keep it casual. If he sounds sincere, but unlicensed, and you are convinced the rig is not stolen, advise him to cease transmitting and direct him to the nearest radio club, local Elmer or source of licensing material so he may start down the road to a license. Of course, if things sound phony or don't check out, make note of all of the information, write it up legibly and pass it along to the San Diego office of the FCC.

In the situation where the suspected station does not give a callsign, call another station and indicate that the suspect station sounds a little confused and should call on the phone so that he can be given some information about his radio, and give a phone number. Proceed as above.

 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 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.

FORESAIL

(Yawl ketch on?)

PERSONAL ADS FOR MEMBERS ARE FREE

Heil boom mike earphone combo wired for Kenwood xcvr, \$40. Call Allen, N7AMR, 434-5656.

Tubes: Two GE 6GB5/EL500s, four 1625s, two 807s. Swan 1040V tra vertical w/75M add-on, 15M 2-elm beam. Call Earl, K6CLU, 724-2827.

Ten Tec Argonaut 509 w/matching 405 amp. Both factory tuned and calibrated, \$300. Leave message for David, N6QCQ, at 582-6464.

Icom IC-451A 15W 430-440MHz all mode xcvr w/AC/DC supply, TT mic, \$295; KLM 13LBA-21' 2M ant., \$45. Call Bob, KB6QC, 931-8759 (leave msg).

Atlas 350XL w/AC pwr supply, \$450. Swan 500CX w/AC & DC pwr supplies. Call Clint, W6OFT, 729-0850.

14-elm 450MHz beam, \$25. TEST EQUIP.: BK 501A Semiconductor Curve Tracer, \$50; BK 3050 Audio Sine/Square Wave Gen., \$75; Sencore FE160 Senior Field Effect Meter, \$50; Heathkit Digital Design Experimenter, \$25; Philips PM-3212 dual trace 0-25MHz scope, \$200; Heath-Schlumberger SM-110C 500 MHz Programmable Frequency Counter, \$150. Call Ralph, K6HAV, 727-5866.

Atlantis 55 VHF marine radio telephone, \$300. Call Skip, K6RTD, 727-2374.

Heath HW-101 xcvr; Heath Numatic Key; Heath low-pass filter, Heath 6M xcvr; TRS-80 cassette player; and lots of misc. Commodore 801 printer; AEA PK-64A w/HF-64, never raced, \$300. Swan 700CX w/pwr supply, mint, recently rejuvenated by W6OFT, \$500. Commodore 801 printer; Tempo One 2M HT. Call Buck, WW6E, 941-0867.

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$200; Autek Research AF-1A audio filter; Heath EIA-416 dual trace 15 MHz scope no book, \$100; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$50; Yaesu YM-39 condenser hand mike, \$10. Call Ralph, K6HAV, 727-5866.

WANTED

Fiberglass quad arms. Call Bill, K6TQ, 727-1580.

Kenwood TH-21-series HT or other small HT. Call Ron, WI6B, 756-3133.

By Potter Junior High School ARC as a donation: C-64-compatible monitor for use with packet radio and for computerized amateur license testing. Call Phil, WF6L, 757-7008.

Icom IC-22A or 22S in working condx. Commodore 1520 4-color plotter. Copy of manual for Epson MX 80F/T printer. Call Dennis, N6KI, 271-6079.

REPEATER

The repeaters have had their winter check out and all appears to be well, according to Repeater Committee Chairman, John, WB6IQS. W9FQN intends to attempt to restore the packet digi-peater to its former usefulness. Antennas are the problem now according to Stan. The cold weather is stymieing any further work on the tower as this is written. WB6IQS and KB5MU are to get together to develop the capability to check the digi when the other repeaters are checked.

The FCC should be checking out the problems caused by K0JPK/R's strong, uncoordinated signal into San Diego County, which, by the way has been on the air without a break for hours at time over the weekend of 19-20 December (obviously a time-out timer is not part of the equipment at K0JPK/R!!) It behooves us all to comment on the sigs heard from this machine and the problems it has caused us over the past 7-8 years. Both San Diego and Long Beach offices of the FCC are aware of the problem and of K0JPK's refusal to cooperate in reduction of his repeater's unsqlchable signal into San Diego County. We hope they get an earful when they monitor 146.730 MHz!

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/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.

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. This repeater, like the PARC machines has battery back up. Feel free to use it.

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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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. Form 610 available from FCC or Club secretary. Bring ORIGINAL licenses and Certificates of Successful Completion.

VOLUNTEER EXAMINER PROGRAM

At our December tests your PARC examiner team administered 19 test elements to 11 applicants. Ten applicants passed 14 elements. Congratulations to club members John Egdahl, N6QMI, who up-graded to Advanced from Technician; to Linda Sellers, KB6SAE, who up-graded from Novice to Technician; and to new members Bertin Hall, KB6QOF, who went from Novice to General; and Dan Parnell, who went from Novice to Technician. Our test crew was: KI6ZM reception; WA6HYB CW exams; N6NNI, AD6Z and KS6S examiners; and K6HAV on the computer and the paperwork.

de Lou, AA6DI

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 Manager is N4KRA. Liaison stations needed.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 MHz each Tuesday 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 146.730MHz 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.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 12/1/87: AA6FP, KJ6BI, N6QXU, KB6UVZ.

DOWN THE TOOBE

Joe, WB6HMY, is under the weather with kidney stones. As a result we had no 75M ARES net a couple of Sundays ago. For lack of a nail (or maybe a stone?)..... Hope you are up and about soon, Joe.

We were sorry to learn of the passing of former PARC member/long tim Carlsbad resident Gene Holzenberg, K7PQ (formerly WB6PFO) on the 25th of November in Oregon, where Gene has lived during the past 10 years or so.

Alice, XYL, of Joey, NU6L, has passed the Novice exam and is awaiting her first license. Congratulations and we're waiting to hear the new call - and the "temporary KT" when the Tech test is passed!

HAPPY NEW YEAR

"That's all", she wrote!

 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.

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.

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

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. 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.

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AND WISH YOU A VERY HAPPY HOLIDAY SEASON. COME AND SEE US.

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— ELECTRONICS —

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BYTES 'N PIECES

By Paul Williamson, KB5MU

The most commonly asked question on the Packet Voice Net (Tuesday 2100 local time on 146.73, except the 2nd Tuesday of each month) is "Why is half the data I monitor on packet meaningless gobbledygook?" The answer is usually that you're listening to stations exchanging what we refer to as "binary data". This term is used to describe information that is not in human-readable text form. It might be a computer program, or a compressed text file, or some special protocol information. If you hear NET/ROM nodes; (such as SAN:W6AMT-4, DELMAR:N6NKF-1, or LJOLLA:KA6IQA-1) you will notice they often send seeming gibberish to each other. This is the internal protocol of the NET/ROM network. They are exchanging information about the user connections and network interconnections the network maintains. Sometimes you will see gibberish followed by readable text in the same packet. This is usually user data being passed between two NET/ROM nodes.

If this data seems to confuse your computer, you should be able to avoid the problem by changing some parameters in your TNC. Most of the recent TNCs have a command called MFILTER that will delete selected characters before sending data to your computer. Likely candidates for characters to MFILTER include \$LB ("escape"), \$0C ("formfeed" or "clear screen"), and \$07 ("bell").

Some very recent TNCs can filter out packets based on the Protocol ID (PID) field in each packet. This allows you to ignore all NET/ROM internal packets. Look for this feature to appear in new releases of TNC software for other brands.

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These officers are your 1988 representatives. Call them if you have questions, comments, or suggestions about our club. They need your input and support to be effective. The next Executive Committee meeting is at 7:30PM: W9FQN, February 11th, Valley Center.

>>>>>>— President's Message —<<<<<<<

###—POTPOURRI—###

###—EARTHQUAKE—###

We would like to establish an earthquake net on 146.730 immediately after any earthquake. We will need from each station reporting in the following three items: 1st) the exact time the disturbance passes you to the nearest second, 2nd) a MARK time to the nearest second, and 3rd) your location.

The recent storm left 360,000 SDG&E customers without electricity. Our house was without electricity for 55 hours except for our emergency 12VDC backup power. If this is what a "little old storm" can do, can you imagine what would happen with an earthquake of 6-7? There would be no HEAT, COOKING, WATER, BATTERY CHARGERS, etc. for long periods of time. ARE YOU PREPARED?

The net control station will come on the air and announce the taking of data after 3-4 minutes. The net control will say "MARK" at which time you should write down your time to the nearest second. The net control will know the correct time and will convert your observation over to the correct time.

###—REPEATER SITE NEWS—###

An all metal cargo container costing \$2,000 measuring 8'x8'x20' has some advantages: no building permit, immediately set up, little foundation requirements, good shielding (EMI) and grounding, better lightning protection, not a permanent structure if we decide to change things, can be placed next to the tower saving 150'(30'x5) of hard line, etc. Can you add any? Note that another cement block building would take a building permit, plans, an increase in taxes, and a lot of people with time to construct it.

After all data is collected, the net control will look at the data and compare it with pre-calculated data to make an estimation of which direction the epicenter is from us and where it might be located. It is very important that you get the QUAKE time and MARK times to the nearest second or they won't do us much good. The "P" wave travels at 5mi/sec and the "S" wave at 3mi/sec. If you could give us the time difference between the "P" and "S" waves we would be able to tell you how far away the epicenter is from you. Look for the difference.

Disadvantages: needs insulation for heat/cold and moisture barrier, neighborhood complaints (looks?), etc. Can you add any others we have missed?

73 de Stan, W 9 F Q N

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FEBRUARY CLUB MEETING

The program for the February meeting will be presented by Herb Johnson of Victor Radio. Herb, who as many of us know, owned and operated both Swan Electronics and Atalas Radio, will tell us about his new transceiver for maritime use. Show and tell will feature CB to 10M SSB conversions; and Charging NiCads easily.

This will probably be the last meeting for Bill, N6OPP, who is moving to Maaantana or some such sea port. We're going to miss you and your good coffee and goodies, Bill.

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We heard from Terry Dubson, W6MKB, who gave a most interesting illustrated talk on his antenna installations and on DX-peditions. If you haven't heard Terry's talk, you don't know what an antenna farm is!

N6OPP's coffee, and all of the home-made and purchased HI-CAL goodies which were brought looked wonderful, and the ones I tasted were! A grand time was had by a whole flock of us.

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At the January meeting the Committee heard and approved the minutes of the previous meeting and the Treasurer's report. The Equipment Fund has \$3,200 in it. The new decoder for repeater control has been started and will add eight new functions to the control capability. Future plans for the repeater site were discussed. The lack of documentation for KA6UAI/ and its effect on test on this machine (147.735) were discussed. W9FQ

indicated that the packet digi-peater was now using a pair of phased Yagis with better results reported to the area east of San Diego. The operation of W200NWG on 3-9 September, 1988 was discussed.

A grand time was had by all.

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

GNU CLUB MEMBERS: Roy Levesque, N6LWD, San Diego; Don Hulbert, W6NQZ; Orlando Vernacchia, N6QVW, San Diego; Warren De Soto, Oceanside; Patrick Mead, KB6SQR; John Hudson, KB6TOX; Aubrey Stewart, W6ODG, San Marcos; Don Clark, KB6QEW, Cardiff; Richard Payne, Leucadia; John Hudson, KB6TOX. Welcome, we're glad you're with us - especially to long ago members W6NQZ and W6ODG.

RENUDE MEMBERS: Russ Krebs, W6HZJ; Lee Willis, N6K GK; Wally Cook, N6JZB; Frank Cassen, N6AT (you're good to 7/90 now, Frank); Dennis Wong, N6KVY.

GNU CALL SIGNS: Loreen Wilhelmy, N6RAO vice KB6UKD.

 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.

FORESAIL

(Yawl ketch on?)

PERSONAL ADS FOR MEMBERS ARE FREE

Kenwood PC-1 phone patch, \$15; Heil EQ-200 mic equalizer, \$25; MFJ Grandmaster Memory Keyer, \$85; Vibroplex key, \$40; Heathkit 2060 2 KW antenna tuner, \$165; Swan Mark II linear and extra set of tubes, \$395; HAL 2550 Electronic Keyer, \$35; ICOM IC255A 2m mobile and bracket, \$150; Palomar noise bridge, \$30; Kenwood MC-50 mic, \$30; Kenwood TR-7950 w/PL & TT mic, \$235; Vista 20A pwr supply, \$35; Hustler 4BTV, \$35; Hustler CGT-144 7/8 wave 2M mobile whip, \$17.50; AR22 rotor, \$25; Eico RC checker, \$10; Heathkit Audio Generator w/meter, \$10; Heathkit field strength meter, \$5; ICOM HM10 scanning mike, \$15; 2KW low pass filter, \$15; Slugs for Bird wattmeter (100D, 250C, 1000H), \$35; 9" video monitor, \$30; Call Bob, KB6QC, 931-8759 - leave message.

Heil boom mike earphone combo wired for Kenwood xcvr, \$40. Collins KWM-2 R/E AC pwr supply; Collins 312B-4 W/E Station Control; Collins W/E S-Line w/ 516F-2 pwr supply. All mint. Kenwood TS-670 Quadbander 40-15-10-6M w/hand mike. Fine condx. Astatic "Silver Eagle" mike. Kenwood power meter SW-200 w/SWC-1 (1.8-150 MHz) and SWC-2 (140-450 MHz) couplers, fine condx. Drake WH-7 power meter, mint. Call Allen, N7AMR, 434-5656.

Tubes: Two GE 6GB5/EL500s, four 1625s, two 807s. Swan 1040V trap vertical w/75M add-on, 15M 2-elm beam. Call Earl, K6CLU, 724-2827.

Ten Tec Argonaut 509 w/matching 405 amp. Both factory tuned and calibrated, \$300. Leave message for David, N6QCQ, at 582-6464.

Icom IC-451A 15W 430-440MHz all mode xcvr w/AC/DC supply, TT mic, \$295; KLM 13LBA-21' 2M ant., \$45. Call Bob, KB6QC, 931-8759 (leave msg).

Atlas 350XL w/AC pwr supply, \$450. Swan 500CX w/AC & DC pwr supplies. Call Clint, W6OFT, 729-0850.

TEST EQUIP.: BK 501A Semiconductor Curve Tracer, \$50; BK 3050 Audio Sine/Square Wave Gen., \$75; Sencore FE160 Senior Field Effect Meter, \$50; Heathkit Digital Design Experimenter, \$25; Heath-Schlumberger SM-110C 500 MHz Programmable Frequency Counter, \$150. Call Ralph, K6HAV, 727-5866.

Atlantis 55 VHF marine radio telephone, \$300. Call Skip, K6RTD, 727-2374.

Sine/Square Wave Gen., \$75; Sencore FE160 Senior Field Effect Meter, \$50; Heathkit Digital Design Experimenter, \$25; Heath-Schlumberger SM-110C 500 MHz Programmable Frequency Counter, \$150. Call Ralph, K6HAV, 727-5866.

Atlantis 55 VHF marine radio telephone, \$300. Call Skip, K6RTD, 727-2374
Heath HW-101 xcvr; Heath Numatic Key; Heath low-pass filter, Heath 6 xcvr; TRS-80 cassette player; and lots of misc. Commodore 801 printer; AEA PK-64A w/HF-64, never raced, \$300. Swan 700CX w/pwr supply, mint, recently rejuvenated by W60FT, \$500. Commodore 801 printer; Tempo One 2M HT. Call Buck, WW6E, 941-0867.

Kenwood TR-7800, \$200 and TR-7400, \$150. Both 25W 2M FM xcvrs. Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$200; Autek Research AF-1A audio filter; Heath EIA-416 dual trace 15 MHz scope no book, \$100; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$50; Yaesu YM-39 condenser hand mike, \$10. Call Ralph, K6HAV, 727-5866.

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

WANTED

Fiberglass quad arms. Call Bill, K6TQ, 727-1580.

Kenwood TH-21-series HT or other small HT. Call Ron, WI6B, 756-3133.

By Potter Junior High School ARC as a donation: C-64-compatible monitor for use with packet radio and for computerized amateur license testing. Call Phil, WF6L, 757-7008.

Icom IC-22A in working condx. Commodore 1520 4-color plotter. Call Dennis, N6KI, 271-6079.

J-38 straight key. Call Don, KB6OXS, 723-8319.

DM-81 grid dip oscillator; manual for Heathkit impedance bridge IB-2A. Call Mark, N6NNI, 748-8391 evenings.

JOIN THE ARRL

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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. This repeater, like the PARC machines has battery back up. Feel free to use it.

CO-LOCATED WITH W6NWG/R AND WD6HFR/R is KA6UAI/R on 147.735 (-) which is also available to PARC members during its six months trial period in the PARC repeater building. Its use as a W6NWG/R overflow machine is encouraged during this test time.

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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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 Successfu

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.

VOLUNTEER EXAMINER PROGRAM

At the January tests our PARC examiner team administered 12 test elements to seven applicants. Seven elements were passed. Congratulations to club members John Hudson, KB6TQX, who up-graded to Technician and Richard Payne who went from no license to Tech with credit for Element 3B.

Our test crew was: KI6ZM reception; WA6HYB CW exams; WI6B, N6INN, and N6NNI examiners.

de Lou, AA6DI

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GRATUITIOUS COMMENTS ON QUASI-EMERGENCY OPERATIONS ON W6NWG/R

During a semi-emergency operation on the repeater last year, many club members and others performed yeoman service.

Most of the operators were good and the repeater was used efficiently. A few cases of discourtesy and poor operating techniques were noted, however. One op (NOT a PARC member, thank goodness) learned the CW/RTTY pro-sign "QSL" early in his time as a ham, but unfortunately did not learn the pro-word equivalent ROGER. Both, of course, mean "I have received your last transmission or message". Neither means "I understand and will comply". Pro-signs are for CW and RTTY where they serve to abbreviate the transmission. Pro-words do the same thing for voice communications. The ham under discussion obviously had an infectious affliction/disease because very shortly others (including a PARC member or two) were using "QSL" to the point that many turned off their radios to prevent self-incineration.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 1/1/88: AA6GH, KJ6CJ, N6RDW, KB6VKQ.

DOWN THE TOOBE

Congratulations to Phil, WF6L and to Tim, KI6GI, both of whom have become proud new papas. Phil and his wife had a seven and one-half pound son on January 4. Tim and his XYL are the proud parents of a new baby girl.

WF6L reports that thieves broke into Potter Jr. High in Fallbrook and, in addition to every VCR in the school, took all of the amateur radio equipment. Phil says that the school's insurance will replace what was lost.

"That's all", she wrote!

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.

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.

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

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. 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.

Just because I'm not paranoid doesn't mean they aren't after me!

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POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWX
Scope

REPEATERS FOR USE BY PARC MEMBERS:
KA6UAI: 147.735(-), SARG
WD6HFR: 224.900(-), 220 CLUB OF S.D.
W6NWX: 145.050(PKT), 146.730(-), 449.425(-)

VOL. XXII, NO. 3
MARCH, 1988

1936-1988

EDITOR: K6HAV

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS:
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	WB6IQS, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	W9FQN, KB5MU, WA6KZN
TREASURER: RON WILHELMI, W16B, RANCHO SANTA FE, 756-3133	KA6UAI, W16B, KB6AI

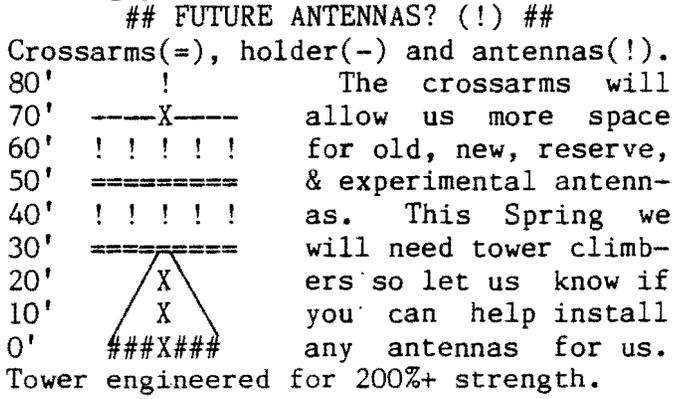
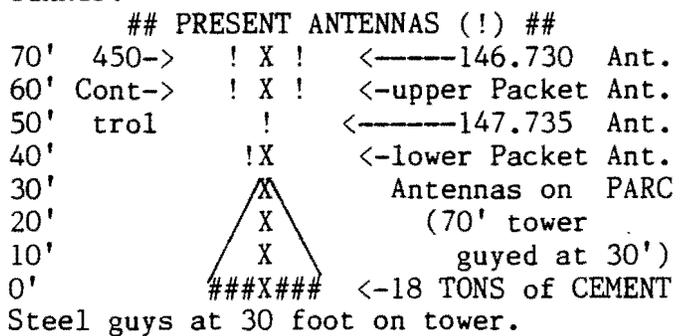
THESE OFFICERS ARE YOUR 1988 REPRESENTATIVES. CALL THEM IF YOU HAVE QUESTIONS, COMMENTS, OR SUGGESTIONS ABOUT OUR CLUB. THEY NEED YOUR INPUT AND SUPPORT TO BE EFFECTIVE. THE NEXT EXECUTIVE COMMITTEE MEETING IS AT 7:30 PM: KB6NMK, MARCH 10TH, ESCONDIDO, 741-2560.

>>>>>--- President's Message ---<<<<<<
###---REPEATER SITE NEWS---###

We are still looking into a metal cargo container for a repeater site building vs building a cement block building for our exact needs and shielding the inside of it with foil and/or conductive paint.

WB6IQS-John Kuivinen, our repeater technical chairman, has installed a borrowed filter from WA6QQQ-Bob Gonsett in the transmitter output of our 146.730 repeater apparently curing completely the -4DB desense of KA6UAI-Eric's 147.735 repeater located two feet from the 146.730 repeater. The antennas are separated by about two feet vertically. Testing indicates both machines can operate from the same location even though the 147.735 input (147.135) is only 395KHz away from our 146.730 transmitter. PARC has bought a filter to replace the borrowed filter from WA6QQQ. The KA6UAI/R machine can now be used by HT's from almost any location where the 146.730 machine can be used. Preliminary tests seem to indicate the 146.730 still has a greater radiated signal into most areas and better receive sensitivity due to the 146.730 machine having better equipment and a higher antenna. A working agreement between PARC and KA6UAI-Eric has still not been completed. Your comments and suggestions are welcome.

The following is our present antenna configuration for our repeaters. The 220 club is on a separate pole near the bunker.



There can be only so many two meter machines operating from one building and tower and we now know that this number is at least three: 145.050, 146.730, and 147.735.

73 de Stan, W 9 F Q N

MAR 88

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 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. Tol' ya a hunnert times.

MARCH CLUB MEETING

The program for the March meeting will be presented by Larry Cox, WA6AIL, on amateur radio operation for the visually handicapped. Show and Tell will feature 10M SSB conversions from CB rigs, and a cheap headset/boom mike combo for HTs or mobile operation.

The coffee pot and coffee will be present, but someone is going to have to step forward and make the coffee or there won't be any..... Call Stan, W9FQN, if you can help.

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. Annual SCOPE subscriptions are \$3.00. 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.

FEBRUARY CLUB MEETING

At the February club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Bill, N6OPP, announced that this was his last club meeting as "Keeper of the Coffee Pot" as he would soon be leaving for Utah. Brian, KF6C, demonstrated a low noise active antenna system usable over a broad frequency range from LF to VHF. Stan, W9FQN, told us about NiCads and their care and feeding. Herb Johnson, W6QKI, told us about his new radio and demonstrated a prototype of it.

Notable at this club meeting was the large number (16) of newcomers, both to the Club and to ham radio. There were also 63 members in attendance.

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 KB6NMK.

At the February meeting at the home of W9FQN, the Committee heard and approved the minutes of the previous meeting and the Treasurer's report. The Committee voted to continue the KB6UAI/R 146.775 MHz test for another 90 days with agreements to be put in final form. No new antennae to be added to tower until crossarms are in place therefore. Due to the increased custodial fee at Lincoln Middle School, future Amateur Radio Licensing Courses will not be held there.

A grand time was had by all, with reduced strength Committee doing yeoman service in disposing of pie and ice cream meant for many more. Nasty job, but someone hadda do it!

 THREE REPEATERS, two W6NWG/R, are owned and operated by the Club. One has 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 radio 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.

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

GNU CLUB MEMBERS: Richard Carey, W6GHD; N.W. Smith, N6HWK, San Diego; Larry Davis, W6QCA, San Diego; Russ Lowell, WB6IOV, Carlsbad. Welcome, we're glad you're with us.

RENUDE MEMBERS: Don Smithana, W9FFG; Gerry Earl, N6LYX, who has just upgraded to Advanced. Congrats, Gerry.

GNU CALL SIGNS: Pat Stedman, N6RHS, vice KB6OXZ.

REPEATERS

John, WB6IQS, and KA6UAI went to the mountain on 1/24 to test the desense problem on KA6UAI/R, the 147.735 repeater. 9dB of desense was measured on that machine when the 146.73 W6NWG/R was transmitting. Peaking and tweeking KA6UAI/R gained about 6 dB in sensitivity for 20 dB of quieting (now about .25 uV.); and the transmitter was retuned to Motorola specs. A pass cavity, loaned by Bob, WA6QQQ, solved the desense problem when put in the transmit line from the .73 machine. The loaned cavity is in line and will be replaced soon by a like cavity currently on order.

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(Yawl ketch on?)

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Swan 600 TX & RX, phone patch, WM-1500 wattmeter, Dentron Super Tuner, MFJ 8043IC keyer, misc. mikes, keys, earphone, tubes. \$400 takes all. Heath HW-99 cw xcvr, Heath SP-99 spr HM-9 wattmeter HFT-9 ant. tuner, all assembled and tested, \$300. Call Jack, WD0DLW, after 5:00 p.m. 728-2444.

MFJ EQ 300 adjustable mike equalizer. New, never raced, \$40 OBO. YAESU FRT-7700 antenna tuner for Yaesu FRG-7700, \$50 OBO. Cost \$100. Call Joe, WA6VNR, 278-2752 any time or leave msg.

Collins 312B-4 W/E Station Control; Collins W/E S-Line w/ 516F-2 pwr supply. All mint. Astatic "Silver Eagle" mike. Drake WH-7 power meter, mint. Call Allen, N7AMR, 434-5656.

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At the February tests our PARC examiner team administered seven test elements to five applicants. Three passed a total of five elements.

Our test crew was: KI6ZM reception; WA6HYB & W6YYV CW exams; KB5MU, W6KCB, and NU6L examiners; and K6HAV paperwork. de Lou, AA6DI

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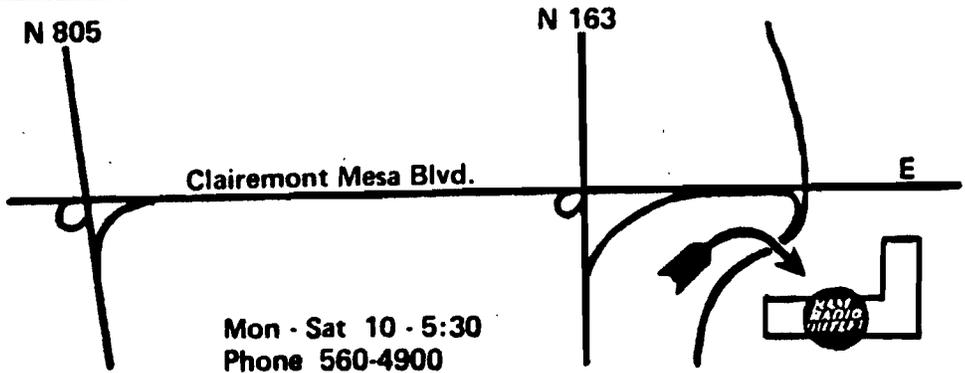
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THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 2/1/88: AA6GR, KJ6CY, N6RIV, KB6VQG.



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 - YAESU FT-2700.....DUO-BAND 2M/450mHz
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MAR 88

DOWN THE TOOBE

Dennis, N6KI, passed along a letter from former member WA1CSO who moved back to New England into a house that's too small. He does hope to have a tower up by spring, but has no room for the amplifier. Joe sends regards to the the PARC gang

The Editor has had a rather lengthy bout with an intestinal bug, perhaps flue (pun intended), so you'll have to excuse the typos as I've lost 5-6 pounds in as many days and my blood pressure is sub-normal rather than high. Maybe not enough blood to the brain ("Wot brain?", 'e sez). Not to fear, we've bitten the bullet and are trying to regain some of the lost poundage although it's a real test of the will - forcing down all of that otherwise-forbidden Dryers!

"That's all", she wrote!

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W6NWX
Scope

VOL. XXII, NO. 4
APRIL, 1988

1936-1988

EDITOR: K6HAV

K6GUA1: 147.735(-), SARG
WD6HFR: 224.900(-), 220 club of S.D.
W6NWX: 145.050(Pkt), 146.730(-), 449.425(-)

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS:
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	WB6IQS, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	W9FQN, KB5MU, WA6KZN
TREASURER: RON WILHELMY, W16B, RANCHO SANTA FE, 756-3133	K6GUA1, W16B, KB6AI

These officers are your 1988 representatives. Call them if you have questions, comments, or suggestions about our club. They need your input and support to be effective. The next Executive Committee meeting is at 7:30 PM: KB6NMK, April 14th, Escondido, 741-2560.

>>>>>>— President's Message —<<<<<<

###—FIRE—###

Palomar Mountain WILL BURN again! The history of Southern California and Baja, Mexico, indicates that approximately the same number of acres burn in each locality each year. In Baja, the fires are small and quickly burn out because Baja is a checkerboard of new and old burned areas. In Southern California we immediately try to put out the fire which allows the land to become saturated with un-burned materials resulting in thousands of acres being burned in UNCONTROLLABLE fires when they do burn. The north end of Palomar will not burn in an uncontrolled manner for many years but the south end where we and other amateur radio repeaters are located WILL BURN sometime in the near future. Our site will sometime be overrun with an uncontrollable fire. PARC did not "Bug-out" during the Palomar fire although it certainly crossed our minds. Instead, we chose to go up to the mountain to charge batteries and leave the repeaters on the mountain feeling that if they saved one life before they were overrun with fire that they would have served their purpose. Other repeaters did "Bug-out" because of the lack of AC power (no battery reserves) and the fear of being overrun by the fire.

prepared to stay through FIRE, EARTHQUAKE, SNOW, and POWER OUTAGES which means the bunker site must be hardened more than it presently is if we are going to withstand the assaults of man and mother nature. The Executive Committee has already decided not to buy a cargo container or construct a new building but to add to the present bunker a battery compartment for increased battery storage and to remove the battery fumes from the electronic equipment room. The money saved will be used for other projects at the site. We also want to replace the wood roof with a cement slab after extending the walls three feet higher for filters and then plaster the block building so that any fire will blister the plaster and not cause the cement blocks to explode from the moisture within them when heated by the intense heat of the fire. Your ideas, support, and help with these projects will be needed in the near future.

###—OLD TIMERS—###

There is a rumor that some of the founding fathers (1936) of the Palomar Amateur Radio Club might be coming to our next meeting. Why not come out to see what a real "Old Timer" looks like after fifty-two years of being a ham and what exposure to electromagnetic radiation (radio active?) will do to a person. ALL OLD TIMERS are encouraged to come to this next meeting to help us find the oldest OLD TIMER at the club meeting.

The PALOMAR AMATEUR RADIO CLUB repeaters on Palomar Mountain are slowly being

APRIL 88

###—FIELD DAY 1988—###

At our next meeting an item of new business will be the club's participation in Field Day. We will survey the membership attending the meeting for their views on: 1) our FD site, 2) transmitter class of 4A or as many as we can put on the air, 3) food, 4) novice operation, 5) CW operation, 6) antennas, 7) work schedules, 8) sleeping areas, etc. This will be a chance for you to influence our club's FD operation.

###—PICNIC—###

Remember the PARC picnic in August when we have a drawing for prizes according to the number of events (one ticket for each event) you have attended with the club: club meetings, Field Day, membership renewal, picnic, etc. IT IS YOUR RESPONSIBILITY TO SIGN-IN AT EACH APPROVED CLUB EVENT SO THAT YOU GET THE PROPER NUMBER OF TICKETS FOR THE DRAWING. We can only give you credit when we have your signature on an approved attendance sheet.

###—DIRECTION FINDING—###

I have just received a Commodore C64 and C128 radio direction finding (RDF) assistance program on disk from Joseph Francis-WB6SZK. This program is used in the LA area for finding locations of unknown signals from group beam headings. It looks as if the program could be put to good use in the SD area when conditions warrant it. If you would like a copy of the disk to see how the program works, please contact me. I will have the disk with me at the next club meeting.

###—REPEATER SITE NEWS—###

Eric's 147.735(-) repeater (KA6UAI/R) seems to be working fine with the new filter installed in our 146.730(-) transmitter output removing most of the "white noise" generated by our transistor power amplifier that was desensing the .735 machine. We hope that more of our members will go "up one" (+1.005) and give the new repeater some use when .730 is busy. Also, we hope that the national traffic system net members at 8:00 p.m. each evening will

feel free to have some of their excess traffic passed on .735 whenever possible. It certainly would speed up net operations when there is a lot of traffic to be passed.

###—MEMBERSHIP—###

Club membership is now over 340 and we should be quite a bit above 350 (a record) by July 31st. The club wants to thank all of you who extend the hand of club membership to those strangers that you talk to on the repeater or who you meet face to face. A strong club means more support for amateur radio activities that the club is involved in. Contributions of a little \$\$\$ and time here and there add up to large sums of resources that can accomplish large tasks that any one of us individually would probably not be able to do. When everyone worked together on the buying of the repeater site, we were able to purchase an expensive piece of real estate on Palomar Mountain for our repeater site activities.

The club is getting large enough that we can use some more help with membership tasks. Our treasurer, Ron-WI6B, can use help and we can use someone to help us with membership services at club meetings. Here is an excellent chance for several club members to learn more about the club operation and provide a real service to the club. If you would like to be of service to the club, contact me or one of the officers and let us know your interests and talents.

###—CLUB MEETINGS—###

Club meeting attendance after three months is an 88 average compared with a 67 average attendance of three years ago. Club meetings are a chance for you to meet your fellow hams as well as being introduced to amateur radio programs of interest. We hope that you will let Ted-N6CKH know about what type of programs you are interested in having at club meetings. He would also like to have help in obtaining programs so if you have knowledge of a good program, please contact Ted as soon as possible so that he can make the proper connections.

We try to have an abbreviated business meeting, announcements, and Show-and-Tell between 7:30 and 8:00 p.m. The program is usually between 8:00 and 8:45 so that you can leave before 9:00 p.m.

Most of the routine club business is conducted at the Executive Committee meetings with only important items being brought before the club for approval. If you have anything that you would like to have the club address, please contact a club officer or come to our Executive Committee meetings on the Thursday following the week of the club meeting. It is your club and we should be addressing your needs. We are looking forward to your participation in club activities.

We desperately need someone to help with the Coffee. How about one of you coffee drinkers volunteering to work with several others so that you only have to do it once every 3-4 months. Then we will only have to look for someone or group to help with the snacks.

Bill-N6OPP has been taking care of the snacks and coffee this past year and has done an outstanding job but since he is going back to the mid-west soon, we really need a replacement. Life is really simple: no help, no coffee!

###---MEMORIAL STATION/etc---###

From time to time there are individuals in a large group such as ours that have the means to donate at the time of their permanent investigation of the "ionosphere and beyond" something of value to amateur radio. Suggestions might be: 1) a Memorial Amateur Radio Station using your call, 2) another repeater site property, 3) a repeater, etc. We might also even consider a Memorial Fund where the \$\$\$ are deposited in an account where the club can only use the interest for specific club projects without touching the principal.

Be sure to see us if you have any suggestions on how this might be done.

###---KING HENRY'S ROUNDTABLE---###

King Henry's Roundtable(KHR), alias the

FACETIOUS NET, which meets each evening as the spirit moves them, is going to have their next get-together at Marie Callenders, Del Mud, on April 19th at 7:00 p.m. Check in some evening on 146.730 for the latest information. This is a good chance to meet some of the late evening two meter gang "up close". Since King Henry's Roundtable has moved into the late evening time slot on 146.730 filling the evening hours with wit, nonsense, owl reports, and facetious comments, late night travelers are never lonely and always have a group of home stations ready to help out with any emergency that you might have. It wasn't too many years ago when I could travel from San Diego to Valley Center during the late evening hours without hearing a station on our repeater. Then there is the morning Owl, Guy-KB6AI, who recently broke into a conversation at 2:30 a.m. that I had with Susan-N6QDB and Barbara-KA6FPS!

KHR's last get-together was on February 20th in Mexico at a beautiful restaurant about five miles below Rosarito Beach where good meals were enjoyed by all at the "La Fachada" restaurant piano-bar. Those attending were: W6OFT & N6QJE, N6QVW & XYL, HB9DGI, N6KI & N6QVV, KB6MME & WA6VNR, KB6OXS & XYL, KB6DGR and friend, N6CHR, KB6PCF & W6SAX, NOCPS & NOEVV, N6CKW & friend, KA6FPS & W9FQN, N6GZI for water, W7HGS, and K6UL (according to the sign-in sheet). We all celebrated Marsh-W6SAX's surprise birthday party and everyone had a good time. It was rumored that there were 50 candles on the cake.

###---SANDARC---###

The Palomar Amateur Radio Club is a member of the San Diego Amateur Radio Council (SANDARC). SANDARC will again be hosting the 1990 Southwest Division Amateur Radio Relay League (ARRL) convention the last weekend in August of 1990 and they are now looking for amateurs to chair various committees. If you are interested in contributing to amateur radio over the next two years as a chairman of a committee, please contact me as soon as possible. We are very happy to see the Escondido Amateur Radio Society (EARS) has again joined SANDARC after a long absence. SANDARC's total liabilities and capital is \$51,000.

SANDARC will be hosting the Two Meter Spectrum Management Association (TASMA) meeting in Vista this Spring (June?) at the Lincoln Middle School which is being arranged by the Palomar Amateur Radio Club. TASMA coordinates all two meter repeaters in Southern California so be sure to spread the word to your friends on other repeaters about TASMA being here in the area this June. PARC is also looking for additional SANDARC representatives from our club to represent us at SANDARC meetings.

PARC is looking for a member who would be willing to take over the club's North County Amateur Radio Emergency Service (ARES) operation. At present we have lots of helpers who are willing to serve but no one who is willing to take charge of the effort.

###---TIME CAPSULE, 200th---###

Larry DeMontegue (WQ6V) has suggested that we bury a time capsule at the repeater site on Palomar Mountain with club memorabilia: pictures of founders of the

club, membership list (after Aug 1st), list of donators to the repeater site, etc. Anyone interested in helping with this little project? We could possibly use a PVC pipe with end caps as the container.

###---K6HAV---###

Ralph-K6HAV has been the editor of the SCOPE for the past fifteen years and used to produce the first copies of the SCOPE on his teletype machine. He has been a faithful editor serving the club and its many officers through "thick and thin". I would like to take this opportunity to express on behalf of the club its appreciation for the countless hours of work on an excellent newsletter and for his devotion to club projects and needs. Ralph is out of town at the time that this newsletter is being produced because of a death in the family. Otherwise, he would never let me get these comments into the SCOPE.

73 de Stan, W 9 F Q N

---CLUB MEETINGS---

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 Street in Vista. Parking is available in the main lot accessible from East Vista Way; and in the City Hall parking lot across from Escondido Street from the School. Talk-in is on 146.730. Visitors are welcome. MEETINGS ARE NOT A FUNCTION OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. Tol' ya a hunnert times. VUSD requires that we print that statement.

---APRIL CLUB MEETING---

The April Club meeting will be THE WONDERFUL WORLD OF AMATEUR MICROWAVE COMMUNICATIONS by Ed Munn, W6OYJ, along with Kerry-N6IZW demonstrating the new microwave beacon that will soon be installed at the club's repeater site on

Palomar Mountain. SHOW-AND-TELL will again feature interesting things by club members and we have given up on Henry-WBOYCQ bringing in his CB to LOM modified rig!

---MARCH CLUB MEETING---

At the March club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Clint-W6OFT, and John-W6SE, were introduced as founding club members. John-WB6IQS, displayed the new cavity purchased to eliminate desense on the 147.735 machine. During Show and Tell, a LOM HT, a J-pole antenna and a discone antenna were shown and told. Larry Cox, WA6AIL, showed us some of the specially made equipment used by the visually impaired in operating amateur radio. Larry is a control operator for SANDRA. He also explained how to use the Sharps auto-patch repeater for emergency phone calls. There were 88 folks in attendance. Quite a turnout.

==CLUB MEMBERSHIP==

Membership in the Palomar Amateur Radio Club is \$12/yr (\$1/mo) with no initiation fee, and includes a subscription to the SCOPE. Family memberships are \$12 for the first family member, and \$9.00 (\$.75/mo) for each subsequent member at the same address. The club year starts August 1st. Annual SCOPE subscriptions are \$3.00. 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.

==EXECUTIVE COMMITTEE MTG==

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 Jo-KB6NMK.

At the March meeting at the home of Jo-KB6NMK, the Committee heard and approved the minutes of the previous meeting and the Treasurer's report. The Committee voted to hold in abeyance any further plans for construction of additional buildings on the Club's property; and to construct racks on the exterior of the repeater bunker for the backup battery system. The Committee also voted to construct a fire resistant roof for the building. Stan-W9FQN announced that Lou-AA6DI was resigning as the Club's VE Team Leader. Ted-N6CKH reported on his attendance at a recent TASMA meeting. The Vista ordinance limiting antenna/towers to 35' was also discussed. It has apparently been tabled for the moment. The cookies were deeeelicious!

==MEMBERSHIP INFO==

GNU club members: Frank Azmann, KA9HDI, Carlsbad; Mitch Kwietniewski, K6UL, San Diego; Mac McCarthy, NH6EW, Oceanside; Doug Gordon, K6PUN, Carlsbad; Russ Braun, N6GPJ, San Diego; B.J. Neely, KB6VXD, Chula Vista; Harlo Hunter, KB6PLG, San Diego. Welcome, we're glad you're with us.

RENUDE club members: Doc Burton, AH8AD; Mel Hanson, KD6QJ.

==REPEATER TECHNICAL==

John-WB6IQS went to the mountaintop and did good things, but found that our control antenna had not weathered the winter too well. An immediate expedition is being mounted (don't think they'd go on foot, do you!) to go forth and do good so that our antenna will again be operationable. John reports that all else is well, but that the building needs to be cleaned out of surplus junque. Fire prevention brush clearing will soon be needed.

==VOLUNTEER EXAMINER PROGRAM==

At the March tests our PARC examiner team administered 11 test elements to six applicants. Four passed a total of six elements. Congratulations to club member Joe-KB6OXW, who passed his General Class exam.

Our test crew was: Tod-KI6ZM reception; Dan-WA6HYB CW exams; Pat-N6INN, John-NW6W, and Ralph-K6HAV examiners; and K6HAV paperwork. de Lou-AA6DI.

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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South County test locations available from SANDARC-VEC.

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.

==FORESAIL (Yawl ketch on?)==
(personal ads for members are free)

World class DX station. 160M-450MHz w/4000 sq ft house, swimming pool, 6-car garage, 13 acres of oranges, 15 acres of horse facilities and stables. Contact Ed-W6KCB 749-0510.

Kenwood 2550A (45 watts) w/PL, mint condx, \$310; Astron RS-35M pwr supply, mint, \$100. Call Tom-N6NNQ 456-1910.

Microwave power meter HP430C w/matching HP477B power head 10MHz-10GHz, 10MW max., \$350 OBO. Audio distortion analyzer/AC voltmeter Heathkit IM-5248, nearly new w/manual, \$50. Early 60s vintage TV3 C/U mutual conductance dynamic tube checker w/good chart and works, \$20. Call John-WB6IQS 758-3519.

Kenwood TS-820X, \$450; Turner 252 desk mike, \$30; 5-band flagpole antenna, \$25; Beckman Tech 310 DVM, \$50; HP5383A 520 MHz freq. counter, \$200; B/W video camera, \$40. Apple IIe 80 col. 5 12K, hi res color mon, duodisk, apple mouse, apple cat modem, CPM Z80 card, parallel port, 70+ disks of software. Pkg, \$950. Call Bryan-WB6TJN 940-8803.

Swan 600 TX & RX, phone patch, WM-1500 wattmeter, Dentron Super Tuner, MFJ 80431C keyer, misc. mikes, keys, earphone, tubes. \$400 takes all. Heath HW-99 cw xcvr, Heath SP-99 spkr, HM-9 wattmeter HFT-9 ant. tuner, all assembled and tested, \$300. Call Jack-WDODLW, after 5:00 p.m. 728-2444.

MFJ EQ 300 adjustable mike equalizer. New, never raced, \$40 OBO. Yaesu FRT-7700 antenna tuner for Yaesu FRG-7700, \$50 OBO. Cost \$100. Call Joe-WA6VNR 278-2752 anytime or leave msg.

Collins 312B-4 W/E Station Control; Collins W/E S-Line w/ 516F-2 pwr supply. All mint. Astatic "Silver Eagle" mike. Drake WH-7 power meter, mint. Call Allen-N7AMR 434-5656.

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$200; Heath EIA-416 dual trace 15 MHz scope on book, \$100; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$50; Call Ralph-K6HAV 727-5866.

Ten Tec Argonaut 509 w/matching 405 amp. Both factory tuned and calibrated, \$300. Leave message for David-N6QCQ at 582-6464.

Two model 19 TTY machines; Call Stan-W9FQN 749-0276.

Atlas 350XL w/AC pwr supply, \$450. Call Clint-W6OFT 729-0850.

TEST EQUIP: BK 501A Semiconductor Curve Tracer, \$40; BK 3050 Audio Sine/Square Wave Gen., \$65; Sencore FE160 Senior Field Effect Meter, \$40; Heathkit Digital Design Experimenter, \$20; Call Ralph-K6HAV 727-5866.

AEA PK-64A w/HF-64, never raced, \$300. My-Gain Hy-Tower vert. 80-10M ant. Call Buck-WW6E 941-0867.

Swan 350 w/ps, Swan 500 w/ps. Call Chuck Harrold 757-4679.

==WANTED (dead or alive)==

52 ohm coaxial low-pass filter; Call Bill-W7EAI 433-3860. Fiberglass quad arms; Call Bill-K6TQ 727-1580. Icom IC-22A in working condx; Commodore 1520 4-color plotter; Call Dennis-N6KI 271-6079.

==FREE==

Free PL encode/decode chips to good homes. Requires +5v, about 12 discrete parts, and some time. Chip includes low pass audio filter, digital tone generator, and digital PLL CTCSS tone decoder. Early birds get needed 1 MHz xtals. Must be used for personal ham radio project or price is \$10 per chip. Call John-WB6IQS, 758-3519.

==FCC NEWS==

Licenses issued as of 3/1/88: AA6HC, KJ6DU, N6RNX, KB6WBL.

==DOWN THE TOOBE==

We are informed by Malcolm Douglas, N6CDA, that he is now running Westcom, and that it will be open 'till 1400 on Saturdays. Coffee and donuts will be on tap Saturday mornings.

Sunday morning Bill Taylor-K6TQ ran into some "claim jumpers" at his mine up in the mountains by Anza and via his 146.730 HT was able to get Pat-N6INN to call the Riverside authorities to help with his "citizen arrest".

The ARRL Letter says: "A multilateral agreement between countries in the Americas which, when acceded to by Mexico, will result in reciprocal operating privileges being available to the amateurs of both countries." It appears that the Mexican League of Radio Experimenters (LMRE) will support the signing of the agreement.

==REPEATER POLICY==

IGNORE all interference on our repeaters. 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. You can also move "up one" to 147.735 to complete your contact.

==CLUB REPEATERS==

The club owns and operates two repeaters. One has an input of 146.730 MHz and an output of 146.730 MHz. Input for the another is 444.425 MHz and output is 449.425 MHz. The third, W6NWG/R, is a packet radio digipeater on 145.050 MHz. All are on the Club's property on Mount Palomar at about 5,600' which cover about 2,000 square miles of S.D. Co.; and are open repeaters for club members and occasional or transient users.

==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? Thanks Marsh-W6SAX, for the strong words on the repeater recently defending ARRL - but then he probably won't read this.

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.

==OTHER REPEATERS==

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. This repeater, like the PARC machines has battery back up. Feel free to use it.

CO-LOCATED with W6NWG/R and WD6HFR/R is KA6UAI/R on 147.735(-) which is also available to PARC members during its trial period in the PARC repeater bunker. Its use as a W6NWG/R overflow machine is encouraged. It does not have battery back up.

==CLUB NETS==

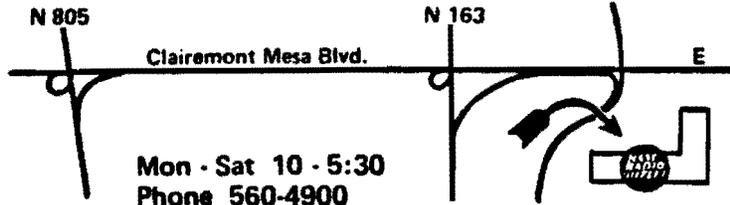
The North County Traffic Net is operated by the club and meets nightly on 146.730 MHz (-600 kHz) at 2000 local to handle formal written traffic. Visitors are welcome. Net Manager is Tom-N4KRA. Liaison stations are needed to LA.

The San Diego County Packet Radio Voice Net meets on 146.730 MHz each Tuesday at 2100. This net is to provide information on Packet Radio for the beginner and the advanced packeteer. All are welcome. Paul-KB5MU is the 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 the net control station.

The Amateur Radio Emergency Service (ARES) for North County meets on 146.730 MHz each Sunday morning at 0830 to pass emergency information to ARES members in North County. All are welcome. Assorted net controls: Floyd-W6JSP, Mike-N6MMP, Jo-KB6NMK, Nash-W6HCD, Carl-N6NZX, and Stan-W9FQN. Club members interested in helping out with ARES assignments should contact Stan-W9FQN.

"That's all", she wrote!



TOM KM6K, Mgr.
GARY K6CAQ

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 - YAESU FT-2700.....DUO-BAND 2M/450mHz
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 - ICOM IC-38A/TT....220mHz mobile.....\$429.95
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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).

Dues are \$12/year + \$9/year for each add'l family member. SCOPE included.

Name and Call _____
(aug-sep-oct\$12, nov\$9, dec\$8, jan\$7, feb\$6, mar\$5, apr\$4, may\$3, jun\$2, jul\$1)
Prorated \$_____ or for the rest of this year consider paying prorated + year(s).
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Ham License expiration month and year _____ . Address, phone nr., (or

changes thereto) _____

ARRL MEMBER? YES ___ NO ___ Remarks, appropriate and otherwise.

Be sure and include name(s), call(s) and dues of family member(s).

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NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC
POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWG
Scope

KA6UAI: 147.735(-), SARG
WD6HFR: 224.900(-), 220 club of S.D.
W6NWG: 145.050(Pkt), 146.730(-), 449.425(-)

VOL. XXII, NO. 5
MAY, 1988

1936-1988

EDITOR: K6HAV

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS:
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	WB6IQS, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	W9FQN, KB5MU, WA6KZN
TREASURER: RON WILHELMY, WI6B, RANCHO SANTA FE, 756-3133	KA6UAI, WI6B, KB6AI

These officers are your 1988 representatives. Call them if you have questions, comments, or suggestions about our club. They need your input and support to be effective. The next Executive Committee meeting is at 7:30 PM: KB6NMK, May 12th, Escondido, 741-2560.

>>>>>>— President's Message —<<<<<<

###—MEMBERSHIP RENEWAL—###

Ron-WI6B, our treasurer, and Skip-K6RTD, our giant computer operator, would really appreciate early renewals so they don't end up with about 350 memberships in the last 10-15 days of July that need to be processed through the books and computer. If one membership update takes one minute, then we are talking about five hours of work for EACH Ron and Skip which needs to be completed before the end of our club year (July 31st). They would appreciate your rejoining the club as soon as possible.

Please check your label on the front of the SCOPE right now. It could look something like this:

PRC8809	LX9505
YrMo	YrMo

PRC is short for PARC. If your label looks like the above, your membership runs out in 1988 during the 9th month. Most members will have PRC8807 which is the end of our club year (July). PRC8809 means that your membership is paid till September of 1988. If possible, we would like to get everyone into step by getting their subscriptions to end PRC8907, PRC9007, etc. Since most of you are PRC8807, you need only to send in the \$12 dues. If you have

something different, please consider getting into step by paying the following:

YrMo	YrMo	Mo+\$12	YrMo	Mo+\$12
8807 \$12	8811 \$8	or \$20	8903 \$4	or \$16
8808 \$11	8812 \$7	or \$19	8904 \$3	or \$15
8809 \$10	8901 \$6	or \$18	8905 \$2	or \$14
8810 \$9	8902 \$5	or \$17	8906 \$1	or \$13

Another suggestion, if you are optimistic about the future, please consider paying for one additional year OR MORE making your renewal year fall on an even year, or how about PRC9007 or PRC9507? If you plan on being around awhile, renewing multiple years saves us a lot of time. Some of our members have PRC9507 or more on their labels. LX9505 would mean that your license needs to be renewed by May of 1995.

PLEASE RENEW SOON and help us avoid the "last minute rush" and the problems of getting out the August SCOPE for the "new" membership. THANKS!

##—EARTHQUAKES—etc—##

Don't be too SHOOK UP if we have an earthquake between May 1st and May 15th! Report to 146.730 for the latest information and directions. The "BIG ONE" is coming! We just don't know when. Are YOU ready?

Something else that might shake you up: 1)one out of every 10 trucks carries hazardous substances, and 2)accidents involving vehicles transporting gasoline cause more deaths and damages than all other hazardous materials trucks combined.

###---FIELD DAY 1988---###

We would like to operate as many stations this year as there is interest among our members. The possibilities are :
75M SSB 15M SSB 2MFM/SSB CW 40-80M
40M SSB 10M SSB 450 FM CW 10-20M
20M SSB 6M FM/SSB (7+ stations?)

Our usual 20M SSB seasoned operators will probably not be with us this year so we are looking for experienced 20M SSBers to run this high scoring station as well as the other stations. If you would like to participate in any of these stations, please contact our Field Day chairman, Bud-KG6VX, at the next meeting and sign up for some good Field Day fun. Novices will again be operating on 10M SSB with Phil-WF6L being the COP(Chief Operator) for the Novices and 40M SSB. Technicians are needed for 10M and above. Remember, you get a participation ticket for the picnic drawing in August for coming to Field Day.

We will be looking for COPs for each band, transceivers, generators or batteries, tents or trailers, antennas, etc. We will try to operate each station for as long as the bands are open so we will be needing day and nighttime operators for most of the positions.

We hope that we will be able to avoid the interference we experienced for the first time last year between certain stations. We are not sure if the RF was sneaking in directly or through the AC distribution system. Our antenna locations have not changed for several years so we were quite surprised at the interference.

###---ADVERTISERS---###

If one of your favorite electronic stores does not advertise in the SCOPE, pick up one of their business cards and send it to us so that we can contact them about the possibility of an ad.

Advertising helps pay for the SCOPE and releases these funds for other club projects.

Some of our advertisers advertise 3-4 times per year on a "space available" basis. If you have a business and would some exposure, you might consider a business card ad.

The ad in this SCOPE by Hugh Jaeger, PA, is by a former physics-electronics student of mine (K4ESQ) from the early 60's. He has worked for the Government Patent Office, the FCC prosecution section, and now does work for companies (ie. IBM) needing special work with projects involving the patent office and/or the FCC. I think that he is interested in developing his business in this area and possibly moving here. Hugh has given the club some advice in the past on working with the FCC.

###---POTPOURRI---###

Mac-NH6EW, one of our newest members, has volunteered to take care of the coffee for us this coming year and we hope that everyone will support him as you have our other excellent "coffee persons". You will need to check with him on what date you can bring in some "munchies" to go with the coffee. Mac also has some good diagrams of a cheap and simple rotor brake which he will no doubt bring again to our next meeting showing us how they do it in Hawaii.

Bill-N6OPP our past coffee chairman is moving to Utah and we all thank him for doing such a fine job with the coffee and munchies for us this past year. We hope that Bill will drop us a line and let us know what bands he is operating on from the new QTH.

###---THANKS---###

THANKS to Buck-WW6E for keeping the Vista antenna ordinance moving in the right direction. Be sure to contact him if you have any questions on what is being done or has been done.

73 de Stan, W 9 F Q N

 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 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. So there!

MAY CLUB MEETING

The program for the May meeting will presented by former club member Ed Null, WB6WQI, who will tell us about the Christian Broadcast System; and about his experiences operating in Quito, Ecuador. There will be coffee.

 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. Annual SCOPE subscriptions are \$3.00. 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.

APRIL CLUB MEETING

At the April club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Committee reports were heard. K6HAV indicated, in response to numerous complaints of non-receipt of the April Scope, the Post Office was swamped by mailers trying to beat the new postal rates as a result of the cupidity, stupidity and short sightedness of the Postal Department in their short-fuzed introduction of those rates. (Many members reported non-receipt nine days after mailing!) WB6IQS discussed the availability of free en/decode chips and the coming need for their use. John also asked for anyone with concrete concrete experience to make themselves known in view of plans to pour a fire-resistant concrete slab roof on the repeater bunker. K6RTD had a copy of the club roster for correction by members present. W9FQN reported that the absence of refreshments were due to lack of anyone to make the coffee. The Club voted unanimously, to direct its San Diego Amateur Radio Council (SANDARC) delegates to vote for the use of SANDARC funds to equip an emergency/display trailer for the San Diego Repeater Ass'n (SANDRA) with the stipulation the trailer be available to the other member clubs of SANDARC.

During Show and Tell, we saw a CB SSB rig converted to 10M by N6KI; a rotor brake for beam antennas by NH6EW; and a 2M DDR antenna for low profile mobile operation presented by W7HGS.

The program for the evening was an outstanding illustrated presentation by Ed Munn, W6OYJ, and Kerry Banke, N6IZW, of the San Diego Microwave Group. Ed gave a very lucid rundown on the microwave bands and what's happening on them. He also told us how we can get going on those bands. Kerry told us of the microwave beacon to be installed at the W6NWG/R site.

Thanks to the efforts of Clint, W6OFT, we had a turnout of old timers in amateur radio. Of the many OTs present, Art Stewart, W6DOS, admitted to being in ham radio the longest, starting in 1921! Art, Clint, John Martin, W6SE, Walt Huckabay, W6JRQ, and perhaps others attending were charter PARC members when the Club was formed in 1936.

There were 76 members and 29 guests in attendance. Quite a turnout.

MAY 88

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 KB6NMK.

At the April meeting at the home of KB6NMK, the Committee heard and approved the minutes of the previous meeting. The Treasurer's report was not heard due to the absence of the Treasurer. The Committee voted to spend up to \$140 for a new battery to up-grade the repeaters' back-up power capability. WB6IQS was directed to further explore this Summer's project to put a fire-resistant roof on the repeater building.

The cookies were deeeelicious!

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 radio 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.

FCC REWRITE OF PART 97

(From the ARRL Letter)

On March 24, the FCC acted to establish PR Docket 88-139, a proceeding which looks toward the modernization of the rules governing Amateur Radio in the U.S. A Notice of Proposed Rulemaking will be issued shortly, but is not yet available, it is said to be an 87-page document, and comments will not be due until August 31 in order to permit careful review and study.

This is the so-called "Part 97 rewrite." According to the Commission's news release on its action, a reorganization of the amateur rules has not been done since 1951 and the result of the ensuing technological advances and operational changes is a patchwork quilt of rules that is often confusing, particularly to the prospective licensee.

Based on the information conveyed at the press briefing, it appears likely that the ARRL may be able to support the overall effort to reorganize Part 97, but that the League will be taking exception to at least some of the substantive changes being proposed.

The full text is now available from the ARRL for a large S.A.S.E. w/seven units of postage. It will also appear in the June issue of QST. (Ed.)

REPEATERS

The encoder/decoder chips WB6IQS is giving away are just the ticket for any of you who want to include these functions in your older 2M rigs (many of the new rigs provide for these functions - sometimes as a \$50 option). See John's FREE ad between FORESAIL and WANTED. With the ever increasing number of repeaters on the air, more are going to have to use "PL" to avoid interference from the users of other repeaters on the same frequency. It's standard practice in commercial repeaters and we're going to see it proliferate in the amateur community. The decode function is also very useful. If you don't understand why YOU might want these functions, talk to any of the Club officers on the repeater or on the phone. This will also be addressed at club meetings.

The hang time on the 2M repeater will be upped to its original four seconds during John's next trip to the mountain.

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

UP-GRADES: Mel Beener, N6ARS, Amateur Extra Class. Congratulations and welcome back.

GNU CLUB MEMBERS: Larry Ruegseger, WA6UTQ, Vista; Erik Thompson, KA6UAI, Encinitas; Eric Johnson, KB6EPO, Chula Vista; Linda & Art Mason, KB6WGA & KB6WGB, Ramona; Fred Ferguson, N6QJO, Vista; Mal Douglas, N6CDA, Fallbrook; Ed Munn, W6OYJ, San Diego; Larry Drummond, KB6IQB, Poway; Jeff Brown, N6PDP, Pauma Valley; Glen Crossman, N6RKE, Fallbrook; Phillipp Normington, WD6HFI, Vista. Welcome, we're glad you're with us.

RENUDE MEMBERS: Bob & Judy Gossett, WA6QQQ & WD6BEZ (3 years); Joe LaPointe, WB6HMY; Mel Beener, N6ARS; Joe Martina, N6RVO; Ted Demos, N6CKH.

GNU CALL SIGNS: Richard Payne, N6RKD (first license - Technician); Warren De Soto, KB7GPP (first call); Mickey Jenkins, WA6WQI (her original call) vice N6PBM; Pat Stedman, N6RHS vice KB6OXZ; Ken Olson, N6RBS vice WB6WON; Gerry Earl, KJ6ES vice N6LYX; Lynn Hamill (nee Stacy), N6QBD vice KB6QZH; Joe Martina, N6RVO vice KB6OXW. Congratulations on the gnu calls (and the new name for Lynn).

VISTA ANTENNA ORDINANCE

Many club members from Vista and other places attended a hearing held by the Planning Department, City of Vista in regard to the proposed changes to the city's existing antenna ordinance, which restricts total antenna height to 35'. The Planning Department is now going to recommend a new ordinance which will restrict total antenna height to 100'. Those of us who attended the Planning Department's hearing were hoping we could persuade the city to adopt the County's antenna ordinance, but we were happy to settle for the 100' limit which will permit a 70' tower plus 30' of masting/antennae for the 100' total. Club members in attendance whom we recognized were: WW6E, T6B, WA6ESG, K6HAV, K6II, K6GJD, KB6OXS, WB6IQS, N6NOG, KF6QH, and KB6QF.

 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.

FORESAIL

(Yawl ketch on?)

PERSONAL ADS FOR MEMBERS ARE FREE

Astron RS-35M pwr supply, mint, \$100. Call Tom, N6NNQ, 456-1910.

World class DX station. 160M-450MHz w/4000 sqft house, swimming pool, 6-car garage, 13 acres of oranges, 15 acres of horse facilities and stables. Contact Ed, W6KCB, 749-0510.

Ten Tec Argonaut 509 w/matching 405 amp. Both factory tuned and calibrated, \$300. Leave message for David, N6QCQ, at 582-6464.

Microwave power meter HP430C w/matching HP477B power head 10MHz-10GHz, 10 mW max., \$35 obo. Audio distortion analyzer/AC voltmeter Heathkit IM-5248, nearly new w/manual, \$50. Call John, WB6IQS, 758-3519.

Kenwood TS-820X, \$450; Turner 252 desk mike, \$30; 5-band flagpole antenna, \$25; Beckman Tech 310 DVM, \$50; HP5383A 520 MHz freq. counter, \$200; B/W video camera, \$40. Apple IIe 80 col. 512K, hi res color mon, duodisk, Apple mouse, Apple cat modem, CPM Z80 card, parallel port, 70+ disks of software. Pkg, \$950. Call Bryan, WB6TJN, 940-8803.

AEA PK-64A w/HF-64, never raced, \$300. Hy-Gain Hy-Tower vert. 80-10M ft. Call Buck, WW6E, 941-0867.

MAY 88

Atlas 350XL w/AC pwr supply, \$450. Call Clint, W6OFT, 729-0850.

Swan 600 TX & RX, phone patch, WM-1500 wattmeter, Dentron Super Tuner, MFJ 8043IC keyer, misc. mikes, keys, earphone, tubes. \$400 takes all. Heath HW-99 cw xcvr, Heath SP-99 spr HM-9 wattmeter HFT-9 ant. tuner, all assembled and tested, \$300. Call Jack, WODLW, after 5:00 p.m. 728-2444.

MFJ EQ 300 adjustable mike equalizer. New, never raced, make offer. Yaesu FRT-7700 antenna tuner for Yaesu FRG-7700, cost \$100. Make offer. Call Joe, WA6VNR, 278-2752 any time or leave msg.

Collins 312B-4 W/E Station Control; Collins W/E S-Line w/ 516F-2 pwr supply. All mint. Astatic "Silver Eagle" mike. Drake WH-7 power meter, mint. Call Allen, N7AMR, 434-5656.

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$200; Heath EIA-416 dual trace 15 MHz scope no book, \$100; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$50; Call Ralph, K6HAV, 727-5866.

Tristao MA-40 40' tubular crankup tower, Cushcraft 4-elm tri-band beam with 40M dipole element, rotor, coax and control cable. You take down. Call George, W50I, 723-1046.

TEST EQUIP.: BK 501A Semiconductor Curve Tracer, \$40; BK 3050 Audio Sine/Square Wave Gen., \$65; Sencore FE160 Senior Field Effect Meter, \$40. Call Ralph, K6HAV, 727-5866.

Swan 350 w/ps, Swan 45 mobile antenna. Call Chuck Harrold, 757-4679.

FREE

Free PL encode/decode chips to good homes. Requires +5v, about 12 discrete parts, and some time. Chip includes low pass audio filter, digital tone generator, and digital PLL CTCSS tone decoder. Early birds get needed 1 MHz xtals. Must be used for personal ham radio project or price is \$10 per chip. Call John, WB6IQS, 758-3519.

WANTED

52 ohm coaxial low-pass filter. Call Bill, W7EAI, 433-3860
Icom IC-22A in working condx. Commodore 1520 4-color plotter. Call Dennis, N6KI, 271-6079.

VOLUNTEER EXAMINER PROGRAM

At the April tests our PARC examiner team administered 13 test elements to nine applicants. Six passed a total of nine elements.

Our test crew was: KI6ZM reception; WA6HYB and WB6R CW exams; N6INN, N6KI, and N6NNI examiners; and K6HAV paperwork.

This was my last time as the Club's VE Team Leader. Thanks to all who have so ably assisted in the administration of the FCC license exams. Ralph Crossman, K6HAV, will be replacing me as the PARC's VE Team Leader.
73 de Lou, AA6DI

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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

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/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.

 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. This repeater, like the PARC machines has battery back up. Feel free to use it.

CO-LOCATED WITH W6NWG/R AND WD6HFR/R is KA6UAI/R on 147.735 (-) which is also available to PARC members during its trial period in the PARC repeater building. Its use as a W6NWG/R overflow machine is encouraged.

 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 Manager is N4KRA. Liaison stations needed.

THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 MHz each Tuesday 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 146.730MHz 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.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 4/1/88: AA6HS, KJ6FF, N6RUN, KB6WSG.

DOWN THE TOOBE

Thanks to Stan, W9FQN, and Jo, KB6NMK, for getting the March Scope on the street. A very nice looking job overall and the ads were really neat. I'm going to do a little proselyting and see if we can't keep Jo in the advertising business - she does it professionally as you can see from her ad in last month's Scope. Stan really got it dumped in his lap when I had to make a very short-fuzed trip to Washington, DC. I just had time to print out what I'd already done and leave it for Stan to pick up. Thanks Stanley and Jo.

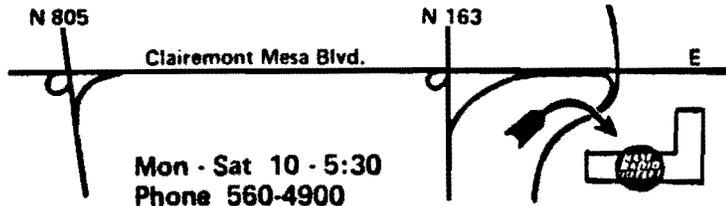
Thanks also to Mal Douglas, N6CDA, the new proprietor of WESTCOM, for that nice new half-page ad.

Good to hear Doc Burton, AH8AD, back with his Samoan call sign. Guess I'll have to have a chat with him to find out what the place's like now. I lived their for nine months early in WW II and got to know Tutuila pretty well, but that was 46 (count 'em, 46) years ago! 'Tis later than I think.

Went over to Industrial Liquidators the other day and found some nice Nylon line - 100' of it in two, connected 50' hanks. The price tag was on one hank, but when we got to the cash register, the clerk said: "This will make you cry, but that's the price for 50'." We handed it to him and said: "You got it." and walked out. Deceptive merchandising? 'Nuff said.

Make the Treasurer's job easier, reenlist in the PARC early - like now!

"That's all", she wrote!



TOM KM6K, Mgr.
GARY K6CAQ

Mon - Sat 10 - 5:30
Phone 560-4900

5375
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SAN DIEGO, CA 92123

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 - KENWOOD TM-221...NEW 2M MOBILE
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 - YAESU FT-747.....NEW.....\$799.95
 - YAESU FT-2700.....DUO-BAND 2M/450mHz
full duplex..... \$499.95
 - ICOM IC-735.....New HF Gen. Coverage... \$949.95
 - ICOM IC-38A/TT....220mHz mobile..... \$429.95
 - ICOM IC-u2AT.....MINI HANDY.....\$289.95
 - KENWOOD TH-25AT..NEWEST GENERATION
HAND HELD..... \$314.95
 - YAESU FT-23/TT....State of the art HT.....\$299.95
- COME IN AND SEE THE NEW ICOM IC-900A
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While browsing, don't forget to see the CW/RTTY set-up using the IBM and the AEA interface. Let us demonstrate this fascinating mode for you.



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OPEN

SATURDAY 9-2

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HUGH D. JAEGER, P.A.
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MAY 88

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(Cut on dotted line, fill in, include \$\$ and mail to PARC, PO Box 1603, Vista, CA 92083-0530).

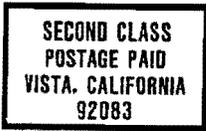
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changes thereto) _____

ARRL MEMBER? YES ___ NO ___ Remarks, appropriate and otherwise.

Be sure and include name(s), call(s) and dues of family member(s).

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NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC

POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWX
Scope

W6NWX/R 146.730 (-)
449.425 (-)
146.050 (Pkt)

1936 - 1988

VOL. XXIII, NO., 6

June, 1988

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS: WB6IQS
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	W9FQN, W16B, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	KB5MU, N6IZW, WA6KZN
TREASURER: RON WILHELMY, W16B, RANCHO SANTA FE, 756-3133	KA6UAI, W66V, KB6AI

These officers are your 1988 representatives. Call them if you have questions, comments, or suggestions about our club. They need your input and support to be effective. The next Executive Committee meeting is at 7:30 PM: Stan-W9FQN, Valley Center, 92082.

>>>>>>— President's Message —<<<<<<

###—FIELD DAY 1988—###

Sign up for Field Day positions at the May club meeting were somewhat disappointing (as usual) and we hope that more of you will see fit to let us know that you will participate as June 25-26 draws nearer. We know that many of you seem to come out of the "woodwork" as FD draws near but it sure makes it tough on planning if you don't let us know enough ahead of time about your participation. We also have need of "loggers" to record the contacts as they are made and to check for duplicates. In the past 20M has been making most of our contacts for us and our experienced 20M operators will not be with us this year. Bud-KG6VX is our FD chairman.

We have the following generators and could use several more: W6NWX(3.5KW), WB6IQS(1.6KW), WF6L(2KW), and W9FQN(.3KW). We need backup generators.

###—INTERFERENCE—###

From time to time most of us experience some interference on the repeater due to malicious actions of someone. Most of our repeater users treat the interference in the way it should be treated: 1)ignore it completely, 2)talk through or over it, 3)do not listen to it and then transmit when the interference quits, 4)quick key (the only time it is permissible) so that the interference is not heard but covered up, and/or 5)make some comment about talking to your contact later or changing frequency (up one).

Remember, you can have a secret code word for going "up one" for your friends to 147.735 but don't take the interference with you! Some people tell the kook when to jam them. For example, you are trying to give your telephone number and you say "my telephone number is 777-7777". The kook knows to key up when you say "is" for maximum effect. Give the information in bursts if it is really important.

- CHIEF Op—STATION—ANTENNAS
- 80M K6HAV..... ..Dipole.....
 - Ops: _____
 - 40M WF6L.....FT-757GX..Loop.....
 - Ops: KI6JM WB6IQS _____
 - 20M _____.....
 - Ops: N6KI KF6C NW6W _____
 - 15M W9FQN.....FT-757GX..Beam.....
 - Ops: KA6FPS _____
 - 10M WF6L..... ..Beam.....
 - Ops(Novice/Tech): Fallbrook JrHS
 - 2M _____.....
 - Ops: K6HLY _____
 - CW KB5MU..... ..Tri-Beam/Dipoles
 - Ops: _____
- (Sign-up at June club meeting)

There is a low level jammer on 146.730 (.130) near I-5 and Mission in Oceanside near (in?) the Radio Shack store so check the input when you are in that area and there is a jammer.

DON'T answer interjecting stations on the repeater that don't give a call sign unless there is a good reason to do so.

###---DEL MAR FAIR---###

The Del Mar Fair is from June 16th to July 4th this year and the Palomar ARC will have the SANDARC booth again at the Fair June 16-17-18 (Thursday, Friday, and Saturday). We will be needing TWO operators per shift and three shifts per day (18 operators total): 10-2, 2-6, and 6-10 p.m. The SANDARC booth will have on display and in operation "state of the art" equipment on almost all amateur bands and will provide you with a free ticket to the Fair. This would be a good chance for you to get your hands on some of the best amateur radio gear around and help explain amateur radio to those who stop by the booth. Our main purpose is to answer questions about amateur radio to the general public and to originate "free" messages which are passed on the NTS net each evening. Please check with Barbara-KA6FPS to get scheduled for one of the vacant spots:

June	10-2 a.m.	2-6 p.m.	6-10 p.m.
Thu 16	KB6NMK	_____	KB5MU
	+ _____	+ _____	+N9AKB
Fri 17	N6NNI	WF6L	_____
	+ _____	+N6KI	+ _____
Sat 18	N6DVJ	N6QVA	_____
	+ _____	+WB6IQS	+ _____

Pick a spot and let us know when you can help.

###---MEMBERSHIP RENEWAL---###

Little did I know that the Giant Computer (alias Skip-K6RTD) had been programmed three months early to print "PLEASE RENEW" for all of our members who should have had printed PRC8807 on their address label and to strip off all membership and license renewal codes. If you had the PLEASE RENEW on your SCOPE label, check one of your past SCOPES for the proper renewal

codes. Sorry about that! The codes might not appear again until the August issue of the SCOPE. It also appears that the PLEASE RENEW computer code mistakenly picked up a bunch of members that were to renew in future years (ie, 8907, 9007, 9107, etc.). Skip says that error has now been corrected in the Giant Computer. Yes, Felix-N6IE, you are a member up into the 90's!

Remember to help us out by renewing early so that we don't have so much chaos at the end of July trying to get the August SCOPE ready for the new membership year. Also remember that "late" renewals will miss their August SCOPE if we don't get the renewal by July 15th.

Your \$12 renewal brings you all the advantages of a good club program and the use of repeater that could easily be well worth the dues with just one use.

###---PICNIC---###

We hope to have the picnic at Dixon Lake in Escondido in August. We voted at the May meeting to make this change and it is probably good for us to look at new parks from time to time. We will have good food, fellowship, hidden transmitter hunts, a prize drawing, etc.

###---NORTH COUNTY TRAFFIC NET---###

Tom-N4KRA, our past traffic net manager, is leaving for Pittsburgh sometime soon because of a job transfer. Tom has done an excellent job of taking over from the master traffic manager, Joe-WB6HMY (Little Joe), and he will be greatly missed. Tom has also led the club in the pledge of allegiance on meeting nights for the past several years. Tom, we hope that your move will be successful and that you will find your new QTH a happy place to "Ham it up". Please keep in contact with us via Packet and let us know how everything is going for you.

Marni-KB6PCF and Tod-KI6ZM have consented to be co-chairmen of the the 8:00 p.m. National Traffic System (NTS) net each evening for PARC. Both Marni-KB6PCF and Tod-KI6ZM are new hams and have done an excellent job of passing traffic on the NTS

with Tod-KI6ZM taking many messages up to the LA regional net (SCNV = Southern California Voice Net) and Marni-KB6PCF running the Monday evening NTS net. They really sound very professional and deserve your help.

Our present net controls for NTS are:

Net Control	Alternate
Mon = Marni-KB6PCF	Dave-WA6HQM
Tue = Paul-KB5MU	Joe-N6RVO
Wed = Mary-N6NOG	Jo-KB6NMK
Thu = Warren-W6EYP	?
Fri = Christy-KB6DGN	?
Sat = Carl-N6NZX	?
Sun = Ralph-K6HAV	?

SCNV LIAISONS are Tod-KI6ZM, Micky-N6GWJ, Paul-KB5MU, Marni-KB6PCF & Joe-N6RVO. We need more SCNV liaison stations on 147.645 and alternate NTS net controls for the PARC daily nets. Please contact a regular net control or Marni-KB6PCF and Tod-KI6ZM if you would like to try being a SCNV liaison, a net control or an alternate.

Our NTS nets are considered as being TRAINING NETS for the big EARTHQUAKE or any other emergency that might be thrust upon us so don't be afraid to get your feet wet and help with the traffic. The net controls are looking for more stations to check in each evening to help with area we are trying to cover. We are also looking for stations that can go up to the LA area to take traffic in and out of San Diego County at least once each week. Be sure to let our net managers know if you can help them out in any way. We also hope to pass the traffic around more among checking in stations so that you can get the "thrill" of passing traffic too.

If you don't receive any traffic for your area, see if you can generate some traffic from your QTH or from friends. Be sure to include a telephone number. Each club member should really try to originate several messages to friends outside of San Diego County several times a year just to keep current in using the proper message format. We all need the practice for when the big "shaker" hits us. Contact our net managers for forms and information.

If any of you would like to serve as a SOURCE OF INFORMATION on any part of the world, please send us your name, call, and area of expertise. We will publish a listing sometime in the future. If any of you can SPEAK A NON-ENGLISH LANGUAGE to any degree, please send in your name and we will publish a list of possible communicators or translators which might come in handy sometime in the future to someone.

If you are planning on GOING TO HAWAII, you really should contact our resident experts for information on the islands and amateur radio operation: Ron-WI6B, Mac-NH6EW, Jim-KH6CN, and Allen-N7AMR (Maui). Ron-WI6B has a condo for rent with some amateur radio gear and a hidden antenna (he is our club secretary). Mac-NH6EW has lived in Hawaii (Maui) for quite some time and was the president of the Maui ARC. He is taking care of our coffee so he can get acquainted with our club members), and Allen-N7AMR spends a lot of time in Hawaii. They all would be happy to tell you "where to go" and what to see in the Islands. Talk to them at any meeting about the Islands and the Hawaii amateur radio repeaters.

###---ADVERTISERS---###

Loreen-N6RAO, wife of Ron-WI6B, is one of our advertisers and she works for Travel Visions in Encinitas as a travel consultant. She would be happy to take care of your travel needs throughout the USA, the world, and especially Hawaii. Be sure to give her a call for your next business trip or family vacation. She would probably be happy to rent you their condo in Hawaii (?????) for your next Hawaii vacation.

###---ARES---###

THANKS to Carl-N6NZX and Mary-KB6NZA, for taking the Amateur Radio Emergency Service (ARES) 8:30 a.m. net the past two months with an average check-in of 35.5. THANKS to all of the net members who check in an get the latest ARES/RACES information. We hope to have sufficient net controls for this net so that you don't have to do it more than once a year. Other

JUN 88

net controls are: Floyd-W6JSP, Nash-W6HCD, Mike-N6MMP, Jo-KB6NMK, and Stan-W9FQN. If anyone is interested in helping out with these ARES nets, please contact Stan-W9FQN. We could use at least two more ARES net control stations.

PARC is still looking for someone or several co-chairmen to head up the ARES effort in North Central/West County. Your job would be to maintain a list of available amateurs to 1)send messages out of S.D. Co., 2)work with Red Cross, hospitals, and governmental agencies requesting help, and 3)point to point 2m communications from accident sites. We have most of the operators, antennas, repeaters, 110vac power supplies, etc. We just need someone to head up the effort and assign the resources. If you can help us with any of these communications needs, contact me, W9FQN.

Please note that at present the Animal Rescue group is to use the 147.735 repeater in emergencies and ARES uses the 146.730 repeater. If any problems develop on 146.730, change immediately to 147.735 without being told to do so.

###---THANKS---###

THANKS to Ken-N9AKB for the donation of a 49 MHz FM wireless microphone system which we hope we will be able to use at club meetings and the club picnic. It has a range of about 100 feet. We used it for part of the May meeting and comments about its quality are solicited.

THANKS to Dennis-N6KI for the donation of a spare set of finals for the club's Drake TR-3 which is for sale. We have many items donated that are for sale so please give me a call if you are looking for something special.

THANKS to all of you who bring in SHOW AND TELL items for our meetings. Your efforts are greatly appreciated and they help make our meetings appeal to a greater number of amateurs. Remember, if you have something new or interesting to share at our meetings, please contact me before the meeting so that I can add you to the agenda. Because of the length of some

meetings, we sometimes do not go through all of the SHOW and TELL agenda that we have scheduled. We like to finish our meetings before 9:00 p.m.

We especially like to see items constructed, Hints and Kinks, new equipment, modifications to equipment, comments on DX, etc. but keep your remarks short. You ARE NOT the main program. You are only a "come on" and people who are interested will seek you out during the break or after the meeting to ask additional questions. We would also like to have some demonstrations for after the meeting on soldering a coax connector, running a SWR graph on a 2m antenna, hints and kinks on sending CW with various telegraph keys, etc. We have many new hams in our ranks who really need to be exposed to some of the things which us "old timers" take for granted. If you have a request for a specific SHOW AND TELL item, please contact a club officer and we will see if we can cover your area of interest sometime in the future.

THANKS to all of you on 146.730 FM who "advertise" our meetings over the repeater. Our attendance this year is averaging over 90 per meeting with 105 attending our April meeting on Microwave which is really fantastic for a club like ours. Meetings are a great time to meet other local hams, to meet that neat voice you talk to on the repeater, to discuss amateur radio, and to participate in good meetings. If you are not meeting and talking to other hams at club meetings, it probably is the club's fault and also yours. Let us know how we can help you make the meetings more enjoyable. Without your input we will probably keep moving along as we have done in the past with few changes. It is your club so let us know what you think would make the club meetings a more enjoyable place to be.

###---POTPOURRI---###

Does anyone have any expertise on PROP-PITCH MOTORS. The club was recently given one and needs advice on how to best get it into operation.

73 de Stan, W 9 F Q N

 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. So there!

JUNE CLUB MEETING

The program for the June meeting will be presented by ?? and will tell us all we ever wanted to know about ?? and then some. There WILL be coffee.

 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.

MAY CLUB MEETING

At the May club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Committee reports were heard. Mac, NH6EW, was welcomed as the new Hospitality Committee Chairman. His coffee was great and several fine folks brought tasty, no-cal goodies. Members present indicated a preference for Dixon Lake over Brengle Terrace Park for the annual picnic. W9FQN indicated that the Vista park was already signed up for, but that an attempt would be made to reserve Dixon Lake in its stead. Ed Null, WB6WQI, gave us a very interesting talk on his sojourn in Quito, Ecuador and on the very high power transmitters (up to 500 KW) and very high gain antennae (24-element Quads) of the Christian Broadcast Network located there. There were ?? members and ?? guests in attendance. Many newcomers were welcomed and the Treasurer was kept quite busy with reenlistments and new memberships. Quite a turnout with 66 members and 12 guests present.

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 June meeting will be at the home of W9FQN.

At the May meeting at the home of KB6NMK, the Committee heard and approved the minutes of the previous meeting. The Treasurer's report was not heard due to the absence of the Treasurer. The Committee voted to spend up to \$850 for two new dB Products antennae for the repeater in view of the problems with the packet digipeater antenna and due to the age of the present antenna in use on the 146.730 machine (We bought it used in 1973, and it's been in service ever since - a fine antenna and we're buying another just like it!). N6CKH told of the plans to conduct tests with the 147.735 repeater to attempt to eliminate desensitization problems with Mt. Laguna repeater. N6CKH also brought up the degeneration of the audio on the 146.730 repeater and produced results of tests conducted by WA6QQQ to substantiate his reports on the audio problems. WB6IQS will take necessary steps to correct the overdeviation and associated problems.

The cookies were deelicious!

 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 radio 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.

FCC REWRITE OF PART 97

(From the ARRL Letter)

A quick read-through of the proposed rewrite of Part 97 doesn't reveal anything obviously bad. However, to comment on it constructively, it is necessary to compare the new and the existing versions side by side. If you want to be well informed on a matter of great interest to ham radio, you may obtain your own copy from ARRL HQ for a large S.A.S.E. with 85 cents postage on it and marked "Docket 88-139".

ANNUAL PARC PICNIC AUGUST 14, DIXON LAKE IN ESCONDIDO. PICTURES AT ELEVEN.

ARRL LETTER

Telephone RFI problems to AT&T phones are guaranteed to be reduced by AT&T modular in-line filter (Z-100 A). It may be ordered by phone with a major credit card from AT&T at 1-800-222-3111.

REPEATERS

On Sunday, May 1, a group of PARC members went to the mountain for repeater maintenance and installation of new equipment.

The main task was to upgrade reserve power capacity by adding a 450 Ah battery, which had been purchased for \$120. It was installed on the 146.730 W6NWG/R. As you have noticed, the "hang time" on this machine was returned to its original four seconds. Please note: This does NOT increase the length of time necessary for "time out" timer reset, which is accomplished on loss of the accessing station's carrier.

The microwave group (Kerry, N6IZW & Ed, W6OYJ) installed a 10 GHz beacon on the main tower at the 60' level. Recent measurements show the beacon gives good coverage over the San Diego area.

Field strength measurements showed high loss in feedlines or in the antennas of KB6UAI/R and the W6NWG/R packet digi-peater. Since substitutes were not at hand, these machines were returned to their original condition until changes can be made. The Executive Committee will discuss fixes.

Extra mouse proofing was installed in the bunker; and Stan, W9FQN, made measurements to calculate the building materials needed raise the roof and make it fire resistant. Jo, KB6NMK, and her husband did yeoman service in the chore of cleaning up the site. They also brought along the tasties.

VOLUNTEER EXAMINER PROGRAM

At the May tests our PARC examiner team administered 11 test elements to nine applicants. Six passed a total of six elements.

Our test crew was: KI6ZM reception; WB6R CW exams; W6SAX, N6NNI, and W6YYV examiners; and N6INN and AA6DI handling the paperwork. 73 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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

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

GNU CLUB MEMBERS: Georgia Griffiths, KB6VUO of Olivenhain; Dick Dipert, N6NYM, Santa Ysabel; Arthur & Anita Nye (calls pending), Vista; David & Christine Loar, WA7OWU & N7EQQ, San Diego; Dirk Reschly, Escondido; John Knight, Jr., WB7TRH, San Diego; Johnny Hart, N6DVJ, Santee. Welcome. We're happy to have you with us.

RENUDE MEMBERS: Ray Harland, N6AMD; Gary Grant, N7AS; Tom Anderson, WD6AXN; Vanessa Harvey, WB6BHE; Ray Dobler, W6BHF; Jim Harper, KH6CN; M.E. Salzarulo, WA6DOC; Betty Bruin, KB6DSC; Claude Kirkpatrick, W6DWE; Jack Swader, WA6DYV; Ray Miller, N6EQB; Warren Lincoln, W6EYP; Al Goepfinger, W6FXL; Richard Carey, W6GHD (2 yrs.); Marty Witting, W9GNI; Chuck Calvert, KA6GRG; Hal Esterly, K6GQS; Mac McBride, WB6GXR; Ralph & Pat Crossman, K6HAV & N6INN; Charles Hodgson, W6HC; Alma Bourhenne, KE6HI; Joe Craig, W6HLB; Dave Copley, WA6HQM; Dan Pugh, WA6HYB; Tom Brown, N6ICH; Art Ride-out, WA6IPD; John Kuivinen, WB6IQS (2 yrs.); Chuck Inskeep, W6IRM; Paul Lackey, N6ISC (2 yrs.); Peter Berg; KG6JI; Guido Bianchi, W6JJA; Jack Hanthorn, KI6JM; Jeff "Shorty" Stouffer, K6JSI; Floyd Harvey, W6JSP; Harry Rouse, WB6JVS; Bob Heitger, WA6KZN; Lane Hart, N6LTV (2 yrs.); Bill Leach, KB7LX (2 yrs.); Billy Smith, KB6MCI; Joe Pevney, WA6MOS; Paul Williamson, KB5MU; Chuck Littlefield, KI6MV; Ted Pakaski, N6NAU; Al Doig, W6NBH; Ralph Yeiger, N6NEH; Steve McKinney, N6NHW (3 yrs.); Jo & A J Ashley, KB6NMK & KB6NML; Wilma & Tom Healey, N6NNP & N6NNQ; Fred Klein, KB6NRL; Walter Coates, KB6NUY; Howard Gates, W4NYU; Rod Grant, N6OIQ; Dick Powell, W6OML; Doug McCartney, KI6PE (2 yrs.); Paul Heismann, KA6PPD; Neil Claassen, N6PYL; Ken Seals, KA5Q; Dick Williams, WB6QBO (3 YRS.); Matt McCormick, KA6QFF; John Egdahl, N6QMI; John Moriarity, K6QQ; Ken Olson, N6RBS (2 Yrs.); George Leppert, KB6RI (2 yrs.); John Neuman, WB6RTY; Herb Wandschneider, WA6SVN; Billy McCord, WB6TBQ; Harry Williams, W6TCI; Lee Miller, W6TDC; Ivan Simpson, S.D. Mtn Rescue Tm., W6TET; Ray Spangler, WA6THC; Ron Earl, W6TXK; Walt Pennington, WO6U (2yrs.); John Kent, NW6W; Bob Felton, K7WLX (3 YRS.); Bill Priest, W6WPO (3 yrs.); George Uminski, K6YGK; Bob Bell, N6YX; Red Courtney (3 yrs.); Leonard Jacobson. 82 renewals.

GNU CALL SIGNS: Neil Claassen, N6PYL; Art Mason, N6RYZ from KB6WGB.

LINDA MASON, KB6WGA, SK

We are saddened to report the passing, on the 8th of May of Linda Mason, KB6WGA, whose new call sign, N6RYY, was received after her passing. Linda and her OM, Art, N6RYZ, just recently joined the Club. Linda was quite active on the repeater and will be missed by those who knew her. We're sorry she was with us such a short while.

HISTORY OF NAVAL COMMUNICATION STATIONS

Retired naval communicator Todd, KI6ZM, has prepared written histories of many of the Naval Communication Stations. Anyone with an interest in reading these should contact Todd on the repeater. The copies are available for loan.

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.

FORESAIL

(That's the bow spirit)

Pwr supply console w/VOX for Atlas 210X, \$15; 6146, \$5. Call John, WB6RTY, 471-0034.

Kenwood MC-50 desk mike, \$25. Call Russ, KG6GW, 583-3297.

Cushcraft A-3 antenna, NEW, still in box. Call Jack, N6OPD, 434-2217.

Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15; various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.

Astron RS-35M pwr supply, mint, \$110. Call Tom, N6NNQ, 456-1910.

Ten Tec Argonaut 509 w/matching 405 amp. Both factory tuned and calibrated, \$300. Leave message for David, N6QCQ, at 582-6464.

Microwave power meter HP430C w/matching HP477B power head 10mHz-10GHz, 10 mW max., \$35 obo. Audio distortion analyzer/AC voltmeter Heathkit IM-5248, nearly new w/manual, \$50. Call John, WB6IQS, 758-3519.

Kenwood TS-820X, \$450; Turner 252 desk mike, \$30; 5-band flagpole antenna, \$25; Beckman Tech 310 DVM, \$50; HP5383A 520 mHz freq. counter, \$200; B/W video camera, \$40. Apple IIe 80 col. 512K, hi res color mon, duodisk, Apple mouse, Apple cat modem, CPM 280 card, parallel port, 70+ disks of software. Pkg, \$950. Call Bryan, WB6TJN, 940-8803.

MFJ EQ 300 adjustable mike equalizer. New, never raced, please make offer. Yaesu FRT-7700 antenna tuner for Yaesu FRG-7700, please make offer. Call Joe, WA6VNR, 278-2752 any time or leave msg.

Collins: 312B-4 W/E Station Control; W/E S-Line w/516F-2 pwr supply, all mint. Astatic "Silver Eagle" mike. Call Allen, N7AMR, 434-5656.

Tristao MA-40 40' tubular crankup tower, Cushcraft 4-elm tri-band beam with 40M dipole element, rotor, coax and control cable. You take down. Call George, W5OI, 723-1046.

Swan 350 w/ps, Swan 45 mobile antenna. Call Chuck Harrold, 757-4679.

FREE

Free PL encode/decode chips to good homes. Requires +5v, about 12 discrete parts, and some time. Chip includes low pass audio filter, digital tone generator, and digital PLL CTCSS tone decoder. Early birds get needed 1 mHz xtals. Must be used for personal ham radio project or price is \$10 per chip. Call John, WB6IQS, 758-3519.

WANTED

Swan 117XC pwr supply w/useable Xfmr. Call Clint, W6OFT, 729-0850.

52 ohm coaxial low-pass filter. Call Bill, W7EAI, 433-3860

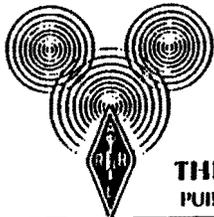
Icom IC-22A in working condx. Commodore 1520 4-color plotter. Call Dennis, N6KI, 271-6079.

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/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

HAMCON 88



THE MAGIC OF AMATEUR RADIO
PUBLIC SERVICE • INTERNATIONAL GOODWILL

ARRL SOUTHWESTERN DIVISION CONVENTION

September 2, 3, & 4, 1988

at the Disneyland Hotel in Anaheim, California

Cut and Mail to: Dick Bruno, N8ISY, Registration Chairman,
HAMCON INC, P.O. Box 3695, Huntington Beach, California 92605

Name: _____ Call: _____

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Address: _____

City: _____ State: _____ Zip: _____

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Convention registration also includes validated parking and special hotel rates. RV parking is nearby. Transportation is available from the surrounding area airports.

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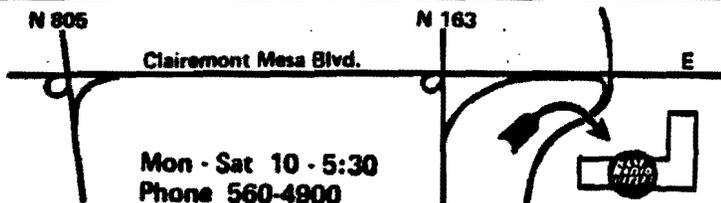
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 THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900
 MHZ REPEATER, which is co-located with W6NWG/R at the PARC site on Mt.
 Palomar. This repeater, like the PARC machines has battery back up. Feel
 free to use it.
 ALSO CO-LOCATED WITH W6NWG/R is KA6UAI/R on 147.735 (-) which too is avail-
 able to PARC members during its trial period in the PARC building. Its use
 as a W6NWG/R overflow machine is encouraged.

 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 Manager is N4KRA. Liaison stations needed.
 THE SAN DIEGO COUNTY PACKET RADIO VOICE NET meets on 146.730 MHz each
 Tuesday 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 146.730MHz 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.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 5/1/88: AA6IG, KJ6GH, N6SAL, KB6YAQ.

DOWN THE TOOBE

The resonant frequency for human beings in free air is 87 MHz. When in
 contact with the ground, it shifts to 41 MHz, according to an article
 entitled How Radio Frequency Waves Interact with Living Systems by James W.
 and Joyce E. Frazer in March-April, 1988 21st Century Science & Technology.

Bill Driml, W6NAT, likes the Scope so much that he just got three years
 off for bad behavior. Bill, a past club president, now lives in Ft. Dick,
 CA, and spends much of his time DXing and county hunting. He says he's got
 236 countries confirmed - all on phone; has worked all 3,075 counties and
 has started over again and only needs 37 more to have done on 20M mobile!!

Thanks to Ron, WI6B, Allen, N7AMR, has a new (very illegal) antenna for
 40M-10M. He's end-feeding his condo rain gutter and getting good reports.
 Wonder if we can't get a new certificate - WAG - for Worked All Gutters.

It's nice to have a ham store in north county which is, not only open on
 Saturday, but also has coffee and doughnuts out for folks. If you haven't
 made it over to Westcom in San Marcos on a Saturday morning, try it. The
 coffee Mal, N6CDA, serves is good and the doughnuts are "no-cal" - oh yeah!

Speaking of N6CDA, it's plain to see that Mal was not contented working
 for Radio Shack. Now that he's happy at Westcom you might say he's Mal
 content. Bringing to mind that when hearing Carl, N6NZX, calling the roll
 on the North County Traffic Net the other evening it made us think of the
 old police radio program: Calling All Cars - only in this case it was
 Carling all Calls. And there is John, W6OLQ, who we have asked to tell us
 about how to order PARC badges - in rhyme - sorta going from badge to verse
 as it were. Or, its plain to see the relationship of Marsh Parker, W6SAX,
 to a leopard, when you realize that a leopard is a dotted lion; and, of
 course, a dotted line is a partial marker - - - -

I'm trying to decide whether things like the foregoing paragraph stem
 from ignorance or apathy, but I don't know and I don't care.

"That's all", she wrote!

(Darn good thing too, looks like!)

JUN 88

PALOMAR AMATEUR RADIO CLUB ENLISTMENT/REENLISTMENT BLANK
(Cut on dotted lines, 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.
Name and Call _____

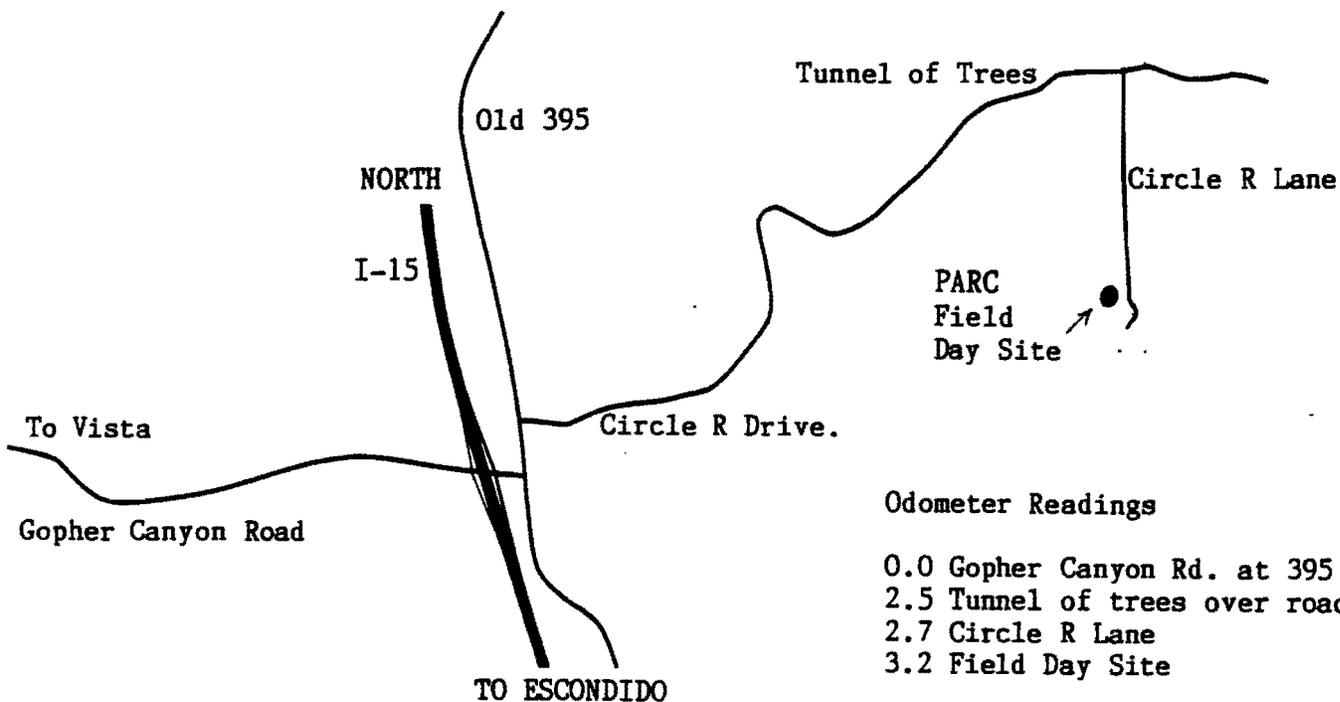
\$12 for ONE year ____ \$24 for TWO years ____ \$36 for THREE years ____

Ham License expiration 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).

This is a map to show how to get to the Field Day site.
Field Day this year is Saturday June 25th and Sunday June 26th from 11am Saturday to 11am Sunday with set-up starting after noon on Friday 24th of June.



— ELECTRONICS —

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JUN 88

BARB, SUE, STAN ROHRER
W9FQN KA6FPS N6QDB
30311 CIRCLE R LANE
VALLEY CENTER, CA. 92082

VISTA TOWER/ANTENNA ORDINANCE

Hams with VISTA addresses who have towers/antennas, please complete the following form and get it to Bill Buckner, WW6E, 993 S. Santa Fe # C Vista, CA 92083. To be used to help get the good Tower Ordinance passed.

Name: _____ Amateur Call: _____ Phone Nr. _____

Address with ZIP Code: _____

My radio tower is (mfg's name & model) _____ and is _____ ft. high with a _____ ft. long mast for a total height of _____ ft. The tower base is set in reinforced concrete _____ inches square by _____ ft. deep; and is guyed self-supporting (circle appropriate one). The tower is guyed at the _____, _____, and _____ ft. levels.

Signature: _____

SCOPE USPS 076530, published monthly by the PALOMAR AMATEUR RADIO CLUB, INC., 3716 Bluebird Canyon Rd., Vista, CA 92084. Subscription: \$3.00 per year. Second Class Postage paid at Vista, CA 92083. POSTMASTER: Send changes to: SCOPE, P.O. Box 1603, Vista, CA 92083-0530

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NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603
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W6NWG
Scope

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

VOL. XXII, NO. 7
JULY, 1988

1936 - 1988

EDITOR: K6HAV

PRESIDENT: STAN ROHRER, W9FGN, VALLEY CENTER, 749-0276	CONTROL OPS: WB6IQS
VICE PRES: TED DEYOS, N6CKH, SAN DIEGO, 296-5103	W9FGN, WI6B, K6HAV
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TREASURER: RON WILHELMY, WI6B, RANCHO SANTA FE, 756-3133	KA6UAI, WQ6V, KB6AI

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

###---MEMBERSHIP RENEWAL---###

THIS MAY BE YOUR LAST SCOPE! So please get your membership renewal money (\$12) to Ron-WI6B as soon as possible. If you have already renewed or paid ahead several years, WE THANK YOU!

###---PICNIC---###

The club picnic will be at Dixon Lake in Escondido on August 14th. Be sure to attend the August club meeting (3rd) to pick up your drawing tickets. The park requires a \$1/car fee and there might be parking problems if you don't get there early. There will be a hidden transmitter hunt, eating at noon, and the prize drawing (you need to be a member!) at 1:30 p.m. More information in the August SCOPE.

###---POTPOURRI---###

At the last club meeting we took a survey on club activities and how we (the club and officers) are doing. For those of you who missed the club meeting, please drop me a line on your comments about the following items so that we can consider your input: EMERGENCY COMMUNICATIONS (capabilities, equip), FIELD DAY (location, objectives, # of stations), NETS (purpose, suggestions), VEC FCC TESTING, PICNIC (location, prizes, activities), HAM RADIO CLASSES, SHOW AND TELL (more, less, content), PROGRAMS (quality, technical, general interest), CLUB MEETINGS (business,

time), EXECUTIVE COMMITTEE (conducts most of the business with club passing only on most important), SCOPE (suggestions), PUBLICITY, REFRESHMENTS (quality, what needed), NEW MEMBERS (help, suggestions), and REPEATERS (146.730, 145.050, 449.425, auto patch, 147.135, 220 club, microwave, design). No comment from you will be considered as a vote of confidence and a mandate to continue on as we have been doing.

###---THANKS---###

THANKS to the following for helping staff the SANDARC booth at the Del Mar Fair: Ralph-K6HAV, Mac-NH6EW, Al-W7HGS, Jack-KI6JM, Paul-KB5MU, Ken-N9AKB, Jo-KB6NMK, AJ-KB6NML, Dennis-N6KI, Phil-WF6L, Jeremy-N6QBI, Jack-KI6RF, John-N6DVJ, Mark-N6NNI, Fred-N6QJO, Wally-N6JZB, Ed-N6GZI, and Judy-KB6DEM.

THE FOLLOWING WAS LEFT OUT OF ABOUT 50 JUNE SCOPE s SO IT IS BEING RUN AGAIN AT THE PRINTER'S EXPENSE:

###---ADVERTISERS---###

Loreen-N6RAO is one of our advertisers and she works for Travel Visions in Encinitas as a travel consultant. She would be happy to take care of your travel needs throughout the USA, the world, and especially Hawaii. Be sure to give her a call for your next business trip or family vacation. She would probably be happy to

July 88

rent you their condo in Hawaii for your next Hawaii vacation.

###---NORTH COUNTY TRAFFIC NET---###

Marni-KB6PCF and Todd-KI6ZM have consented to be co-chairmen of the the 8:00 p.m. North County Traffic Net (NCTN) each evening for PARC. Both Marni-KB6PCF and Todd-KI6ZM are new hams and have done an excellent job of passing traffic on the NCTN. They really sound very professional and deserve your help.

Present Net controls for NCTS are:

Net Control	Alternate	SCN/V 147.645
Mo Marni-KB6PCF	Dave-WA6HQM	Micky-N6GWJ
Tu Paul-KB5MU	Joe-N6RVO	Joe-N6RVO
We Mary-N6NOG	Jo-KB6NMK	Todd-KI6ZM
Th Warren-W6EYP	?	Todd-KI6ZM
Fr Christy-KB6DGN	?	Micky-N6GWJ
Sa Carl-N6NZX	?	Jack-KI6RF
Su Ralph-K6HAV	?	Marni-KB6PCF

Please contact a regular net control or Marni-KB6PCF and Todd-KI6ZM if you would like to try being a SCN/V liaison, a net control or an alternate and they will try to work you into their schedule.

Our NCTN nets are considered as being TRAINING NETS for the big EARTHQUAKE or any other emergency that might be thrust upon us so don't be afraid to get your feet wet and help with the traffic. The net controls are looking for more stations to check in each evening to help with the area we are trying to serve. We are also looking for stations that can go up to the Southern California Net VHF (SCN/V) to pass traffic in and out of San Diego County at least once each week. We also hope to pass the traffic around more among checking in stations so that you can get the "thrill" of passing traffic too.

If you don't receive any traffic for your area, see if you can generate some traffic from your QTH or from friends. Be sure to include a telephone number. Each club member should really try to originate several messages to friends outside of San Diego County several times a year just to keep current in using the proper message

format. We all need the practice for when the big "shaker" hits us.

If any of you would like to serve as a SOURCE OF INFORMATION on any part of the world, please send us your name, call, and area of expertise. We will publish a listing sometime in the future. If any of you can SPEAK A NON-ENGLISH LANGUAGE to any degree, please send in your name and we will publish a list of possible communicators or translators which might come in handy sometime in the future to someone.

If you are planning on GOING TO HAWAII, you really should contact our resident experts for information on the islands and amateur radio operation: Ron-WI6B, Mac-NH6EW, Jim-KH6CN, and Allen-N7AMR (Maui). Ron-WI6B has a condo for rent with some amateur radio gear and a hidden antenna (he is our club treasurer). Mac-NH6EW has lived in Hawaii (Maui) for quite some time and was the president of the Maui ARC. He is taking care of our coffee so he can get acquainted with our club members, and Allen-N7AMR spends a lot of time in Hawaii. They all would be happy to tell you "where to go" and what to see in the Islands. Talk to them at any meeting about the Islands and the Hawaiian amateur radio repeaters.

###---ARES---###

THANKS to Carl-N6NZX and Mary-KB6NZA, for taking the Amateur Radio Emergency Service (ARES) 8:30 a.m. net the past two months with an average check-in of 35.5. THANKS to all of the net members who check in to get the latest ARES/RACES information. We hope to have sufficient net controls for this net so that you don't have to do it more than once a year. Other net controls are: Floyd-W6JSP, Nash-W6HCD, Mike-N6MMP, Jo-KB6NMK, and Stan-W9FQN. If anyone is interested in helping out with these ARES nets, please contact Stan-W9FQN. We could use at least two more ARES net control stations.

73 de Stan, W 9 F Q N

 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. So there!

JULY CLUB MEETING

The program for the July meeting will be presented by Paul Williamson, KB5MU. Paul will tell us about what's happening and what's new in the field of digital communications. There WILL be coffee, thanks to NH6EW.

 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.

JUNE CLUB MEETING

At the June club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Committee reports were heard. WB6IQS reported that the first of the two new repeater antennae has been received and is awaiting an antenna party to install the new hardline and antenna, which is to be used on the packet digipeater. The corner reflector, when received, is to be installed on the 147.135 KA6UAI/R machine. Ed, N6GZI, reported the theft of his Yaesu 208R HT. Stan, W9FQN, reported that the San Diego TASMA meeting will take place in Lincoln Middle School in Vista on July 16.

For Show and Tell, Ron, WI6B, showed us a compact 20M CW xcvr he had built; and Stan, W9FQN, a home-brew boom mike for under \$10. Members present separated into discussion groups and worked on a critique of club operations and suggestions for future club undertakings.

There were 61 members and 9 guests in attendance. The coffee was great, thanks to NH6EW; and the no-cal goodies were tasty, thanks to those kind enough to bring them. An excellent meeting with time for seeing folks.

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 July meeting will be at the home of W9FQN.

At the June meeting at the home of W9FQN, the Committee viewed the Field Day site and the generator trailer, the camping trailer, the new DB-24 antenna, and the crossarms for the repeater tower. The Committee then met and heard and approved the minutes of the previous meeting; and the Treasurer's report. The Committee voted to buy a camping trailer for \$425; and to spend \$200 to put the generator trailer into useable condition. \$400 was voted for picnic prizes; \$700 to raise and make the repeater bunker roof fire resistant; \$30 for the battery shed; up to \$100 for crystals for 450 MHz link receivers and transmitters. W9FQN reported on the results of the June club meeting discussion groups group efforts to recommend club projects. A grand time was had. The tasties were delectious!

JULY 88

ANNUAL PARC PICNIC AUGUST 14, DIXON LAKE IN ESCONDIDO. PICTURES AT ELEVEN.

 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.

RENO HAMFEST AUGUST 20TH. DETAILS AVAILABLE AT JULY CLUB MEETING

+++++
 + VENDY AND GENEVIEVE JOHNSON, W6CW, AND WA6KKQ, SK +
 + Bill Driml, W6NAT, reports the passing of Genevieve and Vendit Johnson +
 +Vendy, who passed away 26 May, was predeceased by Genevieve on May 23.+
 +They were both long-time Palomar Amateur Radio Club members until 1982,+
 +when they moved from Rainbow to Sweethome, OR. Those of us who knew them+
 +are saddened to learn of their passing. +
 +++++

ARRL LETTER

As detailed in December 1987 QST, a U.S. District Court found PRB-1 to be a proper exercise of FCC authority and invalidated a Sand Point, NY village 25 foot antenna height limitation as unduly restrictive. This case represents the first time a zoning ordinance was declared invalid on the basis of PRB-1 and it is an important precedent for radio amateurs fighting unreasonable local zoning ordinances. The prestigious Pike & Fischer Radio Regulations has now published this case. Its citation is: 64 Pike & Fischer Radio Regulations 2d 307.

The FCC has granted an ARRL petition to amend section 97.313, governing station identification by alien amateurs using reciprocal permits while operating in the US. Under the new rule alien reciprocal operators must now ID with the US prefix first i.e.: W6/XE2BAJ. The ARRL's request was based on an IARU resolution to standardize identification. Several other countries have already implemented the proposal.

The peak of the next solar cycle may occur as early as late 1988, and may possibly be the most intense cycle ever measured. The solar activity level could reach normal maximum by summer if current trends continue. Early predictions based on conventional methods suggested 1992 be the maximum, but predicting solar activity is risky, and Dr. McIntosh, Director of Solar Physics Research at NOAA's Space Environment Lab in Boulder, CO cautions that the rapidly increasing levels could flatten out.

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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

REPEATERS

On Sunday, June 5, a crew went to the mountain to clean up unfinished projects and to exchange the 147.735 output with the 147.135 input on the KA6UAI/R machine. The changeover, accomplished by WB6IQS & KA6UAI, required retuning the rx pass cavity, new channel elements, retuning the rx and tx, and rewiring the notch cavities.

KB5MU added local controls to the packet digipeater to enable on-site power output and rx sensitivity measurements.

W9FQN and N6NZX made measurements on the tower for the yardarm installation, reinstalled the control antenna, and broke up concrete left during tower base construction.

WB6IQS reset the hang time on the 146.730 machine to one second in an attempt to learn the reason for the seeming lock-up of the repeater. In several hours of monitoring at the site, John observed no hang up except for those times when a weak carrier or intermod could be detected on the input. The deviation of the 146.730 machine was lowered.

The new \$450 DB-24 four-bay antenna has been received. We are awaiting receipt of the \$350 corner reflector. They will both be installed as soon after Field Day as work parties are available to string the hard line and mount the antenna. Better lightning protection will be built into the new installation. At the same time, and over several weekends, we will install a battery/generator vault outside of the building, check or replace the hardlines and antennae, and install yardarms. Concrete and plumbing work will be done first. Details at Eleven. Willing workers with strong backs needed. Apply at office. No supervisors needed.

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

UP-GRADES: Joe Hypnarowski, WA6VNR, to Amateur Extra; Carl Burgess, N6NZX, to General; Art & Anita Nye, KB6YHY & KB6YHZ, both to Novice. Congratulations.

GNU CLUB MEMBERS: Wayne Dewey, WD6AHX; Ed Carry, K6ICG, San Diego; Mike Hoffman, KD3HN; John Knight, WB7TRN; Ron Kizer, N6SQM, Vista; Christine Sawyer, KB6VGN, El Cajon; Bob Chantrill, KE6VX, Vista; Cliff Helms. Welcome, we're happy to have you with us.

RENUDE MEMBERS: Guy Rowlett, KB6AI; Allen Willett, N7AMR; Edith Nichols, K6AYJ; Ron Wilhelmy, WI6B; John Reber, N6BAD; Red Truax, W6BLK; Jack Williams, W6BLL; Bill Whipple, N6COU; Mike Hamann, WB6CSH; George Bollman, KI6CX; Betty Mahoney, KB6DGR; Lou Albrechtsen, AA6DI; Carl Langjahr, W6DNX; Art Nichols, W6EVL; Ed Falls, W6FTV; Bill Salter, K6GJD; Gordon Wenz, N6GW; Steve Sellers, N5GZP; Nash Williams, W6HCD; Al Thiel, W7HGS; Alma Bourhenne, KF6HI; N.W. Smith, N6HWK; Bill Watt, WA6HYC; Russ Krebs, W6HZJ; Art Smith, W6INI; Paul Stack, WA6IPF; Walt Huckabay, W6JRQ; Dennis Vernacchia, N6KI; Ted Nida, N6LUQ; Betsy Ross, KB6MBL; Will Nielsen, W6MFT; Mike Fisher, N6MMP; Mary & Carl Burgess, KB6NZA & N6NZX; Clint Call, W6OFT; Larry Chandler, KB6OQE; Dave Lien, W6OVP; Fred & Mary Barker, N6PDZ & N6PEA; Jim Murdock, N6PYD; Mel Hanson, KD6QJ; Eleanore Call, N6QJE; Norman Rath, N6QQF; Mark Trapolino, N6QVA; Loreen Wilhelmy, N6RAO; Linda Sellers; KB6SAE; John Horgan, WB6SML; P.J. Mead, KB6SQR; Bob Gates, WB6TBA; Lloyd Hunt, W6TFB; Chuck Dowling, KI6TG; Bill Vlymen, W6VDA; Joe Hypnarowski; WA6VNR; John Albrechtsen, KI6XJ; Gerry Balke, W6YLA; George Todd, KI6ZM; Bruce Stewart; Fred Anderson. 55 renewals.

GNU CALL SIGNS: John Hudson, N6RKJ from KB6TQX; Ron Kizer, N6SQM from KB6WWP. Congratulations.

July 88

VOLUNTEER EXAMINER PROGRAM

At the June tests our PARC examiner team administered 17 test elements to 11 applicants, six of whom passed a total of nine elements. Congratulations to PARC member Carl Burgess, N6NZX, who upgraded to General Class.

Our test crew was: KI6ZM reception; WA6HYB CW exams; WI6B, AA6DI, and N6NNI examiners. 73 de K6HAV

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.

FORESAIL

(Take a bow, spirit)

Drake TR-7 w/pwr supply and AM & CW filters. Call Ron, WI6B, 756-3133.

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.

Mirage B-23 2M 30W amp., \$55; Mirage MP-1 HF wattmeter, \$55. ICom IC-215 port. 2M FM xcvr w/15 local freq xtal sets, Vista 111-R pwr supply, \$95. All w/manuals. Call Al, N6GNB, 741-1840 after 1630.

Alliance HD-73 rotator, \$100; Safety belt, \$10; two 2M 11-elm beams, \$35 & \$30; Autek QF1 ICfilter, \$15; Hy-Gain 2BDQ 40-80M ant.; top brand panel meters, \$4 & up; Signal brass key, \$4; RG-8 coax; Archer CB Gp, \$10; ball/spring mobile ant. mt., \$10; Realistic Navaho base CB, \$25; Heathkit mike, \$5; Shure mike, \$10; Swan desk CM17L, \$15. Call Jerry, W6YLA, 758-1134.

Heath HP-13B mobile pwr supply for HW & SB series xcvs, \$20. Call Dennis, N6KI, 271-6079.

Yaesu FT-270RH 45W 2m xcvr w/programable encoder/decoder, \$300; MBA-RO CW, RTTY, ASCII reader, \$150; Lunar 1W in/20W out 220MHz amp., \$60; Yaesu FT-720RU 10W 440 MHz FM xcvr \$175; Heath EIA-416 dual trace 15 MHz scope no book, \$70; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$25; RCA Senior Voltomyst WV-98C w/new probes, \$20. Call Ralph, K6HAV, 727-5866.

Kenwood MC-50 desk mike, \$25. Call Russ, KG6GW, 583-3297.

Cushcraft A-3 antenna, NEW, still in box. Call Jack, N6OPD, 434-2217.

Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15; various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.

Microwave power meter HP430C w/matching HP477B power head 10MHz-10GHz, 10 mW max., \$35 obo. Audio distortion analyzer/AC voltmeter Heathkit IM-5248, nearly new w/manual, \$50. Call John, WB6IQS, 758-3519.

TEST EQUIP.: Prices reduced. BK 501A Semiconductor Curve Tracer, \$20; BK 3050 Audio Sine/Square Wave Gen., \$45; Sencore FE160 Senior Field Effect Meter (VTVM equivalent), \$25. Call Ralph, K6HAV, 727-5866.

Kenwood TS-820X, \$450; Turner 252 desk mike, \$30; 5-band flagpole antenna, \$25; Beckman Tech 310 DVM, \$50; HP5383A 520 MHz freq. counter, \$200; B/W video camera, \$40. Apple IIe 80 col. 512K, hi res color mon, duodisk, Apple mouse, Apple cat modem, CPM Z80 card, parallel port, 70+ disks of software. Pkg, \$950. Call Bryan, WB6TJN, 940-8803.

Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866. 6146, \$5. Call John, WB6RTY, 471-0034.

JUST BECAUSE I'M NOT PARANOID DOESN'T MEAN THEY AREN'T FOLLOWING ME

FREE

Free PL encode/decode chips to good homes. Requires +5v, about 12 discrete parts, and some time. Chip includes low pass audio filter, digital tone generator, and digital PLL CTCSS tone decoder. Early birds get needed 1 MHz xtals. Must be used for personal ham radio project or price is \$10 per chip. Call John, WB6IQS, 758-3519.

WANTED

For Potter Jr. High School ham library, QSTs: 1976, 77, 86-88 & Jan-Mar of 84. Call Phil, WF6L, 757-7008.

52 ohm coaxial low-pass filter. Call Bill, W7EAI, 433-3860

Icom IC-22A in working condx. Commodore 1520 4-color plotter. Call Dennis, N6KI, 271-6079.

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. This repeater, like the PARC machines has battery back up. Feel free to use it.

ALSO 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 FCC IN GETTYSBURG SAYS:

Licenses issued as of 6/1/88: AA6IV, KJ6HW, N6SIL, KB6YSO.

SPEAKING OF CALL SIGNS.....

The FCC is obviously still reserving certain calls from issue. The Call Book shows no calls issued with a three-letter suffix beginning with X. Only single letter or two letter X-suffix calls have been issued. In the past, the three-letter X-suffix calls have only been issued to experimental stations so designated by the FCC. This is apparently still the case.

Those Q suffixes, which are also Q Signals, are not issued for reasons readily apparent.

One reason for publishing callsign information is so you may be aware of which calls have been issued when you hear new ones on the air.

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.

TRAFFIC HANDLING AS SHE IS DID BY THE BIG GUYS

By Ima Grump, GR0UCH

Speaking of traffic nets, reminds us of traffic handling, which reminds us of some pet peeves which are getting peevier day by day and net by net.

The REAL traffic handlers have taken to converting the pro-sign BT into "Break for text" or "Break for signature". And all the time I thought the pro-word equivalent of BT was "BREAK" and pronounced that way without all of the modifiers tacked onto it. It is not necessary to add "for text" or "for signature" when we know that BT or BREAK sets off the text of the message from the heading and the signature. The furbellows are not needed, thank you. They add nothing and take valuable time.

Politeness is understood in net operations so "please" and "thanks" and the rest of the bowing and scraping is not needed. We all understand that you are not being impolite, merely direct, when you don't say please, etc.

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"Back to net control" is also superfluous. The NCS is paying attention and knows when you are through and will step in and continue running the net without being reminded it's his turn again. That's what he/she is getting paid for, isn't it?

"This is a Directed Net" in the net preamble means net members, visitors, SWLs etc are not to transmit ANYTHING BUT THEIR CALL SIGNS until DIRECTED to do so by the NCS. A Directed Net always operates at the direction of the NCS. On the other hand, a Free Net is one in which stations may call each other at will without the direction of the NCS. A Free Net might be used when it is to be a very lengthy net and the need for the close control of a Directed Net to allow maximum use of the frequency is not indicated.

MORE TRAFFIC TOPICS

By Section Traffic Manager, GORDON WENZ, N6GW

On Page 3, June Scope, the statement concerning SCNV is not quite accurate and may confuse some. the NTS Regional Net (RN6) covers all of California and Nevada. The Southern California Net/VHF (SCN/V) is a section net covering Santa Barbara, L.A., Orange, and San Diego Sections of the ARRL. The PARC's North County Traffic Net (NCTN) as a "local" NTS net interfaces with the SoCal section level net which has three sessions daily: SCN, SCN2 (slow speed CW net) and SCN/V.

CW ops are needed to check into the SCN session on 3598 kHz at 1830 local daily to pick up San Diego Section traffic and bring it to the NCTN at 2000, saving 24 hours in delivery since the traffic otherwise goes to SCN/V at 2100 - AFTER the evening's session of the NCTN. SCN operates at about 15 wpm, but the NCS will slow down to the speed of station checking in. Operators handling traffic off the net frequency set their own pace.

SCN2 also meets on 3598, but at 2015, and connects with SCN/V. SCN2 is a good place to become familiar with CW net procedures for those not yet comfortable on CW. Contact me for any questions which I may help with.

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.

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/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.

NEW SAN DIEGO PHONE NUMBER FOR CHP

Thanks to Dennis, N6KI, for providing us with the new S.D. phone number for the CHP. It's 268-2276. Dennis had several frustrating minutes trying to reach their emergency phone before he was finally able to get the new #.

THANKS FROM RICH, N6KEU

Rich Matros, N6KEU, sends his thanks to all those of you who helped find and/or gave blood for his recent surgery. Your response was overwhelming and is much appreciated by Rich, who is home and recuperating nicely. *****
 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.

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.

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

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. 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. *****

DOWN THE TOOBE

Tom, N4KRA, has left our area for the beauties of downtown Pennsylvania where his employment takes him. When last heard from he was passing through New Mexico where he made contact on a 2M repeater with a Valley Centurion (a retired Roman soldier, name of Valley), who was on his way back to S.D. County.

Sorry about last month's Scope. Between the Editor and the printer we had a substandard issue. (No, they ARE NOT all that way!) Some folks didn't get page 3 but everyone got page 9 - upside down. Those, of course were the printer's fault. Being the Editor, we'll draw the curtain of discretion over the other, too obvious, errors. We'll try and do better this month, won't we. Thanks to the efforts of Treasurer Ron, WI6B, our errant printer is giving us 50 free copies of this newsletter to make up for those missing page 3.

We're always happy to see folks from the CB ranks make the move into the Amateur Radio Service. It shows the dedication and self-discipline necessary to achieve the license. This is what sets the ham apart from the CBer. Once into amateur radio, the CB lingo should be dropped as it too clearly says "CB". The best way to do this is to pick out some of the folks who have been in ham radio for awhile and emulate them. Hams have calls or callsigns, not "numbers"; and we may be standing by but we're not usually "by the frequency". These and other CB jargon, are the mark of 11M and should be left there when moving up to the Amateur Service. We are proud of our amateur fraternity and of you for joining us.

Thanks to Bob Bell, N6YX, for his many donations of gear to the Club.

July 88

His most recent included a Commodore +4 computer. Thanks again Bob.

I'm certain your incredibly keen eyesight and great acumen will lead you to the startling conclusion that there is a club roster published in this issue of SCOPE (once a month does it - thank heavens). We hope you will find time to peruse it, noticing how many of those neat folks you talk to daily on the repeater are NOT listed in it and are actually freeloading on YOUR dues. Hopefully, you will extend the hand of friendship to some of them and offer to have a membership application sent to them. That they may not be able to attend club meetings is really not at issue here. Their support of the club and thereby the repeaters is. The PARC repeaters have, traditionally, been open repeaters for members and occasional and transient users. Dues-paying club members have the right to expect habitual users to join them in helping to support the repeaters they use!

Jim Franklin, KB6QF, started out on a horse but ended up in the hospital with a broken femur and torn ligaments. It's going to take an operation and steel plate to mend the damage. No more horsing around, please, Jim.

"That's all", she wrote!

PALOMAR AMATEUR RADIO CLUB, INC.

Members By Call

86-23-1989 PG 1

N22BK	HERMAN, ETHEL	763-5193	49355 FLIGHTLINE WAY	AGUANGA, CA.	92392
N3CPS	PASCHKE, VERN	484-7581	9289 SAMANTHA CT.	SAN DIEGO, CA.	92129
KD8DC	SMITH, STEPHEN J.		23015 DEL LAGO DR. C-1	LAGUNA HILLS, CA.	92653
WD8DLW	HONTS, C. N. 'JACK'	728-2944	244 N. STAGECOACH LN.	FALLBROOK, CA.	92928
N3EVV	PASCHKE, MARY	484-7581	9239 SAMANTHA CT.	SAN DIEGO, CA.	92129
WB8RWJ	HERMAN, ZEL	763-5193	49355 FLIGHTLINE WAY	AGUANGA, CA.	92382
WB8NGU	WILLIAMS, SANDY	741-9901	1914 HOWE PL.	ESCONDIDO, CA.	92825
WB8YCO	KIRSCHNER, HENRY	722-5394	266 CARISSA DR.	OCEANSIDE, CA.	92856
W2AU0	SHAUT, STANLEY		12850 CAMINO DE LA BRECIA	SAN DIEGO, CA.	92129
WB2ISV	WAGNER, LEO F.	941-6756	1441 PHIL MAR LN.	VISTA, CA.	92883
K2RT8	HASSELL, NATHANIEL W.		27078 BOBCAT TRAIL-HWY 76	SANTA YSABEL, CA.	92878
N38LL	BOLES JR., ROBERT E.	279-3543	P O BOX 82892	SAN DIEGO, CA.	92138
K3FHT	DIVECCHIO, MARK		18435 MOUNTAIN GLEN TER.	SAN DIEGO, CA.	92131
WA3HHC	TOTH, ALAN T.	941-1599	1815 ROSE DR.	VISTA, CA.	92883
KD3HN	HOFFMAN, MIKE		ETC-7 CLASS 8807, PO BOX 4	SAN DIEGO, CA.	92136
K4ACM	LUTZ, EDWARD	789-2460	P O BOX 278744	SAN DIEGO, CA.	92128
N4KRA	MERZ, TOM		PO BOX 31	INDUSTRY, PA.	15052
W4NYU	GATES, HOWARD	449-9841	18911 EDDINGTON RD.	SANTEE, CA.	92871
WD5BRT	BROOM JR., HERMAN	966-1821	243 DOUGLAS DR. APT 281	OCEANSIDE, CA.	92356
W5GZP	SELLERS, STEVE	433-3648	4232 FIESTA WAY #8	OCEANSIDE, CA.	92356
KB5MU	WILLIAMSON, PAUL T.	458-1239	6583 EDMONTON AVE.	SAN DIEGO, CA.	92122
KB5MY	HAMMILL, DAN	431-8278	510 S. VINE ST.	ESCONDIDO, CA.	92825
K458	SEALS, KEN	436-3765	913 HICKORY COURT	CARLSBAD, CA.	92389
WD6AHX	DEWEY, L. WAYNE	948-2874	1987 CHEYENNE CIR.	OCEANSIDE, CA.	92356
KB6AI	ROWLETT, GUY	757-1745	2813 TURNBULL ST.	OCEANSIDE, CA.	92354
W6AMD	HARLAND, RAY	746-4584	2682 MARY LANE	ESCONDIDO, CA.	92325
KB6AGS	SWENSON, GEORGE A.		6460 CONVOY CT. #115	SAN DIEGO, CA.	92117
N6AQV	LINT, KEN		4119 THOMAS ST.	OCEANSIDE, CA.	92356
N6ARS	BEENER, MELVIN	433-5318	4660 N. RIVERROAD #98	OCEANSIDE, CA.	92356
N6AT	CASSEN, FRANK	728-8883	3929 RECHE RD. SP-22	FALLBROOK, CA.	92328
WD6AXN	ANDERSON, THOMAS		13918 PORTOFINO DR.	DEL MAR, CA.	92014
K6AYJ	NICHOLS, EDITH	728-1717	1473 WINTERWARM DR.	FALLBROOK, CA.	92328
W168	WILHELMY, RON	756-3133	P.O. BOX 2448	RANCHO SANTA FE, CA.	92867
N6BAD	REBER, JOHN	453-4952	5968 TULANE ST.	SAN DIEGO, CA.	92122
WD6BEZ	GONSETT, JUDY	753-9133	518 NEPTUNE AVE.	ENCINITAS, CA.	92824
KE6BH	COUNTRYMAN, BILL	757-2528	2886 MACDONALD ST.	OCEANSIDE, CA.	92354
WB6ME	HARVEY, VANESSA	741-8391	1195-33 LA MORSE RD.	SAN MARCOS, CA.	92869
WB6HF	DOBLER, RAY	487-4423	17142 CLIGUOT CT.	POWAY, CA.	92864
WB6LK	TRUAX, DON 'RED'	465-8398	7915 SHADOW HILLS DR.	LA MESA, CA.	92941
WB6LL	WILLIAMS, JACK	729-5318	3828 MARGARET WY.	CARLSBAD, CA.	92888
WD6BNX	DEAN, ROBERT K.	749-9468	13681 WOODSTOCK PL.	VALLEY CENTER, CA.	92892
K6BPT	SKINNER, MURIEL 'SKIP'	728-6984	1422 LOS AMIGOS	FALLBROOK, CA.	92828
WD6BRX	BROUILLET, PAUL	745-8878	3131 MARY LANE	ESCONDIDO, CA.	92825
WA6BSD	LANG, STEVEN	746-9834	832 OLEANDER PL.	ESCONDIDO, CA.	92827
W6BYJ	COUP, BOB	726-4819	385 SKYLINE DR.	VISTA, CA.	92894
KF6C	COMER, BRIAN	744-3215	689 WASHINGTONIA DR.	SAN MARCOS, CA.	92869
N6CDA	DOUGLAS, MALCOM	729-9859	312 E. ELDER	FALLBROOK, CA.	92829
N6CKH	DEMOS, TED	296-5183	2218 MISSION AVE.	SAN DIEGO, CA.	92116
N6CK8	BROADBENT, LOUIS	755-9179	976 SANTA ESTELLA	SOLANA BEACH, CA.	92875
K6CLU	LEAK, EARL	724-2827	1242 GRANDVIEW RD.	VISTA, CA.	92884
KH6CN	HARPER, JIM	483-1648	5142 PROVIDENCE RD.	SAN DIEGO, CA.	92117
N6COU	WHIPPLE, BILL	758-7163	1625 WAGON WHEEL DR.	OCEANSIDE, CA.	92356
WB6CSH	HAMANN, MICHAEL	481-8778	14169 HALF MOON BAY DR.	DEL MAR, CA.	92814
K6CV	BASTOW, J. G.	484-7835	8733 ELFORD COURT	SAN DIEGO, CA.	92129
K16CX	BOLLMAN, GEORGE	728-2755	1632 DOROTHEA AVE.	FALLBROOK, CA.	92828
KB6DEM	ROSS, JUDY	297-7758	1419 GOLDEN GATE DR.	SAN DIEGO, CA.	92116
KB6DGR	MAHONEY, BETTY	428-2277	121 ORANGE AVE. SP 84	CHULA VISTA, CA.	92811
AA6DI	ALBRECHTSEN, LOUELLA	941-9725	845 HAMPTON COURT	VISTA, CA.	92883
WD6NY	LANGJAHN, CARL	726-4818	4644 CORDOBA WY.	OCEANSIDE, CA.	92356
WA6DOC	SALZAPALO, MARK	945-1367	5649 ROANE DR.	OCEANSIDE, CA.	92356
KB6DSC	BRUIN, BETTY	277-7142	5573 MT. ACARA DR.	SAN DIEGO, CA.	92111
W6DVJ	HART, JOHNNY	258-1819	8866 DONNA JEAN LN.	SANTEE, CA.	92871
W6DWE	KIRKPATRICK, CLAUDE L.	273-9735	1744 PACIFIC BEACH DR.	SAN DIEGO, CA.	92189
W6DYV	SHADER, JOHN B.	728-2328	1455 S. ALTURAS SP# 118	FALLBROOK, CA.	92328
W6E	BUCKNER, BILL	941-8967	993 S. SANTA FE #C	VISTA, CA.	92893
W6EEZ	HEERSMA, BILL		1145 IMPERIAL BEACH BLVD.	IMPERIAL BEACH, CA.	92832
KB6EPO	JOHNSON, ERIC	575-7865	799 ADA ST.	CHULA VISTA, CA.	92811
N6EQB	MILLER, RAYMOND	728-3179	4658 S. MISSION RD.	FALLBROOK, CA.	92828
KJ6ES	EARL, GERRY	486-3867	13504 ORANGE BLOSSOM LN.	POWAY, CA.	92864
WA6ESG	CASTAGNA, ED	726-5236	273 MAR VISTA DR.	VISTA, CA.	92883
W6EVL	NICHOLS, ART	728-1717	1473 WINTERWARM DR.	FALLBROOK, CA.	92828
W6EWH	McCARTHY, MAC	945-7391	2729 THUNDER DR.	OCEANSIDE, CA.	92356
W6EYP	LINCOLN, WARREN	744-5897	1286-88 DISCOVERY ST.	SAN MARCOS, CA.	92869
WZ6F	ORR JR., ALAN	723-7514	1665 PARVENU LANE	FALLBROOK, CA.	92328
W6FAY	CARR, JAY	745-3381	2785 SUNSET HILLS	ESCONDIDO, CA.	92825

N6FMK	BOWEN, BILL	941-9492	484 VALERIE DR.	VISTA, CA.	92084
W66FMT	HOUSER, JERRY	750-4380	1973 CYPRESS DR.	VISTA, CA.	92084
W6FN	KLIPPEL, KEN	434-2350	4420 LA PORTALADA DR.	CARLSBAD, CA.	92088
KA6FPS	ROHRER, BARBARA	749-8276	38311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
W6FTV	FALLS, EDWARD L.	728-2729	3352 CANONITA DR.	FALLBROOK, CA.	92028
WD6FNE	JOHNSON, DON	750-4187	3140 LINCOLN ST.	CARLSBAD, CA.	92008
W6FXL	GOEPPINGER, ALBERT	745-4436	2161 SUNSET DR.	ESCONDIDO, CA.	92025
KD6FY	BELFIELD, SCOTT	487-7005	17083 ABRA WAY	SAN DIEGO, CA.	92128
N6FYJ	RUTLEDGE, BILL	745-8936	1510 ESPERANZA WAY	ESCONDIDO, CA.	92027
K6GAK	GARREN, RICHARD K.	447-8893	1088 BENJAMIN PL.	EL CAJON, CA.	92020
N6GDT	MITCHELL, NANCY	576-8650	10485 VIACHA DR.	SAN DIEGO, CA.	92124
WD6GEB	ROBERT, BARRY K.	271-4809	8010 VALDOSTA AVE.	SAN DIEGO, CA.	92126
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
WD6GIN	PARNELL, THOMAS	729-1811	3870 BLENKARNE DR.	CARLSBAD, CA.	92008
K6GJD	SALTER, BILL	726-2829	1327 PHILLIPS ST.	VISTA, CA.	92083
N6GJW	FOLSOM, RUSS	789-8348	P.O. BOX 1308	RAMONA, CA.	92065
N6GNB	FAHNESTOCK, ALBERT	741-1840	1499 E. WILSON AVE.	ESCONDIDO, CA.	92027
N6GPJ	BRAUN, RUSS		P O BOX 86521	SAN DIEGO, CA.	92138
K6GGS	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
K6GWH	AMES, RUSS	583-3297	6594 SEAMAN ST.	SAN DIEGO, CA.	92120
N6GWH	FAHNESTOCK, MICKEY	741-1840	1499 E. WILSON AVE.	ESCONDIDO, CA.	92027
W6GXR	MC BRIDE, WILLERT 'MAC'	561-2211	9493 EMERALD GROVE AVE.	LAKEVIEW, CA.	92040
KB6GYG	GOOD, GENE		12610 ROBISON BLVD.	POWAY, CA.	92064
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 I.	272-9778	P.O. BOX 178374	SAN DIEGO, CA.	92117
W6HCD	WILLIAMS, NASH	728-3974	32001 VIA ARARAT DR.	BONSALL, CA.	92003
K6HE	SANDBERG, SANDY	745-6940	1138 E. RUSTIC RD.	ESCONDIDO, CA.	92025
W6HFE	RAPPE, FRANK B.	757-9365	331 REDONDO DR.	OCEANSIDE, CA.	92056
WD6HFI	NORMINGTON, PHILLIPP	724-4736	1302 HERMANA LN.	VISTA, CA.	92084
KB6HGR	MITCHELL, CYNTHIA		9139 BERKVIEW LN.	SPRING VALLEY, CA.	92077
KE6HI	BOURHENNE, ALMA	753-2542	2825 CAMBRIDGE AVE.	Cardiff by the sea, CA	92007
W6HLB	CRAIG SR., JOE	757-1272	412 S. BARNWELL ST.	OCEANSIDE, CA.	92054
W6HMY	LA POINTE, JOE	722-6854	188 EVERGREEN PKWY.	OCEANSIDE, CA.	92054
W6HOG	HANSEN, ERIC		14167 MEADOW DR.	GRASS VALLEY, CA.	95945
W6HGM	COPELEY, DAVE	753-2605	1727 GREENTREE RD.	ENCINITAS, CA.	92024
W6HSZ	CAMPBELL, JOHN	724-1764	324 EAST DR.	VISTA, CA.	92083
W6HM	BAUMGARTNER, VERN		3700 OLDS RD. SP-86	OXNARD, CA.	93030
N6HMK	SMITH, N WHITNEY	223-3444	930 ARMADA TERR.	SAN DIEGO, CA.	92106
W6HYB	PUGH, D. C.	433-4445	4660-125 N. RIVER RD.	OCEANSIDE, CA.	92056
W6HYC	WATT, BILL	439-8814	1733 S. DITMAR ST.	OCEANSIDE, CA.	92054
W6HZJ	KREBS, RUSS	728-8925	3909-108 RECHE RD.	FALLBROOK, CA.	92028
K6ICG	CARRY, EDWARD		5844 KENT PL.	SAN DIEGO, CA.	92120
N6ICH	BROWN, THOMAS F.	728-8925	4433 KITTIWAKE WAY	OCEANSIDE, CA.	92056
N6IE	FERRANTO, FELIX	724-4772	1010 E. BOSIER # 76	VISTA, CA.	92084
N6IES	MITCHELL, THEODORE		9139 BERKVIEW LN.	SPRING VALLEY, CA.	92077
K6II	HOLM, ED	726-4333	1851 ALTA VISTA DR.	VISTA, CA.	92084
W6INI	SMITH, ART	273-1120	4515 MELISA WAY	SAN DIEGO, CA.	92117
N6INN	CROSSMAN, PAT	727-5866	P. O. BOX 73	VISTA, CA.	92083
W6IOV	LOMELL, RUSS	436-6714	7507 QUINTA ST.	CARLSBAD, CA.	92008
W6IPD	RIDEOUT, ART	728-6834	2235 GUM TREE LN.	FALLBROOK, CA.	92028
W6IPF	STACK, PAUL J.		753 POMELO DR.	VISTA, CA.	92083
KB6IQB	DRUMMOND, LARRY	740-4901	13708 SOMERSET RD.	POWAY, CA.	92064
W6IQS	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	727-8777	1087 SHADOWRIDGE APT 106	VISTA, CA.	92083
W6IUG	WEST, RICHARD O.	566-7089	10711 CHARBONO TERR.	SAN DIEGO, CA.	92131
W6IWK	PATCHEL, HERBERT	272-5233	3634 JENNIFER ST.	SAN DIEGO, CA.	92117
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
K66JA	BERG, PETER	729-8409	P.O. BOX 4207	CARLSBAD, CA.	92008
W6JJA	BIANCHI, GUIDO	353-0893	1320 W EVAN HEWES HWY #28	EL CENTRO, CA.	92243
KI6JM	HANTHORN, JACK	590-0420	1211 HIDDEN OAKS TRAIL	VISTA, CA.	92084
W6JRG	HUCKABAY, WALT	722-3248	1047 SHAFER ST.	OCEANSIDE, CA.	92054
K6JSI	STOFFER, JEFF 'SHORTY'	724-4020	2040 HAWLEY DR.	VISTA, CA.	92084
W6JSP	HARVEY, FLOYD	741-8391	1195-33 LA MOREE RD.	SAN MARCOS, CA.	92069
N6JTT	BOTIEFF, DAVE	750-7119	1315 MELROSE WAY	VISTA, CA.	92083
W6JVS	ROUSE, HARRY A.	757-2260	328 CROUCH ST.	OCEANSIDE, CA.	92054
N6JZB	COOK, WALLY	272-0304	4615 BANNOCK AVE.	SAN DIEGO, CA	92117
N6KAL	MATROS, BECKY	789-3101	452 E. WASHINGTON ST.	RAMONA, CA.	92065
W6KCB	JANKOWSKI, EDWARD	749-9510	28548 MAC TAN RD.	VALLEY CENTER, CA.	92092

N6KEU	MATROS, RICH	789-3101	452 E. WASHINGTON ST.	RAMONA, CA.	92065
K6KFY	WYTEMBAACH, BEN		6951 BATISTA ST.	SAN DIEGO, CA.	92111
N6K6K	WILLIS, LEE	726-1897	3902 BROWN ST.	OCEANSIDE, CA.	92056
N6KI	VERNACCHIA, DENNIS	271-6879	8993 COVINA ST.	SAN DIEGO, CA.	92126
K6KVY	WONG, DENNIS		10615-6 TIERRASANTA B.162	SAN DIEGO, CA.	92124
W6KZM	HEITGER, BOB	729-4504	1708 BONITA LANE	CARLSBAD, CA.	92080
N6L	CONTOGENIS, JOEY	295-2427	3428 ALABAMA ST.	SAN DIEGO, CA.	92104
W6L	LEONELLI, PHIL	757-7308	3564 STRAWBERRY PL.	OCEANSIDE, CA.	92056
K6LWJ	PEARCE, ART	724-6155	3580 TWILIGHT LN.	OCEANSIDE, CA.	92056
N6LPM	MILLS, JOHN		142 POLK ST.	OCEANSIDE, CA.	92056
N6LTV	HART, LANE	743-7532	1918 PAMELA LN.	ESCONDIDO, CA.	92026
N6LU0	NIDA, TED H.	945-8677	1021 DEERHAVEN DR.	VISTA, CA.	92084
N6LWD	LEVESQUE, ROY	231-7589	3178 VALLE AVE.	SAN DIEGO, CA.	92113
N6LXD	LISCOMB, BILL	931-1438	7034 FERN PL.	CARLSBAD, CA.	92089
N6MAE	GREER, JOHN	753-8174	669 RANCHO SANTA FE RD.	OLIVENHAIN, CA.	92024
K6MBL	ROSS, BETSY E.	272-6395	1252 DIAMOND ST.	SAN DIEGO, CA.	92109
K6MFCU	SMITH JR., BILLY J.	582-2313	3429 PAGE ST.	SAN DIEGO, CA.	92115
W6MFT	NIELSEN, WILL O.	264-1100	1731 REPUBLIC ST.	SANDIEGO, CA.	92114
K6MI	SMITH, GEORGE	477-7287	1325 ROSELAWN ST.	NATIONAL CITY, CA.	92050
N6MMP	FISHER, MICHAEL O.	789-2892	P.O. BOX 1757	RAMONA, CA.	92065
W6MOS	PEVNEY, JOE	826-1662	4134 SKYLINE RD.	CARLSBAD, CA.	92080
KI6MP	ABRAMS, BOB	453-8953	7027 DENNISON ST.	SAN DIEGO, CA.	92122
K6MPZ	LINCOLN, CAROLINE	436-3570	1345 HYMETTUS AVE.	LEUCADIA, CA.	92024
N6MBV	NIELSEN II, WILL O.	726-4238	2438 STOCKTON LN.	VISTA, CA.	92084
K6HRK	BURRITT, JAY	486-4397	13220 EL REY VISTA	POWAY, CA.	92064
N6MTL	HIER, RICK		12633 HEDGETREE CT.	POWAY, CA.	92064
KI6MV	LITTLEFIELD, CHARLES	941-3991	439 LADO DE LOMA DR.	VISTA, CA.	92083
N6MVN	DIPERT, STEVEN R. 'DICK'	NONE	PO BOX 127	SANTA YSABEL, CA.	92070
N6MVZ	CALDWELL, BENTON	729-5161	4150 ADAMS ST.	CARLSBAD, CA.	92088
N6NAU	PAKASKI, TED		3731 PARK DR.	CARLSBAD, CA.	92088
W6NBH	DOIG, AL	741-1320	419 EL DORADO DR.	ESCONDIDO, CA.	92025
N6NEH	NEIGER, RALPH	489-6292	1337 PARK HILL LN.	ESCONDIDO, CA.	92025
W6NFG	MANDY, BILL	563-8220	7240 EL CAJON BLVD. # 2	SAN DIEGO, CA.	92115
N6NHM	MC KINNEY, STEPHEN B.	756-2649	80X 1266	RANCHO SANTA FE, CA.	92067
W6NIJ	MC LAREN, DAVID	750-0246	2330 MALEE DR.	VISTA, CA.	92084
W6NLO	ARNOLD, MERIT	744-7486	630 ROSE RANCH RD.	SAN MARCOS, CA.	92069
K6NPK	ASHLEY, JO	741-2560	2655 LAS PALMAS AVE.	ESCONDIDO, CA.	92025
K6NPL	ASHLEY, A. J.	741-2560	2655 LAS PALMAS AVE.	ESCONDIDO, CA.	92025
W6NVC	RIVERA, BOB	724-2383	2233 VISTA GRANDE DR.	VISTA, CA.	92084
N6NNI	SCHLESINGER, MARK M.	740-8391	13633 CATAWBA DR.	POWAY, CA.	92064
N6NMP	HEALEY, WILMA	456-1910	416 BONAIR ST.	LA JOLLA, CA.	92037
N6NNG	HEALEY, THOMAS	456-1910	416 BONAIR ST.	LA JOLLA, CA.	92037
N6N0G	BUCKNER, MARY	941-0867	993 S. SANTA FE #C	VISTA, CA.	92083
W6NGZ	HULBERT, DONALD		1022 TAYLOR ST.	VISTA, CA.	92084
K6NRL	KLEIN JR., FRED	727-5429	3505 BADILLO ST.	SAN MARCOS, CA.	92069
N6NSU	SCHMIDT, WILLIAM	753-8987	920 STRATFORD DR.	ENCINITAS, CA.	92024
K6NUY	COATES, WALTER	439-2165	730 PEARWOOD ST.	OCEANSIDE, CA.	92056
W6NVX	BARBEE, STANLEY N.	756-4651	P.O. BOX 1589	RANCHO SANTE FE, CA.	92067
K6NZA	BURGESS, MARY	749-2822	PO. BOX 271543	ESCONDIDO, CA.	92027
N6NZX	BURGESS, CARL W.	749-2822	P.O. BOX 271543	ESCONDIDO, CA.	92027
W6OBH	MAYES, PETE	744-6213	1700 KINGSLET RD.	SAN MARCOS, CA.	92069
W6ODG	STEWART, AUBREY L.		196 CALLE GUERNICA	SAN MARCOS, CA.	92069
W6OFT	CALL, CLINT	729-0850	2240 JEFFERSON ST.	CARLSBAD, CA.	92080
N6OIG	GRANT, ROD	672-1402	15520 ANDORRA WAY	SAN DIEGO, CA.	92129
W6OKG	GLASER, PETER	439-5705	519 NEVADA ST.	OCEANSIDE, CA.	92054
W6OLG	TENTOR, JOHN	672-3891	11012 AVENIDA MARIA	SAN DIEGO, CA.	92129
W6OML	PONELL, RICHARD	727-9432	3535-275 LINDA VISTA DR.	VISTA, CA.	92083
N6OPD	CRABTREE, JACK	434-2217	3601 LOREDO ST.	CARLSBAD, CA.	92080
K6OQE	CHANDLER, LARRY	469-0844	6390 FALMOUTH	LA MESA, CA.	92042
W6OVP	LIEN, DAVID A.		18215 CORTE DE CASARES	SAN DIEGO, CA.	92128
K6OXK	TIPPIT, DON	723-8319	2233 S STAGECOACH LANE	FALLBROOK, CA.	92028
W6OYJ	MURIN, ED	453-4563	6255 RADCLIFF DR.	SAN DIEGO, CA.	92122
K6PCF	PARKER, MARNI	272-1409	4166 TAOS DR.	SAN DIEGO, CA.	92117
N6PDP	BROWN, JEFF	742-3536	15000 HWY 76	PAUMA VALLEY, CA.	92061
N6PDZ	BARKER, FRED	726-2611	1341 PHILLIPS ST.	VISTA, CA.	92083
KI6PE	MC CARTNEY, DOUGLAS B.	753-9320	3535 SITIO BAVA	CARLSBAD, CA.	92089
N6PEA	BARKER, MARY	726-2611	1341 PHILLIPS ST.	VISTA, CA.	92083
K6PLG	HUNTER, HARLO	273-0960	2605 LORING ST.	SAN DIEGO, CA.	92109
W6PNT	OLSEN, FRED	566-9152	10600 CAMINITO DERECHO	SAN DIEGO, CA.	92126
K6PP	HORRALL, GENE	442-3716	620 ECKEN RD.	EL CAJON, CA.	92023
KA6PPD	HEISMAN, PAUL	726-1657	1008 TOROLE CIR.	VISTA, CA.	92084
N6PQB	de MONTGREG, VINA	726-2353	750 CRESTVIEW RD.	VISTA, CA.	92083
K6PUN	GORDON, DOUG	729-0239	3915 TRIESTE DR.	CARLSBAD, CA.	92080
N6PYD	MURDOCK, JIM	729-2596	2987 BRANDON CIRCLE	CARLSBAD, CA.	92080
N6PYL	CLASSEN, NEIL	729-0331	4931 LOMA LAGUNA DR.	CARLSBAD, CA.	92089

N60BD	HAMMILL, LYNN	431-0270	510 S. VINE ST.	ESCONDIDO, CA.	92025
N60BI	SIMMONS, JEREMY	222-4209	4637 ORCHARD AVE.	SAN DIEGO, CA.	92107
W600BO	WILLIAMS, RICHARD	757-3734	P.O. BOX 177	SAN LUIS REY, CA.	92268
KB60C	BREHM, BOB	931-8759	2610 EL AGUILA LN.	CARLSBAD, CA.	92008
W60CA	DAVIS, LARRY	582-4324	6579 CRYSTALAIR DR.	SAN DIEGO, CA.	92120
N60CQ	ZEIHER, DAVIS	582-6464	4466 COLLEGE AVE.	SAN DIEGO, CA.	92115
N60DB	ROHRER, SUSAN	749-0276	30311 CIRCLE R LN.	VALLEY CENTER, CA.	92092
N60DK	PAIGE JR., CHARLES	967-8767	711 ARTHUR AVE.	OCEANSIDE, CA.	92056
N60DR	MAHLUM, DAVID	723-2974	1198 SENWOOD AVE.	FALLBROOK, CA.	92028
KB60EW	CLARK, DONALD C.	753-3923	2117 WALES DR.	CARDIFF BY SEA, CA.	92007
KB60F	HORRELL, MAURICE	726-7111	1906 ALTA VISTA DR.	VISTA, CA.	92084
KA60FF	MC CORMICK, MATT	724-6361	1810-134 E. BOBIER DR.	VISTA, CA.	92084
KB60H	GREGORY, ROBERT	461-0124	6365 CASS BERRY WY.	SAN DIEGO, CA.	92119
KF60H	FRANKLIN, JIM	726-4822	2174 FOOTHILL DR.	VISTA, CA.	92084
KD60J	HANSON, MELVIN R.	569-5854	3972 CAMINITO DE TATAN	SAN DIEGO, CA.	92111
N60JE	CALL, ELEANORE	729-0850	2248 JEFFERSON ST	CARLSBAD, CA.	92008
N60JO	FERGUSON, FRED	726-9234	29814 MARGALE LANE	VISTA, CA.	92094
KB60JO	VICKERY, VICTORIA	726-7504	844 HAMPTON COURT	VISTA, CA.	92083
N60MI	EGDAHL, JOHN	729-2156	4208 HIGHLAND DR.	CARLSBAD, CA.	92008
KB60OF	HALL, BERTIN	758-0393	1554 CAMINO CORTO	FALLBROOK, CA.	92028
W60P	FORBES, JACK	724-3341	2355 SAN CLEMENTE AVE.	VISTA, CA.	92094
K60Q	MORIARTY, JOHN		GENERAL DELIVERY	PALOMAR HT, CA.	92060
N60RF	RATH, NORMAN H.	721-1653	1096 TURNSTONE WAY	OCEANSIDE, CA.	92056
W60000	GONSETT, BOB	753-9133	518 NEPTUNE AVE.	ENCINITAS, CA.	92024
KE60V	FAY, CHARLIE	433-1258	200-93 N. EL CAMINO REAL	OCEANSIDE, CA.	92054
N60VA	TRAPOLINO, MARK	632-1264	3517 CAMINITO SIERRA #303	CARLSBAD, CA.	92009
N60VW	VERNACCHIA, ORLANDO	578-0427	8946 HILLERY DR.	SAN DIEGO, CA.	92126
KB60WI	MARTIN, JOSEPH		619 FLORA DR.	OCEASIDE, CA.	92056
WB6R	STEDMAN, DUANE	753-4821	1614 EDILEE DR.	CARDIFF, CA.	92007
N6RAO	WILHELMY, LOREEN	756-3133	P.O. BOX 2448	RANCHO SANTA FE, CA.	92067
N6RBS	OLSON, KEN	741-0040	1406 VIA VALENTE	ESCONDIDO, CA.	92025
K6RF	CULLIAN, TED	439-0562	2108 BUNKER VIEW WAY	OCEANSIDE, CA.	92056
KI6RF	SIMMONS, JACK	222-4209	4637 ORCHARD AVE.	SAN DIEGO, CA.	92107
KB6RGT	WATSON, WALTER A.	697-2145	P.O. BOX 234	JANUL, CA.	92033
N6RHS	STEDMAN, PATRICIA	753-4821	1614 EDILEE DR.	CARDIFF, CA.	92007
KB6RI	LIPPERT, GEORGE	727-6650	1228 LUPINE HILLS RD.	VISTA, CA.	92083
N6RKE	CROSSMAN, GLEN	720-8431	P O BOX 3142	FALLBROOK, CA.	92028
K6ROR	SCHUTZE, AURA	724-0098	2333 MAELEE DR.	VISTA, CA.	92084
N6RSR	NEELY, B.J.	420-7347	350 BROADWAY #81	CHULA VISTA, CA.	92010
K6RTD	MAYNARD, GEORGE 'SKIP'	727-2374	643 PLUMOSA AVE.	VISTA, CA.	92083
WB6RTY	NEUMAN, JOHN		822 LAURELWOOD CT.	SAN MARCOS, CA.	92059
N6RVO	MARTINA, JOSEPH F.	433-6885	4462 IBIS WAY	OCEANSIDE, CA.	92056
WB6RNF	BROWN, JIM	750-4794	3201 MIRA MESA AVE.	OCEANSIDE, CA.	92056
N6RYZ	MASON, ART	789-2931	2418 DALEY ST.	RAMONA, CA.	92065
KS6S	RICE, BOB	724-3558	3130 MORNINGSIDE DR.	OCEANSIDE, CA.	92056
KB6SAE	SELLERS, LINDA	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
W6S6K	MARTIN, ALAN	753-3345	1135 CREST DR.	ENCINITAS, CA.	92024
WB6SML	HORGAN, JOHN		2438 GALAHAD RD.	SAN DIEGO, CA.	92123
KB6SGR	MEAD, PATRICK (P.J.)	941-9162	5333 DARRIN DR.	OCEANSIDE, CA.	92056
W6SVN	HANDSCHNEIDER, HERB	722-2803	1029 S. NEVADA	OCEANSIDE, CA.	92054
W6T	TILLEY, AUBRA	742-3735	P.O. BOX 429	PAUMA VALLEY, CA.	92061
WB6TBA	GATES, BOB	729-1976	1777 BUTTERS RD.	CARLSBAD, CA.	92008
WB6TBO	MC CORD, BILLY	724-3837	222 WASHINGTON ST.	VISTA, CA.	92084
W6TCI	WILLIAMS, HARRY	724-3471	1300 PHILLIPS ST.	VISTA, CA.	92083
W6TDC	MILLER, LEE	724-7460	630 CORTEZ AVE.	VISTA, CA.	92084
N6TE	BLUESTEIN, HARRY	454-1098	5533 MOONLIGHT LN.	LA JOLLA, CA.	92037
W6TET	SIMPSON, IVAN	273-0219	3669 JENEL ST.	SAN DIEGO, CA.	92109
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
W6THC	SPANGLER, RAY	729-2001	3774 SKYLINE RD.	CARLSBAD, CA.	92008
WB6TJN	SELLE, BRYAN		4631 BRIAR RIDGE RD.	OCEANSIDE, CA.	92056
K6TQ	TAYLOR JR., WILLIAM H.	727-1500	3744 BLUEBIRD CANYON RD.	VISTA, CA.	92084
WB6TQF	HALYBURTON, ALEX		9141 HEATHERDALE ST.	SANTEE, CA.	92071
KB6TGX	HUDSON, JOHN R.	727-0113	3427 CAPALINA RD. #24	SAN MARCOS, CA.	92069
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
N66U	MITCHELL, LOREN	576-0650	10485 VIACHA DR.	SAN DIEGO, CA.	92124
W66V	PENNINGTON, WALTER	433-1056	3529 PEAR BLOSSOM DR.	OCEANSIDE, CA.	92056
KA6UAI	THOMPSON, ERIK	436-5550	962 HYMETTUS AVE.	ENCINITAS, CA.	92024
K6UL	KWIETNIEWSKI, MITCH	274-1434	3728 1/2 A INGRAHAM ST.	SAN DIEGO, CA.	92109
W6UTQ	RUEGSEGER, LARRY	758-5820	1450 HEDIONDA AVE.	VISTA, CA.	92083
W6UZL	HICKS, WALT	292-7918	2671 ELYSSEE ST.	SAN DIEGO, CA.	92123
W66V	de MONTEGRE, LARRY	726-0353	750 CRESTVIEW RD.	VISTA, CA.	92083

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Members By Call

86-23-1988 PG 5

W6VDA	VLYMEN, BILL	466-4234	4850 JESSIE AVE.	LA MESA, CA.	92041
KB6VGN	SAWYER, CHRISTINE		635 CHAMBERLAIN AVE. #8	EL CAJON, CA.	92020
K6VGP	MC KAY, DICK	377-2789	27532 ELMSRIDGE DR.	RANCHO PALOS VERD CA	90274
WA6VNR	HYPNAROWSKI, JOE		3785 MT BLACKBURN AVE.	SAN DIEGO, CA.	92111
KB6VQ	SIEMONS, MARCEL				
KB6VUO	GRIFFITHS, GEORGIA	942-5882	2207 SERENO VIEW LANE	OLIVENHAIN, CA.	92024
KE6VX	CHANTRILL, ROBERT	727-8686	1961 PINEMOOD RD.	VISTA, CA.	92083
K66VX	LINCOLN, CHESTER 'BUD'	436-9983	1345 HYMETTUS AVE.	LEUCADIA, CA.	92024
WB6VYC	CHAMBLESS JR., BURR	757-6870	P.O. BOX 190	SAN LUIS REY, CA.	92968
WA6VYD	CHAMBLESS, BURR	757-6870	P.O. BOX 190	SAN LUIS REY, CA.	92068
NN6W	KENT, JOHN L.	729-5254	3920 HOLLY BREA LN.	CARLSBAD, CA.	92080
WB6WET	HARKER, HARLAND 'HARK'	724-2111	607 VIA DEL MAR	VISTA, CA.	92083
WB6WPO	PRIEST, BILL	724-4279	3533 LINDA VISTA DR.	VISTA, CA.	92083
WA6WQI	JENKINS, MICKEY	433-2160	4815 STEPHANIE PL.	OCEANSIDE, CA.	92056
WA6WSZ	HARRY, JOE	726-9526	2438-2 E. VISTA WAY	VISTA, CA.	92084
WA6WTZ	FRANKLIN, OLIVIA	726-4822	2174 FOOTHILL DR.	VISTA, CA.	92084
KB6WMP	KIZER, RON	941-8857	1252 WOODRAIL DR.	VISTA, CA.	92083
KD6WX	PATCHEL SR., HERBERT		4920 DELLA PL.	SAN DIEGO, CA.	92117
WB6WYR	DAUBEN, DENNIS	466-7722	8025 ANDERS CIR.	LA MESA, CA.	92041
KD6WZ	FREY, FREDERICK	729-2991	3449 CORVALIS ST.	CARLSBAD, CA.	92089
K26X	BUSCEMA, PAUL	436-2537	343 WHITEWOOD PL.	ENCINITAS, CA.	92024
K16XJ	ALBRECHTSEN, JOHN	941-8725	845 HAMPTON COURT	VISTA, CA.	92083
K6YGK	UMINSKI, GEORGE	755-1814	13776 MIRA MONTANA DR.	DEL MAR, CA.	92014
KB6YHY	NYE, ARTHUR	758-8234	1869 ALESSANDRO TRAIL	VISTA, CA.	92084
KB6YHZ	NYE, ANITA	758-8234	1869 ALESSANDRO TRAIL	VISTA, CA.	92084
W6YJU	SCHWEIZER, EARL	753-8096	P.O. BOX 532	CARDIFF, CA.	92037
W6YLA	BALKE, JERRY	758-1134	746 HONEYDEW LN.	VISTA, CA.	92084
WB6YVT	GOLDEN, CHUCK	724 1718	3031 LOUANA DR.	OCEANSIDE, CA.	92056
W6YX	BELL, BOB	745-3722	1926 ALEXANDER DR.	ESCONDIDO, CA.	92025
W6YVV	BURDETTE, SAM	726-2624	4718 WESTRIDGE DR.	OCEANSIDE, CA.	92056
AD6Z	RICE, JANE	724-3558	3130 MORNINGSIDE 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
WB6ZJZ	GIBBS, CHARLEY	758-3666	3213 MARINS RD.	OCEANSIDE, CA.	92056
K16ZM	TODD, ALLEN	439-8227	822 LA SALINA PL.	OCEANSIDE, CA.	92054
W7AMR	WILLET, GEORGE	434-5656	4722 BIRCHWOOD CIR.	CARLSBAD, CA.	92089
7AS	GRANT, GARY		17634 PLAZA ARICA	SAN DIEGO, CA.	92128
WA7BIA	LEWIN, A. A.	942-1166	1166 WOTAN DR.	ENCINITAS, CA.	92024
KB7CPP	DE SOTO, WARREN	758-8168	2523 CATALINA CR. #353	OCEANSIDE, CA.	92056
N7EQG	LOAR, CHRISTINE	484-3494	13073 SUNDANCE AVE.	SAN DIEGO, CA.	92129
N7EQU	MERRITT, BARRY	481-8750	2292 CAMINITO CALA	DEL MAR, CA.	92014
WA7GRW	TRAYNOR, BOB	578-7425	12414 SEMILLON BLVD.	SAN DIEGO, CA.	92131
W7H6S	THIELE, AL	755-7347	3444 LADY HILL RD.	SAN DIEGO, CA.	92139
KB7LX	LEACH, BILL	560-0545	5415 CLAIRMONT MESA BLVD.	SAN DIEGO, CA.	92117
WB7OCR	EVANS, LEE	749-9113	18218-150 PARADISE MTN RD	VALLEY CENTER, CA.	92082
WA7ONU	LOAR, DAVID	484-3494	13073 SUNDANCE AVE.	SAN DIEGO, CA.	92129
KA7PII	TRAYNOR, JUDY	578-7425	12414 SEMILLON BLVD.	SAN DIEGO, CA.	92131
WB7TRH	KNIGHT JR., JOHN A.	530-8355	11224 POLARIS DR.	SAN DIEGO, CA.	92126
K7WLX	FELTON, BOB	729-5519	4803 NEBLINA DR.	CARLSBAD, CA.	92080
AH8AD	BURTON, LIONEL 'DOC'	744-6984	603 BARRYHILL DR.	SAN MARCOS, CA.	92069
N9AKB	CARLSEN, KENNETH	434-3256	4817 REFUGIO	CARLSBAD, CA.	92080
W9FFG	SMITHANA, DON	578-2486	11105 PEGASUS AVE.	SAN DIEGO, CA.	92126
W9FGN	ROHRER, STAN	749-8276	38311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
W9GNI	WITTING, MARTIN J.	439-4845	CHAPLIN OFF. 1ST FSSG	CAMP PENDLETON, CA	92055
KA9HDI	AZMANN, FRANK	434-4494	1270 STRATFORD LANE	CARLSBAD, CA.	92080
ASSOC	ANDERSON, FRED	452-1928	4850 ROSENDA CT. APT 238	SAN DIEGO, CA	92122
ASSOC	ANDERSON, HELEN	452-1928	4850 ROSENDA CT. #238	SAN DIEGO, CA	92122
ASSOC	WALLER, ERICH M.	755-4472	745 HOSEA DR.	DEL MAR, CA.	92014
ASSOC	TEALE, J. N.	753-3308	2784 EL CAMINO DEL NORTE	OLIVENHAIN, CA.	92024
ASSOC	BARRY, DANIEL	724-2257	2455 EDGEHILL RD.	VISTA, CA.	92083
ASSOC	LOUNSBURY, JERRY	437-8546	357 ALAMEDA BLVD.	CORONADO, CA.	92118
ASSOC	STEWART, F. BRUCE	941-3884	867 EVERGREEN LANE	VISTA, CA.	92034
ASSOC	JACOBSON, LEONARD H.		1125 MEADOWLAKE DR #7	VISTA, CA.	92084
ASSOC	PAYNE, RICHARD	436-0160	366 ANDREW AVE.	LEUCADIA, CA.	92024
ASSOC	COURTNEY, B.C. 'RED'		5209 COLONIAL WAY	OCEANSIDE, CA.	92056
ASSOC	PARNELL, DAN		P.O. BOX 1903	RAMONA, CA.	92065
ASSOC	HELMS, CLIFF	676-6651	PO BOX 1773	TEMECULA, CA.	92390
ASSOC	RESCHLY, DIRK		3518 PRINCE ST.	ESCONDIDO, CA.	92025

TOTAL 368

K16MP	ABRAMS, BOB	W6TZV	CRISPELL, HAL	ASSOC	HELMS, CLIFF
AA6DI	ALBRECHTSEN, LOUELLA	N6RKE	CROSSMAN, GLEN	N28BK	HERMAN, ETHEL
V76XJ	ALBRECHTSEN, JOHN	K6HAV	CROSSMAN, RALPH	WB6RW	HERMAN, ZEL
K66GW	AMES, RUSS	N6INN	CROSSMAN, PAT	W6UZL	HICKS, WALT
WD6AXN	ANDERSON, THOMAS	K6RF	CULLIAN, TED	N6MTL	HIER, RICK
ASSOC	ANDERSON, FRED	WB6WYR	DAUBEN, DENNIS	W6HC	HODGSON, CHARLES I.
ASSOC	ANDERSON, HELEN	W69CA	DAVIS, LARRY	KD3FN	HOFFMAN, MIKE
W6NLO	ARNOLD, MERIT	KB7CPP	DE SOTO, WARREN	K6II	HOLM, ED
KB6NMY	ASHLEY, JO	WD6BNX	DEAN, ROBERT K.	WD6DLW	HONTS, C. N. 'JACK'
KB6NML	ASHLEY, A. J.	N6CQH	DEMOS, TED	WB6SML	HORGAN, JOHN
KA7HDI	AZMANN, FRANK	N66Z	DENTON, WILLIAM H.	K6PP	HORRALL, GENE
W6YLA	BALKE, JERRY	WD6AHX	DEWEY, L. WAYNE	KB6GF	HORRELL, MAURICE
N6IZW	BANKE, KERRY	N6MYN	DIPERT, STEVEN R. 'DICK'	WB6FMT	HOUSER, JERRY
WB6NVX	BARBEE, STANLEY N.	K3FMT	DIVECCHIO, MARK	KI6GI	HOY, TIM
N6PDZ	BARKER, FRED	W6BHF	DOBLER, RAY	W6JRO	HUCKABAY, WALT
N6PEA	BARKER, MARY	W6NBH	DOIG, AL	KB6TQX	HUDSON, JOHN R.
ASSOC	BARRY, DANIEL	N6CDA	DOUGLAS, MALCOM	W6N9Z	HULBERT, DONALD
K6CV	BASTOW, J. G.	KI6TG	DOWLING JR., CHUCK	W6TFB	HUNT, LLOYD
W6HN	BAUMGARTNER, VERN	KB6IGB	DRUMMOND, LARRY	KB6PLG	HUNTER, HARLO
N6ARS	BEENER, MELVIN	KJ6ES	EARL, GERRY	W6VNR	HYPNAROWSKI, JOE
KD6FY	BELFIELD, SCOTT	W6TXK	EARL, RONALD C.	W6IRM	INSKEEP, CHUCK
N6YX	BELL, BOB	N6GMI	EGDAHL, JOHN	ASSOC	JACOBSON, LEONARD H.
K66JA	BERG, PETER	K66GS	ESTERLY JR., HAROLD D.	W6KCB	JANKOWSKI, EDWARD
W6JJA	BIANCHI, GUIDO	WB7OCR	EVANS, LEE	W6WGI	JENKINS, MICKEY
N6TE	BLUESTEIN, HARRY	N6GNB	FAMNESTOCK, ALBERT	KB6EPO	JOHNSON, ERIC
N3BL	BOLES JR., ROBERT E.	N6GJH	FAMNESTOCK, MICKEY	WD6FWE	JOHNSON, DON
KI6CX	BOLLMAN, GEORGE	W6FTV	FALLS, EDWARD L.	N66W	KENT, JOHN L.
N6JTT	BOTIEFF, DAVE	KE6GV	FAY, CHARLIE	W6DWE	KIRKPATRICK, CLAUDE L.
KE6HI	BOURHENNE, ALMA	K7WLX	FELTON, BOB	WB6YCG	KIRSCHNER, HENRY
N6FMK	BOWEN, BILL	N6QJO	FERGUSON, FRED	KB6WNP	KIZER, RON
N6GPJ	BRAUN, RUSS	N6IE	FERRANTO, FELIX	KB6NRL	KLEIN JR., FRED
KB6QC	BREHM, BOB	N6NPP	FISHER, MICHAEL O.	W6FN	KLIPPEL, KEN
N6CKQ	BROADBENT, LOUIS	N66JH	FOLSOM, RUSS	WB7TRH	KNIGHT JR., JOHN A.
WD58RT	BROOM JR., HERMAN	W6GP	FORBES, JACK	W6HZJ	KREBS, RUSS
WD6BRX	BROUILLET, PAUL	KF6QH	FRANKLIN, JIM	WB6IQS	KUIVINEN, JOHN
WB6RHF	BROWN, JIM	W6GHTZ	FRANKLIN, OLIVIA	K6UL	KWIETNIEWSKI, MITCH
N6ICH	BROWN, THOMAS F.	KD6WZ	FREY, FREDERICK	WB6MY	LA POINTE, JOE
N6PDP	BROWN, JEFF	K6GAK	GARREN, RICHARD K.	N6ISC	LACKEY, PAUL
KB6DSC	BRUIN, BETTY	W6NYU	GATES, HOWARD	W6BSD	LANG, STEVEN
W6E	BUCKNER, BILL	WB6TBA	GATES, BOB	W6DNX	LANGJAHN, CARL
N6N0G	BUCKNER, MARY	WB6ZJZ	GIBBS, CHARLEY	KB7LX	LEACH, BILL
W6YVY	BURDETTE, SAM	W6OKG	GLASER, PETER	K6CLU	LEAK, EARL
KB6NZA	BURGESS, MARY	W6FXL	GOEPPINGER, ALBERT	WF6L	LEONELLI, PHIL
N6NZX	BURGESS, CARL W.	WB6YVT	GOLDEN, CHUCK	N6LWD	LEVESQUE, ROY
K6MRK	BURRITT, JAY	W6699	GONSETT, BOB	W67BIA	LEWIN, A. A.
AH8AD	BURTON, LIONEL 'DOC'	WD6BEZ	GONSETT, JUDY	W66VP	LIEN, DAVID A.
KZ6X	BUSCEMA, PAUL	KB66Y6	GOOD, GENE	W6EYP	LINCOLN, WARREN
N6MVZ	CALDWELL, BENTON	K6PUN	GORDON, DOUG	K66VX	LINCOLN, CHESTER 'BUD'
N6QJE	CALL, ELEANORE	N7AS	GRANT, GARY	KB6MPZ	LINCOLN, CAROLINE
W6OFT	CALL, CLINT	N6OIQ	GRANT, ROD	N66QV	LINT, KEN
KA6GR6	CALVERT, CHUCK	N6MAE	GREER, JOHN	KB6RI	LIPPERT, GEORGE
WB6HSZ	CAMPBELL, JOHN	KB66H	GREGORY, ROBERT	N6LXD	LISCOMB, BILL
W66HD	CAREY, RICHARD	KB6VUO	GRIFFITHS, GEORGIA	KI6PN	LITTLEFIELD, CHARLES
N9AKB	CARLSEN, KENNETH	KB69OF	HALL, BERTIN	N7EQQ	LOAR, CHRISTINE
W6FAY	CARR, JAY	WB6TGF	HALYBURTON, ALEX	W67OWU	LOAR, DAVID
K6ICG	CARRY, EDWARD	WB6CSH	HAMANN, MICHAEL	ASSOC	LOUNSBURY, JERRY
N6AT	CASSEN, FRANK	N68BD	HAMMILL, LYNN	WB6IOV	LOWELL, RUSS
W6GEG	CASTAGNA, ED	KB5MY	HAMMILL, DAN	K4ACN	LUTZ, EDWARD
NC6J	CHAMBERS, BOB	W6H06	HANSEN, ERIC	N66DR	MAHLUM, DAVID
W6VYD	CHAMBLESS, BURR	KD6QJ	HANSON, MELVIN R.	KB6DGR	MAHONEY, BETTY
WB6VYC	CHAMBLESS JR., BURR	KI6JM	HANTHORN, JACK	W6NFG	MANDY, BILL
KB609E	CHANDLER, LARRY	WB6WGT	HARKER, HARLAND 'HARK'	KB66MI	MARTIN, JOSEPH
KE6VX	CHANTRILL, ROBERT	N6AMD	HARLAND, RAY	W6SE	MARTIN, JOHN
KB66EW	CLARK, DONALD C.	KH6CN	HARPER, JIM	W6SGK	MARTIN, ALAN
N6PYL	CLASSEN, NEIL	W6MSZ	HARRY, JOE	N6RVO	MARTINA, JOSEPH F.
KB6NUY	COATES, WALTER	N6DUJ	HART, JOHNNY	N6RYZ	MASON, ART
KF6C	COMER, BRIAN	N6LTV	HART, LANE	N6KAL	MATROS, BECKY
NU6L	CONTOGENIS, JOEY	WB68HE	HARVEY, VANESSA	N6KEU	MATROS, RICH
N6JZB	COOK, WALLY	W6JSP	HARVEY, FLOYD	WB60BH	MAYES, PETE
W6GHM	COPLEY, DAVE	K2RTG	HASSELL, NATHANIEL W.	K6RTD	MAYNARD, GEORGE 'SKIP'
KE68H	COUNTRYMAN, BILL	N6NNP	HEALEY, WILMA	WB66XR	MC BRIDE, WILLERT 'MAC'
W6BXJ	COUP, BOB	W6NNG	HEALEY, THOMAS	KI6PE	MC CARTNEY, DOUGLAS B.
ASSOC	COURTNEY, B. C. 'RED'	W6EEZ	HEERSMA, BILL	WB6T8Q	MC CORD, BILLY
N6OPD	CRABTREE, JACK	KA6PPD	HEISMAN, PAUL	KA6OFF	MC CORMICK, MATT
W6HLB	CRAIG SR., JOE	W6KZN	HEITGER, BOB	K6V6P	MC KAY, DICK

N6NHM	MC KINNEY, STEPHEN B.	W6YJU	SCHWEIZER, EARL
W6N1J	MC LAREN, DAVID	KA5Q	SEALS, KEN
KB6SQR	MEAD, PATRICK (P.J.)	W6TJN	SELLE, BRYAN
N7EGU	MERRITT, BARRY	N5GZP	SELLERS, STEVE
N4KRA	MERZ, TOM	KB6SAE	SELLERS, LINDA
W6TDC	MILLER, LEE	W2AUO	SHAUT, STANLEY
N6EQB	MILLER, RAYMOND	KB6VQ	SIEMONS, MARCEL
N6LPM	MILLS, JOHN	N6QBI	SIMMONS, JEREMY
N66U	MITCHELL, LOREN	KI6RF	SIMMONS, JACK
N6GDT	MITCHELL, NANCY	W6TET	SIMPSON, IVAN
KB6HGR	MITCHELL, CYNTHIA	K6BPT	SKINNER, MURIEL 'SKIP'
N6IES	MITCHELL, THEODORE	K0QDC	SMITH, STEPHEN J.
K6QQ	MORIARITY, JOHN	N6HWK	SMITH, N WHITNEY
W60YJ	MUNN, ED	W6INI	SMITH, ART
N6PYD	MURDOCK, JIM	KB6HI	SMITH, GEORGE
NH6EW	MCCARTHY, MAC	KB6MCU	SMITH JR., BILLY J.
N6RSR	NEELY, B.J.	W9FF6	SMITHANA, DON
N6NEH	NEIGER, RALPH	W6ATHC	SPANGLER, RAY
W6ARTY	NEUMAN, JOHN	W6IPF	STACK, PAUL J.
K6AYJ	NICHOLS, EDITH	W6R	STEDMAN, DUANE
W6EVL	NICHOLS, ART	N6RHS	STEDMAN, PATRICIA
N6LUG	NIDA, TED H.	ASSOC	STEWART, F. BRUCE
W6MFT	NIELSEN, WILL O.	W6OD6	STEWART, AUBREY L.
N6MGV	NIELSEN II, WILL O.	K6JSI	STOUFFER, JEFF 'SHORTY'
W6HFI	NORMINGTON, PHILLIPP	W6DYV	SWADER, JOHN B.
KB6YHZ	NYE, ANITA	KB6AQS	SWENSON, GEORGE A.
KB6YHY	NYE, ARTHUR	K6TQ	TAYLOR JR., WILLIAM H.
W6PNT	OLSEN, FRED	ASSOC	TEALE, J. N.
N6RBS	OLSON, KEN	W6OLQ	TENTOR, JOHN
W6ZF	ORR JR., ALAN	W7HGS	THIELE, AL
N6QDK	PAIGE JR., CHARLES	KA6UAI	THOMPSON, ERIK
N6NAU	PAKASKI, TED	W6T	TILLEY, AUBRA
W6SAX	PARKER, MARSH	KB6QXS	TIPPIT, DON
KB6PCF	PARKER, MARNI	KI6ZM	TODD, GEORGE
W66GIN	PARNELL, THOMAS	W6JHC	TOTH, ALAN T.
ASSOC	PARNELL, DAN	N6QVA	TRAPOLINO, MARK
WV6Z	PARTRIDGE, DELMAR E.	W67GRW	TRAYNOR, BOB
N6CPS	PASCHKE, VERN	KA7PII	TRAYNOR, JUDY
N6EUV	PASCHKE, MARY	W6BLK	TRUAX, DON 'RED'
KA6GHE	PATCHEL, JUDITH	K6Y6K	UMINSKI, GEORGE
W6IWK	PATCHEL, HERBERT	N6GVN	VERNACCHIA, ORLANDO
KD6WX	PATCHEL SR., HERBERT	N6KI	VERNACCHIA, DENNIS
ASSOC	PAYNE, RICHARD	KB6QJO	VICKERY, VICTORIA
K6LNI	PEARCE, ART	W6VDA	VLYMEN, BILL
W06U	PENNINGTON, WALTER	W62ISV	WAGNER, LEO F.
W6MOS	PEVNEY, JOE	ASSOC	WALLER, ERICH M.
W6OML	POWELL, RICHARD	W6SVN	WANDSCHNEIDER, HERB
W6WPO	PRIEST, BILL	KB6RGT	WATSON, WALTER A.
W6HYB	PUGH, D. C.	W6HYC	WATT, BILL
W6HFE	RANNE, FRANK B.	N6GH	WENZ, GORDON
N6QQF	RATH, NORMAN H.	W6IUG	WEST, RICHARD O.
N6BAD	REBER, JOHN	N6COU	WHIPPLE, BILL
ASSOC	RESCHLY, DIRK	N6RAO	WILHELMY, LOREEN
KS6S	RICE, BOB	W16B	WILHELMY, RON
AD6Z	RICE, JANE	N7AMR	WILLETT, ALLEN
W6IPD	RIDEOUT, ART	W6ABX	WILLIAMS, BILL
W66NMC	RIVERA, BOB	W6QBO	WILLIAMS, RICHARD
W66EB	ROBERT, BARRY K.	W6WGU	WILLIAMS, SANDY
N6QDB	ROHRER, SUSAN	W6SLL	WILLIAMS, JACK
KA6FPS	ROHRER, BARBARA	W6TCI	WILLIAMS, HARRY
W9FQW	ROHRER, STAN	W6HCD	WILLIAMS, NASH
KB6DEM	ROSS, JUDY	KB5MU	WILLIAMSON, PAUL T.
N6GZI	ROSS, ED	N6K6K	WILLIS, LEE
KB6MBL	ROSS, BETSY E.	W9GNI	WITTING, MARTIN J.
W6JVS	ROUSE, HARRY A.	K6KVY	WONG, DENNIS
KB6AI	ROWLETT, GUY	K6KPY	WYTTENBACH, BEN
W6UTQ	RUEGSEGER, LARRY	N6QCQ	ZEIHER, DAVIS
N6FYJ	RUTLEDGE, BILL	N6PQQ	de MONTEGRE, VINA
K6GJD	SALTER, BILL	W66V	de MONTEGRE, LARRY
W6DOC	SALZARULO, MARK		
K6HE	SANDBERG, SANDY		
KB6VGN	SAWYER, CHRISTINE		
N6NNI	SCHLESINGER, MARK M.		
N6NSU	SCHMIDT, WILLIAM		
K6ROR	SCHUTZE, AURA		
		TOTAL	369

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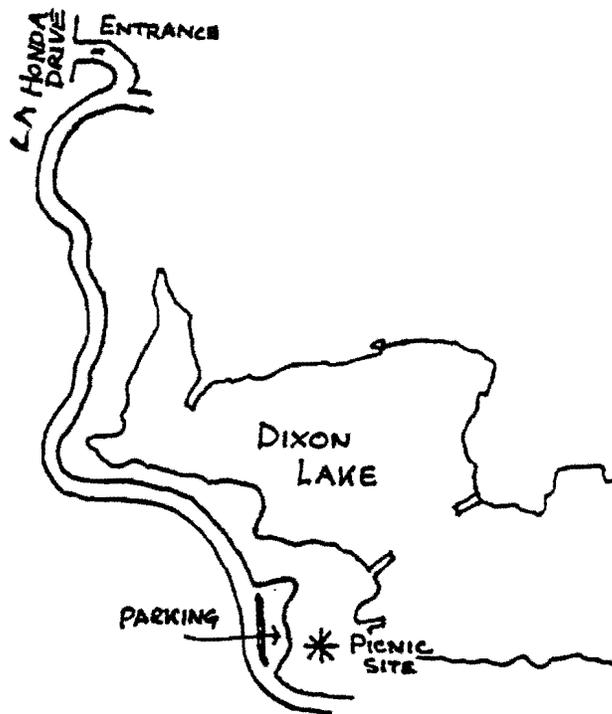
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BENT OFFERINGS By Don Addis



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July 88

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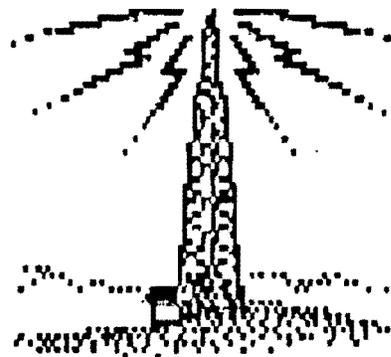
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NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWG

Scope

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

VOL. XXII, NO. 8

1936 - 1988

AUGUST, 1988

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS: WB6IGS
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	W9FQN, W16B, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	KB5MU, N6IZW, WA6KZN
TREASURER: RON WILHELMY, W16B, RANCHO SANTA FE, 756-3133	KA6UAI, WQ6V, KB6AI
EDITOR: RALPH CROSSMAN, K6HAV, VISTA, 727-5866	

>>>>>>— President's Message —<<<<<<

###—PICNIC AUGUST 14th, SUNDAY—###

The club picnic this year will be at Dixon Lake in Escondido. There is boating but no swimming. Schedule of events:

- Pick up drawing tickets, Aug. 3rd at Mtg.
- Picnic, August 14th, Sunday morning
- 8:00—> Fishermen's Folly, boating?
- 9:00 Early Bird Drawing, small prize
- 9:30—> Hidden Xmtr Instruction (HT's)
- 10:00—> Hidden Xmtr Hunt (HT only)
- 11:30—> Receive Food
- 12:00—> EAT and be Merry
- 1:00 BIG TIME DRAWINGS (\$400+)
- 1:20 Open time / Go home / Fish

there is any interest. It looks as if my three Radio Shack model IV's, three model III's, and three Sinclair T-1000's don't rate repeater time! If there is interest, the net will operate on a trial basis for three months starting August 10th at 2100 hours.

Subjects to be covered will probably be: IBM PC news, new programs, amateur radio applications, word processors, spread sheets, computer aided drawing (CAD) systems, program requests, problems and requests for help, etc. The format of the net will be similar to the Packet Net (Paul-KB5MU) and the Microwave Net (Kerry-N6IZW) whose nets have been quite successful.

FROM HIWAY I-15, TAKE 78 EAST (BECOMES LINCOLN) TO THE END (T). TURN LEFT ON CITRUS, THEN FIRST RIGHT ONTO LA HONDA TO LAKE DIXON via winding road or follow the map in the July SCOPE. Info on 146.73.

###—FIELD DAY—###

Admission is \$1/car and get there before 9:00 a.m. to get a good parking place or else park outside and 1) walk (long walk), or 2) ask for someone to bring you into the park. Bring several folding chairs in case we need them.

TNX to all who came out the Friday before FD to help set up equipment and to take it down Sunday noon. Friday afternoon early birds who signed in were Larry-WQ6V, Dennis-N6KI, Jack-KI6JM, Phil-WF6L, Stan-W9FQN, A.J.-KB6NML, Jo-KB6NMK, Ron-N6SKM, Carl-N6NZX, Paul-KB5MU, and Larry-WQ6V who came out Thursday evening with the air driven tower.

###—IBM PC NET (computer)—###

Chuck-KI6TG, our local CAD expert, has consented to start a computer help net for IBM compatibles and possibly others. They will meet on W6NWG/R (146.730) on the 2nd and 3rd Wednesdays. Other computers such as the C-64 and Apple will probably be covered on the 4th and 5th Wednesdays, if

The club's tower-trailer 40' crankup (TACO STAND) worked well even though it is not finished. The club's house trailer showed potential with a temporary table installed in place of one of the beds. With some help on both of these trailers we

AUG 88

should end up with some excellent ARES and FD trailers.

TNX to Bud-KG6VX, Field Day Chairman, and the Chief Ops (CHOPS) who took care of each operating position:

Band	CHOP	approx. contacts	
CW	Paul-KB5MU	600	!Contact points
80M	Mike-KD3HN	150	! earned in yrs
40M	Phil-WF6L	380	! 1988 5,800
20M	Dennis-N6KI	900	! 1987 5,554
15M	Mike-KD3HN	170	! 1986 4,870
10M	Phil-WF6L	54	! 1985 4,418
VHF	John-WB6IQS	75	! above is
1988 contact total=2,329			!less bonus pts

COMMENTS: We seem to be improving each year. The CW ops did much better than expected and the new 20 meter group turned in a respectable score for their first outing. The other stations turned in improved scores over last year. We hope that next year we can have a 10-15-20 CW group (young turks) and an 80-40 CW OT experts. We hope to start working on operators for next year sometime soon.

So as you can see, we certainly did quite well this year even though it has been suggested by some that we certainly have not reached our full potential yet in many areas. Wait until next year amigos!

###---GIANT COMPUTER---###

Skip-K6RTD has asked to be relieved of his position of taking care of the Giant Computer (membership data base and printing of labels) because of new business obligations. If anyone in the north county has a Radio Shack III or IV or has an IBM PC, please contact me since Skip would like to make this change as soon as possible.

###---MEMBERSHIP RENEWAL---###

Our membership this year peaked at 368 which is the largest the club has ever been. Much of this growth has come about because of the way club members have welcomed new (and old) users of the repeater to join the club. We thank you for your efforts and hope that you will continue to extend the "warm hand" of friendship to those that you meet.

###---NORTH COUNTY TRAFFIC NET---###

The North County Traffic Net (NCTN) is a TRAINING NET and needs to be treated as such. Net Control Stations (NCS) and net members are not expected to function perfectly such as would be expected in MARS nets or high speed phone and CW nets. NCS and members are expected to "upgrade" their operation as they gain more experience in net operation. Stations participating in these nets with constructive criticism should write down their suggestions and send them to Marni-KB6PCF and Todd-KI6ZM. Remember that comments made on the repeater are heard over an area 2,000 square miles. We should do everything possible to increase participation in these nets rather than discourage new people with unrealistic expectations. If someone would consider writing up a "do / don't)" list, I will see if we can get it published in the SCOPE.

Remember that each amateur should send out 3-5 messages every year to friends and relatives to keep in practice for the big emergency just around the corner.

###---ADVERTISERS---###

One of our oldest and consistent advertisers is Nicholas Andree of HIWAY COMPANY in Oceanside. If you have never been in the place, you will find it quite an adventure. My visits to HIWAY remind me of my days in the Air Force and the equipment we used to use. If you want a trip down memory lane, plan on spending several hours browsing through the piles of goodies. If it was made, you probably can find it somewhere in the building (or outside). Nick is very friendly and goes out of his way to help. He has donated many items to the club when we were in need and tells us about people wanting to become amateurs. Get a group together and visit HIWAY sometime soon.

###---THANKS---###

TNX to Jo-KB6NMK for taking the ARES net for May and June. TNX to Buck-WW6E and his crew for a "job well done" on the Vista antenna ordinance.

73 de Stan, W 9 F Q N

 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. So there!

AUGUST CLUB MEETING

The program for the August meeting will be presented by Don Root, WB6UCK, the Chairman of TASMA's Technical Committee, who will talk to us on Disaster Preparedness, a subject much in the mind of everyone with the current predictions of imminent earthquakes. There WILL be coffee, thanks to NH6EW.

ANNUAL PALOMAR AMATEUR RADIO CLUB PICNIC AT DIXON LAKE ON AUGUST 14

See first item, page 1 for the WHERE, WHEN, and some of the WHAT. Some of the HOW is HOW we are going to eat. The meal will be potluck. Some of the rest of the WHAT is WHAT we are to bring to make the potluck a feast. Those with surnames beginning with the letter A through F should bring a meat dish or casserole; those beginning with G through M a dessert; and N through Z a salad. Bring enough to feed eight people. After the meal we will have a drawing, during which I plan to win at least the first prize from among the \$400 in gift certificates from HRO and WESTCOM. First prize will be a \$200 certificate, and the ones you may have a chance at are each for \$100. WESTCOM has also donated a 2M 5/8th wave mag mount antenna.

Tickets for the picnic drawing are based on attendance at Club functions, which include club meetings, the annual club picnic, and Field Day. One ticket for each attendance and one for enlisting and reenlisting. Joining or rejoining in July gets a ticket for the 1989 picnic. TICKETS FOR THIS YEAR'S PICNIC WILL BE HANDED OUT BY THE SECRETARY AT THE AUGUST CLUB MEETING AND AT THE PICNIC. Attendance at the picnic is NOT necessary to win. You or an agent, named in writing, may pick up your tickets. The tickets must then be placed in the "hopper" for the drawing. You or your agent MUST be at the picnic to accept your winnings (assuming, of course, that I don't win them all!). The Club will NOT act as your agent. Unclaimed winnings go back into the hopper. First winner wins 1st prize.

Come and bring your loved ones - or your wife and kids - but keep the calories down in all of that wonderful chow you intend to force me to eat. Some of us are still on a diet, darn it! CU there.

 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.

+++++
 + RICH MATROS, N6KEU, SK +

+ We are saddened to report the passing of Rich Matros, N6KEU, on July 22 +
 +after a sudden relapse. Though Rich appeared to be recovering from +
 +cancer surgery, when he was again stricken, was taken to the hospital +
 +where he passed away. We are deeply saddened by his passing. Our deepest +
 +sympathy to Becky, N6KAL. We will all miss Rich. +

+++++

JULY CLUB MEETING

At the July club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Committee reports were heard.

Paul Williamson, KB5MU, gave us a most interesting and educational illustrated presentation on Digital Signal Processing. If you missed it, you missed a whole new (to me, at least) use for the computer in processing, storing and retrieving, and in some cases, regenerating, information. There were 68 members and 10 guests in attendance. The coffee was great, thanks to NH6EW; and the no-cal goodies were tasty, thanks to those kind enough 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 August meeting will be at the home of W9FQN.

At the JULY meeting at the home of W9FQN, the Committee inspected the recently received DB-252 corner reflector antenna to be used on KB6UAI/R on 147.135; and the utility trailer (which the few of us at Field Day saw). The Committee heard and approved the minutes of the previous meeting; and the Treasurer's report. The Committee discussed the summer's projects at the repeater site to include installing the new antennae, the checking and refurbishing and reinstallation of coax lines and installation of new ones; the construction of a fire resistant roof on the vault; the construction of a shed to house the batteries; and the general up-grading of our lightning protection. Priority is to go to the antenna/feedline work. The Committee voted to proceed with the work on the utility trailer; to increase the amount to be expended on it by \$50; and to authorize expenditure of up to \$100 on repair and refurbishing equipment. A grand time was had. The fresh raspberry longcake was delectious!

ARRL LETTER

In what has probably been the hottest DX news since Peter I and the Western Sahara, along comes Malyj Vysotskij Island claimed to be a new DXCC country, 4J1FS. M-V Island is located in the Bay of Vyborg, in the Gulf of Finland, Western USSR.

Your assistance is urgently need. There are two Concurrent Resolutions presently "in processing" which concern Amateur Radio: one in the House of Representatives (H. Con. Res. 317) and the other in the Senate (S. Con. Res. 127). These are resolutions which express a "Sense of the Congress" in general support of Amateur Radio. In order for these resolutions to be accepted, 218 co-sponsors are required in the House, 51 in the Senate.

Please take a few moments to write a short note to your Congressmen (perhaps a QSL card!) asking them to be a co-sponsor of these resolutions. If they are already co-sponsors, thank them for supporting Amateur Radio. Senator Pete Wilson and Rep. Robert Dornan, Calif. 38th Dist. introduced the Senate and House Resolutions, respectively. (These resolutions are very important in the battle to retain amateur frequencies - FCC Docket 87-14 proposes to reallocate 2 MHz of the 220 MHz band to a commercial Service. Ed.)

If your ham license is hard to read when you get it from Gettysburg, do NOT go over it with a pen or pencil to "darken it up". ANY alteration of the license automatically voids it. If it's unreadable, simply request a duplicate from the FCC, Box 1020, Gettysburg, PA 17326, explaining the circumstances.

VOLUNTEER EXAMINER PROGRAM

At the July tests our PARC examiner team administered ten test elements to seven applicants, six of whom passed a total of nine elements.

Our test crew was: K6HAV reception; WB6R CW exams; KB5MU, KS6S, and N6INN examiners. Paperwork by AD6Z, N6INN, & 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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

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

UP-GRADES: Dan Parnell, N6RKP, to General. Congratulations.

CORRECTIONS TO PREVIOUSLY REPORTED UP-GRADES: Joe Hypnarowski, WA6VNR, did not recently up-grade to Amateur Extra Class. He's been one for quite a while. Sorry Joe. You were obviously misheard and/or misunderstood.

GNU CLUB MEMBERS: Charles Miele; Hal Gorewit, KE6EX; Matt Taylor, NF6L; Terry Runyon, K3PXX; Kelly Partridge, N6SHB; Eric Crosser, KB6YAL; Bill Elder, KB6YNL. Welcome, we're happy to have you with us.

RENUDE MEMBERS: Ed Lutz, K4ACM; Stan Shaut, W2AUO; Arnie Lewin, WA7BIA (2 yrs); Paul Brouillet, WD6BRX; Steve Lang, WA6BSD; Lou Broadbent, N6CKQ; Vern Paschke, N0CPS; Judy Ross, KB6DEM; Bill Buckner, WW6E; Ed Castagna, WA6ESG; Mary Paschke, N0EVV; Jerry Houser, WB6FMT; Don Johnson, WD6FWE; Tim Hoy, KI6GI; Russ Folsom, N6GJW; Steve Sellers, N5GZP; Al & Mickey Fahnestock, N6GNB & N6GWJ; Ed Ross, N6GZI; Ed Holm, K6II; Ed Jankowski, W6KCB; Dennis Wong, N6KVY; Phil Leonelli, WF6L; John Hammond, WB6MEI; George Smith, KB6MI; Benton Caldwell, N6MVZ; Mary Buckner, N6NOG; Pete Mayes, WB6OBH; Lee Evans, WB7OCR, Jack Crabtree, N6OPD; Don Tippit, KB6OXW (3 yrs); Marni Parker, KB6PCF; Charles Paige, N6QDK (2 YRS); Maury Horrell, KB6QF; Bob Gregory, KB6QH; Jim Franklin, KF6QH; Duane & Pat Stedman, WB6R & N6RHS; Dan Parnell, N6RKP; Marsh Parker, W6SAX; Linda Sellers, KB6SAE; John & Alan Martin, W6SE & WA6SGK; Aubra Tilley, WM6T (2 yrs); Bill Taylor, K6TQ; B.J. & Burr Chambless; WB6VYC & WA6VYD; Joe Harry WA6WSZ; Olivia Franklin, WA6WTZ; Herb Patchell, KD6WX; Fred Frey, KD6WZ; Bill Denton, NG6Z; Del Partridge, WV6Z. 53 renewals.

GNU CALL SIGNS: Ron Kizer is N6SKM not N6SQM; and Dan Parnell has gone from no call sign to N6RKP.

COMMENT: We sure do appreciate good guys, like Eric, KB6EPO, kind enough to tell us of changes, particularly changes of address. When a change order is filed ONLY with the P.O., the Club pays \$.30 to learn the new address and the P.O. still does NOT forward the Scope to the new one. The Club doesn't either since \$.30 is 1/10th of the Scope subscription price. The Club paid \$1.20 this month and we stood in line at the P.O. thrice to pay for learning of four address changes. We do NOT consider it to be a character building experience, although we are learning about patience.

'Bout time too, I'm reminded.

 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.

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.

+++++

+ RED TRUAX, W6BLK, SK +

+ We were saddened to learn of the passing of fellow PARC member Don "Red" +
 +Truax, W6BLK, on June 29. While Red was not active in the Club, he was a +
 +staunch supporter of it through his membership. He will be missed. +

+++++

FORESAIL

(Maybe you just don't jib a darn)

C-64 computer w/1541 disk drive & 1702 color monitor, \$325. Call Lloyd, W6TFB, 757-9374.

Two Atlas 350XLs. One the bare-bones model, \$300; the other with everything, \$400. Call Clint, W6OFT, 729-0850.

ESTATE SALE: Kenwood TS-520S w/mike, \$375; Swan 700CX w/pwr supply, \$300; Swan 350 w/pwr supply, \$175; Swan WM-1500 wattmeter, \$40; Autek QF-1 audio filter, \$35; Vibroplex bug; Poucel bug; Tempo S-1 2M HT, \$75; Unique ant. tuner (does not tune coax lines), \$60; KDK-2015R 2M FM xcvr, \$100; Hallicrafters HA-1 keyer, \$30; Hustler 4BTV 40-10M vert. ant., \$30; Hustler 75/80M resonator, \$15; 2M 5/8 wave mag mount, \$15; Johnson low-pass filter, \$20; 25' & 30' push-up towers, \$50 each; Westcom pwr supply \$20. Call Art, WA6IPD, 728-6834.

Kenwood 2550A 45W 2M FM xcvr w/PL, mint condx, \$325, firm. Call Tom, N6NNQ, 456-1910.

C-64, disk drive, color monitor, modem, printer interface, joysticks, & software, best offer. Kenwood 2500 HT w/case, xtra btry and drop-in base charger, best offer. Call Gerry, KJ6ES, 486-3867 eves or 471-7401 days.

Kenwood TS-670 all mode 40, 15, 10, 6M, mint; Collins R/E single wire ant. tuner 180S-1; Collins KWM-2 xcvr w/312B-5 VFO, 516F-2 pwr supply, SM-2 mike, all R/E, mint; Palomar Engineers Tuner-Tuner, new; Nye Viking MB-V-A 3KW ant. tuner, mint. Phone Allen, N7AMR, 434-5656 after 7/30/88.

Drake TR-7 w/pwr supply and AM & CW filters. Call Ron, WI6B, 756-3133.

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.

Mirage B-23 2M 30W amp., \$55; Mirage MP-1 HF wattmeter, \$55. ICom IC-215 port. 2M FM xcvr w/15 local freq xtal sets, Vista 111-R pwr supply, \$95. All w/manuals. Call Al, N6GNB, 741-1840 after 1630.

Alliance HD-73 rotator, \$100; Safety belt, \$10; two 2M 11-elm beams, \$35 & \$30; Autek QF1 ICfilter, \$15; Hy-Gain 2BDQ 40-80M ant.; top brand panel meters, \$4 & up; Signal brass key, \$4; RG-8 coax; Archer CB Gp, \$10; ball/spring mobile ant. mt., \$10; Realistic Navaho base CB, \$25; Heathkit mike, \$5; Shure mike, \$10; Swan desk CML7L, \$15. Jerry, W6YLA, 758-1134.

Ham M rotor and contl, rebuilt, used a year. Call Al, WA6JWC, 942-2165.

Yaesu FT-270RH 45W 2M xcvr w/programmable encoder/decoder, \$285; Yaesu FT-2700RH 2M/450 MHz dual-bander similar to FT-270RH, \$300; MBA-RO CW, RTTY, ASCII reader, \$150; Lunar 1W in/20W out 220MHz amp., \$60; Yaesu FT-20RU 10W 440 MHz FM xcvr \$150; Heath EIA-416 dual trace 15 MHz scope no book, \$70; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$15; RCA Senior Voltohmyst WV-98C w/new probes & book, \$20; BK 501A Semiconductor Curve Tracer, \$20; BK 3050 Audio Sine/Square Wave Gen., \$35; Sencore FE160 Senior Field Effect Meter (VTVM equiv.), \$25. Call Ralph, K6HAV, 727-5866.

Kenwood MC-50 desk mike, \$25. Call Russ, KG6GW, 583-3297.

Cushcraft A-3 antenna, NEW, still in box. Call Jack, N6OPD, 434-2217.

Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15; various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.

Kenwood TS-820X, \$450; Turner 252 desk mike, \$30; 5-band flagpole antenna, \$25; Beckman Tech 310 DVM, \$50; HP5383A 520 MHz freq. counter, \$200; B/W video camera, \$40. Apple IIe 80 col. 512K, hi res color mon, duodisk, Apple mouse, Apple cat modem, CPM Z80 card, parallel port, 70+ disks of software. Pkg, \$950. Call Bryan, WB6TJN, 940-8803.

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

WANTED

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

A.R.E.S. RED FLAG ALERT DRILL AT RED MOUNTAIN FIRE STATION

On July 3, Nash, W6HCD, and PARC members Barry, N6ENI; John, WB6HSZ; Joe, N6RVO; Jo, KB6NMK; and Lloyd, W6TFB, conducted a formal drill using 40M, 75M, and 2M. The fire station has a Hustler 4BTV and a Ringo Ranger mounted on it. VHF communications are virtually useless at the Red Mountain Fire Station, according to W6HCD, and could only be used by installing WB6HSZ at the lookout on top of Red Mountain as a relay. Routes covered included De Luz Canyon and Valley Center. 75M was fully satisfactory, but 40M was better between base station and mobiles. HF & VHF were used between the De Luz area and the fire station and Red Mountain Lookout. VHF only was used from the Valley Center route.

 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 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.

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/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.

VISTA ANTENNA ORDINANCE HEARING

The Vista Planning Commission heard and approved the new antenna ordinance permitting maximum tower/antenna heights of 100 feet; sending the ordinance to the City Council recommending approval. The hearing took place about an hour before 20 July, and was well attended by PARC members and others too humorous to mention. After attending City Council and Planning Commission meetings, the feeling is received that both bodies have an appreciation for Amateur Radio and the good deeds we are capable of if given a chance. We wanted (and still want at the Council meeting) plenty of hams just in case some anti-ham types should appear. It's really nice to see half of the audience walk out after "our" matter has concluded!

THE FCC IN GETTYSBURG SAYS:

Thanks to N6INN, we know that the last Amateur Radio licenses issued as of 7/1/88 were: AA6JH, KJ6IV, N6SOW, KB6ZBI; and that Novice calls issued after KB6ZZZ will have the prefix KC.

HELP WANTED:

Skilled laborers needed! The Club needs some strong backs for some of our summer work projects on Mt. Palomar, the first of which is to take place at the repeater site on August 6:

30 foot ditch diggers. (I'm not sure what a foot ditch is or whether we need thirty foot tall diggers.) This is easy digging in loamy soil from the repeater bunker to the tower. This ditch will carry the pipe which will carry the coax cables.

Workers for installation of fence around tower base. Again, easy digging in loamy soil. Need at least two folks.

Wood workers and painters to do work on Club's new (old) emergency trailers, including installation of floor on antenna trailer.

If you can help with this work, let Stan, W9FQN, know and he'll try and get you into the right job for your skill level. (Every time he talks to me about "skill level" this, he measures my hands to see if a shovel fits!) This will be a good opportunity for all of us skilled workers to see the repeater site, enjoy the cool atmosphere at 5,600', and help up-grade the installation.

DOWN THE TOOBE

Our thanks to Bill Taylor, K6TQ, for his generous donation to the Equipment Fund. Bill also is responsible for a new member, his son Matt, NF6L, and a not too "new" reader in Bill Jago, K7MO, in downtown Merlin, OR. K7MO used to live across from Tri-City Med. Center.

Clint & Eleanore, W6OFT & N6QJE, are very happy since grandson Gordon Johnson passed his Novice examination while visiting them.

Allen, N7AMR, is working the world on 15M & 40M on the rain gutter antenna Ron, WI6B, rigged up for him. We tried it with a heating/air condx duct, but weren't impressed with reports received on 75M. Ya wanna buy a duct? Viaduct? By a duct? Via a duct? Bye a duct?

We're sorry to report that Bob Coup, W6BXJ, suffered a disabling stroke on April 19th. We found out about it when we called to remind him of the Vista antenna ordinance hearings. He is at home, but can't have visitors.

Congratulations to Phil, WF6L, on his appointment as Emergency Coordinator for the Tri-City Area of north county.

"That's all", she wrote!

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W6NWX

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SEPTEMBER 1988

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS: WB6IQS
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	W9FQN, W16B, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	KB5MU, N6IZW, WA6KZN
TREASURER: RON WILHELMY, W16B, RANCHO SANTA FE, 756-3133	KA6UAI, WQ6V, KB6AI
EDITOR: RALPH CROSSMAN, K6HAV, VISTA, 727-5866	

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

###---FUTURE WORK DETAILS---###

The following club members have indicated that they would be willing to help with the projects listed below. The projects are listed in order of their importance to PARC. We need some more help with these items. If I missed your name or have you listed in the wrong place, please re-contact me and I will make the proper changes.

- ANTENNAS -> *
- RUNNING LIGHTS -> *
- REFRIGERATOR(Gas) REPAIR -> *
- ANTENNA TRAILER
- FLOOR/SIDES/ROOF -> Joe-N6RVO, *
- RADIO TABLE -> *
- TOWER-> Ron-N6SKM, *
- RUNNING LIGHTS -> *
- PAINT BODY-> *

* = Need 1-2 more workers. ** = Need 3-5 or more workers.

REPEATER ANTENNAS

- CLIMBING CREW -> Ed-N6GZI, Chuck-KI6TG, Stan-W9FQN, Don-WB5IBX, Chuck-KI6TG, Charles-N6QDK, Joe-WA6VNR.
- GROUND SUPPORT -> Jack-KI6JM, Bud-KG6VX, Caroline-KB6MPZ, Carl-N6NZX, Mary-KB6NZA **
- FENCE TOWER -> *
- TOWER DIRECTION (N/S) -> Bud-KG6VX.

REPEATER BUILDING

- REMOVE WOOD ROOF -> Mike-KD3HN, Bill-WAOABX, Carl-N6NZX, **
- LAY CEMENT BLOCKS -> **
- OUTSIDE LIGHTS -> * (wiring)
- CEMENT SLAB ROOF -> ** (knowledge of cement)
- CEMENT MIXER-> WW6E

911 AUTO-PATCH

- PLANS/EQUIPMENT -> Fred-N6QJO, Charles-N6QDK, Nash-W6HCD

HOUSE TRAILER

- PAINT OUTSIDE -> Joe-N6RVO, Mike-KD3HN *
- PAINT INSIDE -> *
- BROKEN/MISSING GLASS WINDOW -> *
- RADIO TABLE -> *
- VALVES PROPANE -> *

Be sure to go through the above list and decide if you can devote a little time and energy to any of these projects. Your participation will help improve the club's emergency capabilities. THE BIG QUAKE IS COMING!

###---AUGUST 6th WORK PARTY---###

John-WB6IQS and Jack-KI6JM sorted out all of our new hardline for the new repeater antennas and made up "do" lists for the antenna party in September. Decisions were made on the location of our new underground cable system and the new locations of our antennas on the tower.

Susan-N6QDB, Carl-N6NZX, and Stan-W9FQN put in the new battery-generator shed base and mixed the cement by hand. The shed will allow us to remove the batteries from the bunker along with their fumes: hydrogen and sulfuric acid. At present there is also room for the club's 3.5KW

110VAC generator. On the way back from Palomar Mountain, we visited Mary-KB6NZA and Carl-N6NZX's house in the remote hills of the La Jolla Indian Reservation where they have a spectacular view of the beginnings of the Vista-Escondido water canal and the Santa Magarita river. They have no telephone or commercial AC power but they do have a LONG wire from one side of the canyon to the other next to a swinging bridge (ala Tarzan movies)! During the winter you can see waterfalls (like Hawaii) cascading down one side of the canyon wall. You have to see it to believe it.

##--SIMULATED EMERGENCY TEST(SET)--##

Sometime around October 15-16th we will be testing our North County Traffic System (NCTS) by dumping WITHOUT WARNING approximately fifty+ messages going to San Diego County, the state of California, and the rest of the country. Just think! Fifty+ messages coming from 10-15 stations for ONE traffic net. To handle this volume I suspect that we will have to use 146.730, 147.135, Packet, HF, other repeaters, and simplex. WHO will be the lucky net control during this SET test?

###---TRANSLATORS---###

The following club members have indicated that they might possibly be available for translating the languages listed. If you would like to be added to this list, please let us know so that you can be added to an updated list.

- Frank-KA9HDI Gen ..+. German
- Henry-WBOYCQ Gen German
- Barbara-KA6FPS .. Gen Spanish
- Nash-W6HCD Gen Spanish
- Others ????????

###---DACRON ROPE ORDER---###

- 3/32" 260 lbs test 4c/ft
- 3/16" 770 lbs test 8c/ft
- 5/16" 1790 lbs test 12c/ft

For 1,790 pounds of guying at 45 degrees, this translates into well over 1,000 pounds of horizontal restraining force at the top of your tower! Since the

rope is non-conductive, it can be used for guying towers without fear of distorting your radiation pattern.

This DuPont black Dacron/polyester rope is double braided, mildew resistant and ultra-violet light resistant besides providing excellent resistance to aging and abrasion. PARC offers no guarantee on the orders we are making for members although PARC intends to use the 5/16 for guying at the repeater site and the 3/32 for emergency-field day antennas. You will be able to borrow our "hot knife" for cutting and sealing this rope. Contact W9FQN at the next club meeting if you are interested in obtaining any of this rope through PARC. Measure your needs before you come to the meeting.

###---ADVERTISERS---###

Jack-K6NY (Althouse) has been an advertiser for years and is the chief engineer at Palomar Engineers. They have a factory-office at 1924 (Space F) West Mission Road in Escondido where they construct most of their items. Besides their fine line of equipment they are now selling toroid coils for interference (TVI, AC, computer,etc). They don't have a display room but Jack is always willing to show you whatever you might be interesting in seeing.

###---POTPOURRI---###

PURDUE UNIVERSITY, my alma mater, has just announced a new chip, called a nonlinear filtering device, which can perform up to 48 different filtering operations to eliminate "noise" caused by weather conditions or other types of interference. The chip should be available commercially in several years.

###---THANKS---###

THANKS to everyone who helped with the CLUB PICNIC: Jo-KB6NMK, Eleanore-N6QJE, Ken-N9AKB, Barbara-KA6FPS, & Ron-WI6B. THANKS to all who contributed by preparing such delicious food for our potluck luncheon!

73, Stan W 9 F Q N

 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. See!

SEPTEMBER CLUB MEETING

The program for the September meeting will be presented by Joe & Nancy Hypnarowski, WA6VNR & N6RLE, who will tell us about a their travels and operations on a DX trip in the South Pacific to Samoa, Fiji, Tonga, and Rarotonga in 1985. Their presentation includes pictures taken there. Show and Tell will feature "An easy way to double the power of your HT." W9FQN has a "detailed" Arizona Repeater Listing for the first person who asks him for it at the meeting. The Club will have five SWR meters and some other exciting junk things for sale. There WILL be coffee, thanks to NH6EW.

Since this is "back to school month" let's be sure and police up the cafeteria and the area outside (don't leave the remnants of your tobacco habits on the ground, for instance).

FCC EMASCULATES 220 MHZ BAND, GIVES 2/5THS OF IT TO COMMERCIAL USE

On Black Thursday, August 4, the FCC saw fit to ignore the myriad of comments filed by members of the Amateur Radio Service and its friends; and has announced that it has adopted its own proposal. The lower two megahertz (220-222 MHz) of the 220 MHz band will be given to the (commercial) Land Mobile Service. The effective date was not announced.

The Commission's Proposed Rulemaking was strongly and overwhelmingly opposed by the 435,000-strong Amateur Radio Service, by disaster-relief and public-safety organizations, by members of Congress and the Armed Forces. Not until the six-months-late United Parcel Service comments was there a significant user who even bothered to comment on this FCC-originated proposal. The last time the Commission listened to the siren song of the commercial folks, the 11M amateur band was given to the Citizens' Radio Service. We have all seen the results of this "carefully thought out, necessary in the public interest" maneuver!! This time we have lost a much used and valuable portion of our spectrum - the portion of the 220 MHz band used for control and link frequencies, pushing them all up to the already fully committed 440 MHz band and higher.

In Southern California alone, the loss of these two megs means the loss of frequencies on which the following presently reside: 47 remote base stations (including the Condor hub on Frazier Peak linking all 12 of the Condor System, and a control link for an ATV repeater); 22 auxiliary links for 15 2M, five 220 MHz, and two 440 MHz repeaters; 31 control links for 16 2M, 14 220 MHz, and one 6M repeaters; five repeaters; 100 kHz of simplex freqs; the the 20 kHz set aside for 56 Kbaud wide-band packet; and the 500 kHz for moonbounce and other weak signal work. All of this in the two megahertz the Commission feels is little used by the Amateur Service!!

The Commission appears to have acted in just a timely enough manner to avoid the still-pending Sense of the Congress action, which if passed would send the Commission a message declaring the Congress' support for the Amateur Radio Service.

As a sop, and to show how much the Commission cares about the Amateur

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Service, we are informed that we can have the remaining three megs on an exclusive basis! And you'd better appreciate such a thoughtful action!

There may still be a chance to reverse this decision. Call and write your elected representatives in the Congress. See the item in the ARRL Letter column on page 6 hereof. Don't just sit there, do it and let's let 'em see some pressure on the Commission on this donation to the commercial boys! Your voice should be heard, especially if you haven't yet made your feelings known to your elected representatives. You will, won't you!

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 September meeting will be at the home of WI6B.

At the August meeting at the home of W9FQN, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Annual Report. This report will be available for inspection at the September club meeting. The Committee discussed the repeater and the current rash of jammers. WB6IQS will set the repeater squelch slightly higher with audio required. Work on the repeater installation was also discussed. WB6IQS reported the possible availability of two complete 900 MHz repeaters. The Committee authorized the expenditure of up to \$500 for the purchase of the two. The batteries donated to the Club through the good offices of Larry Ruegseger, WA6UTQ, were discussed. They will substantially enhance the repeater emergency power capability. The Committee decided the computer net had started off well; and is to be called the San Diego County Personal Computer Net (or PC Net for short). The Club's policy requiring the net control stations of routine nets be PARC members was re-affirmed - the thought being that Club membership is neither so expensive nor onerous a burden as to bar anyone who wants to be an NCS. W9FQN will include the results of the recent survey in his column in a coming Scope. A grand time was had. The no-cal goodies were muy sabroso.

ARRL LETTER

According to a 1986 Dr. Wayne Overbeck, N6NB, study, "Every single new housing development in Orange or Ventura County was found to have a deed restriction prohibiting all outdoor antennas."

ARRL FILES COMMENTS ON COVENANTS - The ARRL, on July 8, filed a comment on FCC Docket 88-138, an FCC Inquiry into possible adverse effects to viewers when cable TV companies do not carry all of the local TV stations. In the past, the FCC has tried to require cable companies to provide an "A-B switch," with which the viewer could switch between cable and his outside antenna to receive stations not on cable. In order to do this, the viewer must normally use an outside antenna. Restrictive covenants on outside antennas limit the off-the-air reception of broadcast TV signals in the same way they prohibit or seriously limit amateur communications. The ARRL comments conclude "the proliferation of restrictive covenants makes it impossible to cast the issue aside by calling them 'private contractual

agreements'; there is no alternative. The covenants become contracts of adherence, with no reasonable means of accomodation for TV viewing short of cable subscription...the ad hoc regulation of interstate communications by covenant is so extensive as to require the Commission's immediate attention..."

FCC REALLOCATES 220-222 MHZ In a memo to all ARRL members, David Sumner, K1ZZ, ARRL Vice President said: There's only a few weeks left to reverse the FCC's onerous decision by legislative means in the 100th Congress. Among other initiatives, we believe that sending letters, QSL cards, and calling the offices of key senators and congressmen will enhance our efforts on Capitol Hill. Please assist us in retaining this spectrum for amateur use by picking up your pen or phone today. A proposed amendment to pending legislation follows. Please read it, then voice your support for Amateur Radio to the key decisionmakers listed at the end of this memo.

Radio Spectrum Allocation

Sec. The Commission shall enforce the regulations, rules and policies in effect as of August 3, 1988, as they relate to the Amateur Radio Service in the 220-225 MHz frequency band as defined in 47 CFR Section 2.106 (table of Frequency Allocations).

U.S. HOUSE: Rep. John Dingell (D-MI), Room 2221 RHOB, Washington, DC 20515 Tel: (202) 225-4071 Attn: John Orlando; Rep Edward J. Markey (D-MA) Chairman of Telecommunications and Finance Subcommittee, Room 316 House Annex II, Washington, DC 20515 Tel: (202) 226-2424 Attn: Gerry Saleme.

U.S. SENATE: Sen. Ernest F. Hollings (D-SC), Chairman Commerce, Science and Transportation, Room SD-508, Washington, DC 20510 Tel: (202) 224-0427 Attn: Ralph B. Everett; Sen. Daniel K. Inouye (D-HI), Chairman of Communications Subcommittee, Room SH-227, Washington, DC Tel: (202) 224-9340 Attn: Tom Cohen.

AUGUST CLUB MEETING

At the July club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Committee reports were heard. Don Root, WB6UCK, Assistant Chief of Telecommunications, of the State's Office of Emergency Services (OES) gave us a most interesting illustrated talk on the organization of emergency communications in the OES. Show and Tell featured our Repeater Committee Technical Chairman showing us a 2M cavity and the two new repeater antennae which will soon be mounted on the tower. The coffee and tasties were courtesy of NH6EW and all of those good people kind enough to bring the little beauties!

VOLUNTEER EXAMINER PROGRAM

At the August tests our PARC VE team gave ten test elements to six applicants, five of whom passed a total of eight elements.

Congratulations to club member Charles Miele, who went from no license to Technician with flying colors.

Our test crew was: KI6ZM reception; WA6HYB CW exams; W6TFB, WQ6V, and NW6W examiners. Paperwork by AA6DI & K6HAV.

George Todd, KI6ZM, has asked relief from his duties as VE Team Receptionist and Processer. He says age and limited mobility are catching up with him. He will be relieved by Jack Hanthorn, KI6JM. Thanks, Todd and Jack. If any other Advanced or Amateur Extra Class club member would like to help, please let me know as it's nice to have an alternate. 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 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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

ANNUAL CLUB PICNIC

We had spectacular weather for the Club's annual picnic at Dixon Lake in Escondido. The chow was great, the company exceptional, and the locale splendid. The fly in the ointment was my failure to hold a winning ticket! Those who did hold winning tickets were Chuck Inskeep, W6IRM, \$200 gift certificate; Stan Rohrer, W9FQN, \$100 certificate; Mark Schlessinger, N6NNI, \$100 gift certificate; and Barbara Rohrer, KA6FPS, 2M mag mount antenna donated by WESTCOM. Winners in the RDFing contests were: 1st contest KB6NMK, WB5IBX, W6OFT/N6QJE, N6QJO, KB6VGN, W6SAX, and N6GZI. 2nd Contest KB6NMK. Left at the picnic: GEOCO hat and silver cake server. If either belong to you, see W9FQN or KA6FPS, they'd like to give them back to you. It was fine picnic. Sorry you couldn't join us.

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

UPGRADES: Charles Miele to Technician from no license. Congratulations.

GNU CLUB MEMBERS: Alice Contogenis, KB6VPZ, San Diego; Lane Arbuthnot III; Ray Hickman, W6IZS, La Mesa; Gerald Worth, WA6PJJ; Joe Duffie, KB6QJR, San Diego; Nancy Hypnarowski, N6RLE; San Diego; Ed Potter, KA6VYF, San Diego; Sam Oran, WB4YQU; Tim Ames, WA6ZEN, El Cajon. Welcome, we're happy to have you with us.

RENUDE MEMBERS: Bill Williams, WA0ABX; George Swenson, KB6AQS; Bob Dean, WD6BNX; J.G. Bastow, K6CV; Bill Steele, W7EAI; Bob Traynor, WA7GRW (2 yrs.); Joey Contogenis, NU6L; Leona Wallace, WA6OHB; Judy Traynor, KA7PII (2 yrs.); Fred Olsen, W6PNT; John Hudson, KB6TQX; Dick McKay, K6VGP; Sandra Williams, WB0WGU; Charlie Gibbs, WB6ZJZ. 14 renewals.

GNU CALL SIGNS: Eric Crosser, N6SUB, from KB6YAL.

++++
+ BOB COUP, W6BXJ, SILENT KEY +
+ Bob Coup, W6BXJ, a long time PARC member passed away on August 23. He +
+ was a regular at club meetings until the last year. Bob will be missed +
+ by those who knew him. +
++++

REPEATERS

When we have continuing problems with jammers, we need the general locale of these psychopaths. When you hear a jammer or a steady carrier on either the .73 machine or the 7.135 machine, please listen on the repeater input (your transmit freq. when you work the repeater). If you can hear the offending signal on the repeater input, let it be known and how strongly you are receiving it. If you have a beam, please try and give us a heading. We need this info so that we have a starting point for mobile RDFers

Lend a hand so we can turn these birds over to the FCC for prosecution.

WB6IQS spent most of a Saturday on the mountain trying to trace down the problem with the .73 machine's intermittently staying on the air in the absence of any signal. He was able to determine that the problem does exist and is not being caused by an external agency. This was done by isolating the repeater from the antenna system and then causing it to happen, (as it did about one time in ten). John will go back to the mountain some soon to try to eliminate the problem by exchanging boards in the repeater.

John also readjusted the repeater so that the "turn-on" threshold and the audio squelch threshold were identical. Bob, WA6QQQ, had found that the machine, over the years, had developed a 5 dB difference, permitting the repeater to be turned on with a signal 5 dB too weak for its audio to be heard. This made the machine sound as if it were hanging up without a signal present. This no longer occurs. If the signal is strong enough to turn it on, the audio will be heard. (Jammers, of course, complicate this, making it sound as if the audio is not getting through.)

W9FQN and K6HAV took the new battery shed to the mountain and mounted the battery support frame work on the recently poured slab.

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.

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. This repeater, like the PARC machines has battery back up. Feel free to use it.

ALSO 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.

FORESAIL

(Genoa that's a jib, son - not a marconi)

ESTATE SALE: Kenwood TS-520S w/mike, \$325; Swan 350 w/pwr supply, \$150; Autek QF-1 audio filter, \$35; Poucel bug; Tempo S-1 2M HT, \$50; Unique ant. tuner (won't tune coax), \$60; KDK-2015R 2M FM xcvr, \$100; Hallicrafters HA-1 keyer, \$30; Hustler 4BTV 40-10M vert. ant., \$30; Hustler 75/80M resonator, \$15; 2M 5/8 wave mag mount, \$15; Johnson low-pass filter, \$20; Westcom pwr supply \$20; 8-elm 2M beam, \$20. Call Art, WA6IPD, 728-6834.

Atlas 350XL w/pwr supply, \$400; Kenwood tuner AT-250 w/pwr supply, \$300. Call Clint, W6OFT, 729-0850.

100+ feet of 1/2" alum. jacketed 72 ohm hardline, \$25. Call Dennis, W6KI, 271-6079.

IC-37A 220 MHz 25W xcvr; Collins R/E single wire ant. tuner 180S-1; Phone Allen, N7AMR, 434-5656.

Sept 88

Cushcraft A-3 antenna, NEW, still in box. Call Jack, N6OPD, 434-2217.

Alliance HD-73 rotator, \$100; Safety belt, \$10; two 2M 11-elm beams, \$35 & \$30; Autek QF1 ICfilter, \$15; Hy-Gain 2BDQ 40-80M ant.; top brand panel meters, \$4 & up; Signal brass key, \$4; RG-8 coax; Archer CB Gp, \$10; ball/spring mobile ant. mt., \$10; Realistic Navaho base CB, \$25; Heathkit mike, \$5; Shure mike, \$10; Swan desk CML7L, \$15. Jerry, W6YLA, 758-1134.

Yaesu FT-720RU 10W 440 MHz FM xcvr \$150; AEA MBA-RO CW, RTTY, ASCII reader, \$150; Lunar 220MHz amp. 1W in 20W out, \$60; Marygold 2M amp. 10W in 45W out, \$40; Heath EIA-416 dual trace 15 MHz scope, \$60; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$10; RCA Senior Voltohmyst WV-98C w/new probes & book, \$20; BK 501A Semiconductor Curve Tracer, \$15; BK 3050 Audio Sine/Square Wave Gen., \$30; Sencore FE160 Senior Field Effect Meter (VTVM equiv.), \$25. Call Ralph, K6HAV, 727-5866.

Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15; various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.

Heath SB-102 HF XCVR w/pwr supply, \$100; V-7A VTVM w/RF & DC probes; homebrew ant. tuner; Eico 950B bridge; mikes. Call Dan, 742-1654.

Commodore C-64 w/1702 color monitor, 1541 disk drive, MPS 802 printer, & etc., \$395 for all. Call Stu, N6GRD, 451-7722.

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

Two HT-37 xmtrs, National NC-303 rx, Palomar Engineers swr/watt meter, automatic keyer, coax switch, dummy load. Call Jack Harvey, 729-3769.

C-64, disk drive, color monitor, modem, printer interface, joysticks, & software, best offer. Kenwood 2500 HT w/case, xtra btry and drop-in base charger, best offer. Call Gerry, KJ6ES, 486-3867 eves or 471-7401 days.

WANTED

Swan pwr supply 117XC; Swan & Atlas equip. in any condx. Call Clint, W6OFT, 729-0850.

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

THE FCC IN GETTYSBURG SAYS:

Thanks to N6INN, we know that the last Amateur Radio licenses issued as of 7/1/88 were: AA6JU, KJ6KK, N6SVA, KB6ZOE.

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 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.

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 it costs you not one fat farthing more!

NAVY CONDUCTING EMP TESTS OFF OF NORTH CAROLINA

UPI says the Navy began sending huge bursts of electricity across the Atlantic from a barge off North Carolina in the first stage of tests designed to see how ship communications can be maintained in the electronic environment that would follow a nuclear explosion. The experiments are being conducted from 15 miles off shore on a barge carrying two huge diesel generators capable of sending 7,000,000 volt jolts of electromagnetic energy through a tall cage-like antenna.

When a nuclear device is detonated in the upper atmosphere, a pulse of electromagnetic energy spreads at the speed of light until it strikes metal at which point it is converted into electricity. The power surges, known as Electromagnetic Pulses (EMP) can fuze solid state circuitry and fry electric and telephone lines as well.

N6ATQ-1 NOW HAS A NEW SYSTEM WITH FOUR (COUNT 'EM FOUR) PORTS

Thanks to Al, N6GNB, we know that Craig, N6ATQ, has installed a new system for his digipeater, N6ATQ-1 on 145.05. It is now a four-port system in combination with KI4PH-1. Port 1: KI4PH-1 - NODE, Port 2: KI4PH-2 - MBBS, Port 3: KI4PH-3 -Digipeater, Port 4: N6ATQ-1 - Digipeater. Use N6ATQ-1 as before, no changes, connect direct.

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.

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.

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.

Sept 88

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is somewhat of 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.

DISNEYLAND FREQUENCIES

Bob, WA6QQQ, has shipped us an article by Rod Wheeler in the July issue of Mobile Radio Technology which lists the Disneyland frequencies of radios used at the park. Folks with some of the new radios which permit reception on freqs above and below the ham bands may be interested.

GROUP CODE	FREQUENCY	OPERATION	GROUP CODE	FREQUENCY	OPERATION
Brown	469.5375	Maintenance	Silver	469.0375	Ride Control
Red	469.6375	Common	Yellow	469.5125	Spcl Events
Blue	469.6425	Security	Green	469.4875	Entertainment
Orange	469.4125	Maint/Custodial	SP1	154.570	Security
White	469.7625	RRs/Monorail	SP2	154.699	Submarines
Purple	467.575	Countywide	Page	154.625	Paging
Black	469.325	Security	Ham	146.94 (-)	Open rpttr

DOWN THE TOOBE

Thanks to Larry Ruegseger, WA6UTQ, the Club has several hundred more ampere hours of repeater battery backup. By Larry's persuasion, the Club was given a batch of batteries. Larry's thoughtfulness is much appreciated.

The PC Net is off and running. Chuck, KI6TG, is doing a fine job as NCS. With all the computers out there, the net can serve as an information clearing house. Don't be bashful. There are others out there as dumb as we are about the computer. You may not even have to read the book!

We appreciate the time and effort Skip, K6RTD, put into maintaining the Club's membership roster, mailing list, etc, and cranking out mailing labels and the 2nd Class mailing sheet the PO requires each Scope.

Since Skip has graduated to other things after long and faithful service, we now have Bill Whipple, N6COU, running the "Gi'nt Computer" and doing all of those good things iterated above. Thanks for stepping forward, Bill. The Scope wouldn't get "on the street" without you.

There ARE "good guys" out there who will volunteer to look after what a club needs to keep going - like Mac, NH6EW, with the coffee; Jo, KB6NMK, the advertising in the Scope; John, WB6IQS, repeaters; our club officers. We should all give something - not just be takers.

Alexander Battery Co., 520 State St., Escondido has HT & other batteries.

Thanks to Art Rideout, WA6IPD, for his help with the Club's Survivor's Assistance Committee, helping a ham widow in Fallbrook. Art's done it all. This committee is an ad hoc committee to help survivors of Silent Keys, when they are most vulnerable, to dismantle and dispose of, in accordance with their wishes, the station of the SK. Does your family know of it?

Carl Pagel, N6BVU, president of the 220 Spectrum Management Association and TASMA secretary, has sent us along a gouge indicating he is running for Vice Director, ARRL Southwestern Division. ARRL members will receive their ballots in October. Carl has been very active in VHF/UHF spectrum management and has been the SW Division's rep on the ARRL VHF Repeater Advisory Committee since 1983.

We're sorry to report that Bill Steele, W7EAI, suffered a stroke in late March, but glad he now feels well enough to re-gnu his membership.

"That's all", she wrote!

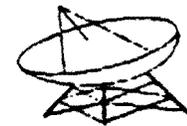
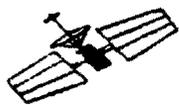
Sept 88

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

SEPTEMBER SPECIALS

NEW TOYS

KENWOOD TM221 369.95

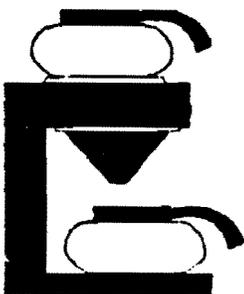
KENWOOD TH25AT 299.95

ICOM IC2GAT 369.95

ICOM IC781 5900.00

YAESU FT747 699.95

KENWOOD TS140S 789.95



KENWOOD TM621 609.95

KENWOOD TM721 609.95

KENWOOD TM521 499.95

ICOM IC228H 459.95

ICOM IC32AT 549.95

YAESU FT212 399.95



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MEMBERSHIP APPLICATION

Name _____ Call _____

Street _____

City _____ Prov./State _____ PC/Zip _____

\$25 in U.S. \$33 elsewhere (U.S. funds) Licensed amateurs, or age 65 or over, upon submitting proof of age, may request the special dues rate of \$20 in the U.S. \$28 elsewhere, in U.S. funds) Persons age 17 and younger may qualify for special rates, write for application.

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

 _____ Expires _____

 _____ Bank. No. _____ Expires _____

The American Radio Relay League 225 Main St. Newington, CT. 06111 USA

W6NWC
Palomar Amateur Radio Club

Sept 88

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DUPLEX REPEATER
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The TWELVE Code

The following radio codes are not known to be in authorized use by any law enforcement agency, but they probably should be.

- | | |
|--|--|
| <ul style="list-style-type: none"> 12-1 Ask the complainant - our periscope has been repossessed. 12-2 The watch commander is in the sandbox - when he gets back I'll ask him. 12-3 Everybody can hear you and you're making an idiot of yourself. 12-4 Hearing you fine - I'm ignoring you. 12-5 You're beautiful when you're angry. 12-6 Your sister dispatches fire trucks. 12-7 Are you confirmed yet? 12-8 I'm en route to communications to rearrange your face. 12-9 Repeat your traffic - without the mouthful of oatmeal. 12-10 How did you get on the payroll? 12-11 I'm back in service, but don't give me any calls. I go off duty shortly and I've got a hot date. 12-12 I know where you are. I also know where you're going. 12-13 Can the wants checks or I'll give you a barking duck call ten miles off your beat. 12-14 If your prisoner can speak English, bring him to communications so I can go to lunch. | <ul style="list-style-type: none"> 12-15 Is your mike clicking or is your upper plate loose? 12-16 Slow down. My shorthand lesson got lost in the mail. 12-17 Cancel Christmas. 12-17 My God! Do you get paid by the word? 12-18 Show me back in service while I finish my coffee. 12-19 Poker game is on for tonight. 12-20 I refuse to crack! Go ahead with your eight 10-29's, but one of them had better be F-Frank! 12-21 This assignment has been pending since God was a small child. 12-22 Is there a K-9 unit on the air that can assist the fire department in locating a fire plug? 12-23 I'll make you think "report writing!" I've got a stack of details here that we'll be working on next month! 12-24 Your mother swims after troop ships. 12-25 I'll be en route as soon as I run 10-29's on the rest of the cars in this lot. 12-26 Okay, I screwed up. None of us are human. 12-27 I can't copy you. Are you sitting on your microphone? |
|--|--|

- Tim Dees, Reno, Nevada Police Dept.

Lifted from the West Coast ARC INTERMOD

Sept 88

PALOMAR AMATEUR RADIO CLUB ENLISTMENT/REENLISTMENT BLANK

(Cut on dotted lion, 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.

----- (Dotted lion) -----

SCOPE USPS 076530, published monthly by the PALOMAR AMATEUR RADIO CLUB, INC., 3716 Bluebird Canyon Rd., Vista, CA 92084. Subscription: \$3.00 per year. Second Class Postage paid at Vista, CA 92083. POSTMASTER: Send changes to: SCOPE, P.O. Box 1603, Vista, CA 92083-0530

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W9FGN KA6FPS N6QDB
30311 CIRCLE R LANE
VALLEY CENTER, CA. 92082

NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWX

Scope

W6NWX/R 146.730 (-)
449.425 (-)
145.050 (pkt)

VOL. XXII, NO. 10

1936 - 1988

OCTOBER 1988

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS: WB6IQS
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	W9FQN, W16B, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	KB5MU, WQ6V, N6IZW
TREASURER: RON WILHELMY, W16B, RANCHO SANTA FE, 756-3133	KA6UAI, KB6AI
EDITOR: RALPH CROSSMAN, K6HAV, VISTA, 727-5866	

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

###---SEPT 17th WORK PARTY---###

We had an excellent crew for our repeater site work detail and we were able to accomplish quite a bit. Many thanks to all of those who spent Saturday morning and afternoon with us improving the repeater site and a special thanks to the climbing crew who had their hands full for several hours at the 70' level installing a 10' tower section to make the total tower height 80'. The cross arms and 10' tower section were donated by Clint-W6OFT.

- *Chuck-KI6TG, tower extension at 70'.
- Ed-N6GZI, tower extension at 70'.
- *Betsy-KB6MBL, tower ground crew.
- Harry-WB6JVS, crossarms & corner reflector.
- Jack-KI6JM, battery and generator shed.
- *Mike-KD3HN, anchor holes, cementing, coax.
- Carl-N6NZX, cement hole drilling, cementing.
- Mary-KB6NZA, 4-dipole assembly, cookies,
- Bud-KG6VX, 4-dipole assembly, coax, etc.
- John-WB6IQS, control system, hardline, etc.
- *first time at site.

All antennas remain as originally configured and another work party will be scheduled to finish the projects that were started. If you have never been to a repeater site, you might want to come along on one of the work details to see what a nice facility the club is operating on Palomar Mountain.

The new antenna configuration should keep the 146.730 and 147.135 machine coverage the same as at present. The 145.050 packet should be significantly improved. The corner reflector will give the club a spare antenna which will give us a little more directivity into selected areas of San Diego County when needed.

##---SIMULATED EMERGENCY TEST(SET)---##

Please remember that part of our SET test this year will be the placing of 50+ messages into the 8:00 p.m. traffic net some evening in October. Approximately 75% of the messages will be for the San Diego area and 25% for SCNV or out of state. Net controls might want to be thinking of efficient ways of getting this traffic delivered efficiently. GOOD LUCK!

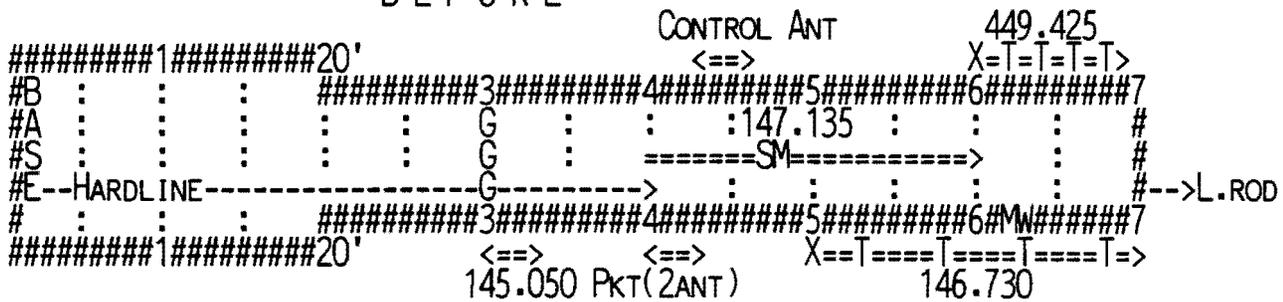
###---POTPOURRI---###

We are still looking at the KA6UAI repeater (147.135) because of some possible problems with interference to other systems but not with PARC. We hope that this "testing" phase will soon end and that we can come to some agreement with Eric-KA6UAI.

73, Stan W 9 F Q N

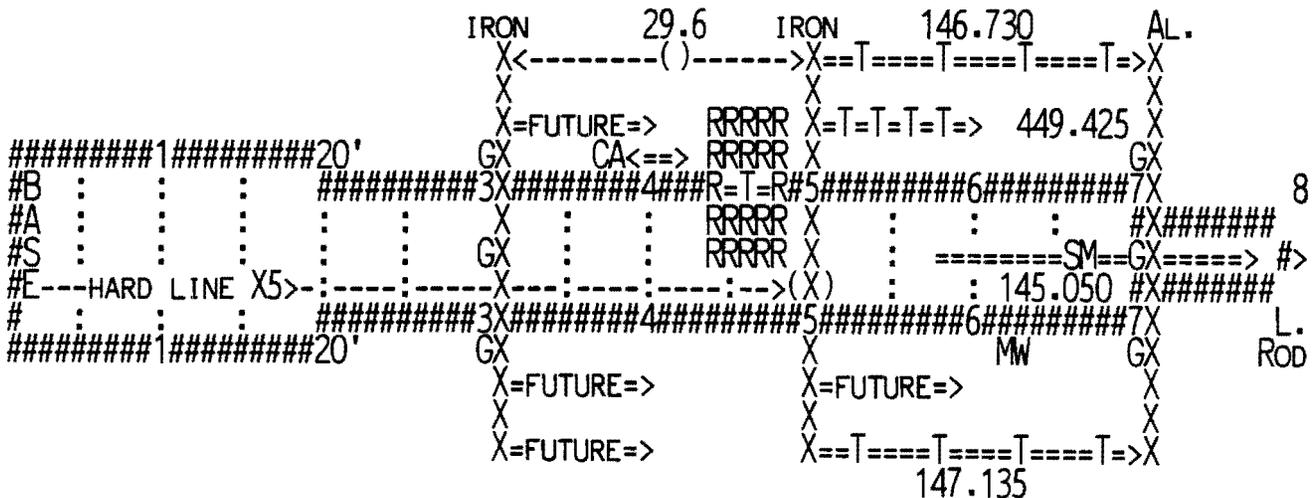
PALOMAR AMATEUR RADIO CLUB TOWER ON PALOMAR MOUNTAIN

BEFORE



145.050 = PACKET W6NWG STATION MASTER(SM) 9DB GAIN.
 146.730 = VOICE W6NWG & 147.135 = VOICE KA6UAI DB-264 (4 DIPOLES) 9DB GAIN.
 449.425 = VOICE W6NWG DB-450 (4 DIPOLES). DB-411.
 CONTROL ANTENNA(CA), KLM 420-470-6. DIPOLE FOR 10M (29.6MHz).
 CORNER REFLECTOR DB-252 8.3DB (SPARE ANTENNA)
 TOWER FACE IS 240 DEG. TRUE. LIGHTNING PROTECTION AT TOP WITH DISCHARGE TUBES.
 X = 10' CROSS ARMS AT 30/50/70'. R = CORNER REFLECTOR AND IS SPARE 2M ANTENNA.
 T = DIPOLE(S) (#) = TOWER SECTIONS. GUYS(G) AT 30' & 70'. MW = MICROWAVE.

AFTER



(SITE PLOT) S <---> N
 E
 UNDERGROUND CABLES 0#0000 <- TOWER BASE 6x6'
 ##### <---> 30' <---> 0#0000 18 TONS OF CEMENT
 # W6 #-### <- NEW BATTERY/GEN SHED 80' TALL
 # NWG # GUYED AT 30' & 70'
 ##### 0 <- 220 CLUB POLE. 0-20' HOLLOW PIPE, 20-70' SOLID 1.5" ROD,
 REPEATER SHED 8x8' x 8' 70-80' HOLLOW TOWER SECTION ADDED FOR
 SUPPORT OF 145.05 PACKET & LIGHTNING ROD.

 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 Eucalyp-
 tus 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. See!

OCTOBER CLUB MEETING

The program for the October meeting will probably be presented by San
 Diego Gas & Electric Company and will tell us how their electrical power is
 handled in time of emergency.

There WILL be coffee, thanks to NH6EW.

 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 October meeting
 will be at the home of WI6B.

At the September meeting at the home of WI6B the Committee heard and
 approved the Minutes of the last meeting; and the Treasurer's Report. The
 Committee approved a letter to the California Department of Forestry,
 regarding the establishment of a repeater on Red Mountain in Fallbrook. A
 grand time was reportedly had.

SEPTEMBER CLUB MEETING

At the September club meeting the minutes of the previous meeting were
 read and approved as was the Treasurer's report. Committee reports were
 heard. W9FQN showed us a power "amplifier" (a radial and a 1/4 wave
 antenna) for the HT; Larry, WQ6V, showed us a book-sized Realistic general
 coverage RX; Brian, KF6C, demonstrated a nearly HT-size general coverage RX
 with NO knobs and a dynamic range better than any Japanese RX short of the
 \$6,000 class which is computer operated by hooking it up to a PC or clone
 and can be used, with the proper software, on RTTY, CW, packet and as a
 frequency analyzer (what happens to the knob twister, I don't know!). Joe
 & Nancy Hypnarowski, WA6VNR & N6RLE, gave us a very interesting illustrated
 talk on their travels and operations on a 1985 DX trip to the South Pacific
 to British Samoa, Fiji, Tonga, and Rarotonga. We were happy to see a
 goodly number of new members, guests, visitors, as well as some members who
 had been missing. Their were ?? members and ?? guests present. An excel-
 lent meeting with fine coffee and tasties courtesy of NH6EW and all of
 those good people kind enough to bring the little beauties!

 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. This repeater, like the PARC machines has battery back up. Feel
 free to use it.

ARRL SOUTHWESTERN DIVISION CONVENTION

The SW Div ARRL convention at the Disneyland Hotel on 2-4 September was very well attended despite the 107 degree wx on Saturday and Sunday. Club members observed there were: Frank, N6AT; Ron, WI6B; Buck, WW6E; Scott, KD6FY; Gordon, N6GW; Ralph, K6HAV; Art, W6INI; Pat, N6INN; Mark, N6NNI; Kelly, N6SHB; Ron, W6TXK; Earl, W6YYV; and Del, WV6Z. We also saw several of the 3895 bunch there, including Scope subscriber "Moz", WA6MOZ. Didn't hear of any PARC members winning any prizes, except for N6INN, who won a Gordon West General Class code course (just what an Amateur Extra Class ham needs!!). The BEEG Prize, a TS-940S/AT, was won by a brand new Novice!

STEVE SELLERS, N5GZP, WINS UPI AWARD FOR BEST INVESTIGATIVE DOCUMENTARY
PARC member Steve Sellers, N5GZP, received an award from United Press International for "Best Investigative Documentary." Steve received the award for reporting, writing, and producing a half-hour program "Earthquake Country" over KGMG-FM in San Diego where he is News Director. Congratulations to Steve, and thanks to World Radio from which we received the information.

VOLUNTEER EXAMINER PROGRAM

At the September tests our PARC VE team gave six test elements to four applicants, three of whom passed a total of four elements.

Our test crew was: KI6ZM, KI6JM, and KD3HN reception; K6HAV CW exams; W6SAX, N6NNI, and W6YYV VEs. Paperwork by N6INN & K6HAV. Thanks to George Todd, KI6ZM, for his long and faithful service in the reception/processing area of the Club's VE Team. Thanks also to Jack, KI6ZM, and Mike, KD3HN, for stepping forth and volunteering for the job Todd has been forced, by health reasons, to vacate. 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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

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

UPGRADE: David Dutcher, KB6ZIM, Amateur Extra Class. Congratulations.

GNU CLUB MEMBERS: Jim O'Berry, AB4JZ, El Cajon; Rusty Massie, N6SZH, Escondido; Wes Wilson, WA6UGG, Vista (gnu/old); Harry Hodges, WA6YOO, Escondido; Jerry Carter, Escondido; David Dutcher, KB6ZIM, Ramona; Varna Shrewsberry, Fallbrook. Welcome.

RENUDE MEMBERS: John Reber, N6BAD; Bob Chambers, NC6J; Lee Willis, N6KGG; Vina de Montegre, N6PQQ; Jeremy & Jack Simmons, N6QBI & KI6RF; Richard Mirdas, KF6RX; Harry Bluestein, N6TE; Larry de Montegre, WQ6V.

FIRST CALL: Rusty Massie, N6SZH, new ham, new member, congratulations.

THE FCC IN GETTYSBURG SAYS:

Thanks to N6INN, we know that the last Amateur Radio licenses issued as of 9/1/88 were: AA6KI, KJ6LK, N6TCA, KB6ZWO.

REPEATERS

On Saturday the 10th, a crew went to the Mountain and increased the tower height to 80' by adding a ten-foot section to the tower, punched holes in the repeater blockhouse for installation of the new heliax and for the battery cables from the battery shed, installed the heliax to the 50' level, and got ready for the installation of the new antennae and crossarm therefore. Climbers were N6GZI, KI6TG, and W9FQN. See the President's remarks on page one for further details.

 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 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.

FORESAIL

(Genoa that's a jib; son - not a marconi)

ESTATE SALE: Kenwood TS-520S w/mike, \$300; Autek QF-1 audio filter, \$35; Poucel bug; Unique ant. tuner (won't tune coax), \$60; Hallicrafters HA-1 keyer, \$30; Johnson low-pass filter, \$15; Westcom 7A 12VDC pwr supply \$20; 8-elm 2M beam, \$15. Call Art, WA6IPD, 728-6834.

Atlas 350XL w/pwr supply, \$400; Kenwood tuner AT-250 w/pwr supply, \$300. Call Clint, W6OFT, 729-0850.

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

IC-37A 220 MHz 25W xcvr; Collins R/E single wire ant. tuner 180S-1; Phone Allen, N7AMR, 434-5656.

New (in the box) Alliance HD-73 rotator, \$100; two 2M 11-elm beams, \$35; Hy-Gain 2BDQ 40-80M ant.; new top brand panel meters, \$4 & up; RG-8 coax; Heathkit mike, \$5; Shure mike, \$10; Jerry, W6YLA, 758-1134.

Lunar 1W in 20W out 220MHz amplifier, \$60; Marygold 10W in 45W out 2M amplifier, \$40; AEA Model MBA-RO CW, RTTY, ASCII reader, \$150; Heath EIA-416 dual trace 15 MHz scope, \$60; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$10; RCA Senior Voltohmyst WV-98C w/new probes & book, \$20; BK 501A Semiconductor Curve Tracer, \$15; BK 3050 Audio Sine/Square Wave Gen., \$30; Sencore FE160 Senior Field Effect Meter (VTVM equiv.), \$25. Call Ralph, K6HAV, 727-5866.

Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15; various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.

Heath SB-102 HF XCVR w/pwr supply, \$100; V-7A VTVM w/RF & DC probes; homebrew ant. tuner; Eico 950B bridge; mikes. Call Dan, 742-1654.

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

Commodore C-64 w/1702 color monitor, 1541 disk drive, MPS 802 printer, & etc., \$395 for all. Call Stu, N6GRD, 451-7722.

Cushcraft A-3 antenna, NEW, still in box. Call Jack, N6OPD, 434-2217.

WANTED

Swan pwr supply 117XC; Swan & Atlas equip. in any condx. Call Clint, W6OFT, 729-0850.

Schematic for DSI 561 freq. counter; Icom IC-22A in working condx. Call Dennis, N6KI, 271-6079.

SIX MONTHS IN JAIL AND \$5,000 FINE FOR SAN DIEGO JAMMER

James Fike, age 32, of San Diego, was sentenced to six months in jail and a fine of \$5,000 by a Federal Magistrate on August 31. After a one-day trial he was found guilty of unlicensed radio operation under Sections 301 & 501 of the Communications Act of 1934. Fike jammed San Diego PD channels in January and February, at times completely shutting down five channels. He could have been sentenced to one year's confinement and \$100,000 fine. The FCC's RDF gear did the job in nailing Fike in the act. Thanks for the above to June Butler, Public Service Specialist, San Diego FCC office.

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 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.

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 it costs you not one centime rouge more!

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.

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 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.

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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is somewhat of 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.

DOWN THE TOOBE

Real nice to know that some of our members have seen fit to write to their elected reps about the emasculation of the 220 MHz band. Both Nash, W6HCD, and Charles Miele, a new PARC member and new ham (license not received yet), did just that and sent me a copy of their communications. Hope you've all done it too. Just because you don't operate on 220 doesn't mean you shouldn't get involved!

Dennis, N6KI, says the Facetious Group held its 3rd annual midnight breakfast at a Penesquitos restaurant on September 3 with PARC members N6KI, N6QVW, WB0YCQ, K6YGK, N0CPS, N0EVV, W6SAX, KB6PCF, K6UL, KB5MU, KI6TG, and Helen and Fred Anderson in attendance. Good food, good company and a good time was had by all. Pictures at 11:00.

"That's all", she wrote!

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***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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OCT 88

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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 \$___/\$___

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NOVEMBER 1988

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PLEASE CONSIDER VOLUNTEERING TO HELP OR FILL ANY OF THE ABOVE POSITIONS. WE CAN USE YOUR HELP. THE EXECUTIVE COMMITTEE CONSISTS OF THE OFFICERS AND HEADS OF COMMITTEES WHO ATTEND OUR MEETINGS.

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

###---OCT 15th WORK PARTY---###

As usual we did not finish everything at the repeater site but we did make a very big dent in what needed to be done. We will try to finish the antenna work on the 22nd. I am really pleased with what has been done and how it looks. We have now mounted two sets of crossarms which can carry six antenna mounts of which only two

are being presently used. The two 4-bay dipoles (21' long and 9DB gain) are mounted at the 50 foot level on the right and left of the tower for the 146.730 and 147.135 repeaters. One of these antennas is pointed out over the Encinitas-La Jolla area and the other one out over Vista and San Marcos. These antennas are at the same height as before but now mounted on

crossarms with torque restrainers at their tops.

The packet antenna has been changed from two yagis at low levels to its original collinear (9DB gain) with the top element at about the 77 foot level and we hope the packet coverage will again be almost all of San Diego County. It is now the highest antenna at the site and it has maximum radiation out over the Encinitas-La Jolla area.

The corner reflector (8.3DB gain) is pointed out over Vista and San Marcos and is not used at present. We will be comparing its coverage with one of the 4-bay dipoles sometime in the near future.

On our next trip to the site we will change over to the new hardline and finish putting the repeater to bed for the winter. For those of you who have never been to the site it is hard to appreciate all of the effort that has been put into the repeater bunker and antenna tower.

The tower face is pointed at Encinitas-La Jolla or 220 degrees TRUE rather than 240 degrees as I stated in the September SCOPE. The basic direction is courtesy of Bud-KG6VX, the club's chief navigator. It should be noted that we cover 2,000 square miles of San Diego County with only a 90 degree beam width. Within several weeks we hope to be able to cover Fallbrook better than in the past. We try to do everything possible to confine our signals to S.D. Co. and prevent them from entering the L.A. area. We are a SAN DIEGO club and only want to serve our area except for possible links to the L.A. area.

(Climbers)

Ed-N6GZI, Rick-WV6K, and Stan-W9FQN

ED was in charge of all climbing and as usual did a superb job except that Rick complained at some of the stories he was being told. Ed has been with us on almost all of the tower climbing since the tower was put up in 1984. Ed is really concerned with safety and lets us know when we are not doing it right. RICK has climbed with us before and was especially interested in seeing that the Packet antenna was in a more favorable location. Rick is a high

rise steel worker and uses a Gorilla hook for climbing. We really appreciate his helping us and it should be noted that he is the president of the El Cajon club.

We now have lots of space for new and experimental antennas.

(Ground crew)

Charles-N6TEP, John-K6QQ, Mike-KD3HN, John-N6RKJ, Jo-KB6NMK, and Chuck-N6TJT

CHARLES in his spare time took movies of everything which we would like to see sometime. JOHN(QQ) was part of our ground crew helping out where needed and he lives on Palomar Mountain. MIKE again did a superb job on the crossarms. Mike is in Navy training in San Diego and we are certainly going to miss him at the repeater site and on Field Day when he leaves in November. JOHN(RKJ) really was able to show us how to tie knots for lifting antennas and crossarms. JO and CHUCK came up around noon and brought with them drinks and lots of cookies which were greatly appreciated by all. Jo is always very thoughtful and it was nice that she brought up Chuck to see his first repeater site. Chuck had his hands on everything and we are pleased to see his interest in club activities.

(Miscellaneous)

John-WB6IQS helped with the ground duties and took care of the repeater cable modifications. Eric-KA6UAI was up to work on his 147.135 repeater but ended up helping with the ground crew. His 10M FM link was able to work Japan from a 2M HT ... very interesting.

Jack-KI6JM again worked on the battery shed and completed most of the work on it by himself. We will be taking up batteries sometime within the near future.

Some members contribute to the club by serving as officers. Some members by serving as heads of committees. Some members contribute by coming to meetings and inviting non-members to become members. Some members contribute by participating in club work parties and nets: traffic, ARES, Packet, Computer, and Microwave. Some members serve by contributing funds or

resources. Only a few members contribute by serving as officers, heads of committees, inviting people to join the club, participating in club nets, and contributing funds or resources. We need all of you to participate in your own way in club activities.

Remember to invite non club members who use the repeater to participate in the operation of the club and its repeaters through club membership. The ARRL repeater directory admonishes "all regular users of a repeater to support the efforts of those keeping the repeater on the air." If you don't know if they are a club member, just ask them if they have seen something in our OUTSTANDING NEWSLETTER - the S-C-O-P-E.

I guess that all clubs have the same problems: NEVER HAS SO MUCH BEEN OWED BY SO MANY TO SO FEW PEOPLE! THANKS to those who have found the time, energy and resources to support the club and its activities these past few years.

###---HAM HELP NET---###

We are looking for some one or some group of members that would like to conduct a net on Thursday evenings at 9:00 PM dealing with general or technical amateur problems: equipment, antennas, etc. The net would be patterned after the successful microwave (Mon), packet (Tue), and personal computer (Wed) nets at 9:00 PM on 146.730. You don't have to be an expert. You just need to get the net members together who have the questions and those who have the answers.

We would hope that a net of this type would be of great service to hams in San Diego County by allowing them to have quick access to information of importance to them. If you are interested in helping us with this net, please contact me.

Nets take up repeater time but it should be remembered that club members can always use the 147.135(+) machine during nets. Nets are an efficient use of our repeaters since while one person is talking, there are 10-30 people participating in the net who are not talking. Knowing 146.730, I suspect that there are two to three times

as many amateurs listening to the nets. The Palomar ARC has members who are not hams and have no intention of getting their licenses but they like to listen to some of the nets!

This is just about the last of the possible nets that we might sponsor with the exception of reactivating our code practice net and a SAN DIEGO COUNTY BULLETIN BOARD net on Sunday evenings which lists: club meetings, information from SANDARC, nets, contests, etc.

###---CLUB SURVEY---###

We thank everyone for participating in the club survey over the past year and here are the results of the survey:

EMERGENCY COMMUNICATIONS: need a trailer (we have 2-3 now), autopatch dialer (working on it), connections to the North (working on it). Received OK marks.

FIELD DAY: more UHF, more computer logging, more active people, video tape (have one), more instruction, win but have good time, use as many stations as possible. Received good marks but there are many areas in which we can improve.

NETS: need helpers, need buddy/teacher sessions, use simplex and UP ONE, and experiment with format. Need a technical net (working on it). We received good marks.

VEC TESTING: more information to the public, excellent job, and "well done" were many of the comments. We received excellent marks.

AUGUST PICNIC: use different sites, don't worry about \$\$\$, and well done.

HAM RADIO CLASSES: more Novice and Novice classes only, publicity needed, need classes for our general membership on specific things: test equipment, SWR bridges, etc.

OTHER ACTIVITIES: club trips, Mexico, Las Vegas, help hams in buying equipment, joint mobiling, equipment reviews in SCOPE, more promotion of ham radio using local free services.

It would appear that the club as a whole has received a "very good" rating with very few complaints which is really hard to do in a club our size where interests are so diverse. We appreciated your suggestions.

Please keep the executive committee advised of any potential problems before they become too serious.

It would also appear from the comments made that members are quite happy with an abbreviated business session at meetings and in having the Executive Committee doing most of the business and taking care of your special problems while bringing only more important items of a general nature before the club members at club meetings.

###---THANKS---###

THANKS to Frank-WD6HFE for the donation of twelve 4v @ 100 Ahr batteries (12V @ 300 Ahr) which will replace batteries at the repeater site that will then be used in the club's trailers(2). We really appreciate amateurs who keep their eyes open and their ears to the ground looking for things that we can use in our emergency programs. The batteries were very lightly stressed and were used for emergency lighting in an operating room at a hospital.

THANKS to Duane-WB6R for taking care of the guy rope at meetings. (3/32" 260 lbs test 4c/ft, 3/16" 770 lbs test 8c/ft, 5/16" 1790 lbs test 12c/ft)

THANKS to all the people who bring in things at club meetings and leave them for us to find ... although we would like to know who to thank!

THANKS to John-WB6IQS for the use of two hardhats and to Fred-N6QJO for the donation of a hardhat to our repeater site crew. Your thoughtfulness is much appreciated.

THANKS to Carl-N6NZX for bringing up to the repeater site a large drill which easily knocked several holes into the bunker ... where we needed them. He was the only one that could lift this gasoline motor drill!

THANKS to Buck-WW6E for all the help he has been giving lately to NEW and OLD amateurs in the area. I know that everyone appreciates what you have been doing. Buck also has a world of practical information at his finger tips which is a great help to me when I have questions. And thanks for the use of the drill which the club will have to buy you a new AC cord!

THANKS to Micky-N6GWJ and Al-N6GNB for sending me reams of information on ARES, MARS, and RACES along with a San Diego

repeater list. We also enjoyed the article on THE CALIFORNIA EARTHQUAKE by Bob-KA6HZF.

THANKS to Aubrey-W6ODG for the donation of computer transformers at the September meeting. The transformer windings appear to be Red-Red(24VAC), Blue-Blue(8.4VAC), Yellow-Yellow(27.8VAC) with Black being the center tap for the Yellow-Yellow.

THANKS to Nash-K6HCD for all the informative letters on things of interest about the club.

THANKS to Mark-N6NNI for pushing the Palomar ARC membership over the air. We appreciate the good publicity and the extending of invitations to become club members to others who use the repeaters.

###---POTPOURRI---###

See me if you are interested in a COLLINS instruction book for the 75S-3B and 75S-3C receivers. We have a surplus copy. I also have a 75 page catalog of TRS-80 Mod IV "free" programs and I will bring it to the next meeting if you contact me several days before the meeting.

At the next meeting I will have a copy of the Japanese version of CQ MAGAZINE for those who would like to look at 516 pages of material for May 1988. They (the Japanese) really know how to put out an interesting magazine and Ralph-K6HAV is probably the only one who can read it in our club ... but the pictures are very interesting (Old Chinese philosopher say, "pretty picture worth thousands of words.").

It seems as though I get involved in many of the club projects for one reason or another ... which I don't seem smart enough to avoid ... which tends to slow down some of our projects since I seem to operate with "blindness" and can't see too many things at one time. It looks now as if we will not get to the repeater bunker expansion until next Spring but we should be ready to start work on the trailers sometime in November. The trailer(s) need: paint, woodwork, desks, antennas, AC wiring, propane connections, light wiring, station wiring, DC battery wiring, glass window work, refrigerator repair, etc. Fun for all!

73, Stan W 9 F Q N

 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 BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. See!

NOVEMBER CLUB MEETING

The program for the November meeting will be the Club's annual auction. Come early and register as a seller and/or buyer, get your items out early so prospective buyers may "eyeball" them, and you will have a chance to do likewise so that your garage will not soar into the air from a lack of weight! All items are to be tagged with tags the Club will provide. When the seller wishes to restrict bidding with a minimum bid, it must be so indicated on the tag. The Club will receive 10% of the sale price of each item. Members are encouraged to bring items to donate to the club for the auction.

There WILL be coffee, thanks to NH6EW.

 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 November meeting will be at the home of WI6B.

At the October meeting at the home of WI6B, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report. The Committee heard a report from W9FQN on the status of the work under way at the repeater site and discussed the next club meeting which is to feature an auction, as was the forthcoming election of officers. The Committee again decided a membership chairman was required to relieve the Treasurer of the membership chores. A grand time was had.

OCTOBER CLUB MEETING

At the October club meeting the minutes of the previous meeting were read and approved as was the Treasurer's report. Committee reports were heard. Mr. Chuck Howell, Energy Control Supervisor, Diego Gas & Electric Company gave us a most interesting discussion on power generation and distribution in the West. The coffee and tasties courtesy of Mac, NH6EW. Volunteers are needed to bring those delicious no-cal goodies, which were in short supply this meeting. Coordinate your do-gooding with Mac. 59 members and 15 guests attended.

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

VOLUNTEER EXAMINER PROGRAM

At the October tests our PARC VE team gave 20 test elements to nine applicants, eight of whom passed a total of 16 elements.

Our test crew was: KI6JM and KD3HN reception; WA6HYB CW exams; WI6B, N6NNI, and K6HAV VEs. Paperwork by AA6DI and K6HAV.

Congratulations to club members Carl Burgess, N6NZX, who up-graded to Advanced and to Mal Douglas, N6CDA, who received a certificate for passing the 20 wpm code element. 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, 3rd, and 4th Saturdays in south county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido. South county test locations available from SANDARC-VEC.

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.

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

UPGRADE: Carl Burgess, N6NZX, to Advanced. Congratulations.

GNU CLUB MEMBERS: Bert Chase, W6IPQ, Chula Vista; Chuck Kramarich, N6TJT, Escondido; Karl Krohn, KB6YLA, San Diego; Mick McDaniel, W6FGE, San Diego; Roger Stuart, KS6P, Escondido; Lanny Goodman, N6CEK, Del Mar. Welcome.

RENUDE MEMBERS: Sandy Sandberg, K6HE; Frank Ramme, WD6HFE, Dick West, W6IUG, (2 yrs); Mark Schlessinger, N6NNI.

NEW CALLSIGNS: John Knight, WR7W, from WB7TRH.

THE FCC IN GETTYSBURG SAYS:

The last Amateur Radio licenses issued in the 6th call area as of 11/1/88 were: AA6KV, KJ6MR, N6TIV, KC6AFQ.

REPEATERS

Thanks to Frank Ramme, WD6HFE, the Club has received a donation of some more batteries, giving us a very respectable emergency power capability when the new batteries are placed on line.

It is interesting to note one of the other clubs in the area is paying \$85 per month for rental of a repeater site on Mt. Palomar! Aren't you glad your club bought our site when the opportunity presented itself.

The 146.730 MHz machine has a "numb" receiver as this is written, taking many dB more signal strength to activate it than does KA6UAI/R (147.135 MHz). We hope this problem is solved by the time this issue is "on the street," as it is distressing to those using it. It may be due to coax or connectors, or a problem in the duplexer, or the rx itself. Time and WB6IQS will tell (and hopefully, the latter will get it fixed!)

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
 , 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.

FROM THE ARRL LETTER

The ARRL has requested the FCC issue an Order permitting immediate in-
 terim use of 17 meters, 18.068-18.168 MHz, by US amateurs on a secondary,
 non-interference basis. In support of its request, the ARRL said that the
 large number of amateurs from more than 60 other countries already operat-
 ing on 17M has shown that immediate US amateur operation "would cause no
 significant additional interference" to the few, if any, remaining govern-
 ment stations still using the band. (Editors note: This is only a request
 to the FCC. The Commission has NOT yet acted on it.)

A 10 GHz EME (Moonbounce) contact has been made between hams in Dallas
 and Phoenix. An Oregon group set a 47 GHz terrestrial record of 105 km.

A new dial-up voice space news service has been placed on-line. The new
 BBS is called SPACHL, for Space Activities Hot Line. It carries the latest
 on Amateur Radio satellite operations, related nets, and world-wide space
 activieites. The number is 914-986-3875. SPACHL is available 24 hours per
 day, and bulletins are up-dated at least daily. It is a volunteer
 affiliated service provided by WA2LQQ. Recording of the five minute
 announcement is advised as it goes by quickly with details of times and
 frequencies.

FORESAIL

(The halyard, ya' say!)

ESTATE SALE: Auetek QF-1 audio filter, \$25; Poucel bug, \$20; Unique ant.
 tuner (won't tune coax), \$40; Hallicrafters HA-1 keyer, \$25; Johnson low-
 pass filter, \$10; Eico VOM, \$1; Eico VTVM \$1; Heath sig. gen, \$5; military
 headphones, \$1. Call Art, WA6IPD, 728-6834.

Atlas 350XL w/pwr supply, \$400; Kenwood tuner AT-250 w/pwr supply, \$300.
 Call Clint, W6OFT, 729-0850.

AEA PK-232 multi-purpose terminal, 8 months old turned on about two
 hours. Needs a home where it can feel wanted. Never hooked up.
 Reasonable offers or trade for? Call Paul, KZ6X, 436-2900 or 436-2537.

Digicast solid state 10-15W in, 75-90W out 450 MHz amp., \$90; 100+ feet
 of 1/2" alum. jacketed 72 ohm hardline, \$25. Call Dennis, N6KI, 271-6079.

IC-37A 220 MHz 25W xcvr; Collins R/E single wire ant. tuner 180S-1; Phone
 Allen, N7AMR, 434-5656.

New (in the box) Alliance HD-73 rotator, \$100; two 2M 11-elm beams, \$35;
 Hy-Gain 2BDQ 40-80M ant.; new top brand panel meters, \$4 & up; RG-8 coax;
 Heathkit mike, \$5; Shure mike, \$10; Jerry, W6YLA, 758-1134.

Lunar 1W in 20W out 220MHz amplifier, \$60; Marygold 10W in 45W out 2M
 amplifier, \$40; AEA Model MBA-RO CW, RTTY, ASCII reader, \$150; Heath EIA-
 416 dual trace 15 MHz scope, \$60; Heath TV Post-Marker Sweep Generator IG-
 257 w/book, \$10; RCA Senior Voltomyst WV-98C w/new probes & book, \$20; BK
 1A Semiconductor Curve Tracer, \$15; BK 3050 Audio Sine/Square Wave Gen.,
 \$30; Sencore FE160 Senior Field Effect Meter (VTVM equiv.), \$25. Call
 Ralph, K6HAV, 727-5866.

Kenwood TS-520 xcvr w/mike, \$325. Call Bill, K6GJD, 726-2029.
 Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15;
 various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.
 Heath SB-102 HF XCVR w/pwr supply, \$100; V-7A VTVM w/RF & DC probes;
 homebrew ant. tuner; Eico 950B bridge; mikes. Call Dan, 742-1654.
 Complete RTTY, CW, ASCII setup: AEA CP-1 Computer Patch, Vic-20 computer
 w/monitor, Datasette, software, all manuals. Call Ralph, K6HAV, 727-5866.
 Commodore C-64 w/1702 color monitor, 1541 disk drive, MPS 802 printer, &
 etc., \$395 for all. Call Stu, N6GRD, 451-7722.
 Cushcraft A-3 antenna, NEW, still in box. Call Jack, N6OPD, 434-2217.

WANTED

For Flying Samaritan honor student, reasonably priced word processor
 hardware/software. Call Nash, W6HCD, 728-3574.
 Swan pwr supply 117XC; Swan & Atlas equip. in any condx. Call Clint,
 W6OFT, 729-0850.
 Schematic for DSI 5612 freq. counter; Icom IC-22A in working condx. Call
 Dennis, N6KI, 271-6079.

EMPLOYMENT OPPORTUNITY

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

 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 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 Wed-
 nesday 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, answers on any type PC.

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 it costs you not one
 peso rojo mas!

NATE 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.

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.

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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is somewhat of 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.

ELECTRICITY

(Courtesy of Steve Cilurzo, KA6YBC via Bob Gonsett, WA6QQQ)

Today's scientific question is: What is electricity and where does it go after it leaves the toaster?

Here is a simple experiment that will teach you an important electrical lesson: On a cool, dry day, scuff your feet along a carpet, then reach into a friend's mouth and touch one of his dental fillings. Did you notice how your friend twitched violently and cried out in pain? This teaches us that electricity can be a very powerful force, but we must never use it to hurt others unless we need to learn an important electrical lesson.

It also teaches us how an electrical circuit works. When you scuffed your feet, you picked up batches of 'electrons', which are very small objects that carpet manufacturers weave into carpets so that they will attract dirt. The electrons travel through your bloodstream and collect in your fingers, where they form a spark that leaps to your friend's fillings, then down to his feet and back into the carpet, completing the circuit.

Amazing electronic fact: If you scuffed your feet long enough without touching anything, you would build up so many electrons that your finger would explode! But this is nothing to worry about unless you have carpets.

Although we modern persons tend to take our electric lights, radios, mixers, etc. for granted, hundreds of years ago people did not have any of these things which is just as well because there was no place to plug them in. Then along came the first electrical pioneer, Benjamin Franklin, who flew a kite in a lightning storm and received a serious electrical shock. This proved that lightning was powered by the same force as carpets, but it also damaged Franklin's brain so severely that he started speaking only in incomprehensible maxims, such as: 'A penny saved is a penny earned.' Eventually he had to be given a job running the Post Office.

After Franklin, came a herd of electrical pioneers whose names have become part of our electrical terminology: Myron Volt, Mary Louise Amp, James Watt, Bob Transformer, etc. These pioneers conducted many important electrical experiments - - among them, Galvani discovered (this is the truth) that when he attached two different kinds of metal to the leg of a frog, an electrical current developed and the frog's leg kicked, even though it was no longer attached to the frog, which was dead anyway. Galvani's discovery led to enormous advances in the field of amphibian medicine. Today, skilled veterinary surgeons can take a frog that has been seriously injured or killed, emplant pieces of metal in its muscles, and watch it hop back into the pond just like a normal frog, except for the fact that it sinks like a stone.

But the greatest electrical pioneer of them all was Thomas Edison, who was a brilliant inventor despite the fact that he had little formal education and lived in New Jersey. Edison's first major invention in 1877 was the phonograph, which could soon be found in thousands of American homes, where it basically sat until the record was invented. But Edison's greatest achievement came in 1879 when he invented the electric company. Edison's design was a brilliant adaption of the simple electrical circuit: The electric company sends electricity through a wire to a customer, then immediately gets the electricity back through another wire, then (this is the brilliant part) sends it right back to the customer again.

This means an electric company can sell a customer the same batch of electricity thousands of times a day and never get caught, since very few customers take the time to examine their electricity closely. In fact, the last year any new electricity was generated was 1937. The electric companies have been merely re-selling it ever since, which is why they have so much time to apply for rate increases.

Today, thanks to men like Edison and Franklin, and frogs like Galvani's, we receive almost unlimited benefits from electricity. For example, recently scientists have developed the laser, an electronic appliance so powerful it can vaporize a bulldozer 2,000 yards away, yet is so precise it can be used to perform delicate operations on the human eyeball, provided the power setting is changed from 'VAPORIZE' to 'DELICATE.'

SATELLITE COMMUNICATIONS - NOW AND IN THE FUTURE

It is generally considered that to make nominal use of the amateur satellites available requires certain equipment, prioritized as follows:

1. SSB and CW transceivers for 145 and 435 mHz with 10 dB gain class antennas for each band.
2. A computer for orbital predictions.
3. A 29 mHz sideband cw receiver and antenna.
4. A 21 mHz SSB & CW transmitter and antenna separate from 3., above.
5. A packet station with at least a terminal, TNC, AFSK modulator for uplink and PSK demodulator for downlink.
6. A 1269 mHz SSB & CW transmitter with 15-20 dB gain class antenna.
7. An S-band receiver and antenna (2.4 GHz).

Depending on the goals of the operator, some would move priorities 5, 6, and 7 up ahead of 3 and 4.

Ten years ago, the 29 mHz receiver was most important, followed by 145 and 435 mHz transceivers. Computers and orbital calculation software were not yet available at the hobbyist level.

Ten years from now, the 435 mHz rig will be the most important, followed closely by 1.269 and 2.4 GHz; 21, 29, and even 145 mHz will be nearly, if not entirely, out of the amateur satellite picture.

What is most important, satellite-based communications will then play a much larger role in general amateur radio. Its role now is more advanced and experimental.

Even the simplest emergency preparedness plans will not be able to overlook the need for satellite communications capability (and a presence on local and regional digital networks for that matter). Routine and priority traffic handling, both analog and digital, will rely on, and may be dominated by, satellite-based backbones. Conventional operations, rag chewing, DXing, and keeping schedules with buddies will be occurring on the satellites more routinely, and more dependably than on the HF bands now.

This last will be particularly true among those of us living in the more densely populated areas. An individual doesn't need a couple of acres for an antenna farm or kilo\$ for kilowatts to operate satellite DX regularly, for example. In the coming years, dependable, routine worldwide communications will be achieved via satellite from apartments with balcony antennas, not much more room than is needed now to operate the local repeaters.

(From an article by N5BF in W6VIO CALLING, the JPL ARC newsletter.)

DOWN THE TOOBE

We're sorry to learn that charter member Jack Williams, W6BLL, is in the hospital in very serious condition. Blood donors are needed.

Norma, wife of Guy Rowlett, KB6AI, is likewise in the hospital in very serious condition. Your thoughts and prayers are urged. They're needed.

The Club has received notice that former member (1980-81) Gerald Worth, WA6PJG, of Oceanside became a silent key on 30 September. We're saddened by his passing.

Wonder if anyone out there has had to have the lithium memory-backup battery replaced in a rig? We did. It cost a fortune, but less locally at Westcom. It's a timely process and time is money.

Price Club has made it cheap and easy to provide powerline spike and RFI suppression for your radios and computers. The plain old six-outlet power strip that used to cost \$15 or so has been replaced at our QTH by the protected variety at about \$8-\$9 (at Price Club).

We do appreciate the help we get in putting this thing on the street. Thanks to KB6NKM for the ad layouts; to N6COU for the mailing list and labels; to W9FQN for his column(?) and the fantastic graphics of the new tower layout; to WI6B for picking the Scope up from the printer and paying for it; and to KI6ZM, W9FQN, N6COU, W6TFB, and WI6B for the folding, spindling and mutilating. We do appreciate it.

"That's all", she wrote!

NOV 88

ELECTRONICS

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KENWOOD TM3530 389.95

YAESU FT109 299.95

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*Note:
If you are joining the ARRL for the first time and I 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.

NOV 88

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.

----- (Dotted line) -----

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NORTHERN SAN DIEGO COUNTY

THE PALOMAR AMATEUR RADIO CLUB, INC.
POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530



W6NWX
Scope

W6NWX/R 146.730 (-)
449.425 (-)
145.050 (pkt)

VOL. XXII, NO. 12

1936 - 1988

DECEMBER 1988

PRESIDENT: STAN ROHRER, W9FQN, VALLEY CENTER, 749-0276	CONTROL OPS: WB6IQS
VICE PRES: TED DEMOS, N6CKH, SAN DIEGO, 296-5103	W9FQN, W16B, K6HAV
SECRETARY: JO ASHLEY, KB6NMK, ESCONDIDO, 741-2560	KB5MU, WQ6V, N6IZW
TREASURER: RON WILHELMY, W16B, RANCHO SANTA FE, 756-3133	KA6UAI, KB6AI
EDITOR: RALPH CROSSMAN, K6HAV, VISTA, 727-5866	

>>>>>>— President's Message —<<<<<<

###—> W 6 O F T <—###
1919 - 1988

One of the founding fathers (1936) of the PALOMAR AMATEUR RADIO CLUB became a silent key this past month. We will all greatly miss Clint's cheerful voice on 146.730 and miss his generous helping ways. Clint was always there when our club needed him. 73 W6OFT de W6NWX SK.

###—SIGNAL STRENGTH—###

If you have a base station with an S-meter, please check out the difference in signal strength between the following repeaters and report it to me several times in November and in December: 145.05, 146.73, and 147.135. You might need to use a shorter antenna, rotate your beam to reduce the signal strength of the strongest station or an attenuator calibrated in DB. If possible, you should take readings at the same time of day each day you take readings since we suspect that our signals from Palomar Mountain vary during the daylight hours with a high in the morning and evening hours and a low at noon. Anyone have any ideas why?

This can be done with an informal message on the nightly traffic net at 8 p.m. Use the form listed below.

FREQ. Date=> _____

146.050 S-meter=> _____

146.173 or => _____

147.135 DB => _____

FREQ.	PWR	-3db WIDE	HEADING
145.050	3w	180 deg	220 La Jolla
146.730	22w	150 deg	250 Vista
147.135	22w	150 deg	220 La Jolla
Corner	N/A	54 deg	250 Vista
(Reflector)			

B E A R I N G S F R O M W6NWX/R
280 deg. Fallbrook
253 deg. Oceanside
250 deg. Vista

+-----Antennas pointed at 250 deg-----+

! (4 dipoles, 146.730 W6NWX) !

! At -3db 150 deg wide =175 to 325 deg!

! (Corner reflector, not used) !

! At -3db 54 deg wide =223 to 277 deg!

+-----+

232 deg. is the center of SD Co.

225 deg. Del Mar

223 deg. Escondido, Solana Beach

220 deg. La Jolla

+-----Antenna pointed at 220 deg-----+

! (4 dipoles, 147.135 KA6UAI) !

! At -3db 150 deg wide =145 to 295 deg!

! (Collinear, 145.05 W6NWX Pkt) !

! At -3db 180 deg wide =130 to 310 deg!

+-----+

212 deg. Ocean Beach, NAS

207 deg. S.D. & N6GZI

190 deg. Tijuana, San Ysidro

185 deg. Lakeside, Jamul

(280-185=95 deg to cover SD Co.)

The packet (145.050) is running 3 watts, beam width at the 3db down points is 180 degrees, and the antenna favors 220

degrees True out over La Jolla. It should cover within -3db 130 to 310 degrees which is more than enough for all of San Diego County. You can calculate approximately how far down the 4-dipole antenna is at your location by multiplying -.04 db/deg times the number of degrees you are from the repeater antenna you are using. For example, N6GZI (207) is -1.7db from the 146.73 antenna while Fallbrook (280) is about -1.2db. Ed is also about .5 db down from the 147.135 repeater and should be hard pressed to find much difference between the two repeaters (.7db or 1/10th S-unit). You can use about .1 db/degree for the corner reflector.

We would like to check out the corner reflector as soon as the above data is tabulated. We are trying to serve Fallbrook with a little stronger signal without reducing mobile usage in South County running 2+ watts into an outside mobile antenna. The W6NWX antennas in the future will be adjusted as needed for proper coverage of our service areas.

###---MEMBERSHIP---###

Membership in the Palomar Amateur Radio Club has been growing steadily with a 50% increase over the year 1985. It always peaks at the end of the club year (July) and then drops only to rise again to higher levels.

	'85	'86	'87	'88	88-5
Jan	208	295	316	331	**123
July	247	344	360	368	+121
Loss	-34*	-79	-126	-93	
Aug	213	265	234	275	+ 62
Oct	260	296	289	316	+ 56
	*(247-213)		**(331-208)		

We take a beating each July-> August: moving, disenchanted, forgot, deaths, etc. Membership then climbs because of new members and the "forgots" coming back home. July of '88 is our current record of club membership (368). As of this October we are 27 ahead of last year which means that with your help we are probably headed towards a "400" July 1989 (368+27= 395).

Increased membership can probably be attributed to: 145.050, 146.730, 147.135, 449.425, club meetings, excellent news letter (SCOPE), traffic nets, packet net, computer net, microwave net, and the ARES net. And then there are those precious souls who support the club because it is supporting amateur radio in San Diego County or they just like listening to our repeaters on their scanner.

As club membership climbs, more of our club officer-committee positions need to be broken down into more manageable work levels. We are a volunteer organization and we are likely to "kill off" our officers and helpers from overwork if only a few are doing everything, so please feel free to offer your services where you think that you can help the club. WE HAVE ALL SORTS OF OPENINGS! JUST ASK BEFORE WE ASK YOU!

###---NOMINATIONS---###

The club accepted the nominating committee report, chaired by Ralph-K6HAV, with the following officers nominated:

- President : Stan Rohrer W9FQN 5th yr
- V-President: Mac Mc Carthy NH6EW 1st yr
- Secretary : Nash Williams W6HCD 1st yr
- Treasurer : Ron Wilhelmy WI6B 4th yr

These officers will need your support so please say "YES" when they ask you for help in our club programs.

###---OCT 22nd WORK PARTY---###

Another assault on the tower. What first appeared as an easy Saturday turned into the longest one yet. We arrived at 10 a.m. as the mountain started to warm up after having driven through the Indian Reservation in semi-fog on the way up. At about 2,000 feet we broke into brilliant sunshine and were treated to a pleasant drive up the mountain.

We were able to attached connectors to six new hardlines, bury the cables in a three inch pipe, bury two smaller pipes for the future, install a LOM vertical on the lower (30') right crossarm, and connect up our repeaters to the new hardline which now runs into the building. One of the

lightning units (Alpha) was installed and others will be added when they arrive.

The crossarms (2) and the additional 10' on top of the 70' tower were donated by Clint-W6OFT and it is only fitting that when we look upward that we think of Clint.
(Climbers)

Chuck-KI6TG, Lanny-N6CEK, and Stan-W9FQN

Chuck and Lanny are rock climbers so it was quite interesting to see their approach to tower climbing and how rapidly they are able to come down off of the tower. I am beginning to like their climbing harness as compared to my telephone climber's harness which gives me a pain in the ___ after an hour or so. Possibly Chuck and Lanny can show us a few of their climbing tools at our Christmas program this year.

They installed the upper guy lines to the tower at the 70 foot level, installed a 10m vertical and two lightning rods. Helping with the hardline also took up a lot of time.

(Ground crew)

Charles-N6TEP, Ben-WD8CZP, Erik-KA6UAI,
Wally-N6JZB,

Charles again took pictures of everything inbetween lending us a helping hand. Can't wait to see the pictures. Ben and Wally came up around noon and really helped us with a lot of the ground chores: cables, ditch, etc.

(Hardline/connectors)

John-WB6IQS, Dennis-N6KI

John and Dennis spent a good share of the day working on the hardline installing connectors that are quite different from the regular SO-239 which you and I normally use to make coax connections.

* * * * *

October 23rd Erik-KA6UAI and Stan-W9FQN revisited the repeater site to put 147.135 back on the air and connect up the 10 meter vertical for the 29.6 MHz link on his repeater. The cementing on the hardline junction box was completed and we are ready to install a metal cover.

* * * * *

November 13th John-WB6IQS and Stan-W9FQN: fixed the 146.73 repeater receiver, installed the cable junction box lid, installed lightning devices, and cleaned up the site.

###—HOUSE TRAILER—###

Here is a listing of small projects which need to be done on the club's emergency communication trailer and they are listed by priority. Some of you have already volunteered to help and you might now want to pick a specific area(s):

WINDOWS - replace 2 missing louvers
TOWING - lighting cable to car
TABLE - construct simple op table
BATTERY - install 300 Ahr batteries
SOLAR - add solar 12V charging

Nash-W6HCD + _____,

MAST - mount 30-40' tower/mast

ANTENNAS - mount 2M and HF antennas

WIRING - new 12VDC and 110 VAC

REMOVE PAINT- use paint remover

PAINT - white with an orange stripe

Jo-KB6NMK + _____,

LETTERING - PARC, W6NWG, ARES, etc.

Jo-KB6NMK + _____,

INSIDE PAINT - white (?)

PROPANE - 2 tank switches added

REFRIGERATOR - check out problems.

Steve-N6NHW + _____,

CURTAINS - replace with new

Uses for the trailer are:

Emergency Communications Center, public Service events, demonstrations at schools, demonstrations at malls, amateur radio contests (Field Day & VHF Contest), portable digipeater, DFing center for problem areas, and repeater site protection while building the new roof.

Our second trailer is a flatbed with a welded 7' box frame which will be used with our portable 40' tower. It needs some of the following work:

Plywood floor, sides, and roof, hinge the 40' crankup tower, install 300 Ahr of batteries, install running lights, and install 12v wiring.

Uses for the trailer are: Emergencies, Field Day, public service events, contests, portable digipeater, etc.

These trailers have been used on Field Day so some of you have seen them in the "raw" state. With a little bit of effort the club will have some excellent additions to our emergency capabilities as well as helping the club with its other programs. Your help and support on these projects will be greatly appreciated. We would also expect that club members would be able to use these trailers for amateur radio activities within San Diego County.

###---POTPOURRI---###

For the past few years I have noted a member on our roster by the name of David Lien-W6OVP I wonder if he reads the SCOPE and if he is the author of 2-3 computer books that I have on my shelves. Ralph-K6HAV says "no one reads the SCOPE" so I guess he won't see this!

I forgot to list Frank-N6AT in the club committee list last month. Frank is our Southwestern Division Assistant ARRL Director reporting to the Director, Fried Heyn-WA6WZO, and he has served in this post for many years.

Frank Ramme's call in the November SCOPE is really WB6HFE and not WD6HFE. Y mi amigo, Nash Williams, tiene W6HCD and no tiene K6HCD. Lo siento mucho mis amigos.

###---FIELD DAYS PAST---###

Or wait till next year!

(X= points, Y= contacts total)

						thousands	
yr	USA	Cal.	S-Cal	SD	class	X	Y
85	33rd	2nd	2nd	1st	4A	5.2	1.9
86	21st	2nd	2nd	1st	4A	5.8	2.1
87	17th	2nd	1st	1st	4A	6.3	2.4
88	12th	3rd	3rd	1st	5A	6.8	2.3
89	---	---	---	---	?	---	---

In 1988 a higher % of CW contacts, which are multiplied by two (X2), gave us a higher final point score with slightly less total contacts.

We are improving in terms of total points made each year which is reflected in our scores and ranking in the United States. It is interesting to note that if we took our scores and moved up to 6A or 7A with just the points made in 5A this year that we would even rank higher than we do in 5A due to the fact that there are probably fewer clubs that can put forth the effort required for higher classes. Higher classes allow more unrestricted operation by our club members.

Personally, I tend to look mostly at the total score and contacts made since they are a better gage or measure of club participation and the club's ability to participate in emergencies. Its true that Field Day is a contest but I like to look at it as a contest with ourselves to do better each year. So in my book we are a winner when we show improvement in our capabilities and the point score each year. What do you think?

###---THANKS---###

THANKS to Chuck-W6IRM for conducting the W6OFT funeral services and many THANKS to John Martin W6SE for doing the eulogy. Your help at this very sad time was greatly appreciated.

And again THANKS to Chuck-W6IRM for the nice letter thanking the club for the gift certificate which he won at the club picnic ... and also THANKING Ed-N6GZI, Clint-W6OFT, and Buck-WW6E for working on his HF beam. Chuck is now back on the air and used the gift certificate to buy an ICOM HT. One of these times I wish we could find the time to get Guy-KB6AI's HF beam back up and working. Guy is one our our really late repeater night owls and I've talked to him many times between 1-3 in the morning.

M E R R Y C H R I S T M A S

to all of you from the

Executive Committee

of

The P A L O M A R A R C

and a very

H A P P Y N E W Y E A R

73 & 88, Stan W9FQN

 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. See!

DECEMBER CLUB MEETING

The program for the December meeting will be a demonstration of rock climbing gear and techniques as they apply to tower climbing by Lanny Goodman, N6CEK. Following this will be the Club's annual Christmas party. It would be nice if each of us could bring something toothsome and tasty. Coffee by NH6EW.

 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 December meeting will be at the home of KB6NMK.

At the November meeting at the home of WI6B, the Committee heard and approved the Minutes of the last meeting; and the Treasurer's Report. The Committee heard a report from WB6IQS on the status of the 146.730 machine and the very "numb" receiver it has evidenced. John indicated he will soon make a trip to the mountain to make things right. A Poway ARS request to rent space in the club bunker was discussed. The tasties were just that.

AMATEUR RADIO POSTAGE STAMP REPLICA PINS

The Club still has for sale (\$5 a shot) some of the amateur radio postage stamp replica pins purchased for sale at the National ARRL Convention in San Diego in 1986. If you're interested in these attractive pins see Ron, WI6B or Stan, W9FQN.

NOVEMBER CLUB MEETING

At the November club meeting, committee reports were heard. K6HAV, Chairman of the Nominating Committee, reported the Committee's slate of officers for the 1989 is: President, Stan Rohrer, W9FQN; Vice President, Mac McCarthy, NH6EW; Secretary, Nash Williams, W6HCD; Treasurer, Ron Wilhelmy, WI6B. K6HAV moved the Committee's slate be placed in nomination. The membership approved the motion. No nominations were received from the floor. The vote will take place at the December club meeting. The Club's annual auction was held and was a resounding success. Steve Kerrin, WA6CDU, again did a masterful job as the auctioneer and sold everything I brought and most of the stuff others came with. He sold all of the Club equipment and made a pretty penny for the Club (\$196.34 + \$30 more still owed) on stuff that was too young to be antique, but old enough to vote! The coffee and tasties were courtesy of Mac, NH6EW, and all of us good guys who helped out by bringing the no-cal goodies. 67 members and 12 guests signed in.

+++++
 + CLINT CALL, W6OFT, CHARTER MEMBER, SK +
 + Charter PARC member Clint Call, W6OFT, became a silent key on Sunday. +
 + 23 October in Tri-City Medical Center after a short battle with cancer. +
 + Clint had worked as Service Manager for both Swan and Atlas; and oper- +
 + Clint's TV Service. He had been retired due to back problems, but con- +
 + tinued to work at home, servicing Swan and Atlas equipment. He was an +
 + Amateur Extra Class operator whose cheery and helpful voice will be +
 + missed by his myriads of friends in and out of the Club. +
 +++++

Eleanore Call, N6QJE, sends thanks to the many club members who sent plants, flowers, food, cards -- and for your multitude of phone calls extending your support to her.

FROM THE ARRL LETTER

On October 19, the ARRL filed its Petition for Reconsideration in Docket 87-14, the FCC order which reallocates 220-222 MHz to the Land Mobile Service. The petition is 25 pages long and contains another 80 pages of exhibits! The strongly worded petition accuses the FCC of predetermining the outcome of the original proposal: "In order to justify what clearly was a predetermined outcome of this proceeding, the Commission failed to address the arguments of the amateur commenters; it extended the reply deadline for filing reply comments without advance notice; it accepted comments from the United Parcel Service more than six months after the close of the already extended comment dates because the record lacked support for the position the Commission had already chosen in this proceeding..."

The ARRL said the Order showed a complete ignorance, and lack of any interest in, the spectrum needs of amateurs.

CONGRESS AND THE PRESIDENT TELL HOW THEY FEEL ABOUT AMATEUR RADIO!

During the rush to recess, the Congress passed a piece of legislation called the FCC Authorization Bill, S.1048 to which had been added what had originally been Senate Concurrent Resolution 127. This resolution, with House Concurrent Resolution 317 was the Sense of the Congress Resolution the Scope reported on in the August, 1988 issue which expressed strong Congressional support for the Amateur Radio Service. Both houses passed S.1048. The President's signature on November 3 made it law!

We have heard rumors which seem to have arisen from passage of this bill and the strong pro-radio amateur sentiments it expresses. This bill does NOT force anybody to do anything; it does not automatically wipe out the FCC Report and Order in Docket 87-14 (the one giving away 220-222 MHz).

Section 10 is the Sense of the Congress portion of the bill. 10.(b) says:

(b) It is the sense of the Congress that--

(1) it strongly encourages and supports the Amateur Radio Service and its emergency communications efforts; and

(2) government agencies shall take into account the valuable contributions made by amateur radio operators when considering actions affecting the Amateur Radio Service. (From ARRL Letter of October 26, 1988.)

+++++
 + JANE RICE, AD6Z, SK +

+ Jane Rice, AD6Z, who had been a long-time PARC member, lost a long +
 + fight with cancer on 12 November. Jane, who served so well as an exami-+
 + er in the VE Program and who did such a fine job of operating the CW --+
 + station on many Field Days, will be missed by all who knew her. She was +
 + a fine person and a credit to the amateur fraternity. +
 +++++

 THE 220 CLUB OF SAN DIEGO WELCOMES PARC MEMBERS ON WD6HFR/R, ITS 224.900
 MHZ REPEATER, which is co-located with W6NWX/R at the PARC site on Mt.
 Palomar. This repeater, like the PARC machines has battery back up. Feel
 free to use it.

VOLUNTEER EXAMINER PROGRAM

At the November tests our PARC VE team gave 12 test elements to seven
 applicants, six of whom passed a total of 10 elements.

Our test crew was: KI6JM and KD3HN reception; WB6R CW exams; KB5MU,
 N6NNI, and W6TFB VEs. Paperwork by W6TFB and K6HAV.

Congratulations to club members Bill Christoph and Dennis Ingebretsen,
 both of whom went from no license to Technician; and to Leo Wagner, WB2ISV,
 who up-graded to Technician. 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, 3rd, and 4th Saturdays in south
 county and the 4th Saturday at Coast Savings & Loan, 1540 E. Valley Park-
 way, Escondido. South county test locations available from SANDARC-VEC.

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.

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

UPGRADE: Richard Felker, KB6VRQ, to Advanced; Bill Christoph and Dennis
 Ingebretsen to Technician and awaiting first license; G. Lane Arbuthnot to
 Novice and awaiting his first license. Congratulations.

GNU CLUB MEMBERS: Rich Smith, KF6EA, San Diego; Bill Christoph, Vista;
 Sandra Selle, KA6RSI, Vista; Jim Yacabucci, K6HZ, San Diego; Donald Beck,
 N6GOS, Beverly Hills; Richard Felker, KB6VRQ, Fallbrook; Jim McConahay,
 WB6NUV, Poway; Dennis Ingebretsen, San Diego. Welcome.

RENUDE MEMBERS: Judy & Herb Patchell, KB6GHE & WA6IWK; Bryan Selle,
 WB6TJN.

NEW CALLSIGNS: Charles Miele, N6TEP (first call). Congratulations.

THE FCC IN GETTYSBURG SAYS:

The last Amateur Radio licenses issued in the 6th call area as of 11/1/88
 were: AA6LG, KJ6OB, N6TOU, KC6AKH.

REPEATERS

WB6IQS and W9FQN went to the mountain top on 13 November and dealt
 satisfactorily with the numb receiver problem on the 146.730 machine.
 Resetting squelch levels and getting rid of a defective coax connector
 solved the problem very nicely. We do notice that there is some grunge on
 the machine that was not there before, but this probably indicates a change
 in something else on the mountain - someone has put a new commercial or ham
 rig into operation or the operating parameters of existing commercial or
 ham equipment have changed. It takes some doing to track these down. Clues
 as to other machines being on the air when the grunge is evident on .730
 would be much appreciated. Thanks to John and Stan for getting us back to
 where we no longer need a "ton" of RF to access .730!

 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 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.

FORESAIL

(The halyard, ya' say!)

Auetek QF-1 audio filter, \$25. Call Art, WA6IPD, 728-6834.

6146 tubes. Call Glen Schmidt, 727-4004.

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

IBM Correcting Selectric II typewriter, IC-37A 220 MHz 25W xcvr; Collins R/E single wire ant. tuner 180S-1; Phone Allen, N7AMR, 434-5656.

Two 2M 11-elm beams, \$35; new top brand panel meters, \$4 & up; RG-8 coax; Heathkit mike, \$5; Swan Signet HF xcvr, \$150. 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 (VTVM equiv.), \$25. Call Ralph, K6HAV, 727-5866.

Probemaster test probe kits, \$10; Probemaster X10 attenuator kits, \$15; various vacuum tubes, all tested. Call Sandy, K6HE, 745-6940.

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

Commodore C-64 w/1702 color monitor, 1541 disk drive, MPS 802 printer, & etc., \$395 for all. Call Stu, N6GRD, 451-7722.

WANTED

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.

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

 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.

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 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.

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 it costs you not one peso rojo mas!

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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. John is somewhat of 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 have.

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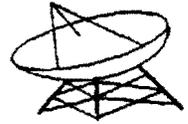
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***Note:**

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.

DEC 88

DOWN THE TOOBE

The Club certainly appreciates members like Art, WA6IPD, for his good works in doing the Survivor's Assistance Committee job in the case of a silent key in Fallbrook. Art did it all. Dismantling the station and selling the gear. He has realized over \$1,000 for the widow from a station which did not have much in the way of late model equipment. Thanks Art.

Bob Heitger, WA6KZN, has sold the old plantation and is going to be operating mobile from his motor home from here on. His donation to the Club of a Collins KWM-2, station control & pwr supply, a VIC-20, a CP-1, and much small equipment is greatly appreciated. Bob, a past president, has been the Club's Historian and a control op for W6NWG/R. Smooth motor-ing, Robert.

Floyd, W6JSP, reports the passing of former club member Chet Elder, W6KRH, on 28 October.

Don't know if anyone else caught the amateur TV segment at the close of the national news on Channel 4 on 3 November or not, but it was certainly a nice plug for amateur radio and very well done. Its main thrust was ATV.

Echoing an item on the survival of CW in the armed forces, which we printed in the May '87 Scope, the L.A. Times, in its 4 November edition, printed a front page feature story on the subject. It sez the same thing we told you: CW isn't dead yet.

W9FQN has a free listing of Arizona repeaters for the first person who asks for it.

The Club has checks for several folks, including W6OLQ, N6KI, and KB6SQR, for the gear they sold at the annual auction. If you haven't collected yet, see KA6FPS or W9FQN at the Xmas meeting. Those who sold gear at the auction but who haven't yet "tithed" to the Club, please see KA6FPS at the club meeting.

"That's all", she wrote!

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