

NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWX

Scope

VOL. XXII, NO., 1

1936 - 1987

JANUARY, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
 VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
 SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
 TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

---PRESIDENT'S MESSAGE---

REPEATER SITE

We are now within \$150 of paying off the note. If all goes well, we can burn the note at our January or February meeting.

NEW OFFICER

Bob Brehm, KB6QC, is our new Vice President. He is looking for suggestions for future programs for our club meetings, so be sure to get your suggestions and comments to Bob so we can plan for 1987.

IN APPRECIATION

Phil Schutze, K6ROR, has been the operator of the "Gi'nt Computer" for the past many years, and he has performed his job faithfully, keeping the Club computer records up to date. Phil, the Club thanks you for all of your efforts over the past years and we hope to see you at some of our meetings soon.

Larry de Montegre, WQ6V, has been our more-than-faithful Vice President these past two years and has always been at my right hand whenever I needed him. Thanks, Larry for a job "well done".

Thanks also to Vina (WQ6V's XYL) for her excellent work with the refreshments. (We're going to need a replacement for Vina after the January meeting.) Many thanks also to Bill Buckner, WW6E, and to his XYL Mary, N6NOG, for taking care of the prizes. (Their help too will be missed after January.)

MEMBERSHIP

Our membership is now 311, which is 29 more than last year at this time. We appreciate the help that many of you have given us by extending membership invitations to your friends and to people to whom you talk on the repeaters. Some of our good public relations people on 146.730 are not presently available, so we certainly would like to see some of you extend the hand of friendship to the new people whom you hear on the repeater. Remember, club membership supports amateur radio in the area through packet, microwave, traffic, and ARES nets; voice and packet repeaters; Field Day, etc. It is not necessary to attend meetings to be a club member.

NEW DIRECTIONS

In what direction would you like to see the Club move? What kind of projects do you think our club should be working on for the next five years? Be sure to bring your ideas to the January club meeting.

73 de Stan, W9FQN

Jan 87

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.

JANUARY CLUB MEETING

THE PROGRAM FOR THE EVENING WILL BE: A talk on locating and troubleshooting powerline and power line-carried RFI by Mr. Frank Van Avery of San Diego Gas and Electric Company. Mr. Van Avery is SDG&E's head man in the power line noise location business. This is one that none of us should miss! Maybe it'll solve my Channel 2 problems.

COFFEE AND GOODIES: Vina's last turn at making the coffee and overseeing the table full of no-cal goodies that we all are going to bring.

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, 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.

DECEMBER CLUB MEETING

At the December club meeting we held our annual Christmas party. The food was delicious - burritos and tostadas with lots of other goodies, including chips, salsa and guacamole; cake, pie, cookies, and other mouth watering delicacies. WQ6V and Vina did the major chore of the burritos and the tostadas and many others brought goooood things to eat. WF6L provided the music and many others of us brought computers and packet gear for copying programs and for demonstration. It was a very festive evening with lots of chance to have those eyeball QSOs (unless you were stuck at a computer or packet station).

WI6B told us we were nearly over the top on paying off the note on the mountain top property. The new slate of officers listed in the masthead was elected to office. Larry, WQ6V, was thanked for his faithful service as Vice President. We voted to affirm the motion before SANDARC to support with a \$1,000 donation, the defense efforts of a western ham in his fight against restrictive tower laws.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the December meeting, which was held at the home of Ron, WI6B, the Committee decided to: publish a club roster to be handed out at the January and February club meetings; start a training program. W9FQN reported that the Club's representatives to SANDARC for the new year would be: W9FQN, WF6L, N6GZI, and W6SAX; that the remainder of the WD6ENK estate radio gear had been donated to the Club. The possibility of constructing a structure to house the repeaters' emergency power batteries and the generator was discussed, as was the continuing problem with the intrusion of the signal from K0JPK/R into San Diego County. The Committee had a look at the generator donated to the Club by Merit

Arnold, W6NLO, of WESTCOM to see what may be required to refurbish and repair it for future use after the Animal Control people get the wildlife out of it.

REPEATER SITE MORTGAGE

As indicated in W9FQN's column, the balance owed on the repeater site note is now less than \$200 with about six more \$35 contributions needed to finish it off so that Stan can hold that mortgage burning ceremony he's been promising us. That will do the job once and for all. We have had a phenomenal response (nearly 50% of the Club's membership, and the unlicensed XYL of our one Oxnard club member, have responded to the President's letter requesting donations). We were helped by the proceeds from the sale of the Amateur Radio Postage Stamp pins and by money from the Treasury which would have ordinarily been used to make the monthly mortgage payments. But largely our \$9,000 debt has been paid by our club members - to the tune of over \$6,000! You can really be proud of your club; and of the response of its concerned members. Thanks to all of US who did the job so well and so quickly. We stood up and were counted!! Everyone who uses any of the PARC repeaters owes us a vote of thanks.

EXPIRING FCC LICENSES

Licenses expiring in some unstated month of 1987: N6GSS. In January: NG6Z, N6IE, W6JSP, W2FWV, W9KEX. In February: WB6WGT, K6CLU. In March: W6OMM.

To be reminded of your license expiration month/year, it must be in the Computer. 610 forms are available from the FCC and, for club members only, from the PARC Secretary.

FORESAIL

(The halyard, ya say!)

Yaesu FT-225RD all mode 2M base station w/Yaesu YD-849A mike \$325; Kenwood R-1000 gen. cov. rx \$250; Mirage B108 10-80W 2M amp \$125; Mirage B1016 10-160W 2M amp \$200; Daiwa CNA-2002 2.5KW auto. ant. tuner \$250; Tentec Triton IV 200W hf xcvr w/245 CW filter, 249 Noise Blanker, 244 Digital Readout, 255 12VDC 18 amp pwr supply, and Astatic 1104C mike \$450; RCA WR64A Color Bar/Dot/Crosshatch Generator \$35; Astron RS-35A pwr supply \$85. Call Ralph, K6HAV, 727-5866.

Drake TR-7 xcvr w/pwr supply, voice processor, and spkr. All filters and noise blanker installed. \$500. Call Lloyd, W6TFB, 757-9374

KLM Twister 2M cir. polarized antenna, \$50. Call Buck, WW6E, 941-0867.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$250. Call Arnie, WA7BIA, 942-1166.

Kenwood TS-520 HF xcvr w/cw filter, manual, factory re-tweaked, make offer. Call Fred, W6UAP, 747-3074.

From the estate of W6HAW: Late model Atlas 210X, \$175; Westcom 2M 15/80W amp, \$100; Tristao CT840588 5-section 88'guyed crank-up tower w/guy lines, \$800; Hy-Gain TH-7 tri-band antenna, \$400; Telrex 40M329 3-elm 40M beam, \$600; Hy-Gain 5-elm 20M beam, \$250; Loads of small stuff: Miller low pass filter, Heath remote coax switch, Siltronix watt/swr meter, Hustler mobile antenna, Hustler BTV-5 5-band vertical ant., 300' of 8-conductor rotator cable, Saxon 8283 RG-8/U foam coax, coax switches, Swan Mobile antenna etc. Call Buck, WW6E, 941-0867.

Three 4' fiberglass microwave dishes w/ mount in xlnt condx, \$100 ea. One 5' green fiberglass dish, no mount, \$75. Call Larry, WQ6V, 726-0353.

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Drake TR4C, VFO, pwr supply, and Shure 440SL mike w/all manuals. Clean, \$225. Call Hal, W6DOL, 271-5939.

Realistic Pro-77A VHF police/fire scanner, as new, \$45; 500W dry-type dummy load, \$20; Cantenna dummy load, \$15; 6-position B & W 575 coax switch mounted in box, \$18; new Hi-Q balun, \$10; Hallicrafters SX-111 rx, \$40. Call Duane, AA6EE, 789-3674 (evenings).

Hy-Gain 204BAS 4-elm. 20M beam w/stainless steel hardware, Mosely 2-elm. 40M beam, Tristao 354HD 54' self-supporting crankup tower, prop pitch motor antenna rotor w/mast coupling and control unit. Call Otto Miller, W6PT, 727-0086.

1) Commodore 1541 disc drive, 9" BPF scope, pwr supply. 2) Kantronics terminal unit, manuals and cables, Multi 2000 all mode, Yaesu mike, Ringo Ranger ant., manuals, 100' RG8/U. 3) Mosley 3-elm beam, CDE rotor, 95' of 10-wire control cable. Complete groups only. Call Wil, W2FWV, 436-3277.

Johnson Matchbox KW antenna tuner w/swr meter. Call Ralph, K6HAV, 727-5866.

Drake TR-4 HF xcvr w/home brew pwr supply; Drake RV-4 remote VFO; Drake MC-4 mobile spkr & watt meter; Drake DC-4 mobile pwr supply; Ameco rcvr pre-amp; Home brew 2KW PEP GG linear amp. w/pair of 4-400s and spares and pwr supply; and all cables and manuals for Drake equipment; Heath monitor scope. Call Bill Welsh, W6TIW, 439-6526.

Tempo S-5 2M HT, \$90. ALL CLUB ITEMS: Heathkit Apache TX-1 HF tx, \$30; Gonset 6N2 tx, \$10; Heath SB-401, HF tx \$??; Hallicrafter S-120, rx \$25; Heathkit SB-100 HF xcvr, \$100; Heath SB-102 HF xcvr, \$125; Drake TR-3 HF xcvr w/A.C. & D.C. pwr supplies, \$125; Heath HW-2036 2M xcvr, \$90; Heathkit GR-78 gen. coverage rx, \$??; SWR bridges, \$10-\$20; test equipment (o'scopes, sig gens, tube testers, etc); and tubes, components, and quality items. Parts by the bucketful, cheap, cheep. All Club items. Talk to W9FQN at 749-0276.

WANTED

Pair of 572B tubes, duplexer, 430 & 440 mHz units for Yaesu 726R. Call Ron, WI6B, 756-3133.

ALDA 103 maintenance manual to borrow and copy. Bill, N6COU, 758-7163.

Ham software for Apple IIe; to borrow QEX for 7/86 & 9/86. Call Duane, AA6EE, 789-3674.

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

UP-GRADES: Clint Call, W6OFT, to Advanced with code credit for 20WPM; Doug McCartney, N6MMD, to Advanced. Congratulations.

GNU CLUB MEMBERS: Doug McCartney, N6MMD, Carlsbad; Jay Burritt, K6MRK, Poyay; Chet Atlas, K6MSF, Olivenhein; Lynn Stacy, Escondido; Stephen Smith, KD0D, Oceanside. Welcome, we're glad to have you with us.

RE-NUDE MEMBERS: K7HOE, and W6SMP, who has moved back from the Palm Springs area into Rancho Bernardo the year round; WA7GRW & KA7PII, who have regnued for 1987-1988.

GNU/CHANGED CALLSIGNS: Marni Parker (XYL of W6SAX), KB6PCF, from no license. Congratulations to the Parker family.

FROM THE ARRL LETTER

The FCC reiterated its stand on coordinated vs. uncoordinated repeaters when Ray Kowalski, Chief of the Special Services Division of the Private Radio Bureau said in part: "Stations which operate with illegitimate repeater coordination do so at their peril." "And it is the licensees of

these repeaters - not the coordinators - who risk sanctions if interference occurs."

A private company is sending official-looking literature to amateurs offering assistance with their license renewal, and it is possible some amateurs may think the literature is from FCC. The catch is that the fee the private company charges for this service is \$50. The FCC, of course, charges no fee and the 610 forms are available free from the FCC, the ARRL for a S.A.S.E., and from your club secretary.

6th Area call signs issued as of 11/1/86: WY6X, KI6MA, N6OLQ, KB6OOZ.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at a place to be announced in Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92014 ten days prior to the testing date. New 610s may be obtained from the FCC. Applicants MUST BRING their ORIGINAL LICENSE AND CERTIFICATE OF SUCCESSFUL COMPLETION (if any) with them.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge. Too bad you missed the 50th year commemorative badge.

ADS & MATERIAL FOR SCOPE to P.O.Box 73, Vista, CA 92083-0030. Deadline is normally Wednesday of the week two weeks before the club meeting.

VOLUNTEER EXAMINERS PROGRAM

At our December 13 test session we had a less than notable success rate, but we did have one new club member, Doug McCartney, N6MMD, who succeeded in up-grading to Advanced. Congratulations, Doug. We also had our first try at exams given on the computer. Paul, KB5MU, conducted this first (for us) try at it.

Our examiners were WW6E, WA6HYB, and W6HCD; with W6YYV and WA6KZN as proctors. W6DEY conducted the CW exams with an assist from KB5MU. KG6VX looked after reception and processing.

de Pat, N6INN

THREE REPEATERS, all 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 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. Repeater control operators are: KB6AI, W9FQN, K6HAV, WA6KZN, KB5MU, K6ROR, WQ6V.

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.

Jan 87

Carry on your QSO or sign off or move to simplex, but do NOT acknowledge the crazies. At the same time, try and hear the interfering signal on the input of the repeater and, if possible, determine the direction from which it is coming.

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 control stations and liaison stations are needed. Apply to Joe, WB6HMY.

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 146.730 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.

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 0800.

DOWN THE TOOBE

Leona and Carl Wallace sent along their Xmas newsletter with all of their activities detailed in it, along with a pic or two.

Thanks to George, K6Y GK, we learn from an editorial in Nov/Dec '86 NARTE NEWS discussing Summer Interns in the telecommunications industry that: "We find that those that have had even an acquaintanceship with amateur radio are several steps ahead of those who have only had college as their exposure to the industry."

"That's all," she wrote.

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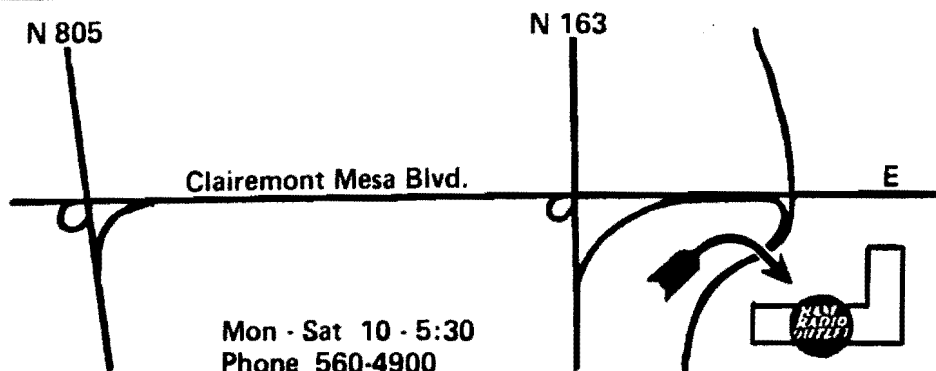


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GARY K6CAQ

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this fascinating mode for you.*



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BYTES 'N PIECES

By Paul Williamson, KB5MU

Protocol wars: finally some software for real networking is beginning to appear. The debate between various ways to implement network and transport functions will heat up with implementation of both types appearing in the field.

Phil Karn, KA9Q, has completed software for the IBM PC and compatibles that implements the TCP/IP protocols for packet radio. These protocols provide network and transport services. Widespread use of these protocols would be one way to make a big step forward for the amateur packet network. The protocols are being tested on the air with good success in various parts of the country.

The "KISS TNC" is the latest tool for the protocol experimenters. The KISS (as in "Keep It Simple, Stupid") TNC is just a TNC-2 with additional RAM and a bootstrap loader in EPROM. The host computer then downloads the TNC's program into the TNC. This makes it much easier to change the way the TNC behaves, and is ideal for development of new protocols.

Ron Raikes, WA8DED, author of the WA8DED firmware for the TNC-1, has firmware for the TNC-2 (and clones) in alpha test on 145.09 MHz in Long Beach. This new firmware provides network and transport level functions, using the "virtual circuit" approach. Ron plans to equip several of the digipeaters on 145.09 (including K6KGS-1 on Pt. Loma) with the new firmware for beta test soon. This firmware also promises to be a big step forward for the network.

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FEBRUARY, 1987

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SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, W16B, Rancho Santa Fe 756-3133

NOW HEAR THIS!! REPEATER SITE NOTE PAID IN FULL!!

Lila, XYL of Vern Baumgartner, W6HW, reads the SCOPE, and when she saw that we needed \$150 more to finish paying off the note on the repeater site, she wanted to add to her already-generous contribution and do the job for us. She called and confirmed the amount needed, and then dashed off a check and sent it south from Oxnard. She asked only that the contribution be recorded as being in memory of her two sons, Dennis Franklin Drake and William Drake. It is done, Lila, and their names will, along with yours and Vern's and those of all of the other contributors, be recorded at the repeater site for posterity. Thanks, Lila. Your good feelings toward the Club are truly reciprocated.

Thanks to all of the staunch club members who got this job done in short order and good fashion. Our mountain top real estate is now the Club's, free and clear! WELL DONE!

----- President's Message -----

REPEATER SITE

Be sure to come to the February meeting for the mortgage burning ceremony. Many thanks to all of you good people for your efforts. We are over the top and the property is now ours with no strings attached. This also means that we can now reallocate the principal and interest to other things. It removes a \$1,400 anchor per year from our necks for the next 16 years and allows us to tackle some new amateur radio projects with confidence.

MEMBERSHIP

Club membership is now about 315 and last year at this time it was 295. We appreciate everyone extending a warm hand to new amateurs in the area.

NEW DIRECTIONS

Some of the new projects for this year or for the next five years that have been mentioned most are: 1) Generator shed for our remote controlled 3.5 KW generator to

be used at the repeater site, 2) New and larger repeater building closer to the tower using the old building for batteries and generator, 3) Six meter repeater, 4) Ten meter repeater, 5) Direction finding equipment for "lost" transmitters, 6) Code and theory classes with lab equipment, 7) Repairing the 7.5 KW generator, 8) A 911 telephone patch for the two meter repeater, 9) A telephone patch for the 450 repeater, 10) Lightning proof the repeater site, 11) Emergency vehicle or trailer, 12) New repeater antenna system, 13) Emergency portable PACKET stations for disasters, 14) Support school amateur radio stations. 15) Assemble another two meter repeater to be used as backup to the present one on 146.730 or as an emergency portable repeater for remote emergency operation. What do you think is important?

73 de 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 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.

FEBRUARY CLUB MEETING

THE PROGRAM FOR THE EVENING WILL BE: Roger Dogas, AA6I, a System Specialist from Motorola, Inc. Roger will be speaking on: Computer Controlled Two-Way Radio Networks used in both public safety networks and government. He will explain how these radio systems are controlled and reprogrammed by computers while installed in the field. It should be a most informative and interesting meeting and the first time this topic has been presented to the Club!

Club members have been invited to take part in the antenna technical discussion presented each Wednesday night on 147.555 with net control Del Radant, N6JZE, who incidently will be speaking on antenna design and practical applications at the May 6th club meeting. If you have any questions about antennas, check into the net or come to the May meeting.

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JANUARY CLUB MEETING

At the January club meeting we heard from Mr. Fred Van Avery, R & TVI Inspector, Transmission Maintenance, SDG&E, on the subject of power line generated and carried RFI. He answered a multitude of questions and said that he is eager to help you solve noise problems which may come from SDG&E lines, hardware, etc. You should provide him with information as to frequency, time of day, type of noise and direction of source (if discernible) when you call his office at 278-8908. He also said that if he does not get back to you within a day or two, he should be nagged, i.e., call again. His principal RFI locating device is a general coverage receiver.

WI6B announced that the repeater site note was paid IN FULL, and N6INN told how Lila Baumgartner, although not a club member, had responded to the call with the final check to put PAID to the note.

Coffee was, for the last time, by Vina and goodies were by Mac, WB6GXR, the only one of us to remember to bring something. KB6QC announced the requirement for someone to step in and take over the prize table from WW6E and N6NOG, and the refreshments from WQ6V and Vina. Our thanks to both families for their loyal service to the Club.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the January meeting, which was held at the home of Ron, WI6B, the Committee heard and approved the Minutes of the previous meeting and the

Treasurer's Report which projects solvency through the end of the fiscal year. The Committee discussed a proposed training program and decided to press the search for a suitable classroom. Likewise discussed was the possibility of a microwave beacon and repeater. The letter from N6IZW, relating thereto is to be answered. The acquisition of several hundred feet of Andrews Heliac, donated by former member W6KCB, was discussed as were the plans to utilize it. The possibility of adding another repeater was also considered. The continuing K0JPK/R intrusion into W6NWG's coverage area was again rehashed. TASMA has advised W9FQN that there has been no reported change in K0JPK's operating parameters, and no permission for K0JPK to conduct TASMA-sanctioned tests for coordination. The problem of finding club members to handle the prize table, the refreshments, and to help with the training program was discussed.

REPEATERS

Some repeater-user members are not aware that the "beep" which is occasionally heard on the 2M repeater indicates that it is operating from an emergency battery because of a mains power outage. While this "beep" sounds similar to the "courtesy beep" on some other machines, it occurs every few seconds and not just after carrier drop. So if you do hear it, please help to conserve the battery by limiting the use of the repeater and by letting visitors know emergency power is being used.

How about offering membership to some of your non-member friends who are frequently on the repeater. It is a friendly act to extend the privilege of membership. SOME of them would welcome the chance.

All of us who use the repeaters need to remember to have our lengthy QSOs on simplex or outside of commuting hours 0700-0900, 1600-1730 so that the repeaters are freed up for the mobiles during those hours.

EXPIRING FCC LICENSES

Licenses expiring in February: WB6WGT, K6CLU. In March: W6OMM.

FORESAIL

(The halyard, ya say!)

Kenwood R-1000 gen. cov. rx \$225; Mirage B108 10-80W 2M amp \$105; Mirage B1016 10-160W 2M amp \$175; Daiwa CNA-2002 2.5KW auto. ant. tuner \$200; Tentec Triton IV 200W hf xcvr w/245 CW filter, 249 Noise Blanker, 244 Digital Readout, 255 12VDC 18 amp pwr supply, 240 160M convertor, and Astatic 1104C mike \$430; RCA WR64A Color Bar/Dot/Crosshatch Generator \$25; Call Ralph, K6HAV, 727-5866.

KLM Twister 2M cir. polarized antenna, \$50; Yaesu FT-480R 10W all mode 2M xcvr, loaded. Call Buck, WW6E, 941-0867.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$250. Call Arnie, WA7BIA, 942-1166.

Kenwood TS-520 HF xcvr w/cw filter, manual, factory re-tweaked, make offer. Call Fred, W6UAP, 747-3074.

From W6HAW,s estate: Tristao CT840588 5-section 88' guyed crank-up tower w/guy lines, \$750; Hy-Gain TH-7 tri-band antenna, \$400; Telrex 40M329 3-elm 40M beam, \$500; Hy-Gain 5-elm 20M beam, \$200; 2 prop pitch motors, \$100 ea; Hustler BTV-5 5-band vertical ant., \$75; 4-elm. 10-15M beam, \$75. Loads of small stuff: Miller low-pass filter, Heath remote coax switch, Siltronix watt/swr meter, Hustler mobile antenna, 300' of 8-conductor rotator cable, Saxon 8283 RG-8/U foam coax, coax switches, Swan Mobile antenna etc. Call Buck, WW6E, 941-0867.

Hy-Gain 204BAS 4-elm. 20M beam w/stainless steel hardware, Tristao

354HD 54' self-supporting crankup tower, prop pitch motor antenna rotor w/mast coupling and control unit. Call Otto Miller, W6PT, 727-0086.

Drake TR-4 HF xcvr w/home brew pwr supply; Drake RV-4 remote VFO; Drake MC-4 mobile spkr & watt meter; Drake DC-4 mobile pwr supply; Ameco rcvr pre-amp; Home brew 2KW PEP GG linear amp. w/pair of 4-400s and spares and pwr supply; and all cables and manuals for Drake equipment; Heath monitor scope. Call Bill Welsh, W6TIW, 439-6526.

ALL CLUB ITEMS: Heathkit Apache TX-1 HF tx, \$30; Gonset 6N2 tx, \$10; Heath SB-401, HF tx \$??; Hallicrafter S-120, rx \$25; Heathkit SB-100 HF xcvr, \$100; Heath SB-102 HF xcvr, \$125; Drake TR-3 HF xcvr w/A.C. & D.C. pwr supplies, \$125; Heathkit GR-78 gen. coverage rx, \$??; SWR bridges, \$10-\$20; test equipment (o'scopes, sig gens, tube testers, etc); and tubes, components, and quality items. Talk to W9FQN at 749-0276.

WANTED

A 1,000 to 3,000 gallon steel tank which could possibly be used as a "hardened" (EMP) repeater building. Call Stan, W9FQN, 749-0276.

L-44 series type N connectors for 1/2" copper-clad Andrews Heliax hardline. Needed for the Club's repeaters. Call John, WB6IQS, 724-8380.

One A.R.E.S. jacket with label NASH/W6HCD. Was passed along by N6LYX at a recent club meeting. Call Nash, 728-3574.

Duplexer, 430 & 440 MHz units for Yaesu 726R. Ron, WI6B, 756-3133.

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

UP-GRADES: Joe Martina has received his Novice ticket, KB6OXW, and is awaiting his Technician license; Mary Johnson, KB6NZA, has up-graded to Technician. Congratulations.

GNU CLUB MEMBERS: Mark Schlesinger, N6NNI, San Diego; Joe Harry, WA6WSZ, Vista; Tim Farris, NM7V, San Diego. Welcome.

RE-NUDE MEMBERS: Del Partridge, WV6Z, San Diego.

GNU/CHANGED CALLSIGNS: Joe Martina, KB6OXW, first license; Bill Blackmore, N6OPP, from KB6JWM; Charles Littlefield, KI6MV, from N6MOU.

LATEST STRAIGHTEST FROM THE SAN DIEGO OFFICE OF THE FCC

(At 4542 Ruffner Street, San Diego, CA 92111-2216)

The San Diego office has levied a total of \$5,450 in fines for various maritime violations against nine different persons/corporations. The violations included navigation of a vessel with no FCC licensed Marine Radio Operator aboard; and operating radio transmitters on unauthorized radio channels. Five of the fines were also for operating a coast station without a Marine Radio Operator Permit while allegedly communicating with vessels at sea when FCC engineers traced the radio signals to their San Diego homes.

(Thanks to June Butler, Public Service Specialist, phone 619 293-5478)

TELEVISION ELECTRONICS COURSE BASIC THEORY AND LAB

Burr, WA6VYD, has passed along information on basic electronics course covering DC, AC, components test equipment and soldering techniques to be conducted on cable TV followed by hands-on lab sessions in Escondido, Vista, Mt. Carmel High, La Mesa, Santee, and Pine Valley.

The once a week TV lectures are from Texas Instruments and are 30 minutes long, followed by a lab preview tape of from 14-24 minutes, covering the equipment and procedures to be used to run the experiments during the lab to be attended that week. Each lab session is 3 hours.

The course starts Sunday, February 1, and can be seen on Cal Video 23,

Coronado 12A, Julian 4, Cox 23, Southwestern 19, Carlsbad 23, Times Mirror 15B, North County Calbe 23, and Pala Mesa 23. Call 292-3683 for info and to pre-register or register at your local ROP office. Sign up date January 31, 10:00 a.m., room 401, San Diego County Office of Education, 6401 Linda Vista Road, San Diego 92111-7399. Or you can call Burr at 757-6070.

A super way to improve basic knowledge or to get that theory info to an aspiring ham so you can play ELMER with ease.

HARDLINE DONATED TO THE CLUB FOR ITS REPEATERS

Former club member Ed Jankowski, W6KCB, has donated to the Club several hundred feet of 1/2" copper-clad hardline for use in the Club's repeater system. This generous donation from Ed should fix it so we have continuous runs from the antennae to the duplexers, according to WB6IQS.

FROM THE ARRL LETTER

Novice enhancement is coming! The FCC is expected to release its final decision soon on the new rules allowing expanded operating frequencies and new modes for Novices. See September QST, page 67 for details.

The Volunteer Examiner program is working and the VE and VECs are doing a fine job in screening the applications sent to the FCC. Less than .5% of the applications were defective. Approximately 60% of the 86,533 applicants tested by the VEs have passed at least one exam element.

FCC license processing is 6-8 weeks behind as of the first of the year.

Call signs issued as of 1 December, 1986: WZ6R, KI6NK, N6OOH, KB6OZK.

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.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. New 610s may be obtained from the FCC. Applicants MUST BRING their ORIGINAL LICENSE AND CERTIFICATE OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our first session of the new year, we examined seven and had five who succeeded to one degree or another. Our congratulations to Mary Johnson, KB6NZA, who is now awaiting her Technician license. Elements 3 and 4A were given on the computer. The three applicants who used the computer were successful.

Examiners were WW6E, W6YYV, and WB6R. CW exams were given by W6DEY and N6IE. WI6B, W6TFB, and K6HAV helped conduct the examinations on the computer. WA6KZN manned the front desk.

de Pat, N6INN

THREE REPEATERS, all 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 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.

ADS & MATERIAL FOR SCOPE to P.O.Box 73, Vista, CA 92083-0030. Deadline is normally Wednesday of the week two weeks before the club meeting.

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 control stations and liaison stations are needed. Apply to Joe, WB6HMY.

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 146.730 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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge - like the big guys have.

DOWN THE TOOBE

Clint, W6OFT, found Santa (in the guise of Bill, N6OPP) and his trusty reindeer (WW6E and truck) arriving a day or two early, but didn't chase them away when he found that he was carrying a beautiful Tektronix dual trace scope. Clint says he'll take that kind of surprise any day.

Wil, W2FWV, dropped us a note and told us of his new address in Alabama. We were happy to hear from him and to know that he's ok.

We appreciate getting changes of address from YOU rather than from the Postal People, who charge us \$.30 for each one - and then don't forward your mail to you. We won't either since it costs the Club another \$.39 or so to do so. That with the \$.30 to learn of your new address adds up to nearly a quarter of the SCOPE's subscription price. It's fine to give the P.O. the change of address, but please also give us one - as Wil did.

Congratulations to Mary, KB6NZA, and Carl, N6NZX, who now both have the same last name. They got married to accomplish the name change.

"That's all," she wrote.

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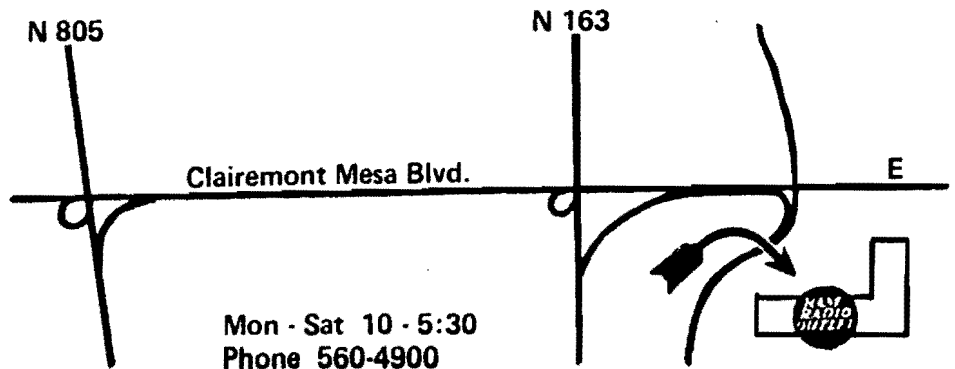


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OSCAR SATELLITE, AVAILABLE
YAESU FT-23TT.....MINI HANDHELD, \$269.95
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YAESU FT-2700..... DUO-BAND 2M/450 mhz
Full Duplex w/free PL...\$529.95
YAESU FT-727..... DUO-BANDER HT 2M/450 \$399.95
ICOM IC-735..... NEW HF Gen. Coverage..\$849.95
ICOM IC-2AT/3AT/4AT Great prices on these
ICOM IC-02AT, KENWOOD TR-2600A, YAESU FT209RH
Newest generation "State of the Art" HTs. See
here. GREAT PRICES!
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COMMUNICATIONS SPECIALISTS sub-audible units for your FM and HT rigs.
We have a good stock of antennas, and of course, a good supply of rotors, too.
Don't forget - we have guaranteed used equipment also.

While browsing... don't forget to see the
PACKET set-up using the Commodore 64
and the AEA interface. Let us demonstrate
this fascinating mode for you.



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Feb 87

BYTES 'N PIECES

By Paul Williamson, KB5MU

Ron Raikes, WA8DED, and Mike Busch, W6IXU, have installed their "NET/-ROM" software at W6AMT-1, -2, and -3. It will soon be up at the San Diego station, W6AMT-4. It's also installed at K6KGS-1 at Pt. Loma and several other stations on 145.09 MHz. This software features true network virtual circuit connections with link acknowledgements, and represents a significant advance over the digipeater kludge we've been using so far.

The NET/ROM software is designed to be installed at main network stations (called "nodes" in NET/ROM nomenclature), not at every user's station. You can use your standard TNC without modification. The nodes take care of the fancy stuff. Each node in a given network automatically knows where the others are. You just connect to the nearest node and tell it where you want to talk. Through the network of nodes, you can connect to any other node without knowing what path of stations to use. Once connected to a node near your target area, you ask the remote node to connect you to the desired station. You can download detailed instructions about how to use the NET/ROM network from most local mailboxes.

Be aware that this is an early test version of the software, so it may have some bugs. Also realize that all the software in the world won't help if the radio paths aren't there, as sometimes occurs with the long paths around Southern California. Get the document and read about it, then try it! It can be a part of network experimentation.

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NORTHERN SAN DIEGO COUNTY

W6NWX

Scope

THE PALOMAR AMATEUR RADIO CLUB, INC.

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VOL. XXII, NO., 3

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MARCH, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
 VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
 SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
 TREASURER: Ron Wilhelmy, W16B, Rancho Santa Fe 756-3133

----President's Message----

From time to time I hear individuals on our 146.730 repeater refer to our repeater as "the friendly repeater." There are many things that we could be doing to make the repeater even more friendly. It should be the responsibility of all of us to make new users feel welcome. If they are new to the area, we should make sure that they feel welcome to 146.730 and that they are welcome to participate in repeater and club activities.

New users should be invited to participate in the national traffic system net each evening, the microwave net each Monday evening, the packet net each Tuesday evening, the ARES net each Sunday morning, and the many informal gab

sessions throughout the day and evening.

Club members should make a special effort to talk to new members and visitors at our club meetings. It should be remembered that many of these new people have special needs which sometimes could be satisfied with a few words of encouragement or advice. New hams have many questions and there is no place like a club meeting to get them answered. The club will try to provide a time at each meeting for new hams to get help with their problems.

Let it be said that "the Palomar Amateur Radio Club meetings are a friendly place to be."

73 de 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 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.

NOVICE ENHANCEMENT TO BE EFFECTIVE MARCH 21

The FCC has approved ARRL's recommendations on enhanced privileges for Novice Class licensees effective March 21. See ARRL Letter column later in this letter - literally.

220 MHZ BAND AGAIN IN JEOPARDY

The FCC has asked for comments on a Notice of Proposed Rulemaking to give two MHz of the 220 MHz band to the land mobile service. See item on Page 5.

MARCH CLUB MEETING

THE PROGRAM FOR THE EVENING WILL BE: Bob Brehm, KB6QC, speaking on Almost Free Software. Bob will describe Computer Bulletin Boards - what they are, where to find them, and how to use them. He'll also discuss alternate sources of Public Domain Software and the types of programs (including amateur radio) that are available almost for the asking! If you have any ideas on the subject, bring them for Show and Tell!

SHOW AND TELL will feature Phil, WF6L, showing us the GX Turbo (C-64) control of the Yaesu FT-757 transceiver.

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.

FEBRUARY CLUB MEETING

At the February club meeting we heard from Roger Gagos, AA6I, System Specialist, of Motorola Communications and Electronics Inc., who told us about trunking radio networks and how they operate to provide better use of available frequencies in government and commercial two-way radio networks. A most interesting presentation.

N6GZI told us of SANDARC's unwillingness to fund the Potter Jr. High School ARC's packet station. This item to be resubmitted to SANDARC.

Barbara, KA6FPS, was pressed into service to make the coffee as we still do not have a refreshment committee. Tasties were brought by KA6FPS, N6INN, and others.

Dick Williams, WA6QBO, who is still farming his acreage in the San Luis Rey River bottom, surrounded by teeming housing developments, made his annual appearance and told us that since he's made it to 80, he just might keep on for a few more years.

Sixty two or so of us enjoyed a very fine meeting and the good company of our fellow club members.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the February meeting, which was held at the home of K6HAV, the Committee heard and approved the Minutes of the previous meeting and the Treasurer's Report. KB6QC reported on forthcoming programs for future club meetings. WB6IQS reported that he had no offers to buy the old 450 mHz repeater at the last TRW swap meet. W9FQN stressed the need to continue our good practices in cleaning up the meeting room after each club meeting as it saves janitorial bills. W9FQN reported on the TVI complaint he had handled for new member W6KTE. Stan also stated that he had had no luck in finding Refreshment and Prize Committee chairmen. W9FQN discussed the possibility of using a re-cycled water tank as a bunker-type building at the repeater site. The transfer switch for changing from commercial mains power to emergency generator built and donated to the Club by Art Rideout, WA6IPD, was demonstrated by W9FQN who has added surge-protection MOVs to the transfer switch. K6HAV reported the Annual Picnic would take place in Brengle Terrace Park in Vista on

Sunday, August 23, at a cost of \$29 for the park. In discussing the start of the Club's licensing program, WF6L told of the availability of a classroom at Potter Jr. High in Fallbrook. He was directed to procure the classroom for classes to start in the summer. Phil also indicated the availability of WA6IPD, as an instructor. The need for a syllabus, lesson plans, and a coordinated training program was stressed. Present were: W9FQN, KB6QC, WF6L, WB6IQS, K6RTD, K6HAV.

EXPIRING AMATEUR RADIO LICENSES

Licenses expiring in March: W6OMM. In May: N6EQB, N6GZI.

If you want notification of the expiration date of your license, be sure that Skip, K6RTD, has it in the Gi'nt Computer.

FORESAIL

(The halyard, ya say!)

Atlas 350XL HF xcvr w/pwr supply, complete, mint, \$450. Call Clint, W6OFT, 729-0850.

Yaesu FT-709R 450 mHz HT w/wall charger & PL installed, \$225. Call Dennis, N6KI, 271-6079.

Triex 34' crank-up tower, \$200 or best. Call Dave, WA6HQM, 753-2605.

Prices reduced: Mirage B108 10-80W 2M amp \$105; Mirage B1016 10-160W 2M amp \$175; Daiwa CNA-2002 2.5KW auto. ant. tuner \$200; Astatic 1104C mike, \$20; RCA WR64A Color Bar/Dot/Crosshatch Generator \$25; Call Ralph, K6HAV, 727-5866.

Palomar Engineers noise bridge, \$30; Cubex 2-elm., 3-band quad, \$120. Call Phil, WF6L, 757-7007.

KLM Twister 2M cir. polarized antenna, \$50; Yaesu FT-480R 10W all mode 2M xcvr, loaded. Call Buck, WW6E, 941-0867.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$250. Call Arnie, WA7BIA, 942-1166.

Prices reduced: Tristao CT840588 5-sect. 88' guyed crank-up tower w/guy lines, \$750; Telrex 40M329 3-elm 40M beam, \$500; Hy-Gain 5-elm 20M beam, \$200; 2 prop pitch motors, \$100 ea; 4-elm. 10-15M beam, \$75. Loads of small stuff: Heath remote coax switch, Siltronix watt/swr meter, Hustler mobile antenna, 300' of 8-conductor rotator cable, Saxon 8283 RG-8/U foam coax, coax switches, Swan Mobile antenna etc. Call Buck, WW6E, 941-0867.

Collins KWM-380, key pad, NB, processor, 350 & 140 Hz filters, service manuals and bulletins. Mint. Best offer. Call Bob, WB6DPU, evenings 213-928-1665.

Hy-Gain 204BAS 4-elm. 20M beam w/stainless steel hardware, Tristao 354HD 54' self-supporting crankup tower, prop pitch motor antenna rotor w/mast coupling and control unit. Call Otto Miller, W6PT, 727-0086.

Drake TR-4 HF xcvr w/home brew pwr supply; Drake RV-4 remote VFO; Drake MC-4 mobile spkr & watt meter; Drake DC-4 mobile pwr supply; Ameco rcvr pre-amp; Home brew 2KW PEP GG linear amp. w/pair of 4-400s and spares and pwr supply; and all cables and manuals for Drake equipment; Heath monitor scope. Make an offer. Call Bill Welsh, W6TIW, 439-6526.

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WANTED

For Potter Junior High School amateur radio station: old, useable rigs for an equipment pool for use by new Novices to help get them on the air. Call Phil, WF6L, 757-7007.

Two 20' iron tower sections to be used as cross arms for antenna installations on our tower. Call Stan, W9FQN, 749-0276.

L-44 series type N connectors for 1/2" copper-clad Andrews Heliac hardline. Needed for the Club's repeaters. Call John, WB6IQS, 724-8380.

One A.R.E.S. jacket with label NASH/W6HCD. Was passed along by N6LYX at a recent club meeting. Call Nash, 728-3574.

Duplexer, 430 & 440 MHz units for Yaesu 726R. Ron, WI6B, 756-3133.

Tentec Argosy, preferably w/cw filters. Call Bob, WB6DPU, evenings 213 928-1665.

REPEATERS

A recently made videotape of our repeaters and tower and of other sites on Mt. Palomar will be shown at some future meeting to give everyone an idea of what we have on the mountain. The tape was made by Walt Hicks, W6UZL, of the 220 Club and by Bob Gonsett, WA6QQQ, of the 220 Club and PARC. W9FQN, who went along, and has seen the tape, says it's great.

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 a member of the ARRL you should be!

When joining or re-joining the ARRL, do so via the Club and the Club will receive a modest stipend which would otherwise go to the ARRL. Make check payable to the Palomar Amateur Radio Club and get it, with your membership application, to our aging-but-agile Treasurer, WI6B. He'll take it from there and the Klub Koffers will get fatter and it won't cost you a fat farthing more than if you hadn't. DO IT!

FROM THE ARRL LETTER

On January 30, the FCC announced the expansion of Novice privileges. Part 97 has been amended to include for Novices all emission modes for the 1.25 and .23 meter bands and emissions A1A, F1B, and J3E for the 10M HF subband. This action was taken to attract more Novice operators to the Amateur service without diminishing their incentive to upgrade to higher class licenses. The FCC recommended that current Novice Operators, who were authorized the new privileges without additional qualifications, become knowledgeable in the new requirements before using the new privileges. The Novice examination has been expanded to 30 questions (presently 20) so that the examination is more commensurate with the privileges granted.

220 MHz band: all modes, maximum power: 25W PEP 222.1-223.91 MHz

1270 MHz band: all modes, maximum power: 5W PEP 1270-1295 MHz

10 meter band: CW & digital modes 28.1-28.3 MHz; CW & SSB 28.3-28.5 MHz. Novice and Technicians are limited to 200W output, but other licensees are not similarly limited (unlike the 80, 40, & 15M subbands).

Additionally, the Commission separated examination Element 3 into Elements 3(A) and 3(B). This will enable examinations for Technician and General operators to correspond more closely with the actual privileges. Two VEs will be required to administer Novice exams. These changes are effective March 21, 1987.

Licenses issued as of 1/1/87: WZ6Z, KI6NX, N6OPU, KB6POK.

ARRL Bulletin 16 of 2/12/87 states: On February 12, the FCC released a Notice of Proposed Rulemaking, General Docket 87 14, that proposes to allocate 220 to 222 MHz on an exclusive basis to the Land Mobile Service and 223 to 225 MHz exclusively to the Amateur Service. According to the FCC, the 220 to 225 MHz band is underutilized, and that the Land Mobile Service has needs that can be met in this region of the spectrum. Therefore, the Commission is proposing that the lower 2 megahertz, 220 to 222 MHz, be reallocated on a primary basis to the Land Mobile Service for both government and nongovernment operations and the existing primary allocations to the Amateur, Fixed and Mobile Services be deleted. Accordingly, the FCC proposes to allocate the remaining 3 megahertz, 222 to 225 to the Amateur Radio Service on a primary basis. Comments on this proposal may be filed with the FCC on or before April 6, 1987. Reply comments may be filed on or before April 21, 1987. See the ARRL Letter and QST for further details. (Note the frequency discrepancy.)

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

UP-GRADES: Clint Call, W6OFT, to Extra Class. Congratulations!

GNU CLUB MEMBERS: Richard Krist, W6KTE, Vista. Welcome.

OLD/GNU MEMBER: Ted Demos, N6CKH, San Diego. Welcome back.

RE-NUDE MEMBERS: WB6TQF, N6DSX, and N6DSU.

++++++
+ MARV SMITH, N6NI AND FORMER W6OBH, SK +

+ We are saddend to report the passing of club member Marv Smith, N6NI, +
+on Friday, January 30th. Marv will be missed by all who knew him. +

++++++
+ FRED SCHNELL, W6OZF, SK +

+ Former club member Fred Schnell, W6OZF, has become a silent key. Fred +
+was an antenna manufacturer who helped Swan Electronics to open its +
+antenna shop. He will be missed by his many friends. +

++++++
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.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. New 610s may be obtained from the FCC. Applicants MUST BRING their ORIGINAL LICENSE AND CERTIFICATE OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

Clint Call, W6OFT, was, for medical reasons, examined in his home and passed the Extra Class license tests. Congratulations, Clint.

We examined seven and had four successes at our regular February session. Again we used both the test booklets and the computers to conduct our examinations. Two of our applicants who failed (one cw and one written) were within one question of making it though. Our examiners were AD6Z, W6YYV, and KS6S. W6DEY conducted the code exams; and WF6L, W6TFB, WA6KZN helped with the computer-generated tests. KG6VX manned the front desk, and K6HAV helped with the supervision and the computer exams.

The bad news is: We had to wait around for nearly an hour for someone to lock the building up after we were through.

As indicated in the ARRL LETTER item, above, effective March 21, the Novice written examination (Element 2) will consist of 50% more questions to cover the newly granted privileges and will now require two VEs; an separate 25-question Elements, 3(A) and 3(B) created for Tech and General. Those who currently hold the Novice or Technician ticket will not have to be retested, but those testing after March 21 will be required to take the new tests. SANDARC-VEC is making all speed trying to get the new exams written and the question pools published so that applicants will have a study guide.

Effective February 13, credit for successfully passing a written element without up-grading may be given. Heretofore, the CW exam had to be taken before the written element, which, of course, resulted in an upgrade if the written element was then passed.

de Pat, N6INN

DOWN THE TOOBE

Marston, N6GCI, is battling cancer, according to Floyd, W6JSP. We all need to hold good thoughts for him and to give him all encouragement.

Lynne Farley, friend of Dennis, N6KI, is now KB6PZE and studying hard to up-grade to a more euphonic call sign, according to Dennis.

Sure has been a busy month for FCC actions on the Amateur Radio Service (see ARRL Letter and VE Program items pages 5 & 6). We should all read and understand what changes have been made and are proposed, particularly as they relate to the 220 MHz band. It is proposed that the Land Mobile Service will get 220-222, and the Novices HAVE BEEN given 222.1 to 223.91 MHz, leaving 223.91 to 225 MHz for Technicians and above. We need to muster our forces and reply to the Notice of Proposed Rulemaking within the the specified time limit. I'm confident that within the next 6-1 months the 220 band will be heavily populated - at least in the Novice sub-band. Comments should not be based on fire and brimstone, but on reason. We'll try to get a sample in the next Scope.

"That's all," she wrote.

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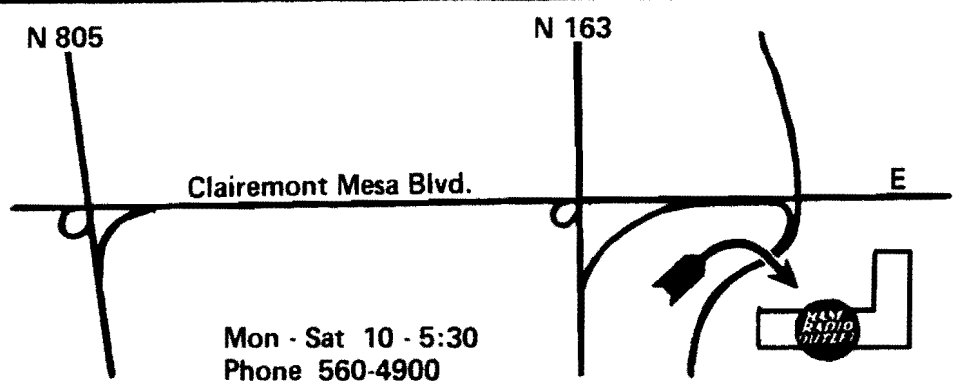
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- YAESU FT-727.....DUO-BANDER HT 2M/450...\$429.95
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TOM KM6K, Mgr.
GARY K6CAQ

While browsing... don't forget to see the PACKET set-up using the Commodore 64 and the AEA interface. Let us demonstrate this fascinating mode for you.



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BYTES 'N PIECES

By Paul Williamson, KB5MU

Several local stations are starting to experiment with the networking software for IBM PC written primarily by Phil Karn, KA9Q. The software implements the standard set of protocols called TCP/IP (Transport Control Protocol/Internet Protocol). It's a little rough around the edges, and it is missing some important features, but it works. These protocols are from the world of big computers, and it shows in the orientation and style of this implementation.

The software currently provides three essential functions: keyboard-to-keyboard conversations, file transfers, and electronic mail. In fact, it can do all three functions at the same time! The conversational mode, called Telnet, works very much like the plain old packet converse mode. The file transfer function, called FTP (File Transfer Protocol), allows either station to move files from any directory on either computer to the other computer. It even allows you to get a directory listing of the other station's disk. (It's currently lacking any kind of file protections, however.) The electronic mail function, called SMTP (Simple Mail Transport Protocol), allows you to compose messages to other stations offline and have them automatically forwarded to the destination station. Currently, the software lacks an easy way to read and manage the received messages, but that's coming.

To get on the air with TCP/IP, you need an IBM-compatible computer and a TNC-2 or clone. The software for the PC is available (free) from any of the experimenters. The TNC-2 requires the 32K RAM upgrade and a firmware revision, also available free (except for the RAM chip, which costs \$15-\$20). Come join us on 144.76 MHz.

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NORTHERN SAN DIEGO COUNTY

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APRIL, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

-----President's Message-----

FIELD DAY

Field Day will be June 27-28 this year and the club will be voting at the April meeting on whether we want to again participate in this activity.

COFFEE

Thanks to Bill Blackmore, N6OPP, for offering to take over the coffee at meetings. We still have an opening to help with refreshments!

INTERVIEWS

Steve Sellers, N5GZP, news director of Magic 102FM (KGMG-AM/FM), will be doing interviews of club members on ham radio. I have given him a list of about 30 club members so don't be surprised if he gives you a call sometime. The first interview was with Phil Leonelli, WF6L.

VE TESTING

Anyone who has medical reasons for not attending our regular testing sessions in San Marcos should contact Pat Crossman, N6INN, who is in charge of our VE program for information on special testing sessions.

TRAILER VS VAN

The club has been offered a Van for use in our Amateur Radio Emergency Service (ARES) program but because of expenses (insurance, repair and upkeep) the executive committee feels that we might be better off with some type of trailer that could be moved by anyone with a trailer hitch. Does anyone know of a cheap trailer?

OFFICIAL NETS

We are very pleased with the operation of the nightly traffic nets run by Joe LaPointe, WB6HMY, and his faithful crew. The Packet net with Paul Williamson, KB5MU, and the Microwave net with Kerry Banke, N6IZW, are very well run and serving amateurs in the San Diego area.

We have received suggestions for other nets but we don't seem to have anyone for net controls yet: computers, general amateur radio questions and answers, antennas, and general bulletins of things happening in the S.D. area. If you would like to help out in the organization of any of these nets, please contact me.

73 de 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 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.

APRIL CLUB MEETING

THE SPEAKER FOR THE EVENING WILL BE: Wayne Overbeck, N6NB, (Vice Director of the ARRL Southwestern Division), who will tell us about his experience in VHF hilltopping from Vermont to California. Wayne still holds the record for the highest score achieved in an ARRL VHF contest and when you hear and see his talk you'll know why! A most interesting and informative evening, so plan to attend.

SHOW AND TELL will feature direction finding equipment and any other items brought in by club members.

THE CLUB SALE TABLE will feature several SWR bridges and coax switches.

HEATHKIT ADVANCED CLASS INSTRUCTION MANUALS available on loan to any member who wants to study for advancement. See W9FQN at the meeting.

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 & MATERIAL FOR SCOPE to P.O.Box 73, Vista, CA 92083-0030. Deadline is normally Wednesday of the week two weeks before the club meeting.

MARCH CLUB MEETING

At the March club meeting we heard from Bob Brehm, KB6QC, who gave us an illustrated talk about Almost Free Software. Bob described the types of available software and told us how to procure the public domain items through the various bulletin boards.

In the absence of our Secretary, the minutes were not read. WI6B read the Treasurer's report and suggested several ways that the Club might raise additional funds for better picnic prizes and other niceties for the balance of the fiscal year. Ron congratulated the membership on the rapid payment and elimination of the note on the repeater site. N6INN reported on changes in the amateur radio license testing in the wake of the Novice enhancement effective March 21st. Many of us provided the tasties (including some marvelous, mouth watering Apple Cake by Betty, KB6DSC; cookies by Mac, WB6GXR; dip and dippers by Barbara, KA6FPS; strawberry bread by Pat, N6INN; coffee and cookies by Bob, KB6QC; and I'm sure there were others I didn't learn about). A grand time was had by more than 70 of us.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the March meeting, which was held at the home of K6HAV, the Committee heard and approved the Minutes of the previous meeting and the Treasurer's Report. Support of the Potter Jr. High School club was discussed. WF6L stated he has resubmitted his request for that radio club to SANDARC. Re-furbishing of the generator donated by Merit, W6NLO, was discussed. The Committee voted to recommend to the Club that it participate in the 1987 ARRL Field Day Contest; and to again use the site across the road from W9FQN'S QTH. The continuing problem with K0JPK/R's strong signals into San Diego County was again re-hashed. Continuing action was decided on to solve this problem which has existed since 12/79. Patience is wearing thin

and TASMA appears to be ineffectual in the solution of this perpetual problem. W9FQN reported that N6LYX has resigned as EC for North County. Several solutions to the ARES problem were discussed. The use of non-Club members as net control stations on W6NWG/R was raised by W9FQN and will be further discussed. Indisputably, a grand time was had by all - no doubt.

EXPIRING AMATEUR RADIO LICENSES

Licenses expiring in April: NONE; in May: N6EQB, N6GZI; in June: NONE.

If you want notification of the expiration date of your license, be sure that Skip, K6RTD, has it in the Gi'nt Computer.

FORESAIL

(The halyard, ya say!)

Pair of 572-B amplifier tubes, new in sealed carton. Call Allen, N7AMR, 434-5656.

Triex 37' crank-up tower, tri-band beam, rotor, \$200 you dismantle. Call George, KB6HEK, 560-9907.

Atlas 350XL HF xcvr w/pwr supply, complete, mint, \$450. Call Clint, W6OFT, 729-0850.

Yaesu FT-709R 450 mHz HT w/wall charger & PL installed, \$225. Sears Roadtalker 40 SSB converted to 10M, \$100. Call Dennis, N6KI, 271-6079.

Triex 34' crank-up tower, \$200 or best. Call Dave, WA6HQM, 753-2605.

Prices reduced: Mirage B1016 10-160W 2M amp \$175; Daiwa CNA-2002 2.5KW auto. ant. tuner \$200; Astatic 1104C mike, \$20; RCA WR64A Color Bar/Dot/-Crosshatch Generator \$25; Call Ralph, K6HAV, 727-5866.

Palomar Engineers noise bridge, \$30; Cubex 2-elm., 3-band quad, \$120. Call Phil, WF6L, 757-7008.

KLM Twister 2M cir. polarized antenna, \$50; Yaesu FT-480R 10W all mode 2M xcvr, loaded. Call Buck, WW6E, 941-0867.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$250. Call Arnie, WA7BIA, 942-1166.

Prices reduced: Tristao CT840588 5-sect. 88' guyed crank-up tower w/guy lines, \$750; Telrex 40M329 3-elm 40M beam, \$500; 2 prop pitch motors, \$100 ea; 4-elm. 10-15M beam, \$75. Loads of small stuff: Heath remote coax switch, Siltronix watt/swr meter, Hustler mobile antenna, 300' of 8-conductor rotator cable, Saxon 8283 RG-8/U foam coax, coax switches, Swan Mobile antenna etc. Call Buck, WW6E, 941-0867.

Collins KWM-380, key pad, NB, processor, 350 & 140 Hz filters, service manuals and bulletins. Mint. Best offer. Call Bob, WB6DFU, evenings 213-928-1665.

Kenwood TS-520 HF xcvr, CW filter, 120VAC or 12VDC, mint, \$325; Curtis EK-430 CMOS Iambic Keyer, \$65; Unique Wire Tuner, 160-10M, \$55; Heath HO-10 Monitor Scope, \$40; Morse MVD-1000 Video Display Terminal, \$100; Pagel 6-VHF-2 Counter, 10Hz-250mHz, \$125; Metz 2M mag-mount, new, \$45; Swan mobile HF antenna, \$30. Call Duane, AA6EE, 789-3674 eves.

Estate of W6OZF: Loads of stuff, including Atlas 210X HF xcvr w/digital display, Swan 1200Z amp., Swan 700S xcvr, Swan 1210 2M xcvr, old National and Johnson rxs and tx. Also many station accessories and small stuff. Call Hal Tarr, K6UZ, 726-3579.

Drake TR-4 HF xcvr w/home brew pwr supply; Drake RV-4 remote VFO; Drake MC-4 mobile spkr & watt meter; Drake DC-4 mobile pwr supply; Ameco rcvr pre-amp; Home brew 2KW PEP GG linear amp. w/pair of 4-400s and spares and pwr supply; and all cables and manuals for Drake equipment; Heath monitor scope. Make an offer. Call Bill Welsh, W6TIW, 439-6526.

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, feedline or generator. Contact any club officer and he will gladly rid you of your surplus TS-940S or KWM-380.

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.

WANTED

For Potter Junior High School amateur radio station: old, useable rigs for an equipment pool for use by new Novices to help get them on the air. Call Phil, WF6L, 757-7008.

L-44 series type N connectors for 1/2" copper-clad Andrews Heliac hardline. Needed for the Club's repeaters. Call John, WB6IQS, 724-8380.

One A.R.E.S. jacket with label NASH/W6HCD. Was passed along by N6LYX at a recent club meeting. Call Nash, 728-3574.

Duplexer, 430 & 440 MHz units for Yaesu 726R. Ron, WI6B, 756-3133.

Tentec Argosy, preferably w/cw filters. Call Bob, WB6DPU, evenings 213 928-1665.

REPEATERS

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 from which it is coming.

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 a member of the ARRL you should be!

When joining or re-joining the ARRL, do so via the Club and the Club will receive a modest stipend which would otherwise go to the ARRL. Make check payable to the Palomar Amateur Radio Club and get it, with your membership application, to our fleeting-but-facile Treasurer, WI6B. He'll take it from there and the Klub Koffers will get fatter and it won't cost you a red, white, and blue cent more. DO IT!

FROM THE ARRL LETTER

ARRL has requested a 45-day extension of the comment period in Docket 87-14, which proposes to take 220-222 MHz away from the Amateur Radio Service. If this extension is granted, it will move the deadline for filing comments from April 6 to May 21, but don't count on it being granted - get your comment off to the FCC NOW!

Licenses issued as of 3/1/87: AA6BG, KI6PY, N6OZB, KB6QGR.

THREE REPEATERS, all 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 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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge - like the big guys have.

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

UP-GRADES: Mark Schlesinger, N6NNI, to Extra Class; John and Lou Albrechtsen, KB6QAU & KB6QAT, to Tech & General. Congratulations!

GNU CLUB MEMBERS: Steve Sellers, N5GZP, Oceanside; Steve Miele, W2MRM, Oakdale, NY; Kenneth Boraker, Oceanside; Ken Seals, KA5Q, Carlsbad; John Mills, N6LPM, Oceanside; John & Lou Albrechtsen, KB6QAU & KB6QAT; Vicky Vickery, awaiting first license, Vista. Welcome.

RENUDE MEMBERS: Ed Jankowski, W6KCB, (for 2 years).

GNU CALL SIGNS: Tom & Wilma Healy, N6NNQ & N6NNP.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan in Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our March tests we had 17 applicants and administered 23 test elements for our largest test session (we tested a few more at the ARRL Convention last year). It was a good day, with 71+% of the elements given passed. Only three of the 17 applicants didn't come away with some success.

Mark Schlesinger, N6NNI, moved up to Extra; the Albrechtsens, John & Lou, KB6QAU & KB6QAT, upgraded to Tech and General, respectively; Paul Bonds went from no ticket to Tech; Pat Stedman, KB6OXZ, Marni Parker, KB6PCF, and Don Tippit, KB6OXS, all went from Novice to Tech; and Tim Hoy, KI6GI, and Charles Littlefield, KI6MV, both got a "leg up" on Extra.

Examiners were: KG6VX on the front desk, W6DEY & N6IE conducting the CW elements; N6INN, W6SAX, & WA6HYB examiners on the CW and written elements; and WA6KZN, KB5MU, WI6B, & K6HAV examiners on the computers. This was probably the first time the applicants have out-numbered the examiners. It was the last time the PARC team will give Elements 2 and 3 in their 20 and 50 question forms. Now, it will be 30 questions for Element 2 (Nov.), 25 for 3A (Tech.) and 25 for 3B (General).

de Pat, N6INN

ELECTRONICALLY ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham-computer-electronics swap meet at the Santee Drive-in theater on Woodside Ave at Hw 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 0800.

DOWN THE TOOBE

We're proud to report that George, K6YGK, despite what you hear on the "Facetious Net", has been selected to be one of about 6,000 who will appear in the 17th Edition of Who's Who in California. If you look George up in the book, you'll find he's been awarded a Certificate of Recognition by the publishers of the book for having demonstrated "outstanding professional achievement, superior leadership and exceptional service. Waytago George!

Sorry that we reported the late Marv Smith, N6NA, with the wrong call sign in our last issue. By whatever call sign, Marv will be missed.

Art Douglas, N6GDM, the EC up in the Hemet area, renewed his subscription to SCOPE and has very kind things to say about it. Art is part of the Lee DeForest ARC, which is very active in emergency communications preparedness and which puts out a fine newsletter of its own. Thanks for the kind words, Art, and your new address is noted.

Dennis, N6KI, had his (t)rusty 1965 Valiant stolen from him on 3/9. The license is NOJIV 65 and it's a light blue, but Dennis would not confirm or deny the strong odor of Oregano on its breath.

We've learned, to our dismay, that Paul, KA6PPD, is selling Vista Printing Service. Paul has done all of the Club printing, including the Scope until several months ago, for many years. Paul, with his years of experience, was able to resurrect our masthead logo of the Palomar observatory from a poor copy on an old club roster. He also taught us about good printing, and made us conscious of it in our newsletter. Sure sorry to see you quitting the business, Paul - we'll miss all of the cumshaw jobs you did so well for the Club. Maybe now you'll have time for some hamming. Enjoy it Paul, and thanks for all you've done for the Club.

"That's all," she wrote.

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 control stations and liaison stations are needed. Apply to Joe, WB6HMY.

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.

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COMMENTS ON THE PROPOSED DELETION OF 220-222 MHZ FROM THE AMATEUR SERVICE
We should protest against the FCC's proposed action taking the 220-222 MHz segment from the Amateur Radio Service and assigning it to the Land Mobile service. Page 14 of April QST shows the format to use in submit-

ting comments to the Commission. A sample is also included herein on the following page. If you do not feel up to preparing the sample letter on page 8 of Scope or that in QST, at least send the Commission a letter opposing this commercial frequency grab by simply stating that you oppose the action proposed in General Docket 87-14, and support the American Radio Relay League's comments thereon. Try to be factual and persuasive, not threatening. At the least, a hand-written one-pager will be better than nothing and will add to the number of comments received. Sign your letter and send it to Secretary, Federal Communications Commission, Washington, DC 20554 to arrive by April 6.

We've made our voices and numbers heard before - the No-Code License proposal, for instance. Let's get with it and save this valuable frequency segment for Amateur Radio. DO IT!



"...Yeah, with that 165-ft. high baby, I can open my radio-controlled garage door from my car in Downtown Albany, and at night from as far away as Tijuana, Mexico!"

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87
Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Amendment of part 2
of the Commissions's Rules
Regarding the Allocation of
the 216-225 MHz Band

General Docket No. 87-14

RM-4829 RM-4831
RM-4983

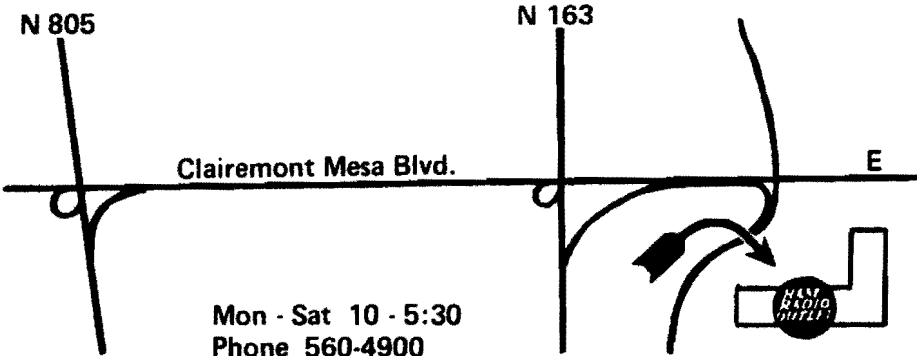
COMMENTS OF RALPH B. CROSSMAN, K6HAV

I oppose the allocation of 220-222 MHz to the Land Mobile Service. I have been licensed since 1957, hold an Amateur Extra Class License, and am an active user of the 220 MHz band, both for pleasure and in the public service. I am a user of 220 MHz repeaters which rely on the portion of the band under discussion for control purposes. I am also active in packet radio in the 220-222 MHz segment. Loss of this segment to Land Mobile would force the present users (remote base stations, control stations, links, and packet digipeaters) to move into the already heavily used remnant of the band or into the crowded 440 MHz band at great expense to all.

There is no technical reason why amplitude compandored single-sideband cannot be used at higher frequencies, i.e. 900 MHz. This would leave the heavily used 220 MHz band intact for the tens of thousands of amateurs now populating it. This is more important than ever with the addition of Novice users now moving into the segment of the band just authorized by the Commission. I strongly urge the Commission NOT to take this portion of the band from the Amateur Service.

RALPH B. CROSSMAN, K6HAV

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TOM KM6K, Mgr.
 GARY K6CAQ

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BYTES 'N PIECES

By Paul Williamson, KB5MU

Bill Miller, N6BUK, is spearheading an effort to supply packet radio communications to the California Department of Forestry (CDF). With help from other local packeteers, local CDF officials have seen several demonstrations of packet capabilities. They are impressed. CDF is responsible for fighting brush fires in unincorporated areas. Fighting a major fire is a huge logistical headache, involving many people and a wide variety of supplies and equipment. CDF has some radio capability of their own, but is is overloaded with communications directly related to fighting the fire. They need a way to pass large amounts of detailed information accurately, and that's a perfect application for packet radio.

One problem that faces communicators at CDF fire camps is that the fires tend to be in the deepest RF hole in the county. In recent memory there have been fires in locations that were only marginally covered by any wide-coverage voice repeaters. This problem is easily solved with packet radio. A TNC and a radio can be placed in a car parked on a convenient high spot near the fire camp. Since every TNC can serve as a digipeater, this mobile packet station can help the packet station at the fire camp communicate back to civilization.

As always, volunteers are needed to train with CDF and to be available when fire season rolls around. CDF is very excited about the capabilities of packet radio, and they want packet at every fire camp in the coming fire season. If you are interested in working on this excellent public service opportunity, contact N6BUK via the WA2QMI mailbox or at 224-0196.

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NORTHERN SAN DIEGO COUNTY

W6NWX
Scope



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603
VISTA, CALIFORNIA 92083-0530

W6NWX/R 146.730 (-)
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145.050 (Pkt)

1936 - 1987

VOL. XXII, NO., 5

MAY, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, W1GB, Rancho Santa Fe 756-3133

-----President's Message-----

FIELD DAY

Bud Lincoln, KG6VX, will again be in charge of Field Day with about the same crew in charge of each position as last year:

CW 80-10 :	#OPEN	*N6IE(Felix)
Novice :	#WF6L(Phil)	*OPEN
80 meters:	#OPEN	*K6HAV(Ralph)
40 meters:	#WF6L(Phil)	*Open
20 meters:	#N6GZI(Ed)	*KZ6X(Paul)
15 meters:	#OPEN	*W9FQN(Stan)
10 meters:	#OPEN(not used last year)	
6 meters:	#KB6QC(Bob)	*OPEN
2 meters:	# " "	* "
450 Mhz :	# " "	* "

Microwave: #WD6FWE(Don)*WA7GRW(Bob)

"#" = in charge. "*" = second in command. "OPEN" means that the position is not filled yet and we need your help. As you can see, we still need help in several areas so be sure to be at the May meeting and sign up for where you can help the club the most.

REFRESHMENTS

We still have an opening to help with refreshments! Thanks to all of you who have filled in while we are still looking for someone to head up this committee.

TRAILER

We would like to obtain a small trailer/trailer-bed to be used for our Amateur Radio Emergency Service (ARES) program. So keep looking for something free or reasonable that could be easily converted.

NEW NETS

At present our repeaters serve the National Traffic System net, Packet net,

Microwave net, and the ARES net. We would like to find someone (group) to run a computer net once a week on a trial basis answering questions on specific machines each week: C-64/C-20, IBM compatibles, Radio Shack, and others. Items to cover: programs, problems, repair, supplies, modems, bulletin boards, etc. A different net control each week knowing the specific computer would mean running the net only once each month. Anyone interested in helping to start this net on a "trial basis" of two months should contact me sometime soon.

Another net that might be of value would be one on "Amateur Radio problems": advice on antennas, transceivers, where to obtain parts, etc.

These nets would be run in the same way as the Microwave (Mon) and Packet (Tues) nets. Listen to these nets for the format. These topic oriented nets start at 9 PM and last for 10-45 minutes depending upon interest. We feel that these nets are of service to the amateur radio community and are efficient use of the two meter repeater with a large number of hams on the same frequency communicating (high listen/transmit ratio).

Other nets which have been suggested in the past are: code practice, RTTY, DX net (where to/how to), amateur radio bulletin board, etc. Our two meter repeater can help bring club members closer together and help us each pursue our hobbies more efficiently.

73 de 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 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 SPEAKER FOR THE EVENING WILL BE: Del Radant, N6JZE, who will tell us all about antennas: How to make them, what works and what doesn't. This should be a good time to "ask the expert" and get some good antenna ideas for Field Day. Plan to be there and find out how to take the pins out of your coax. SHOW AND TELL will feature Climbing Belts and How to Use Them; and any other items brought in by club members, but please see W9FQN prior to the meeting. THE CLUB SALE TABLE will feature SWR and field strength meters, \$4-\$20.

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 & MATERIAL FOR SCOPE to P.O.Box 73, Vista, CA 92083-0030. Deadline is normally Wednesday two weeks before the club meeting.

APRIL CLUB MEETING

At the April club meeting Wayne Overbeck, N6NB, Vice Director of the ARRL Southwestern Division, gave us a most interesting illustrated talk on VHF mountain topping. His color slides were excellent and his delivery held the interest of all of us. The portable 70' towers he and others hauled to mountain tops for VHF contests and Field Day had us green with envy! Very well done. Sorry some of you missed it. Ed, N6GZI, was awarded a Nebulous Certificate for operation in some strange and purportedly illegal portion of the band. The Treasurer's report was read and approved. W9FQN gave an illustrated talk on the use of a handy-talky for RDF-ing. N6INN reminded us that to be tested other than at a regular test site, a handicapped person must make the need known to the VE organization, and have a letter from a doctor certifying to the inability of the applicant to be tested at a regular test site. The Club voted to take part in the 1986 ARRL Field Day Contest. Bud, KG6VX, was appointed Field Day Committee Chairman. The site is to again be the one in Valley Center at the reservoir. Tom, N4KRA, announced that he had relieved Joe, WB6HMY, as Manager of the North County Traffic Net. Bob, KB6QC, called for a well-deserved vote of thanks to Joe for his years of service. Joe was asked to stand so we could all see him - and then we realized he was. It was also announced that the earlier news that the Concorde SST had landed at Fallbrook Air Park was just a figment of the Date, April 1. Delicious goodies were brought by N4KRA, N6OPP, N6INN, WB6GXR, KB6DSC, WA6NNC, and others whom I know not. Coffee by Bill, N6OPP, was on the strength side but goood. Bill found about 80 folks there to enjoy it.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the April meeting, which was held at the home of K6HAV, the Committee heard and approved the Minutes of the previous meeting. The Treasurer's Report was not heard. The Committee approved the spending of up to \$50 to get the engine of the generator donated by Merit Arnold, W6NLO, running. Many other subjects were discussed with lots of heat, but not much light. A grand time was had by all - probably. The May meeting will be, without fail, at the home of WF6L - no doubt.

ARRL 1987 FIELD DAY CONTEST

The Palomar Amateur Radio Club will take part in the 1987 ARRL Field Day Contest at the same location in Valley Center used for the past three years. Bud Lincoln, KG6VX, is again Field Day Committee Chairman. Those who would like to participate should talk to Bud. REMEMBER, JUST ONE MORE NEWSLETTER UNTIL FIELD DAY!

EXPIRING AMATEUR RADIO LICENSES

Licenses expiring in May: N6EQB, N6GZI; in June: NONE. In July, KA6PPD. If you want notification of the expiration date of your license, be sure that Skip, K6RTD, has it in the Gi'nt Computer.

FORESAIL

(The halyard, ya say!)

Swan Astro 102BXA 100W PEP output solid state 160-10M HF xcvr, pwr supply & manual. Daiwa CNA-2002 auto. ant. tuner \$150; Astatic 1104C mike, \$20; RCA WR64A Color Bar/Dot/Crosshatch Gen. \$20. Call Stan, W9FQN, 749-0276.

ANTENNA TUNERS . . Drake MN-2000 2KW PEP and Cubic-Swan ST-2B. Phone Allen, N7AMR, 434-5656 after 5/15.

Yaesu 708 450 MHz HT w/AC&DC chargers, \$250. KLM Twister 2M cir. polarized antenna, \$50; Call Buck, WW6E, 941-0867.

ICom IC-02AT 2M HT w/case, new, unused, \$300. Call Jack, W6QP, 724-3341.

Palomar Engineers noise bridge, \$30; Cubex 2-elm., 3-band quad, \$120. Call Phil, WF6L, 757-7008.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$200. Call Arnie, WA7BIA, 942-1166.

Reduced again: Tristao CT840588 5-sect. 88' guyed crank-up tower w/guy lines, \$700; Telrex 40M329 3-elm 40M beam, \$500; 2 prop pitch motors, \$75 ea; 4-elm. 10-15M beam, \$75, coax switches. Call Buck, WW6E, 941-0867.

Kenwood TS-520 HF xcvr, CW filter, 120VAC or 12VDC, mint, \$325; Curtis EK-430 CMOS Iambic Keyer, \$65; Unique Wire Tuner, 160-10M, \$55; Heath HO-10 Monitor Scope, \$40; Morse MVD-1000 Video Display Terminal, \$100; Pagel 6-VHF-2 Counter, 10Hz-250MHz, \$125; Metz 2M mag-mount, new, \$45; Swan mobile HF antenna, \$30. Call Duane, AA6EE, 789-3674 eves.

Estate of W6OZF: Loads of stuff, including Atlas 210X HF xcvr w/digital display, Swan 1200Z amp., Swan 700S xcvr, Swan 1210 2M xcvr, old National and Johnson rxs and tx. Also many station accessories and small stuff. Call Hal Tarr, K6UZ, 726-3579.

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

MAY 87

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.

WANTED

Two iron 20' tower sections to be used as cross-arms on the repeater tower. Contact Stan, W9FQN, 749-0276.

For Potter Jr. High School ARC: old, useable rigs for an equipment pool to help get new Novices on the air. Call Phil, WF6L, 757-7008.

L-44 series type N connectors for 1/2" copper-clad Andrews Heliax hard-line. Needed for the Club's repeaters. Call John, WB6IQS, 724-8380.

+ RUSS OHL, N6DJC, SK +

+ We are saddened to report the passing of former club member Russel Ohl, + N6DJC, on March 20, at the age of 89. Russ became a ham late in life, in + this 80s. He was employed at Bell Labs, where he was one of Bell's most + prolific radio research engineers, holding 82 U.S. and 50 foreign pat + ents. A stroke kept Russ from being very active in ham radio, but his + accomplishments in electronic engineering made him well known. +

REPEATERS

John, WB6IQS, went to the mountain top 12 April and found all well after the winter snows. Bob, WA6QQQ, measured the 2M repeater input frequency and found it to be within one kHz of the 146.130 frequency.

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 member of the ARRL you should be!

When joining or re-joining the ARRL, do so via the Club and the Club will receive a modest stipend which would otherwise go to the ARRL. Make check payable to the Palomar Amateur Radio Club and get it, with your membership application, to our fleeting-but-facile Treasurer, WI6B. He'll take it from there and the Klub Koffers will get fatter and it won't cost you a red, white, or blue cent more. DO IT!

LATEST SIXTH AREA AMATEUR LICENSES ISSUED

Licenses issued as of 4/1/87: AA6BN, KI6QR, N6PBJ, KB6QLM.

THREE REPEATERS, all 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 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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge - like the big guys have.

ELECTRONICALLY ORIENTED FLEA MARKETS ARE: The El Cajon ARC ham-computer-electronics swap meet at the Santee Drive-in theater on Woodside Ave at Hw. 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.

CLUB ROSTERS AVAILABLE

Copies of the club roster, which were handed out at the January club meeting, are still available from W9FQN or KA6FPS at club meetings; or for a S.A.S.E. to the club P.O. Box. So see Barbara at the next club meeting.

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

UP-GRADES: Vina de Montegre to Novice and awaiting license (we shoulda told you about it last month). She also has to wait for her first license before the paperwork for her Tech license can be forwarded. Lou Albrechtson, KB6QAT, who is waiting for her General license has passed the Advanced class exam and has credit for the 20 wpm code test. Jim Brown, WB6RWF, has joined those in waiting - for his Advanced class ticket. Congratulations!

GNU CLUB MEMBERS: Loren & Nancy Mitchell, NG6U & N6GDT, San Diego; Barry Robert, WD6GEB, San Diego; John Moriarity, K6QQ, San Diego; Guido Bianchi, W6JJA, El Centro; Eric Hansen, W6HOG, Valley Center/Grass Valley (if you want us to use the Grass Valley address, let us know); Don Tippit, KB6OXS, Fallbrook. Welcome. It's nice to have you all with us.

RENUDE MEMBERS: Jim Risely, WB6LEH.

GNU CALL SIGNS: Victoria Vickery, KB6QJO, first license. Congrats.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

WB6HMY TURNS NORTH COUNTY TRAFFIC NET REINS OVER TO N4KRA

Joe, WB6HMY, turned the Club's North County Traffic Net Manager's job over to Tom, N4KRA, on April Fools Day. Whether or not that date has any significance in this case is unknown, but we thank Joe for his years of devotion to the job and for a duty well and faithfully performed. Not too many of us may recall that Joe was the father of the NCTN, recommending its inception to the Club and arguing for its approval until we voted to do so at the January 1979 club meeting. The net, which started out as a traffic training net, met for the first time on 1/4/79 and has continued in daily session (except for club meeting nights) to date. Thanks Joe.

We welcome Tom, N4KRA, to the job. Tom has been very active in the Net and has provided an outlet for our out-going traffic by repeatedly acting as a liaison station to the NTS SCNV when liaison stations were few and far between. Welcome, Tom.

VOLUNTEER EXAMINERS PROGRAM

At our April tests we administered 19 test elements to 14 applicants, just about double our normal amount. Nine elements were passed, 10 failed. Seven of the 14 applicants passed at least one element. This was also the first time we administered the new Tech (3A) and General (3B) 25-question elements and the new 30-question Novice element (2). We also used the new computer-generated test booklets for those who took written tests. It was a very busy day!

Congratulations to Lou, KB6QAT; and Jim, WB6RWF, who successfully up-graded to Advanced class.

Our very busy examiners were WA6KZN on the front desk; W6DEY administering four separate CW exams; W6SAX, N6KI, and W6YYV examiners; KB5MU, W6TFB, and KS6S conducting the exams on the computers. K6HAV ran the session while I attended a seminar in San Diego.

de Pat, N6INN

N6KI'S PRODIGAL "NOJIV 65" VALIANT GIVES UP, COMES HOME - THE HARD WAY

On April 20th, Dennis found his antique car on the freeway, chased it down, got the local law to arrest one of the occupants (the other fled), and was able to identify it to the arresting officer even though the VIN and license plates had been changed. Call off the dogs. Stop looking.

DOWN THE TOOBE

Gene Marygold, K6EJO, former club member, club Repeater Engineer, and inmate of Vista, who now lives in Mound House, NV, called to say that he has up-graded to Advanced Class after having been a Tech for the 30+ years.

Hod Luhn, W6UCN, who was the original club member-owner of the Club's present repeater site, has made his annual hegira to visit relatives in Vista. He got here about a week late for the April club meeting.

Looking at recent Heathkit catalogs, it certainly appears that Heath is gradually getting out of the ham radio business. Their book still shows a lot of ham accessories, many of them manufactured by others, but "big ticket" items appear to be a thing of the past.

Clint, W6OFT, says that he and other original PARC members got together for lunch on Friday, March 27 in Oceanside. Attending were Jack Williams, W6BLL; Art W6BOS; Harold Ulmer, W6EPM; Chuck Inskeep, W6IRM; Walt Huckabay, W6JRQ; Harry Field, W6LKC; John Martin, W6SE; and Mabel Field, W6YZV. Clint says they plan to make it a monthly affair.

Speaking of Clint, he had more back surgery 3/30 and had the "hardware" removed from his back. Unfortunately he will be wearing his "turtle shell" for the better part of another year. He's home now and improving daily.

Buck, WW6E, was delighted when three of his proteges, Victoria Vickery and her mom and dad all received their Novice tickets. Buck says that it took eight and a half weeks for the licenses to arrive, so that's an indication of what our up-grades might also expect.

And as a thought for the day: "The meek shall inherit the earth - if it's ok with you."

"That's all," she wrote.

CW - IT AIN'T DEAD YET!

In the March '87 Marine Corps Gazette, the Comm. Electronics Office, Fleet Marine Force Atlantic discusses the increasingly heavy reliance on SatComs (satellite communications) by the Marine Corps for its tactical communications needs. "If they knock out our SatComs, we're dead." "At one time, Morse code was taught to all field radio operators ..." "Today,

only selected operators learn Morse code ..." "More field radio operators should be schooled in Morse code until they reach a level where they can send and receive a minimum of 13 words per minute." "HF remains the most viable and survivable long-haul transmission option available to the commander in both peace and war."

Did I hear someone say: "Yes, but my computer will copy 100 wpm CW!"? That may be true when it's one computer talking to another under nearly perfect conditions, but I've noticed that it won't even copy at 13 wpm under mediocre conditions where the ear will still do it. 'Nuf said.

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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.

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FBI FREQUENCY JAMMER ARRESTED

In the November '86 Scope we printed the following item which sent to us by June Butler, FCC office in San Diego: "The San Diego office imposed a civil fine of \$750 on Jerry Gastil, K6DYD, an Extra Class operator, of Point Loma, for operating a pirate broadcast station using the unauthorized call sign KIWI, and identifying himself as 'Doctor Demento'. The Communications Act of 1934 provides for civil fines of up to \$2,000 per day for a total amount not to exceed \$5,000."

Then, Bob, WA6QQQ, called our attention to the item below, which appeared in the San Diego Union of 4/11/87: "RADIO JAMMING CHARGED An Ocean Beach man was arrested yesterday on charges of jamming FBI radio frequencies. Jerry Edward Gastil, 47, who is employed as a radio technician by an Escondido firm was arrested about 6:15 p.m. by FBI agents.

Gastil also is charged with operating a radio frequency (sic) without a license in violation of Federal Communications Commission regulations.

FBI spokesman Jim Bolenbach said Gastil was in his own vehicle when arrested and offered no resistance. He was booked into the federal Metropolitan Correctional Center pending arraignment Monday before a U.S. magistrate, Bolenbach said."

The Blade-Tribune of 4/17/87 said: "TECHNICIAN CHARGED WITH RADIO JAMMING San Diego (AP) - Bail was set at \$150,000 for Jerry Edward Gastil, 47, during a hearing this week. According to an FBI criminal complaint, Gastil allegedly tried to jam an FBI communications frequency by transmitting music over the frequency from a mobile unit in his car. The incidents occurred between April 1 and April 10. FBI officials, with the help of specialists from the Federal Communications Commission, were able to trace interference to Gastil, the FBI said."

WA6QQQ says jamming the FBI is inviting trouble. They have VERY sophisticated RDFing equipment, capable of instantaneous bearings on signals of short duration. Gastil might just agree with that!

REPORTING TRAFFIC EMERGENCIES/PROBLEMS VIA RADIO

Operators, mobile and base station, are frequently called on to report traffic problems. When called on, report as accurately as possible: 1. WHAT happened. What vehicles/pedestrians are involved and how. Are they blocking traffic lanes. Are there any injuries. 2. WHERE it happened - name or number of highway, and where in relation to intersections, off/on ramps, direction of travel and lane number or median (center divider) or shoulder. (Traffic lanes are ALWAYS numbered from the centerline outward - because there is always a number one lane, but there may not be number two.

The base station taking the call is in a better situation to be calm and to be sure that all of the information needed is provided, so get it all if possible before you phone it. Then phone the appropriate agency and let them know you are an amateur radio operator with an emergency to report.

Use 911 for all life and death situations - or those which you even suspect might be. Remember though, if you do not specify you are an amateur radio operator with a fire or accident to report in a locale other than your own community/area, you will be transferred to the appropriate agency in YOUR city rather than in the city of the occurrence. Start out: "I am an amateur radio operator with a report of a _____ in (or on) _____". This will let the 911 operator punch the right switch to get you to the agency in the correct location to handle the problem you are reporting. When you dial 911 in San Diego County, the 911 operator has your phone number and address on the screen to look at and will dispatch emergency vehicles from your area unless you get the operator's attention.

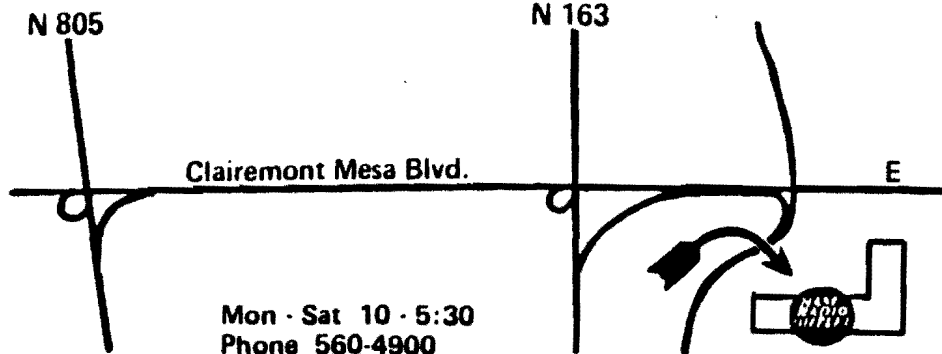
If you are the reporting mobile operator, stay on the frequency long enough for a base station operator to get to the radio to answer your request. Too often I've washed and dried my hands and then left the kitchen to get to the radio to find the emergency reporter no longer on channel. After you have made your emergency report to a base station operator, stay on the frequency for possible questions. Have the emergency numbers, other than 911, handy, so that you don't have to fumble through the phone book or, in desperation, inappropriately use 911. I use ZENITH 1-2000 for CHP emergencies which I consider not appropriate for 911 rather than tie up the life-or-death lines for stranded motorists, etc.

Lots of us monitor. If YOU monitor, answer the call - Don't be bashful and don't wait for Joe or someone else to do it.

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MAY 87

BYTES 'N PIECES

By Paul Williamson, KB5MU

WA4DSY has completed and successfully tested a packet radio modem that works at 56kbps. That's about 47 times as fast as the 1200 bps modems we use today. The modem works at 29 MHz, and a transverter is used to convert to and from the desired band (432 MHz for the test). The modulation is described as bandwidth-limited MSK, and has a bandwidth of 70 kHz for a 56kbps data rate. It can also be operated at lower data rates with a smaller bandwidth. One problem is that the TNC hardware in use (a TNC-2 clone) is just barely capable of generating data that fast. WA4DSY had to modify the TNC firmware (which was the K3MC KISS code) to make it go 56kbps. The modem takes up three circuit boards, with a fourth one on the way to replace the TNC. With a transverter cost of about \$300 and a modem parts cost of about \$200, the ballpark cost of a 56kbps station (less computer, antennas, etc.) is over \$500. Circuit boards are not yet available.

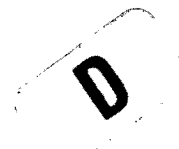
Now that Novices have packet privileges on the 220 MHz band, it is time the packet community paid a little more attention to that band. There is a good possibility that a full-duplex packet machine will appear on 220 in the not-too-distant future. This will be a first for the San Diego area, though full-duplex packet machines have been in daily use in other areas. A full-duplex repeater works just like a normal voice repeater, except that the packet tones are regenerated before retransmission. Just like on a voice machine, anybody who can hear the repeater can hear everybody else. This eliminates the hidden terminal problem that plagues digpeaters. With a cross-link to 144.76 MHz, it should go a long way toward bringing the packet Novice into the mainstream.

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JUNE, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
 VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
 SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
 TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

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

####--HAM CLASSES--####

PARC has been rather delinquent the past few years in not providing radio theory classes for prospective hams simply because we have been preoccupied with many other projects that we thought were more important at the time: repeater tower change-over, buying the repeater site, and just trying to exist with VOLUNTEER help doing everything.

The club is going to be conducting radio theory classes starting sometime this summer or the first of September ... as soon as we can get organized. It appears as though we have two teaching locations: Escondido and Fallbrook. Five demonstration boards have been made up with five more started. We still need more plywood foundation boards: 12"x 12"x 1/4". Several will be on display at the next meeting. We could use about 20-30 more and they can be brought to the next club meeting. We usually sand them lightly and give them several coats of white paint although we will take them anyway they are brought to us.

Many items have been donated to the club which can be used in our training program: earphones, code oscillators, test equipment, small electronic parts, keys, tape units, code practice materials, instruction books, etc.

It appears that all we need now is for an outline of the program to be produced and to staff the training committee. If you feel that you can chair this committee, please contact me. We need teachers of individual subject areas

so that the burden of training does not fall all on one or two individuals. This is a wonderful opportunity to serve the club and promote amateur radio. Can you teach a 15-20 minute lesson on rectification, resistors, capacitors, coils, rectifiers, filtering, code (sending/receiving), ham bands and expected coverage, antennas, transmitters, receivers, transformers, schematics, rules and regulations, etc? As you can see, we can use some help. Students would be expected to master the code on their own with trial code tests given each session to see how they are progressing. They would also be expected to study the license manual on their own and bring their questions to class. The class would have 1-3 demonstrations or lectures once a week to give a basic feel for electronics followed by open study sessions where each individual could have their own specific questions answered concerning the multiple choice test guides. There would be a class fee to take care of class instructional materials.

####--VISITOR/NOVICE/TECHNICIAN--####

I joined PARC in the mid 70's and successfully became one of PARC's "anonymous many" until president Ed Ross, N6GZI, appointed me to chair the repeater site committee. It is interesting to note that for almost 10 years I attended club meetings without anyone knowing that I was there! Not one person knew my name or call even though I introduced myself each meeting. I guess I was sort of quiet. I

would like to suggest that we as a club need to be more aware of new club members and see to it that they are shunted (good electrical term) into the mainstream of club activity as soon as possible. We need to make sure that visitors and new members have someone to talk to about their specific problems or interests. If a new member or visitor is introduced as being from your area, please make a point of introducing yourself to them during the coffee break and see to it that they get your name and telephone number. There is a wealth of technical background in our club membership which needs to be made available to those needing information or help. If I ask you to help out at our new HOSPITALITY table, please do your best at making them feel at home and please see to it that they get introduced to club members that can help them in their interests.

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

We will again have "sign-up" sheets at the June club meeting for Field Day operation on June 27th and 28th. We really need CW operators so that we can operate 1-2 CW stations most of the time. Remember that we get twice as many points for each CW contact! We need operators and loggers who can copy 13-25 wpm. It should be remembered that you know what to expect in the exchanges so you can usually copy at a higher speed than normal.

Bud Lincoln, KG6VX, is in charge of Field Day with about the same crew in charge of each position as last year. We do need a packet station, 80M SSB crew, and SOME HELP IN PUTTING UP THE ANTENNAS ON FRIDAY AFTERNOON (June 26th) from 1 PM to 7 PM. We sure would like to see some of you sometime during the afternoon. We will also have a Novice and a Technician station so encourage your wife, daughter, son, or ??? to come out and join in the fun. Be sure to sign up for a band and time of operation at the next club meeting or just come out and fill in as operators or help with the recording of the contacts. We have restroom facilities and places to take naps. Bring your own sandwiches and drinks for the time you are operating or put up with the club "emergency food" table and hot coffee.

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

This year has been a very good one for the Palomar Amateur Radio Club. We have paid off the repeater site note. We have money in the bank, and have been able to increase our membership to about 335 members. We still have two months to go until the end of the club membership year when we might be near a record of 350 members. Our club year ends the 31st of July and starts August 1st.

With such a large membership we need to take pity on our conscientious club treasurer, Ron Wilhelmy, WI6B, and start those renewals coming in early so that he and Skip (George) Maynard, K6RTD, who is the computer wizard in charge of the giant computer (TRS-80, Mod IV), don't have too much work to do at the end of the club membership year. If each renewal took over 60 seconds, then these two efficient and dedicated club members would have to spend over six hours each just processing renewals. IT WOULD REALLY HELP EVERYONE IF YOU COULD MAIL YOUR MEMBERSHIP APPLICATION, which is in this SCOPE, TO THE CLUB RIGHT AWAY. Of course, you can bring it into the next club meetings if mailing is inconvenient for you.

Some of our faithful club members sign-up for more than one year at a time which helps reduce our paper shuffling. You might consider renewing so that your membership comes due on odd or even years or possibly on a year divisible by five. Ralph Crossman, K6HAV, needs to know how many SCOPES (newsletters) to print at the end of July which means that the end of the club membership year is really very busy for these three gentlemen and multiple year renewals would make their work easier.

At the end of the club year we always have problems with faithful club members forgetting to renew so you might remind your friends of our "renew early program" so that their membership remains continuous.

THE PALOMAR AMATEUR RADIO CLUB NEEDS YOUR CONTINUED SUPPORT for its many programs supporting amateur radio in North County and San Diego County.

Please return the application blank and dues to us as soon as possible. If you don't feel like filling out all of the application blank, JUST FILL OUT THE PARTS

MARKED WITH (*) or THE ITEMS IN THE TOP CENTER OF THE FORM. We use the rest of the information to judge club interests, program requirements, club needs, and emergency equipment that might be available. Thanks.

####--TRAILER CONVERSION--####

Last year, Merit Arnold, W6NLO, of WESTCOM donated to the club a 7.5kw generator that he couldn't justify to fix up. WW6E, WI6B, and others checked everything out and found that the cylinders were frozen and the generator had two or three families of mice that enjoyed eating generator wire. After looking at the costs, we decided to sell everything but the trailer which has an excellent flat bed frame. The bed is 4 feet wide by 7 or 8 feet long. We feel that this would make an excellent Amateur Radio Emergency Service (ARES) and Field Day trailer. We have a 40 foot crank-up tower for the trailer, and radio equipment. We feel that this would be a better installation than some type of van since the upkeep and expenses would be considerably less. Please let us know what your feelings are on the subject.

####--AUGUST 23rd PICNIC--####

Remember to mark your calendars for the club picnic on Sunday, August 23rd, at Brengle Park in Vista. We will have good food, HT transmitter hunt, prizes, ball games, Bluegrass music by Ken Tagami, WA6BCC, and his band, and more.... so mark your calendar!

####--REFRESHMENTS--####

Bill Blackmore, N6OPP, is now handling the coffee AND SNACKS so please volunteer your cooking efforts (or your wife's) to him. Thanks Bill for taking on this responsibility.

####--EQUIPMENT DONATION--####

We would like to thank all of you who have donated equipment to the club. Sometimes we are delinquent and don't get around to acknowledging everything given to us. We do want you to know that the

donations are appreciated. Some of the items have been sold at swap meets with the money going to our equipment fund. Other items are still on "hold" to see if we need them on some special club program: repeater site, instructional programs, ARES trailer, school program, etc. Some items need to be checked out since we get more money for them if we can say that they are in good operating condition. We thank you for your generosity and your support of amateur radio.

####--MEXICAN LICENSE--####

You will find a copy of the suggested ways to get your Mexican XE2 call elsewhere in the SCOPE. Please remember that everything is subject to "daily" change so it should be taken with a "grain of salt". The \$18,000 Peso fee seems to be something that floats with the exchange rate. The whole thing might be done through Oscar, XE1ORH, but you might be expected to add a "few Pesos" to make it worth his effort. The roads in Tijuana are not well marked and they are not paved well in some locations so be careful: buy MEXICAN insurance! Suggestions for improving the map would be appreciated.

If you want your XE2 license NOW, then the only way to fly is to visit Mexicali and you can come home the same day with your XE2. Be prepared to speak some Spanish since their English "no es muy bien". Please keep us advised of the latest information. Feel free to photocopy the info sheet to send to your friends.

146.730 vs 146.520

As some of you have discovered, if you can't find me on 146.730/R, you might try bouncing your signal off of Palomar Mountain where my beam is pointing most of the time. My wife, KA6FPS, teaches in Pauma Valley and we talk on 146.520 in the morning and evening. Sometimes I forget to change it back to W6NWG until later on in the evening. Pointing the beam at Palomar also reduces the interference I experience from KØJPK to the north of us.

73 de 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 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 SPEAKER FOR THE EVENING WILL BE: Jack Althouse, K6NY, owner and proprietor of PALOMAR ENGINEERS. Jack has given us many interesting programs and this time will tell us about filters you can make, using the toroids PALOMAR ENGINEERS sells. Come learn how to cheaply, and quickly solve some of the RFI problems we all have.

SHOW AND TELL will feature items brought in by club members, but please see W9FQN prior to the meeting.

THE CLUB SALE TABLE will feature SWR and field strength meters, \$4-\$20.

 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 & MATERIAL FOR SCOPE to P.O.Box 73, Vista, CA 92083-0030. Deadline is normally Wednesday two weeks before the club meeting.

MAY CLUB MEETING

At the May club meeting Del Radant, N6JZE, gave us a most interesting illustrated talk on antennas. Del had a dozen or so home-brew antennas which he demonstrated, including a very directional pair of phased 2M vertical 1/4 wave antennas for RDF work. Del said he would be pleased to talk to anyone about the construction, tuning, or operation of these antennas. His phone number is: 279-7692. A most educational presentation. Ed, N6GZI, told us about and demonstrated checking and using a safety belt when climbing towers. The coffee by Bill, N6OPP, and tasties by WA6NNC, WB6GXR, and N6OPP were sooo goood. Thanks folks. Hope somebody else will lend a hand. Jo, KB6NMK, helped out with the refreshments too, and we appreciate it, Jo. There were about 70 folks there to enjoy it.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the May meeting, which was held at the home of WF6L, the Committee heard and approved the Minutes of the previous meeting. The Treasurer's Report indicated that finances were normal for the time of the fiscal year. The Committee approved expenditure of \$50 for initial Field Day expenses; and the purchase of sufficient connectors to install the hard line coax donated by Ed Jankowski, W6KCB. Field Day operation was discussed. Present were W9FQN, KB6QC, WF6L, WB6IQS, and KG6VX.

A grand time was had by all - probably. June meeting at WF6L's.

EXPIRING AMATEUR RADIO LICENSES

Licenses expiring in June: N6GWJ. Thereafter: NONE in the computer.

FORESAIL

(The halyard, ya say!)

Swan Astro 102BXA 100W PEP output solid state 160-10M HF xcvr, pwr supply & manual. Daiwa CNA-2002 auto. ant. tuner \$150; Astatic 1104C mike, \$20; RCA WR64A Color Bar/Dot/Crosshatch Gen. \$20. Call Stan, W9FQN, 749-0276.

Late model Yaesu FT-980, mint condx, \$950; Zenith VC1200 color video camera, \$175; Alda 103 xcvr, \$180. Call Bill, N6COU, 758-7163.

MFJ 1270 packet radio TNC w/connect alarm installed, \$85; MFJ 407 deluxe electronic keyer w/AC adapter, \$40. Call Tim, KI6GI, 469-2920.

Heath SB-3 ham band rx w/spkr & book, \$60. Call Hal, W6DOL, 291-5939.

ANTENNA TUNERS: Drake MN-2000 2KW PEP and Cubic-Swan ST-2B. Phone Allen, N7AMR, 434-5656.

Yaesu 708 450 MHz HT w/AC&DC chargers, \$250. Call Buck, WW6E, 941-0867.

ICom IC-02AT 2M HT w/case, new, unused, \$300. Call Jack, W6QP, 724-3341.

Palomar Engineers noise bridge, \$30; Cubex 2-elm., 3-band quad, \$120. Call Phil, WF6L, 757-7008.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$200. Call Arnie, WA7BIA, 942-1166.

Tristao CT840588 5-sect. 88' guyed crank-up tower w/guy lines, \$700; Telrex 40M329 3-elm 40M beam, \$500; 2 prop pitch motors, \$75 ea; 4-elm. 10-15M beam, \$75, coax switches. Call Buck, WW6E, 941-0867.

Swan: 100MXA solid state HF xcvr w/pwr supply, \$250; ST1 antenna tuner, \$75; WM3000 power meter, \$75; Model 55 mobile antenna w/remote, \$50. Mini Quad, \$50; Heath SB200, \$150; also mast, rotator, coax, coax switches. All in xlt condx, except mobile antenna. Asking \$700 for whole station. Call Sam Howe, WA6YJC, 757-1498

WANTED

Two iron 20' tower sections to be used as cross-arms on the repeater tower. Contact Stan, W9FQN, 749-0276.

Icom IC-22S in working condx. 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 a member of the ARRL you should be!

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.

Speaking of the ARRL, the ARRL Letter says that the new tariffs against certain Japanese products do not affect Amateur Radio equipment.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 5/1/87: AA6CB, KI6RM, N6PEX, KB6RII.

THREE REPEATERS, all 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 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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge - like the big guys have.

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.

CONDOLENCES

The Club extends its condolences to Herb Wandschneider, WA6SVN, who lost his wife, Ethel on 4 May; and to Vern, W6HW, and Lila Baumgartner, who lost their son Jerry on 11 May.

RED FLAG PATROL TRAINING EXERCISE

Nash, W6HCD, sends word along that a Red Flag training exercise was held on 25 April at the Red Mountain Fire Station in Fallbrook. Club members who participated included W6INI, W6HCD, KG6VX, WB6HSZ, W6TFB, KB6OXW, KB6NMK, and KB6NML. Patrol routes covered were De Luz canyon communicating on 80M, Valley Center/Lake Wohlford and Highway 76 west of Valley Center, both on two meters. Results on 80M were satisfactory as was the 2M operation on 146.73. The use of 80M in De Luz canyon proved to be a happy solution to an "RF black hole" for the Club's repeater.

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

UP-GRADES: Ed Jankowski, W6KCB, and Lou Albrechtsen, KB6QAT, Extra Class; Richard Earl, KB6NNV, and Jim Murdock, Technician; George Todd, Technician with 20 wpm credit from no license. Congratulations all!

GNU CLUB MEMBERS: Erich Walker, San Marcos; Jim Murdock, awaiting Novice license, Carlsbad; Tom Tweddell, WA6ZBZ, Carlsbad; George Todd, awaiting Tech license, Oceanside; Neil Claassen, Carlsbad; Tom Brown, N6ICH, Oceanside; Ray Spangler, WA6THC, Carlsbad; Marni Parker, KB6PCF, San Diego; Ken Lint, N6AQV, Oceanside; J.N. Teale, Olivenhein. Welcome. It's nice to have you all with us.

RENUDE MEMBERS: Marsh Parker, W6SAX; Paul Brouillet, WD6BRX; Ralph & Pat Crossman, K6HAV & N6INN; Paul Bonds, N6PHR.

GNU CALL SIGNS: Paul Bonds, N6PHR, (first license); Vina de Montegre, KB6RXB, (first license). Congratulations.

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.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our May tests we administered 17 test elements to 13 applicants. 15 elements were passed. 11 of the 13 applicants passed at least one element.

Congratulations to PARC members Ed Jankowski, W6KCB, and Lou Albrechtsen, KB6QAT, both of whom achieved Extra Class; and to Richard Earl, KB6NNV, Jim Murdock, and George Todd, all to Technician, George with a code credit for 20 wpm. Likewise a new Tech, Betsy Ross, KB6MBL, mother of Ed, N6GZI.

Our busy crew was: KG6VX reception; W6DEY and N6IE CW exams; W6HCD, WA6HYB, and W6YYV examiners; WI6B, W6TFB, and WA6KZN on the computers.

With the advent of the exams given on the computer and computer-printed exams, the work load has gone from frantic to chaotic. And the FCC's changing of the rules to permit credit for written elements passed without up-grading; and the granting of certificates for up-grading while "floating" licenses (licenses applied for but not yet issued by the FCC) exist, have added further to the VE Team's load. The paper work load has more than doubled (at the end of each test session we're mailing \$2+ or so worth of papers to SANDARC-VEC - we used to mail \$1+). It used to be fun, but now, 3-4 of us have to disassemble our computers, lug them into the exam site, reassemble them and then reverse the procedure at the end of a frantic session. We've been blessed with very faithful and very tolerant VE's like W6TFB, WA6KZN, WI6B, and KB5MU, who have gone through this routine month after month. Many of us feel that it's getting a bit onerous. We enjoy putting something back into our hobby, and are proud of the job we do, but it now takes so much more to do the same job we were doing a few months ago! This is progress??

de Pat, N6INN

CLUB ROSTERS AVAILABLE

Club rosters are available at club meetings; or a SASE to the club Box.

DOWN THE TOOBE

Had a letter from Will-on-the-Hill, W2FWV, in downtown Fairhope, AL, where he lives at 452 Ivy Circle. Says he has a Hustler antenna up, but 2M is very inactive. He'd sell the xtal Regency 2M rig - best offer.

Earl, K6CLU, writes from Grass Pants (or is it Grants Pass??), OR that he visited former Vistan/former PARC member Bill Jago, K7MO; and other former north county hams. Says he's keeping a 40M sked with someone back home.

Paul Bonds, newly licensed as N6PHR, had helping hands in dismantling the antennae and towers he purchased from the estate of the late Marv Smith, N6NA. The antennas and 40' mast were taken down one weekend by W9FQN, WQ6V, K6RTD, and K6HAV. Later, WQ6V, W6HCD, and K6HAV got the 70' tower to the horizontal. Now to move it and get it back up in Carlsbad.

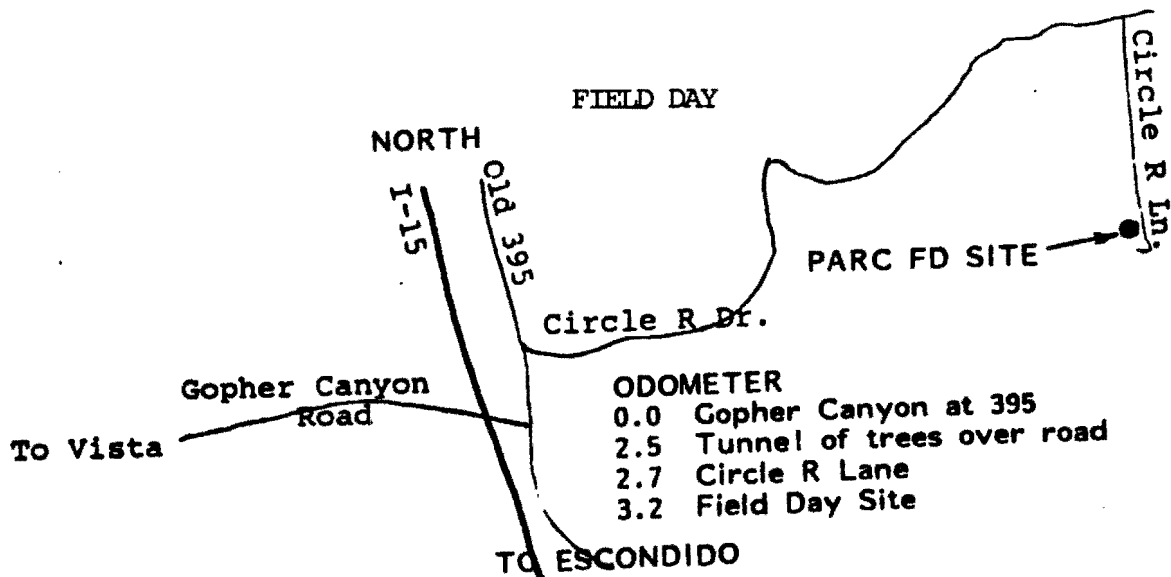
Our membership is approaching the 350 mark. That's really getting up there. We've been over 300 several times before, but this is the largest membership yet. WAYTAGO!!

"That's all", she wrote!

FIELD DAY

The Club Field Day location again this year is in Valley Center at the same site as last year (see following map). Relief ops and helping hands to set up and dismantle will be greatly appreciated so that the ops aren't tired when the contest starts, and so the tired ops don't have to do the taking down on their own after a weekend of operating. See Field Day item in: (drum roll) "President's Message" (fanfare & rockets).

GOOD LUCK IN THE CONTEST.



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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 control stations and liaison stations are needed. Apply to Tom, N4KRA.

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 146.730 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.



N 805

N 163

Clairemont Mesa Blvd.

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Mon - Sat 10 - 5:30
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TOM KM6K, Mgr.
GARY K6CAQ

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ICOM IC-38A.....220MHz MOBILE.....\$395.00

ICOM IC-u2AT.....MINI-HANDY.....\$295.00

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While browsing, don't forget to
see the CW/RTTY set-up using
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PALOMAR ARC application blank

7#8#9#0#1#2#3#4#5#6#####1*	<-Call	## Please indicate
##### -DUES MARKED- #####2*	<-License	## interests and/or
1st + 2nd--Family member. ##	Expires	## equipment, use 3
AUG\$12 + \$9.00 Call	<-1st	## high, 2 medium,
SEP\$12 + 9.00 and their name. ##	Name	## and 1 low---->
OCT\$12 + 9.00	<-Last	## PublicService
NOV \$9 + 6.75	Name	## ARES
DEC \$8 + 6.00 (name)	<-POBox	## RACES
JAN \$7 + 5.25 Consider paying	St.	## 2M HT
FEB \$6 + 4.50 this & next yr. ##	<-City	## 220 HT
MAR \$5 + 3.75 or \$17 + 12.75		## 450 HT
APR \$4 + 3.00 or \$16 + 12.00	<State	## 80-10 Mobile
MAY \$3 + 2.25 or \$15 + 11.25	+ ZIP	## 2M Mobile
JUN \$2 + 1.50 or \$14 + 10.50	8* Yes-No ? ARRL member	## 220 Mobile
JUL \$1 + .75 or \$13 + 9.75	Expiration date	## 450 Mobile
##### -ADDRESS- #####9*	Yes-No ? New member	## Packet
Make checks payable to ==>>	0* Circle--> Novice, Tech	## PortablePacket
---The PALOMAR ARC---	General, Advanced, Extra	##
P.O. Box 1603	<-Home	## Motor home
Vista, CA 92083-0530	phone	## HouseTrailer
or bring to 1st Wed.club mtg.	<-Work	## Work Trailer
Newsletter(only) 1YR=\$3.00	phone	## 4x4 Vehicle
(outside of San Diego Co.)	Yes-No PhonesConfidential	## Truck
Associate member has no	<-Type of	## Home Emg Pwr
license and no vote.	Occupation	## Fire Patrol
##### -CONFIDENTIAL- #####	M/D/Y	## Traffic Nets
This information is not made	Date	##
available to the public	Yes-No	## SSTV-ATV
-STATION-	Type=	## SSB
Equip designations + antennas	<-Year first	## WPM speed CW
80-10M=>	Licensed	## AMTOR / RTTY
	##### -Previous Members- #####	## RF MailBoxes
<-Ant	*Rating(5=high to 1=poor)	## DX
6M=>	Club overall rating	## Contests
2M=>	Club Program rating	## AntennaConst
	Club Friendliness	## Field Day
<-Ant	Club's repeaters	## Interference
220=>	##### -Computer Equip->> #####	## T-Hunts
450=>		## 10M Repeater
Above 450=>		## 6 M Repeater
		## 2 M Repeater
#####		## Packet Rept
## -see above right- #####		## 220 Mhz Rept
Code test 5 WPM	Suggestions/comments->>	## 450 Mhz Rept
Code test 13 WPM		## ReptTechnical
Code test 20 WPM		## Twr. Climbing
Novice Theory		## SatelliteComm
Tech. Theory		## Gateway Comm
Advan. Theory		## Net Control
Extra Theory		##
Code Instructor		##
ElectronicsInst		##
Elmer(helper)		##
GivingFCC tests		##
		##
Sports		## SpecialProjects
Camping		## PublicRelations
Boating	LIST-->	## August Picnic
Photography	HOBBIES	## Volunteer Help
Baja Mexico		## Social Events
Spanish --W6NWG--		## Club Meetings
	>>--SUPPORT AMATEUR RADIO--<<	## S. D. Swap Meet
	>>--THROUGH CLUB MEMBERSHIP--<<	## TRW Swap Meet
		## PARC FORM 02-14-87

JUN 87

BYTES 'N PIECES

By Paul Williamson, KB5MU

Local experimentation with the TCP/IP protocol software by KA9Q is under way. Here's a short description of what it looks like on the air.

When a TCP/IP station starts a session with another TCP/IP station, he requests the connection by IP address. For example, 44.0.0.0 is the IP address for KB5MU. TCP/IP doesn't know that a callsign of KB5MU goes with that address, so it transmits a UI frame (the same kind used in AX.25 for CQs and beacons) with a special PID (protocol ID) addressed to QST. This frame essentially says "Hey, 44.0.0.0, please answer me." Once a proper response is received, further packets in the conversation are addressed to the station callsign.

Note that no AX.25 connection is ever made. TCP/IP replaces the AX.25 protocol. It transmits frames that meet the AX.25 standard for UI frames, except that the data field can be longer than 256 bytes. (This has the unfortunate consequence of confusing certain brands of ordinary AX.25 TNCs which might be monitoring the channel.) If your TNC supports monitoring packet type and PID, you can see these differences. You'll notice that each frame contains, in addition to the message text, a header of cryptic binary information. This is the TCP/IP header. You'll also see frames containing just binary information. If you're not set up to monitor binary data, you may get all sorts of odd effects (screen clears, beeps, etc.) from monitoring this kind of data.

If you're interested in learning about the TCP/IP protocols, they are documented in a series of papers called Requests for Comment, or RFCs. These are available as part of the TCP/IP software distribution; contact me for details.

It's getting harder for me to pick a subject for these columns; please let me know what topics you want to read about in this space. Thanks.

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NORTHERN SAN DIEGO COUNTY

W6NWG

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VOL. XXII, NO., 7

JULY, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
 VICE PRESIDENT: Bob Brehm, KB6OC, Carlsbad 931-8759
 SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
 TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

>>>>>>— President's Message —<<<<<<

###--REPEATER USE--###

Whenever possible we try to keep the membership advised of when the repeater will be used for public service events but sometimes the requests come in so late that it does not make the SCOPE or the general meeting. Many of these events are scheduled almost a year ahead but we are only contacted a few days before the event. Remember that on public service events you are not asked to leave the repeater but only to keep your conversations short with lots of space between transmissions for the public service group to BREAK-IN and use the repeater. The repeater is turned off if prior permission is not obtained so please advise any groups that you are working with that we support public service use of the repeater but only if requested before the event so that we can give them special instructions on the use of the repeater and notify club members of its use.

As our membership climbs to over 355 members (a club record), we can't help but run into problems with the use of the two meter repeater. Most problems seem to come from too much BREAKING into long conversations that really should not have been that long. The talkers are upset by the BREAKS and the BREAKERS are upset at having to BREAK into long winded low priority conversations. Then we sometimes have the BREAKers who have broken into a BREAK of a broken conversation. Listen to

the repeater several minutes to find out what is going on before you BREAK into a conversation.

Everyone needs to work at:

- 1) BREAKING only with a good reason.
- 2) Conducting long specialized conversations at prime times.
- 3) Letting small infractions against "your own little personal repeater code" get you into a conflict situation with other repeater users. We have had several problems like this in the past six months. Keep it COOL. If you really need to BREAK, please feel free to do so but make sure that you pass your information quickly and properly return it to someone in the original conversation.

Be sure to look at the REPEATER ETIQUETTE sheet in this issue of the SCOPE. Remember, these items are the present policies of the club on repeater use and are subject to modification as time goes by. Please keep us informed of any suggested modifications to the list. We do not want to "jump" you on the air in front of all of S.D. Co. (2,000 square miles and 185 miles out to sea). A control operator might send you a checked sheet if problems persist. Remember that we are trying to allow as many people as possible to use the repeater which sometimes results in problems during high repeater usage periods.

CONTROL OPERATORS (COs) monitor the

repeater but will try to refrain from making comments on the air about members' conduct. COs will shut down the repeater under policies established by the executive committee but this is rarely done (once in the past two years) without good reason. The repeater is left on during most types of interference to help with the DFing of the TURKEY and to notify members to check the input. Control operators are usually not available to make telephone calls nor should they be asked to make any. Their function is to control the repeaters which they can do without being near a phone and to monitor repeater conversations for possible future action or correction.

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

SANDARC (The San Diego Amateur Radio Council) has assigned us three days at the Del Mar Fair in July: Fri(3), Sat(4), and Sun(5). Operator shifts (groups of two operators) are 10-2, 2-6, and 6-9:30PM. Barbara Rohrer (KA6FPS) is looking for operators to operate the amateur radio station at the fair. Remember that she will give you free tickets. Give her a call on the phone (749-0276) or on 146.730 to set up your time of operation.

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

Larry deMontegre (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 paying off the repeater site note, SCOPEs, QSL cards, etc. This would be in honor of the 200th birthday of our Constitution and the 50th year of the club's existence. Does anyone have additional suggestions for a time capsule?

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

We have been having troubles lately

with contacting visitors at our meetings and getting them started in the right direction towards getting their licenses. We have established a HOSPITALITY person who will have available free information at all meetings on getting a license and we will also have some commercial books at cost which should be of some help to getting them started since most of the new people can't seem to locate the local candy stores or find the required books. Please make a special effort to contact visitors at our meetings that come from your city and give them your phone number. Our club's radio theory class will start in September.

Remember the club picnic, Sunday, August 23rd ... also, if you haven't sent in your \$12 dues for next year, be sure to immediately send your check to Ron Wilhelmy (WI6B) at our club address so that you will receive your August SCOPE, be eligible for the August Picnic prizes, and have your name and call included in the TIME CAPSULE to be buried this coming September at the repeater site.

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

THANKS to Jo Ashley (KB6NMK), Bill Blackmore (N6OPP), and Bob Rice (KS6S) for helping me with the American Lung bicycle ride from Orange County through Camp Pendleton and back up north on I-15 on the 14th of June. Bob is an experienced communicator handling car, bike, and motorbike races down into Baja, Mexico. The club thanks you all for your help.

THANKS to Clint Call (W6OFT) for checking out 5 or 6 donated rigs to the club's equipment fund so that we could put them on the FOR SALE list knowing that they were in working order. It sure helps clean out my garage which KA6FPS is very happy about!

73 de Stan, W9FQN

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.

 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!

JULY CLUB MEETING

THE PROGRAM FOR THE EVENING WILL BE: Tom Meers, N4KRA, speaking on "Tips for traffic handling". This short talk should be a refresher course for old and young alike and is preparation for those working at the club booth at the Del Mar Faire. We will also hear from Ed, N6GZI, on radio frequency interference. For Show and Tell, we would like to request members with mobile installations to show off their pride and joy mobiles to other club members (and non-members too!). Please park by the cafeteria so we can all look and drool! So come one and all and bring a friend. We've got something for everybody!

SHOW AND TELL will also have items brought in by club members, but please see W9FQN prior to the meeting so that you can be scheduled.

JUNE CLUB MEETING

At the June club meeting Jack Althouse, K6NY, of Palomar Engineers showed us his toroids and told us how to "roll our own" RFI filters using the toroids. I'm going to run over and get some for a phone problem or two.

The minutes of the previous meeting and the Treasurer's report were read and approved. Treasurer WI6B reminded club members that it is costing the Club \$.30 each we time learn of your new address from the P.O. when you fail to notify us before the post office returns your Scope. Phil, WF6L, stated that approval of funds for equipment for the Potter Jr. High Radio Club had finally come from SANDARC. W9FQN reported that SANDARC has over \$50,000 in a blocked account, the interest only being spendable. Pat, N6INN, reported on growing disenchantment with the Volunteer Examiner Program as conducted under SANDARC-VEC's auspices since it has evolved into a computer testing program for all written test elements. Pat is retiring as Team Leader of the PARC VE team at the end of the October test session. She also said that SANDARC-VEC objected to paying \$10/month for the rental of Joslyn Senior Center for the test program. W9FQN indicated the requirement for more equipment and volunteers for the Club's participation in Field Day. Tom, N4KRA, told of the need for more net control and liaison stations for the North County Traffic Net.

The coffee by Bill, N6OPP, and tasties by several thoughtful folk and N6OPP were sooo goood. Thanks folks. Hope somebody else will lend a hand. There were about 80 folks to enjoy it. A grand time was had by all.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the June meeting, which was held at the home of W9FQN, the Committee heard and approved the Minutes of the previous meeting. The Treasurer's Report was read and approved. KB6QC reported on up-coming programs. WB6IQS reported that the old 450 MHz repeater had been sold for \$80 at the last

TRW swap meet. He also told the Committee that he had purchased, at a reduced price, nearly all of the required connectors for the recently donated Heliastax. The Committee discussed the requirement for someone at club meetings to handle guests who want to know how to get started down the road to a ham license. WF6L was so appointed. At the same time, designated persons are to act as hosts for the Club at meetings, introducing guests and pointing them toward WF6L if unlicensed and toward WI6B for club membership. The Committee reaffirmed the importance of the self-introduction period at each meeting. A handout will be prepared for would-be hams, giving addresses, names, telephone numbers, and other information to get them started down the right road. The Club will purchase five publications which will then be available for re-sale to guests who wish to start studying for the Novice license. These books will be replenished as required. Field Day was discussed. The use to which the Club's trailer will be put was discussed. W9FQN said that letters have been written to W5YI and the ARRL asking for information on the VE Program in light of present dissatisfaction with the direction being taken by SANDARC-VEC. Letters to the County of Los Angeles and to the FCC concerning the seven-year problem with WA6NUD/R-K0JPK/R were discussed and a plan of action decided upon. A grand time was had by all. July meeting at the WF6L QTH.

EXPIRED AND EXPIRING AMATEUR RADIO LICENSES

In June: N6GWJ, WB6YVT. August: WB6BHE, W6HLB.

FORESAIL

(The halyard, ya say!)

Swan Astro 102BXA 100W PEP output solid state 160-10M HF xcvr, pwr supply & manual. Daiwa CNA-2002 auto. ant. tuner \$150; Astatic 1104C mike, \$20; RCA WR64A Color Bar/Dot/Crosshatch Gen. \$20. Call Stan, W9FQN, 749-0276.

10-40M flagpole antenna (concealed trap vertical in a flagpole) w/40' of coax. Call Floyd, W6JSP, 741-8391.

Drake 2B rx, near mint, \$50. Call Dan, WA6HYB, 433-4445.

Late model Yaesu FT-980, mint condx, \$950; Zenith VC1200 color video camera, \$175; Alda 103 xcvr, \$180. Call Bill, N6COU, 758-7163.

MFJ 1270 packet radio TNC w/connect alarm installed, \$85; MFJ 407 deluxe electronic keyer w/AC adapter, \$40. Call Tim, KI6GI, 469-2920.

Heath SB-3 ham band rx w/spkr & book, \$60. Call Hal, W6DOL, 291-5939.

ANTENNA TUNERS: Drake MN-2000 2KW PEP and Cubic-Swan ST-2B. Phone Allen, N7AMR, 434-5656, after 7/10/87.

Yaesu 708 450 MHz HT w/AC&DC chargers, \$250. Call Buck, WW6E, 941-0867.

ICom IC-02AT 2M HT w/case, new, unused, \$300. Call Jack, W6QP, 724-3341.

Palomar Engineers noise bridge, \$30; Cubex 2-elm., 3-band quad, \$120. Call Phil, WF6L, 757-7008.

Drake R-4 rx, T-4X tx w/pwr supply, all appropriate cables. Will operate all new freqs. Asking \$200. Call Arnie, WA7BIA, 942-1166.

Tristao CT840588 5-sect. 88' guyed crank-up tower w/guy lines, \$700; Telrex 40M329 3-elm 40M beam, \$500; 2 prop pitch motors, \$75 ea; 4-elm. 10-15M beam, \$75, coax switches. Call Buck, WW6E, 941-0867.

WANTED

Two iron 20' tower sections to be used as cross-arms on the repeater tower. Contact Stan, W9FQN, 749-0276.

Icom IC-22S in working condx. 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 a member of the ARRL you should be!

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.

Speaking of the ARRL, the ARRL Letter says that the new tariffs against certain Japanese products do not affect Amateur Radio equipment.

FROM THE ARRL LETTER

The FCC has reconsidered and will now require one common question pool for each amateur radio license examination element. A previous ruling had permitted individual VECs to compile and maintain their own question pools. Each pool must contain at least 10 times the number of questions required for one examination. Present question pools must stay in effect at least until 1/30/88. Question pools must be published and made available to the public prior to their use for making question sets.

The FCC also affirmed its earlier ruling that all telegraph message elements must contain all 26 letter, 10 numerals, period, comma, question mark, and the prosigns AR, SK, BT, and DN. Message elements must be long enough to satisfy this requirement (meaning that they can be LONGER than five minutes).

The 1987 Net Directory is now available from ARRL HQ for \$1 postpaid.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 6/1/87: AA6CP, KI6TM, N6PNJ, KB6SYY.

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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge - like the big guys have.

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.

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 from which it is coming.

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

UP-GRADES: Paul Bonds, N6PHR, and George Todd, N6PPN, both to General. Congratulations!

GNU CLUB MEMBERS: Linda Sellers, KB6SAE, Oceanside; Ken Klippel, W6FN, Carlsbad; Fred & Mary Barker, N6PDZ & N6PEA, Vista; Tom Brown, N6ICH, Oceanside; Ken Lint, N6AQV, Oceanside; Ray Stangler, WA6THC, Carlsbad; Dan Barry, Vista; Tom Anderson, WD6AXN, Del Mar; Jack & Jeremy Simmons, KI6RF & KB6SFL, San Diego; Larry Chandler, KB6OQE, La Mesa. Welcome. It's nice to have you all with us.

RENUDE MEMBERS: Gary Grant, N7AS; John Reber, N6BAD; Bill Countryman, KE6BH (2 years); Ray Dobler, W6BHF; Arnie Lewin, WA7BIA; Steve Lang, WA6BSD; Betty Mahoney, KB6DGR; Bill Steele, W7EAI; Mark Divecchio, K3FWT; Rich Garren, K6GAK; Marty Witting, W9GNI; Steve Seller, N5GZP; Charles Hodgson, W6HC; Nash Williams, W6HCD; Art Rideout, WA6IPD; Jim Sandberg, K6HE; Bob Chambers, NC6J; Lane Hart, N6LTV; Ted Pakaski, N6NAU; Art Pearce, N6NLJ (2 YEARS); Howard Gates, W4NYU; Carl & Mary Burgess, N6NZX & KB6NZA; Clint & Eleanore Call, W6OFT & WB6OJL; Dick Powell, W6OML; Micky Jenkins, N6PBM; Gene Horrall, K6PP; John Moriarity, K6QQ; Phil Schutze, K6ROR (8 years); Nate Hassell, K2RTQ; Herb Wandschneider, WA6SVN; Bob Gates, WB6TBA; Harry Bluestein, N6TE; San Diego Mountain Rescue Team (Ivan Smith), W6TET; Lloyd Hunt, W6TFB; Hark Harker, WB6WGT; Walt Pennington, WO6U (2 years); Paul Buscema, KZ6X.

GNU CALL SIGNS: George Todd, N6PPN, first license. Vina de Montegre, N6PQQ vice KB6RXB. Mickey Jenkins is now N6PBM, having let WA6WQI lapse (or maybe she didn't want to be confused with WB6WQI). Mickey, if you'd had your expiration date in the Gin't Computer we'da told ya.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our May tests we administered 14 test elements to 10 applicants. Six elements were passed. Four applicants passed at least one element.

Congratulations to PARC members Paul Bonds, N6PHR, and to George Todd, both of whom became General Class amateurs as a result of the day's tests.

Our crew was: KG6VX reception; W6DEY CW exams; N6NNI, W6YYV, and WB6R examiners; W6TFB and K6HAV on the computers.

I'll be retiring as PARC VE Team Leader after the test session in October. SANDARC-VEC is hoping to find someone to step in and do the job so that the north county sessions may continue. If you can volunteer, see me and I'll be happy to put you in touch with the VEC. Or see W9FQN.

de Pat, N6INN

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PACKET IN -- PACKET OUT

The integration of packet into the ARRL National Traffic System (NTS) has reached a point where considerable traffic is being handled on packet. Packet stations are needed to pick up traffic from NTS mailboxes and then pass the messages on the North County Traffic Net (NCTN) to delivering stations. This liaison will expedite delivery by 24 hours. Furthermore, regular packet/NCTN liaison will constitute predisaster preparation for timely handling of large-volume incoming and outgoing disaster welfare traffic. If you can help, please contact Tom, N4KRA, who has agreed to act as Assistant Traffic Manager for Packet.

Also needed are CW stations to pick up traffic on the Southern California Net (SCN1) at 6:30 p.m. on 3598 kHz and then pass the messages to delivering stations on NCTN at 8 p.m. SCN operates at a nominal, and flexible, speed of 15 wpm so you do not have to be a speed demon to participate. This liaison does expedite delivery by 24 hours. If you can support this function, please contact me.

de Gordon Wenz, N6GW, Section Traffic Manager

DOWN THE TOOBE

Bill Driml, W6NAT, past president and former Vistan, who now lives at Ft. Dick, CA, sends along enough \$\$ for Scope renewal for two years and a nice note telling about all of his activities. Bill will be looking for W6NWG on Field Day and hopes one of our ops recognizes him THIS year.

Hal, W6DOL, spent a week or so in the hospital for an operation. He said he talked the the outside world by HT, and was about ready to come home.

Dr. Paul Bonds, N6PHR, who is a brand new ham, is starting out right. He has the 70' tower and three monobanders 10-20M of silent key Marv Smith, N6NA. Paul had help in getting them down, but got 'em up himself!

"That's all", she wrote!

PARC REENLISTMENT NOTICE - LAST ONE TOO

Last month's form confusing? Here's one you can use instead. Dues are \$12/year + \$9/year for each additional 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 _____ CHANGES in address, call sign, phone number _____

Remarks, appropriate and otherwise _____

06-18-87

RPTRULE1-MISC1

KB6AI W9FQN K6HAV WI6B

The PALOMAR AMATEUR RADIO CLUB, Inc.

P.O.BOX 1603, VISTA, CA 92083-0530

Phone 749-0276, 931-8759, 757-7008, 756-3133

<<--Control Ops-->>

REPEATER ETIQUETTE

WB6IQS WA6KZN KB5MU K6ROR

The Control Operators of the PARC repeaters do not want to preach club repeater etiquette to repeater users while they are using the repeater. We feel that private communication is the best way of calling items to the attention of individual users. We hope that others will follow the good examples used by many of our club members. We realize that the FCC permits many things that we do not approve of at present. We hope that you will encourage others to display proper repeater operation by your good example. Everyone will enjoy the repeater more if we show consideration for other users. As repeater usage increases so does the need for good operating. You are reminded of the following checked PARC policy items in connection with the use of the W6NWX repeaters:

IGNORE JAMMERS. Work over or thru them. We are looking for them! Check input and notify us of bearing/intensity for our plot board ASAP. Don't acknowledge that you even know that they are there.

BREAK with your call sign: W6XXX, BREAK W6XXX, or BREAK BREAK W6XXX. This goes from a casual break to an emergency break. Use what is needed!

BREAKING a conversation and then leaving without turning it over to someone by call or name. Don't add to the confusion of the BREAK!

BREAKING a conversation and then ignoring the rest of the stations in the original QSO. Be considerate!

BREAKING into a QSO and interjecting comments without immediately giving a call sign. Break with care and reason.

TALKING for long periods of time and defeating the reset timer. This is permissible only by net controls and traffic handlers. Exchanges should be less than 60 seconds. Think of others.

QUICK KEYING: rapid fire conversations where breaking stations running low power would not be able to make their presence known.

LONG CONVERSATIONS from a base station during mobile hours: 6:00-8:00 AM and 4:30-6:30 PM. Keep it short!

LONG CONVERSATIONS between stations that obviously are all in simplex range of each other. Use simplex.

LONG CONVERSATIONS without asking "if anyone needs to make a call".

PAUSE during casual conversations and ask if anyone wants to join you.

MORE POWER than necessary making it difficult to BREAK with low power.

CONTROVERSIAL subjects where the conversation will likely draw out the crazies or the self appointed police and

ultimately result in jamming: strong political views, sexual subjects, raw ethnic jokes, etc. Humor is great but excessive use leads to repeater problems.

ID on the first transmission and on ending transmission.

LISTEN for 30 seconds before making a transmission.

RUDE BEHAVIOR to people using the repeater. Always be friendly. It pays.

Being CRITICAL of another ham or other repeater on our repeater.

IMPROPER LANGUAGE (free speech) draws jammers. Keep it proper!

Discussing obvious BUSINESS items over the air. Don't be so obvious! FCC no-no!

BROADCASTING: not in two-way contact. FCC no-no.

IMPROPER CALL: W6ZZZ this is W6XXX, are you out there? KISS! Don't give messages with your call.

TESTING on the repeater. Test on simplex. Requesting audio reports ok.

HT WITH RUBBER DUCK inside of a car. Use amplifier and/or outside antenna.

TALKING SIMPLEX on the repeater output or input without good reason.

BAD AUDIO and/or excessive deviation.

INCOMPLETE UNDERSTANDING of how the repeater works. Contact the control operator marked above for information.

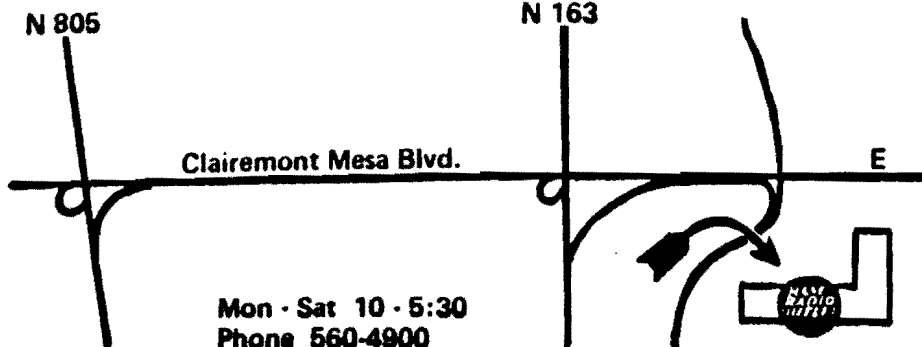
IMPROPER TELEPHONE/PATCH use over the repeater.

REQUESTING ASSISTANCE and then leaving the frequency before someone can answer. Give them time to get to a transmitter.

TIMING OUT of the repeater. It has a 90 second timer. Keep it short.

Acting like a CONTROL OPERATOR. They are appointed by the president with approval of the Executive Committee.

OTHER: _____



5375

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TOM KM6K, Mgr.
GARY K6CAQ

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KENWOOD TS-440S/AT NEW HF MOBILE....\$1019.95
YAESU FT-757GX NEW MK II MODEL.....\$989.95
YAESU FT-2700.....DUO-BAND 2M/450mHz
full duplex.....\$449.95
ICOM IC-735.....NEW HF Gen. Coverage.\$849.95
ICOM IC-38A.....220mHz MOBILE.....\$395.00
ICOM IC-u2AT.....MINI-HANDY.....\$295.00
KENWOOD TH-215...NEWEST GENERATION W/FREE
EXTRA BATTERY.....\$309.95
YAESU FT-23/TT...State of the Art HT....\$269.95
ICOM IC-3200.....Duo-Bander 2M/450mHz. \$539.95
KENWOOD TM-221...NEW 2M MOBILE
45 WATTS & PL.....\$349.95

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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BYTES 'N PIECES

Packet radio has problems. This isn't news to anybody who has operated much packet in this area. The popular two-meter frequencies are grossly overcrowded. This problem arises naturally from the nature of the medium. Two important strengths of packet radio are (1) the capability to have many stations using one channel simultaneously, and (2) the capability for two stations that are not in range of each other to communicate through digipeaters. Both of these strong points contribute to the tendency of packet users to cluster on a few frequencies. Mountaintop resources are limited, so only a few frequencies have extensive digipeater (or NET/ROM mode) networks. Everybody who is interested in long-haul communications, and everybody who wants to communicate with these stations, must remain on one of these frequencies. And the ones who are actually using long digipeat paths are generating all those extra packets due to digipeating (not to mention the retries). Result: overcrowding.

Mailboxes seem to be the most controversial users of channel capacity. Computer networking is supposed to be what packet radio is all about, and electronic mail is one of the essential features of computer networking. But why must they burn up so much space on prime frequencies? Same phenomenon: digipeater networks attract users, and users attract mailboxes, which attract more users.

There is a solution, but it's expensive and will be slow in coming. The user-accessible networks must be partitioned into much smaller pieces (LANs) and the LANs linked on other channels, preferably at higher speeds. Until that happens, we have to try to utilize the existing network as efficiently as possible.

By Paul Williamson, KB5MU

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W6NWX
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VOL. XXII, NO., 8

AUGUST, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, W16B, Rancho Santa Fe 756-3133

>>>>>>— President's Message —<<<<<<

###—NEWSLETTER ADS—###

The Ads in the SCOPE help pay for its printing and they release money for other club projects. We certainly do appreciate our advertisers for their support and we hope that you will support them with your business. If you have a ham or non-ham business, you might consider advertising in the SCOPE. We will allow some non-ham type ads that meet our advertising standards. Some examples might be: insurance, travel, electrical work, house additions, repair work, computer billing, hauling, antenna work, odd jobs, legal work, medical work, etc. These ads are probably tax deductible for your business and they are only \$5.00/issue for a business sized card. It is a good way to help out the club and amateur radio. In most cases one feels safer buying from a club member rather than from a complete stranger.

###—PICNIC—###

The Club Picnic is Sunday, August 23rd from 9:30AM to 2PM. Check elsewhere for your eating assignment and for the rules on the drawing for \$300+ worth of ham gear. Bring your HT's for a "small time" transmitter hunt and play clothes for some fun and games. Hope to see you there!

###—THANKS—###

Many THANKS to the operators who worked at the Del Mar Fair booth on July 3-5th and to Barbara Rohrer (KA6FPS) for organizing everything. Operators were: FRIDAY- Tom Merz N4KRA, John Tentor W6OLQ,

Jo Ashley KB6NMK, Dennis Vernacchia N6KI, Phil Leonelli WF6L, Stan Rohrer W9FQN, Barbara Rohrer KA6FPS, Jack KI6RF and Jeremy KB6SSL Cullian; SATURDAY- Tom Merz N4KRA, Jack Honts WD0DLW (twice), John Kuivinen WB6IQS, Ed N6GZI and Judy KB6DEM Ross; SUNDAY- Larry WQ6V and Vina N6PQQ de Montegre, Paul Williamson KB5MU, Nash Williams W6HCD, and Barbara Rohrer KA6FPS.

Also THANKS to Bud Lincoln KG6VX, his chief operators, and all of the club members who helped with set-up and take-down of the Field Day stations plus the large number of operators who showed up to man the FD stations for the 24 hour emergency exercise. I hope to see you all again next year when we might try some sort of "unlimited" station concept rather than the traditional 4A classification. This would allow more people to operate than in the past years and we would not have to close down stations (to maintain the 4A classification) that took members a lot of time and effort to set up.

We also are considering separating the CW operators into the Old Timers (OT) and the Young Turks (YT) to account for differences in operating style. Possibly the OTers could take 20-10M and the YTs take 80-40M and compete against each other.

THANKS to my daughter, Susan KB6NZS, for getting her Tech. She was told, "no Tech license, no driving of the car". This might not work on your wife!

73 de Stan, W 9 F Q N

Aug 8 /

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!

AUGUST CLUB MEETING

THE PROGRAM FOR THE EVENING WILL BE: A mystery speaker who will speak on a subject of interest to us all.

SHOW AND TELL will feature WF6L showing us his Yaesu FT-757GX Turbo. Anyone else with items for show and tell, bring 'em along, but contact W9FQN prior to the start of the meeting so that you may be included.

We hope that some of the faithful will bring something tasty (but with no calories) to go with N6OPP's cafe sabroso.

JULY CLUB MEETING

At the July club meeting Tom Merz, N4KRA, told us about message traffic handling. Ed, N6GZI, gave a very interesting talk about solving RFI problems, and we saw the mobile installations of Vern, N0CPS and Bill, KB6MCU. WF6L read the minutes of the previous meeting and W6OLQ the Treasurer's report. They were approved. W9FQN reported that there had been no SANDARC meeting. W9FQN also indicated that anyone interested in helping with Handi-Hams should contact him. Stan further said that when W6NWG/R is being steadily kerkchunked, we should listen to 146.115 MHz to see if there is a correlation. The coffee by Bob Brehm, KB6QC, and tasties by several thoughtful folk including Mary, KB6NZA, and others, name to the relator unknown, were sooo goood. Thanks folks. Hope somebody else will lend a hand. There were about 70 folks to enjoy it. A grand time was had by all.

ANNUAL PICNIC IN VISTA'S BRENGLE TERRACE PARK ON AUGUST 23

The Club's annual picnic will take place in Brengle Terrace Park on Vale Terrace in Vista on Sunday, the 23rd of August. Same part of the park as last year - the up-stream end of the park. Lunch will be a pot luck affair with everyone bringing more than enough to feed their own family. Surnames A through F bring a SALAD dish, G through M a MEAT or CASSEROLE, and N through Z a DESERT. Lunch will be at noon to be followed by the drawing for the prizes. Prizes this year will be in the form of gift certificates from our chief advertiser, HRO. Top prize is a \$200 certificate. Others are for \$50, \$30, and \$20. HRO was very generous and donated some Call Books and a Handbook, which will also be given away at the picnic.

Tickets for the drawing are based on attendance at Club functions, with everyone getting at least one ticket (for enlisting or reenlisting in the Club - enlistment/reenlistment for the Club's 1987-88 membership year will be for NEXT year's picnic drawing). Tickets for this year's picnic will be handed out by the Secretary at the August club meeting and at the picnic. You must pick your tickets up and get them into the picnic hopper. You may do so via an agent, designated by you in writing. Either you or your agent must be at the picnic to win. The Club will NOT act as your agent.

Seems to me I heard that we may have entertainment in the form of Blue Grass music by Ken, WA6BCC, and his crew. We also, as usual, will have a dandy time starting off about 10:00 of the a.m. Come and bring your love ones - or your wife/husband and kids. We'll see you there, BUT don't bring all of that wonderful food. We're on a diet - DARN IT!!

 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.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the July meeting, which was held at the home of WF6L, the Committee heard and approved the Minutes of the previous meeting. The Treasurer's Report was not read. The Committee authorized W9FQN to spend up to \$50 to have a new hitch installed on the trailer; and up to \$300 to spend for prizes for the annual picnic. Prizes to be in the form of gift certificates from HRO. The coffee and tasties were delicious. August meeting at the WF6L QTH.

FIELD DAY CONTEST

A rousing time was had by all - well, nearly all - who showed up for Field Day with the PARC in downtown Valley Center. But we had a good time and ionized the immediately surrounding atmosphere so thoroughly that W9FQN says we had our FIRST TVI complaint in the four years we've been using the site. We also made a flock of contacts, notably with Hawaii, one on 144 MHz and one on 432 MHz!! As usual, we worked the world (as well as a TV set or two) and came home dirty and tired. Negatively, we experienced severe RFI between the CW station and the 20M fone station, and perhaps to a lesser degree, with the 40M phone station. An unwanted first for us at this location. We sure could have used some more night time relief. (We don't NEED to close down from 0200 to 0500 and lose those contacts!!) A club with 355 members ought to be able to field round-the-clock ops for four transmitters! According to the sign-in sheet, the following club members took part in Field Day: KB6NMK, KI6JM, W9FQN, WD0DLW, N4KRA, KG6VX, KB6NZA, N6NZX, KB5MY, KS6S, WB6ZJZ, KB6QZH, KB6QC, WD6FWE, WB6OXS, N6INN, K6HAV, WW6E, N6NOG, N6IE, W6BLL, KI6TG, N6GZI, KB6DEM, KB6MBL, KZ6X, KB6RKX, KB6RRV, KB6NML, N6KI, KB6PZE, WF6L, W6BXJ, KB6NZS, KA6FPS, and others who could not locate the sign-in sheet.

According to Bud, KG6VX, our FD Committee Chairman, we had a total of 354 X 2 CW contacts and 2,069 phone contacts, broken down as follows:

CW:	80M	55	40M	201	20M	56	15M	33	2M	2	432MHz	1
Phone:	75M	258	40M	422	20M	1,215	6M	20	2M	70	432MHz	16
Novice phone contacts: 68												

WAIT'LL NEXT YEAR!!

EXPIRED AND EXPIRING AMATEUR RADIO LICENSES

In August: WB6BHE, W6HLB.

THINK ABOUT IT

A manufacturer's rebate is the company's admission they over-charged you!

FORESAIL

(The halyard, ya say!)

Homebrew linear amp. 400W output. Heathkit SB-614 2" monitorscope. AEA CP-1 RTTY/CW/ASCII computer interface and Hamsoft cartridge for C-64. C-64 w/1541 disk drive w/amber monitor, 80-column card, 64 Modem, Centronics printer interface, RS-232 interface, 80-column word processor & spreadsheet, compiler, Basic enhancement, graphics, astronomy, many ham programs, 50 diskettes, books, manuals and more, all for \$525. Cubex III-PT 2-element tri-band quad, CDE Ham III/CD44 rotor, and Dentron Super Tuner, \$175. Call Alan, WZ6F, 723-7514.

Vic 20, Commodore tape deck, C-64 complete w/pwr supply & QBF word processor software, no display. Call Alma, KE6HI, 753-2542.

Four new 872A xmtg tubes in original boxes. Call Nash, W6HCD, 728-3574.

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$250. Call Ralph, K6HAV, 727-5866.

Heath HWA 2036-3 12V 3A pwr supply, mint, \$25. Heath ultra-sonic intrusion alarm GD 1558 - for car - mint w/xtra horn & relay, Bx20. Drake 2B rx, near mint, \$50. Call Dan, WA6HYB, 433-4445.

Tek 465 o'scope, 100 MHz dual-trace, \$800. Call Lou, N6CKQ, 755-9179.

Astatic 1104C mike, \$20; RCA WR64A Color Bar/Dot/Crosshatch Gen. \$20. Call Stan, W9FQN, 749-0276.

10-40M flagpole antenna (concealed trap vertical in a flagpole) w/40' of coax. Call Floyd, W6JSP, 741-8391.

MFJ 407 deluxe elect. keyer w/AC adapter, \$40. Call Tim, KI6GI, 469-2920.

Drake MN-2000 2KW PEP antenna tuner. Phone Allen, N7AMR, 434-5656.

Tri-Ex HM-354 3-sect., 54', crank-up, tilt-over, free-standing tower, new Alliance rotator, and 2-elm 3-band Quad. ICom IC-02AT 2M HT w/case, new unused, \$300. Call Jack, W6QP, 724-3341.

Palomar Engineers noise bridge, \$30; Cubex 2-elm., 3-band quad, \$120. Call Phil, WF6L, 757-7008.

WANTED

Owners Manual for Kenwood TS-511S. Call Frank, N6AT, 728-8003.

Two iron 20' tower sections to be used as cross-arms on the repeater tower. Contact Stan, W9FQN, 749-0276.

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

Phil, WF6L, says thanks to all who responded with donations of equipment to the Potter Jr. High ARC. Phil says Allen, N7AMR, and Gordon, N6GW, were among the latest donors.

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 a member of the ARRL you should be!

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.

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 an transient users.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, he does require money and also feels it only fitting that you provide him with your name and call sign if you want them on your very own badge - like the big guys have.

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.

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

UP-GRADES: Tim Hoy, KI6GI, to Extra; John Albrechtsen, KB6QAU, to Advanced; and Susan Rohrer, KB6NZS, to Technician. Congratulations!

GNU CLUB MEMBERS: Alan Orr, WZ6F, Fallbrook; Jerry Lounsbury (no call listed), Coronado; Zel & Ethel Herman, WB0RWW & N0BBK, Aguanga; Jerry Houser, WB6FMT, Vista; Bill Liscomb, N6LXD, Carlsbad; Al Doig, W6NBH, Escondido; Earl Schweizer, W6YJU, Cardiff; John Greer, N6MAE, Olivenhain; Olivia Franklin, WA6WTZ, Vista. Welcome. It's nice to have you with us.

RENUDE MEMBERS: Guy Rowlett, KB6AI; Allen Willett, N7AMR; Red Truax, W6BLK; John Henry Williams, W6BLL; Skip Skinner, K6BPT (3 years); Bob Coup, W6BXJ; Lou Broadbent, N6CKQ; Jim Harper, KH6CN; Bill Whipple, N6COU; Mike Hamman, WB6CSH; Joe Bastow, K6CV; George Bollman, KI6CX; Roy Maxson, W6DEY; Carl Langjahr, W6DNX; Betty Bruin, KB6DSC; Claude Kirkpatrick, W6DWE (2 years); Jack Swader, WA6DYV; Bill & Mary Bucner, WW6E & N6NOG; Bill Heersma, WA6EEZ (2 years); Ray Miller, N6EQB; Ed Castagna, WA6ESG; Art & Edith Nichols, W6EVL & K6AYJ; Warren Lincoln, W6EYP; Bill Bowen, N6FMK (3 years); Stan, Barbara, & Susan Rohrer, W9FQN, KA6FPS, & KB6NZS; Al Goepfinger, W6FXL; Bill Rutledge, N6FYJ; Tim Hoy, KI6GI; Russ Folsom, N6GJW; Al & Mickey Fahnestock, N6GNB & N6GWJ; Hal Esterly, K6GQS; Chuck Calvert, KA6GRG (2 years); Russ Ames, KG6GW; Gordon Wenz, N6GW; Joe LaPointe, WB6HMY; Dave Copley, WA6HQM; Dan Pugh, WA6HYB; Bill Watt, WA6HYC; Ed Holm, K6II; Art Smith, W6INI; Paul Stack, WA6IPF; Chuck Inskeep, W6IRM; Leo Wagner, WB6ISV; Jack Hanthorn, KI6JM; Floyd & Vanessa Harvey, W6JSP & WB6BHE; Dave Botieff, N6JTT; Harry Rouse, WB6JVS; Wally Cook, N6JZB/XE2GAU; Dennis Vernacchia, N6KI; Bob Heitger, WA6KZN; George Smith, KB6MI; Joey Contogenis, NU6L; Phil Leonelli, WF6L; Ted Nida, N6LUQ; Bill Smith, KB6MCU; Will Nielsen, W6MFT; Joe Pevney, WA6MOS; Jay Burritt, K6MRK; Paul Williamson, KB5MU; Benton Caldwell, N6MVZ; Dan Hammill, KB5MY; Bill Mandy, W6NFG (2 years); Steve McKinney, N6NHW; Dave McLaren, WB6NIJ; Jo & A.J. Ashley, KB6NMK & KB6NML; Walter Coates, KB6NUY; Pete Mayes, WB6OBH; Lee Evans, WB7OCR; John Tentor, W6OLQ; Larry Chandler, KB6OQE; Dave Lien, W6OVP; Don Tippet, KB6OXS; Joe Martina, KB6OXW; Fred Olsen, W6PNT; Paul Heisman, KA6PPD; John & Lou Albrechtsen, KB6QAU & AA6DI; Matt McCormick, KA6QFF; Bob Gregory, KB6QH; Jim Franklin, KF6QH; Mel Hanson, KD6QJ; Jack Forbes, W6QP; Lynn Stacy, KB6QZH; Jim Brown, WB6RWF (2 years); John & Alan Martin, W6SE & WA6SGK; Billy McCord, WB6TBQ; Lee Miller, W6TDC; Ron Earl, W6TXK; Hal Crispell, W6TZV (3 years); Larry & Vina de Montegre, WQ6V & N6PQQ; Bill Vlymen, W6VDA; Marcel Siemons, KB6VQ; Burr & BJ Chambless, WA6VYD & WB6VYC; Bob Felton, K7WLX; Joe Harry, WA6WSZ; Herb Patchell, Sr., KD6WX; Fred Frey, KD6WZ; Jerry Balke, W6YLA; Bob Bell, N6YX (3 years); Sam Burdette, W6YYV; Charlie Gibbs, WB6ZJZ; Neil Claasen, still awaiting first license. A total of 112 renewals this month.

GNU CALL SIGNS: Lou Albrechtsen, AA6DI; Chuck Dowling, KI6TG; Richard Earl, N6PPU.

Aug 87

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.

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 7/1/87: AA6DL, KI6VB, N6PVF, KB6TGU.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 5023, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our July tests we administered 16 test elements to 11 applicants. 14 elements were passed. 10 applicants passed at least one element.

Congratulations to PARC members John Albrechtsen, KB6QAU, who up-graded to Advanced; and Susan Rohrer, KB6NZS, who up-graded to Technician.

Our crew was: KG6VX reception; W6DEY CW exams; AD6Z, KS6S, and W6YYV, examiners; and W6TFB and WA6KZN on the computers; WQ6V helped with the paper work. N6INN, who was on an urgent trip to visit an ill sister, missed all of the fun.

We were seriously hampered in our testing efforts when we found two faulty floppy disks for Test Element 3A, with seven applicants scheduled to take that element and only two test booklets on hand (our VEC has stopped providing us with the printed booklets since the shift to the computer). A flying trip to make 6-7 copies of the test booklet was necessitated.

SANDARC-VEC is hoping to find someone to step in and do the Team Leader's job so that the north county sessions may continue after N6INN retires in mid-October. If you can volunteer, see N6INN who will be happy to put you in touch with the VEC. Or see W9FQN.

Felix, N6IE, and Ted, K6RF, have resigned from the VE program.

de Ralph, K6HAV

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.

DOWN THE TOOBE

Nash Williams, W6HCD, sends along word of a ham radio-oriented computer bulletin board in Los Angeles at 818 918-0319.

Nash also sent along a clipping from the Times-Advocate telling of one of the Flying Samaritans' good deeds - the replacement of damaged cornea for a small Mexican boy. Dr. Paul Bonds, N6PHR, Chief of Ophthalmology at Tri-City Medical Center, was one of the surgeons. And while the article didn't mention Nash, he was the coordinator in getting the young fellow up to Tri-City for the operation. Nash and Paul are both members of the Flying Samaritans, and as Nash explained in a program he presented to the Club, they make many trips a year to small Mexican towns, flying in light aircraft. Paul is also one of the pilots.

Hal Crispell, W6TZV, sends along a 3-year reenlistment accompanied by words of praise for the PARC. Even though distance prevents his attendance at club meetings, he likes and supports the Club for its: (1. Support of A.R.E.S. (2. Support of the NTS (3. Blending of tradition and progress, and (4. Continuity of outstanding leadership. "Long live PARC" says he. Thanks for sharing your thoughts, Hal.

Marcel Siemons, KB6VQ, sends along with his two-year renewal a note saying that he's an optimist for doing so since he's been in the hospital three times for surgery for terminal cancer. He claims that it's RF and not cancer that makes silent keys out of hams. Good luck, Marcel, we're all pulling for you.

If YOU didn't get your Scope this month, it's because you didn't reenlist! So if you're reading this you must have reenlisted (or K6RTD goofed). If you're not reading this, you'd better pay attention and get it taken care of. Both the June and July Scopes had reenlistment papers in them as well as a note from the Gi'nt Computer on your mailing label. If I tol' yez oncet, I tol' yez a hunnert times!

Lloyd, W6TFB, assisted by the Editor, put up antennae and installed a radio station for gnu club member Todd, N6PPN, so he can now get on and harass his former shipmates. For Joe, WB6HMY, those strong sigs you're hearing are from N6PPN, overlooking your mobile home park. Remember Joe, it all runs down hill - RF, we mean!

Gene Holzenberg, K7PQ, formerly WB6PFO when he lived in Carlsbad, sends along his Scope subscription renewal for three years. Gene, who had the tower we used to see from I-5 at Elm across the street from city hall now lives in beautiful downtown Oregon. Gene rotates daily so that he doesn't grow all the moss on the north side.

According to the Communications General COMMUNICATOR, the San Diego office of the FCC has jurisdiction in San Diego, Riverside, and Imperial Counties; and in La Paz and Yuma Counties in Arizona.

If you get a chance to talk to Steve McKinney, N6NHW, get him to tell you the story about a friend of his who put up a 60' tower in Rancho Santa Fe and THEN went to the county for a building permit to do so!! Quite a saga.

Nice to hear that Vendy Johnson, W6CWK, a former club member who now lives up in Sweet Home, OR, has again re-gnued his Scope Subscription.

Floyd Paul, W6THU, our only Glendale (CA) club member, has published the Radio Horn Speaker Encyclopedia, an 80-page paperback of primary interest to the collector of antique radios. It's available from Floyd at \$13.90.

The Tri County ARA is sponsoring a Hamfest on Saturday, August 15, at Palomares Park Rec. Hall, 491 E. Arrow Hwy, Pomona, just off of I-10 at the Jarey offramp. Info sheets available at the August club meeting.

"That's all", she wrote!

Aug 87

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 control stations and liaison stations are needed. Apply to Tom, N4KRA.

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, feedline or generator. Contact any club officer and he will gladly rid you of your surplus TS-940S or KWM-380.

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 sometimes net control station, sometimes general factotum.

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.

COMMERCIAL ATTEMPT AT 220 MHZ BAND GRAB

We hope that you've written to Senators Alan Cranston and Pete Wilson, and the Congressmen of your choice about the FCC staff's attempt to give the bottom 2/5ths of the 220 MHz band to commercial interests.

If you haven't, write immediately and tell them we need all five mega-Hertz of the band; and that we ARE using the band, more so now than ever with the opening of it to Novice licensees. Tell them that the FCC has incorrectly analyzed the land-mobile petitions, ignoring inefficient use of existing land-mobile allocations and the undocumented statements regarding the inadequacy of existing land-mobile allocations. Tell your reps you want them to pressure the FCC to back off from this ill-advised proposal.

Letters and cards will help them act. They DO respond to constituent pressure. Pete Wilson is directly involved with the FCC as a member of the Senate's FCC oversight committee: Senate Commerce, Science, and Transportation Committee, Subcommittee on Communications, SH-227, U.S. Capitol, Washington, D.C. 20510. Write to other Senators and Congressmen at: U.S. Congress, Washington, DC 20510. DON'T DELAY. Let these Senators and Congressmen Jim Bates, Duncan Hunter, Bill Lowery, and Ron Packard know we are directly interested. DO IT NOW. Enclose your QSL card.

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BYTES 'N PIECES

By Paul Williamson, KB5MU

HOW TO BE A LID ON PACKET RADIO

After years of practice, we all know how to be a lid on a repeater or on the low bands. With the advent of packet radio, and its new operating techniques and practices, many of us have been forced to improvise. So to help get you started, here are a few of the many tried-and-true techniques of packet lidsmanship.

Beacon. Don't bother to wait for something worth beaconing about, just type in whatever comes to mind. Beacon every minute or two, to insure that the channel is so clogged with your message that nobody will miss it. Make your beacon as long as possible. If at all possible, beacon through a long chain of digipeaters. Don't even think of turning off the beacon when you leave the shack. And when all else fails, include a bell in your beacons. A judicious combination of these beaconing techniques could win you a place in the Lids' Hall of Fame.

Work direct on a busy channel. Make sure you always converse at length on the long-haul frequencies of 145.01 and 145.05. This insures that any of the folks who need to use the digipeaters will know you are there. To be doubly sure, transmit long text files. And by all means, do it between 7 and 10 p.m. when the channels are busiest.

Read long files from distant mailboxes. Again, the key is to do it during "prime time". This is best if the same files are available on a nearby mailbox on a local frequency. Don't bother to capture the file in memory or on disk; just download it three or four times instead.

When you have exhausted these techniques, don't forget that many of the old, familiar techniques can be used on packet radio. Tell off-color jokes. Interrupt conversations. Overmodulate. Make endless test transmissions. The possibilities are endless.

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W6NWG
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SEPTEMBER, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

>>>>>>— President's Message —<<<<<<

###—NOVICE/TECH/GENERAL CLASSES—###

Please check with your family and friends to see if they are interested in joining our amateur radio theory classes which will start at the end of September or the first week in October. Demonstration boards are being constructed and we are looking for teachers of specific subjects: code, resistors, capacitors, transformers, power supplies, etc. Let us know about your abilities and be sure to get the names of potential students in to a club officer as soon as possible.

\$\$\$—FINANCE—\$\$\$

The club ended the financial year with \$12 which is a little deceptive. This does not include "paid ahead dues", special purpose funds and other budgeted money not yet spent. We have accomplished many things this year and your dues, gifts, and your sales efforts with the amateur radio pins are greatly appreciated. We only hope that the club can serve you and amateur radio in the San Diego area as well as you have served the club this past year.

###—FIELD DAYS PAST AND PRESENT—###

KG6VX—Bud Lincoln reports the following information on PARC Field Days past:

Year	/ CW	/CW%	/Phone/Tot	QSO/Pts.
1985	298	15.6	1613	1911 4418
1986	338	16.1	1759	2097 4870
1987	354	14.6	2069	2423 5554
total	990	—	5441	6431 —
%	15.4%	—	84.6%	100% —

Our QSO total is improving but it is debatable if it is due to skill or band conditions. The CW percent each year is almost constant. Our multiplier for CW is X2 so about 30% of our points come from CW.

1987	Phone	CW	%CW
80M	258	55	18
40M	422	201	32
15M	—	33	100
20M	1215	56	4
10M	68(Novice)	—	—
6 M	20	—	—
2 M	70	2	3
432	16	1	6

With band conditions being about the same for each sub band it is easy to see that the CW percents really need improving. Interference between 20 Phone and 20 CW for the first time in three years lost us many contacts on 20M CW but we hope to prevent this problem in the future by proper station separation and filters. We hope we will be able to get some of the club's CW operators who did not participate this past Field Day into the 20-15-10 operating position next year. We have the potential to double our points next year and CW is a big part of the answer. Wait till next year!

###—THANKS—###

Thanks to the Sunday morning Amateur Radio Emergency Service (ARES) net controls who have helped me for the past five months: W6JSP—Floyd, N6MMP—Mike, and W6HCD—Nash Williams.

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!

SEPTEMBER CLUB MEETING

THE PROGRAM FOR THE EVENING WILL BE: Dr. Mike Tentler speaking on An Update from Inside Russia. Mike's past talks have been fascinating and have developed a real insight into electronics, social life, and politics in this interesting country. Since most Russian hams are prohibited from speaking about "how it is", Mike's expose should be most exciting. So bring your questions to ask Mike, and leave your tape recorders at home.

Incidentally, the October program will be the annual auction. Start to clean out your shacks now and call KB6QC (931-8759) if you want a pick up on goodies you want to donate to the Club for auctioning. Things that sell well include accessories and most items under \$50. Higher priced items are slooow movers. We also will have a silent action for items brought in by club members. See Bob Brehm, KB6QC, at the picnic or September club meeting for details. Let's make this year's auction a great one by planning early and cleaning out the junk you don't need.

Anyone with items for show and tell, bring 'em along, but contact W9FQN prior to the meeting's start so that you may be included.

We hope more of the faithful will bring tasties to go with the coffee.

AUGUST CLUB MEETING

At the August club meeting our mystery speaker was Steve Miller of Radio West, who demonstrated some of the antennas and radios he sells, and told us about the SWL field. A most interesting talk. During show and tell, we heard from Todd, N6PPN, on his new toy, the Kenwood TM-221A, one of the best of the bunch in the 2M 45 watters; and from Phil, WF6L, on the subect of the Turbo-controlled FT-757GX. WF6L read the minutes of the previous meeting and WI6B the Treasurer's report and fiscal report for the year 86-87. They were approved. W9FQN reported that, thanks to paying off the mortgage on the Club's Palomar Mountain repeater site, we are in better shape than ever. The coffee by Bill, N6OPP, and tasties by Mary, N6NOG, and at least one other thoughtful person were sooo goood. Thanks folks. A grand time was had by all 68 members and 13 guests who attended.

ANNUAL PICNIC

A great picnic! The PARC received, via Fried Heyn, WA6WZO, a plaque commemorating 50 years of affiliation with the ARRL. Betty, KB6DSC, won the \$200 HRO gift certificate, Joe, W6HLB, the one for \$75, and Lloyd, W6TFB, the one for \$25. Ted, N6NAU, and A.J., KB6NML, won the Callbooks and Dennis, N6KI, the Handbook. The last three prizes were donated by HRO.

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.

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the August meeting, which was held 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 spend up to \$50 on soft drinks for the annual picnic. The Amateur Radio Class and the possibility of using space at Lincoln Middle School and the problems of suitable text books were discussed. The coffee and tasties were delicious. September meeting to be held at the WF6L QTH.

EXPIRED AND EXPIRING AMATEUR RADIO LICENSES

A readout from the Gi'nt Computer reveals that the following folks have licenses which have expired or are expiring on the dates indicated: 7/85 K6II, 11/85 W6VDA, 7/86 KA6PPD, 12/86 W4NYU & W6PNT, 1/87 W2FWV, W6JSP, NG6Z 2/87 KD6QJ, WB6WGT, K6CLU 3/87 N6TE 4/87 N6GWJ 5/87 WA6HYC, K6MRK 8/87 WB6BHE 9/87 W6BHF, KA6FPS, N7AS 1/88 WB6IQS, K7WLX 2/88 K6BPT, WD6BRX, WB6NIJ, N6YX 3/88 K6GQS, K6HE, WA6WSZ 4/88 KB6AI, W6BXJ 6/88 WD6AXN, KA6KZN, WA7BIA 7/88 KH6CN, W6EYP 8/88 WB6HMY, K6RF 9/88 K6HAV, N6INN, W6JJA, K6QQ, WB6VYC, WA6VYD, W6YYV 10/88 KA6GRG 11/88 N6AQV, WA6SVN, WB6TBQ 12/88 K6GAK 10/89 NU6L 11/89 KD6WZ. This readout is for all licenses expiring prior to 1990. Additions, deletions, and changes to the foregoing should be given to Skip, K6RTD, on the repeater or via the Club's P.O. box, since he now serves at the bidding of the Gi'nt Computer. Winterwagon indeed!!

FORESAIL

(The halyard, ya say!)

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

Kenwood TS-120S HF xcvr, \$275; Kenwood PS-50 pwr supply, \$85; Palomar Engineers tuneable xcvr preamp, \$45; ICom IC-451A 430-440 MHz all-mode 20W xcvr w/built-in pwr supply (operates from 117VAC or 12VDC), \$350. Call Bob, KB6QC, 931-8759.

ICom R-7000 VHF/UHF (25-2000 MHz) scanning receiver, mint condx, in orig. box, \$725; Drake WH-7 HF SWR/wattmeter. Drake MN-2000 2KW PEP antenna tuner. Call Allen, N7AMR, 434-5656.

TI-59 programmable calculator w/programs & PC-100 thermal printer. Never faced. Make offer. Call Dennis, N6KI, 271-6079.

Homebrew linear amp. 400W output. Heathkit SB-614 2" monitorscope. AEA CP-1 RTTY/CW/ASCII computer interface and Hamsoft cartridge for C-64. C-64 w/1541 disk drive w/amber monitor, 80-column card, 64 Modem, Centronics printer interface, RS-232 interface, 80-column word proc. & spreadsheet, compiler, Basic enhancement, graphics, astronomy, many ham programs, 50 diskettes, books, manuals and more, all for \$525. Cubex III-PT 2-element tri-band quad, CDE Ham III/CD44 rotor, and Dentron Super Tuner, \$175. Call Alan, WZ6F, 723-7514.

Vic 20, Commodore tape deck, C-64 complete w/pwr supply & QBF word processor software, no display. Call Alma, KE6HI, 753-2542.

Four new 872A hi-voltage rectifiers in original boxes. FREE. Call Nash, W6HCD, 728-3574.

Atlas 350XL w/pwr supply, mint condx, \$500. Call Clint, W6OFT, 729-0850.

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$250; Astron RS-6A pwr supply, \$40; Yaesu YM-39 condensor hand mike, \$15. Heathkit HN-31 1KW dummy load, \$15; Swan WM-2000A peak reading wattmeter, \$40. Call Ralph, K6HAV, 727-5866.

Heathkit SB-201 HF xcvr w/A.C. pwr supply, in xln't operating condx. RCA WR64A Color Bar/Dot/Crosshatch Gen. \$20. Call Stan, W9FQN, 749-0276.

Heath ultra-sonic intrusion alarm GD 1558 - for car - mint w/xtra horn & relay, \$20. Drake 2B rx, near mint, \$40. MFJ 200BX freq. standard and markers every 25, 50, & 100 kHz, mint condx, \$15. Heath HD-15 phone patch, assembled but never used, \$25. Call Dan, WA6HYB, 433-4445.

Tek 465 o'scope, 100 MHz dual-trace, \$800. Call Lou, N6CKQ, 755-9179.

10-40M flagpole antenna (concealed trap vertical in a flagpole) w/40' of coax. Call Floyd, W6JSP, 741-8391.

MFJ 407 deluxe elect. keyer w/AC adapter, \$40. Call Tim, KI6GI, 469-2920.

Wilson TTA45 2-sect. crankup mast w/ant. rotator and 2-elm, 3-band quad. Call Tray, N6AYQ, 728-2789.

Tri-Ex HM-354 3-sect., 54', crank-up, tilt-over, free-standing tower, new Alliance rotator, and 2-elm 3-band Quad. ICom IC-02AT 2M HT w/case, new, unused, \$300. Call Jack, W6QP, 724-3341.

Kenwood TS-700A all-mode 2M 25W xcvr, \$210; Kenwood PC-1 phone patch, \$40; ICom IC-2AT, \$160; Heath SB-200 amp., \$285; Swan WM-1500 wattmeter, \$35; Ney Deluxe Straight Key, \$18. Call Duane, AA6EE, 789-3674 eves.

WANTED

Owners Manual for Kenwood TS-511S. Call Frank, N6AT, 728-8003.

NO Two iron 20' tower sections to be used as cross-arms on the repeater tower. Contact Stan, W9FQN, 749-0276.

Icom IC-22S in working condx. 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 have you got 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.

CLUB'S AFFILIATION WITH THE ARRL NOW SPANS 50 YEARS

The PARC has been affiliated with the ARRL for 50 years according to a letter from Lee Hayford, AH2W, Manager of the ARRL's Club Services Department. At the Club's annual picnic, Fried Heyn, WA6WZO, ARRL SW Div. Director presented to the Club a very handsome commemorative plaque.

FROM THE ARRL LETTER

The ARRL replied to PRB-3, the FCC's notice which inquired if the private sector could establish a program to grant requests for specific amateur call signs. In its reply the League emphasizes that the Commission should administer any call sign program. The ARRL strongly believes that the assignment of call signs is a governmental function, which should not be relinquished, or contracted away by the FCC. If, however, this is not to be, the ARRL is willing to undertake the administration of the task under certain conditions, which include: A single entity must administer the program; the cost of the call signs would be \$25 initially with a renewal charge of \$10. No one to have a right to a particular call, even if previously held. The FCC has informally indicated that this is a high

priority item and some sort of action will probably take place in the Spring of 1988.

The Palomar Amateur Radio Club is one of eleven to receive an award for 50 years of affiliation with the ARRL.

450 MHZ BAND IS NOW "CLOSED" IN SOUTHERN CALIFORNIA

So says the Southern California Repeater and Remote Base Association (SCRRBA), the frequency coordinating organization for the 29, 52, 450, 902, 1240 MHz and microwave amateur radio bands, in its August newsletter. The gist of the article is that all channel pairs on the 70CM band are now assigned and in use. Further applications for 450 MHz repeater, control, and linking frequencies on this band must wait for someone else to abandon a channel or channel pair!

Should the FCC now go ahead, as proposed, and take away two megaHertz of the 220 MHz band, no room is left on 70CM for the control and link functions which will be displaced - and of course, there's no room for 'em on 220!!! I sure hope that you too have written to your congressman and senators about this.

The PARC, WA6QQQ, K6HAV, and N6INN all received unsatisfactory responses from Congressman Ron Packard, who merely parroted the FCC's argument on why the two megs should go to the commercial interests! We have responded to his letter and asked for his support in the fight against the commercial grab. We'll let you know if we hear further from Mr. Packard, and we told him we'd tell you. The response from Sen. Alan Cranston didn't promise support, but did indicate he would look into it. Nothing so far from Sen. Pete Wilson. Stay tuned, BUT W R I T E TO THEM NOW!!

REPEATER

Ted, N6CKH, has opened up the subject of an autopatch on W6NWG/R for emergency use. Sure seems to be time for the Club to be considering this sort of thing.

I don't know about you, but I resent the Habitual Free Loaders (HFLs) on the repeater which you and I make possible. I resent their continued use of OUR repeaters after they've agreed they'd like a membership application but have studiously avoided doing anything about it long after receiving it. I tend to avoid communicating further with them and almost never answer their calls for someone to make a telephone call for them. I guess I'm a hardhead, but I've always believed in paying my way - not freeloading on the other guy. HFLs sometimes remind you that the frequencies are free. The answer to that is: "So is water, but you still have to pay for the pipes to get it to you." You and I are paying the HFLs' water bill!

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.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, 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.

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.

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

UP-GRADES: Rick Hier, N6MTL, to Extra Class; Eleanore Call, WB6OJL, and Lynne Farley, KB6PZE, to Technician. Congratulations!

GNU CLUB MEMBERS: Barry Merritt, N7EQU; Bob Boles, Jr., N3BLL; George Swenson, KB6AQS; Joe Hypnarowski, WA6VNR, San Diego; John Neuman, WB6RTY, San Marcos; Pat Stedman, KB6OXS, Cardiff; Caroline Lincoln, KB6???, Leucadia; Charles Paige, KB6QWH, Oceanside. Welcome, we're glad you're with us.

RENUDE MEMBERS: Ken Carlson, N9AKB; Earl Leak, K6CLU; Vern & Mary Paschke, NOCPS & N0EVV; Roy Maxson, W6DEY; Jack Honts, WD0DLW; Jay Carr, W6FAY; Don Johnson, WD6FWE; Mac McBride, WB6GXR; Ed & Judy Ross, N6GZI & KB6DEM; Alma Bourhenne, KE6HI; Joe Craig, W6HLB; Ted & Cynthia Mitchell, N6IES & KB6HGR; Rick & Becky Matros, N6KEU & N6KAL; Betsy Ross, KB6MBL; Rick Hier, N6MTL; Charles Littlefield, KI6MV; Ralph Neiger, N6NEH; Bob Rivera, WA6NNC; Gene Horrall, K6PP; Bob Brehm, KB6QC; Victoria Vickery, KB6QJO; Duane Stedman, WB6R; Ted Cullian, K6RF; Bob & Jane Rice, KS6S & AD6Z; Harry Williams, W6TCI; Chuck Dowling, KI6TG; Bill Taylor, K6TQ; Bud Lincoln, KG6VX; Bill & Sandy Williams, WA0ABX & WB0WGU; Henry Kirschner, WB0YCQ; Bill Denton, NG6Z; Del Partridge, WV6Z. Welcome back. 37 renewals.

GNU CALL SIGNS: Jeremy Simmons, N6QBI, vice KB6SFL; Susan Rohrer, N6QDB vice KB6NZS; and John Albrechtsen, KI6XJ vice KB6QAU.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our August tests we administered 20 test elements to 15 applicants. Seven applicants passed a total of seven elements.

Congratulations to PARC members Eleanore Call, WB6OJL, and to Lynne Farley, KB6PZE, who up-graded to Technician.

Our crew was: KG6VX reception; W6DEY and WA6HYB CW exams; N6NNI, AA6DI, and W6YYV, examiners; and W6TFB, KB5MU, and WA6KZN on the computers.

SANDARC-VEC is hoping to find someone to step in and do the Team Leader's job so that the north county sessions may continue after N6INN retires in mid-October. If you can volunteer, see me and I will be happy to put you in touch with the VEC. Or see W9FQN.

de Pat, N6INN

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. 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.

DOWN THE TOOBE

Former club member Doc Burton, KA6DWU, took a trip to Samoa and liked it so well that he and the XYL have decided to move there, according to an article in one of the local papers.

PARC-member Dr. Paul Bonds, N6PHR, ophthalmologist and eye surgeon, will talk on current techniques in ophthalmology including cataract and glaucoma treatment at the Tri-City Medical Center Education Series on September 29th, according to the August issue of the TCMC Health Perspectives.

"That's all", she wrote!

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 sometimes net control station, sometimes general factotum.

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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.

QSL CARD FROM ORIGINAL HOLDER OF W6NWX RETURNS TO ROOST

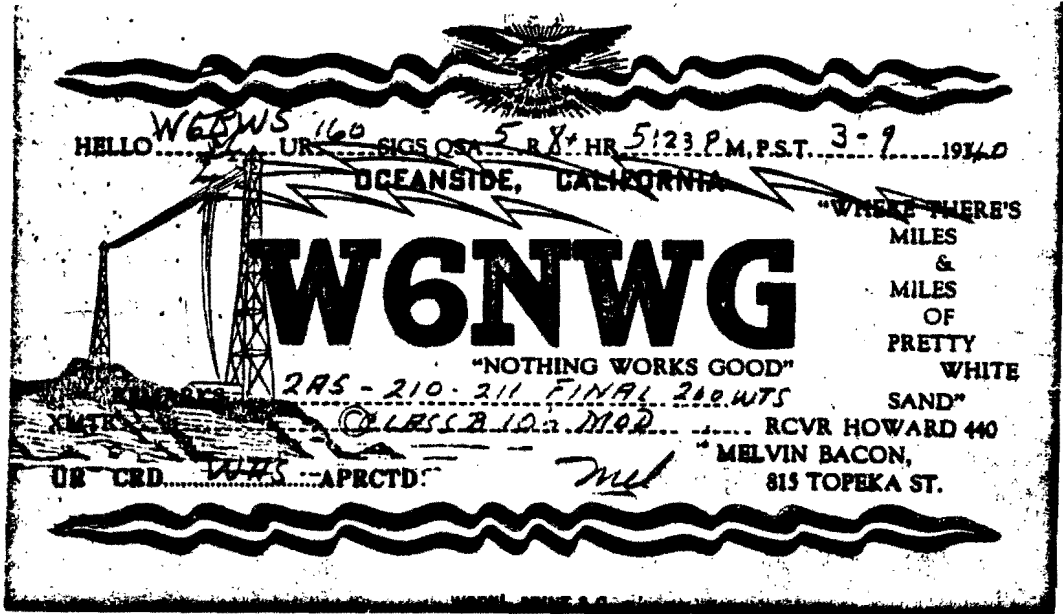
The Club recently received a QSL card sent on 4/2/40 by the original holder of the Club's call, W6NWX, to confirm a contact made in 1940. Mel Bacon, the original W6NWX, was a charter PARC member. The note from the person sending the card to the Club and the QSL are reproduced below.

I recently obtained a box with some QST's from the 1940-1950 era and at the bottom of the box I found the enclosed QSL card. You will notice that they date back to the 1940's and I realize that in some cases they are not your personal card but rather the same call letters listed for you in the 1987 CALLBOOK. I thought you may enjoy having this memento to put with your files.

In the case of those of you who may be seeing your QSL card after a period of 47 years, I only hope that I may have brightened your day and re-kindled fond memories. I would like to say thank you for keeping Amateur radio going during those years so I may enjoy this fascinating hobby.

73 to you all and maybe we will get together someday on the air....

Tom
TOM
WD6EAW





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BYTES 'N PIECES

By Paul Williamson, KB5MU

As you read this, you may still have time to make plans to attend the Sixth ARRL Amateur Radio Networking Conference. The Conference will be held at the TRW Space and Technology facility, on Compton Boulevard between Freeman Avenue and Aviation Boulevard in Redondo Beach, on Saturday, August 29 from 9:00 AM to 6:00 PM. Look for the TRW cafeteria just south of the white high-rise TRW administration building, or ask for talk-in on W6TRW/R, 145.32 MHz (-). The site is about 1/4 mile from the infamous TRW swap meet (which is held the same morning at 7:00 AM).

The past five Conferences have chronicled the progress of packet radio from the very beginning of U.S. experimentation through the current attempts to add higher-level networking functions to the packet radio networks. This year's Conference will include announcements of new hardware for network control and high-speed data transmission, many papers on various aspects of computer networking, and lots more. There will be a separate room just for live demonstrations. Most of the content will be fairly technical, but there will be a beginners' session at 9:00 AM. The technical papers will begin at 10:00 AM, and should offer the latest and greatest in amateur packet radio technology.

For those unable to attend the conference, a short summary should be given on the Packet Voice Net. The Net is held every Tuesday (except the second Tuesday of each month) at 9:00 PM on W6NWG/R, 146.73 (-). Also, the San Diego Packet Radio Association (SANDPAC) plans to have video tapes of the best presentations at future meetings.

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Scope

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OCTOBER, 1987

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, WI6B, Rancho Santa Fe 756-3133

>>>>>>— President's Message —<<<<<<

###—NOVICE/TECH/GENERAL CLASSES—###

Well, it looks as if we are getting started at last. Classes will begin October 13th, Tuesday evening at 7:30 in a place to be announced at our October club meeting. Make sure that you contact W9FQN to pre-register for the classes. At present our plans are to have 25 minutes of code and 45 minutes of theory. Individual work on the test questions will be during the last 20 minutes. This first class will be geared for NOVICES and TECHNICIANS although those going for a GENERAL class license would profit from the theory and code, if you feel a little shaky.

###—CONTESTS—###

Quite a few amateurs who live in antenna restricted areas have asked me if it would be possible to operate some of the contests from an existing station not under antenna restrictions and do it under the club call of W6NWX. Does anyone want to volunteer a station for some contest work?

###—POTPOURRI—###

The generator shed is at my QTH now along with 40' of tower sections. These need to be scraped and painted this month and we are looking for help. A club like ours exists on donated labor so please help when you can do so.

###—THANKS—###

THANKS to W6OFT-Clint Call, our resident Atlas expert, who has been a great help in seeing that donated equipment is up

and running properly. Clint also donated two 20' sections of tower (needs paint) for us to use as cross arms for mounting our growing collection of antennas at the repeater site.

THANKS to HIGHWAY ELECTRONICS in Oceanside for donating a beautiful metal shed (needs paint) to be used to house our generator at the repeater site. The generator will be operated by remote control during emergencies.

THANKS to all of the wonderful people who helped make the club picnic a success. WI6B-Ron Wilhelmy, picked up the gift certificates and the items donated by HAM RADIO OUTLET, N4KRA-Tom Merz' wife helped KA6FPS-Barbara Rohrer with the food line, N6QDB-Susan Rohrer filled in for WF6L and handed out tickets.

And THANKS to everyone who took part in the HIDDEN TRANSMITTER hunt which took place in the park. Their order of finish was (1) N6CKH-Ted Demos, (2) W6SAX-Marsh Parker, (3) WQ6V-Larry DeMontegre, (4) WD6FWE-Don Johnson, (5) KB6MCU-Bill Smith Jr. (6) N6QDB-Susan Rohrer, (7) N6QBI-Jeremy Simmons, and I think several others of the group got lost but made it back in time for the food. The hidden transmitter was in a paper sack sitting on one of the picnic tables with a metal fence to one side creating all sorts of strange reflections. Wait till next year!

73 de Stan, W 9 F Q N

Oct 87

CLUB MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the GYMNASIUM 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 so! Tol' ya so!

AUCTION!! OCTOBER FUND RAISING & AUCTION MEETING AUCTION!!

The October meeting will be the annual equipment auction and flea market extravaganza - and we have a good one planned for this year! This is the time for you to sell your old electronic treasures and related items to finance those new goodies you want, and at the same time, help raise money for the Club. Bring your gear (ham, computer, magazines, accessories, etc.) so our auctioneer can get the best price for you and the Club. If you would like to donate items to the Club, call any officer or Bob, KB6QC, at 931-8759 for pickup.

Professional Auctioneer

Our auctioneer is one of the best - Steve, WA6DCU - well known for his talents at the Escondido Amateur Radio Society's auctions. If anyone can get a good price for your treasures, he can!

Good Food and Door Prizes

We are also asking each XYL and YL member to bring a special home-baked contribution for our bake sale at the auctions (proceeds to the Club). Suggestions include brownies, muffins, peanut brittle (to auction), etc. Coffee will be provided by the Club. All attendees will be eligible for special door prizes to be awarded during the auction.

Tips for Those Attending

BUYERS: Bring lots of small change - not large bills and make sure to check in with the Buyer Chairman and get your bidder number and door prize ticket. All bidding will be by bidder number only.

SELLERS: Equipment checkin with the Seller Chairman will begin at 6 p.m. and the auction will start at 7:30. Large items with an asking price over \$50 can be placed on the flea market tables (first-come, first-served) or reserved for the auction. Experience shows that items under \$50 move fastest and have the best chance of being sold. All items to be auctioned must have a description ticket. 10% of the proceeds go to the Club.

EVERYBODY: Come early - we expect a good crowd since all San Diego Clubs have been advised of the auction, and flyers have been handed out at flea markets and ham radio stores. Support your club and be there!

NOTICE: THIS, AND FUTURE MEETINGS, WILL BE HELD IN THE GYMNASIUM INSTEAD OF THE CAFETERIA at Lincoln Middle School. From the main parking lot, skirt the swimming pool on the right/west side (away from Escondido Ave.), and enter the gym at the near left corner. Bear left into the room ahead.

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.

SEPTEMBER CLUB MEETING

At the September club meeting we were told we were not scheduled for the cafeteria. It was the evening of a very warm day, there were outside lights and picnic tables with benches, so Bill, N6OPP, resourcefully got us set up outside. It turned out better than if we'd been indoors with no air conditioning - a delightful evening although Bob, KB6QC, who conducted the meeting in the absence of El Presidente, was somewhat "in the dark" due to the placement of the lights. Our speaker was Dr. Mike Tentler who told us about recent changes inside the USSR and his feelings about "Glasnost" and other developments there. During show and tell, Ron, WI6B, showed us the rapid heating of a Weller butane-operated soldering iron, which he said was a little expensive (in the \$30-\$40 range), but is exactly the thing you need for that soldering job at the top of the pole or tower. WF6L read the minutes of the previous meeting and WI6B the Treasurer's report. They were approved. N6INN introduced the PARC's new VE Team Leader, Lu Albrechtsen, AA6DI, who will take over from Pat after the October test session.

The coffee by Bill, N6OPP, and tasties by Mac, WB6GXR, and at least one other thoughtful person were sooo goood. Thanks folks. A grand time was had by all 70+ members and guests who attended.

 * PHIL SCHUTZE, K6ROR, SILENT KEY *
 * Phil Schutze, K6ROR, became a silent key on the evening of September *
 * after a brief stay in the hospital. He had suffered a series of heart *
 * attacks. Phil was a long-time PARC member and staunch supporter. He *
 * was a parapalegic as a result of a fall from a tower. In years past he *
 * had been very active in Navy-Marine Corps MARS, handling thousands of *
 * pieces of message traffic to and from Viet Nam. Phil was Editor of the *
 * Scope in 1973-74 and maintained the Club's roster and Scope mailing *
 * list in his computer until he sensed his failing health late last year. *
 * He was the Club's second Repeater Committee Chairman. He will be missed *
 * by all of us who knew him and of his generosity to the Club. *
 * *****

EXECUTIVE COMMITTEE MEETING

The Executive Committee, consisting of the Club's officers and committee chairmen, meets on the second Thursday of the month at the home of various of its members. Without fail, the meetings usually start at 7:30 of the p.m. Club members are welcome to attend and observe.

At the August meeting, which was held at the home of WF6L, the Committee heard and approved the Treasurer's Report. WB6IQS reported the probable demise of the batteries used for repeater control and the packet digipeater for emergency power. The Committee authorized him to spend up to \$100 for replacement batteries.

\$50 was also authorized for material required to bury the coaxial lines from the tower to the repeater building and for approved grounding at the building. W9FQN reported the probable availability of a used Honda 4KW generator for about \$300. The Committee voted to buy it, and authorized W9FQN to do so. \$50 was authorized by the Committee for painting and installing the generator shed at the repeater site, and for construction of a base for the generator, which is to be installed at the site. W9FQN reported that Buck, WW6E, had picked up the generator cover donated by Highway Company and delivered it. \$30 was authorized for repairing and painting the two 20-foot tower sections donated by Clint, W6OFT. These are to be used as crossarms on the repeater tower for additional antennae.

Ted, N6CKH, addressed the Committee, asking that the Club consider an autopatch or simplex patch for reporting emergencies directly to the appropriate authorities. The Committee agreed to a trial period using a loaned simplex patch. Members to be informed when tests start.

W9FQN reported that TASMA had sent the Club a letter stating that K0JPK had failed to respond to the TASMA letter requiring modification of the K0JPK/R antenna to reduce that repeater's coverage of San Diego County. It suggested that the PARC take such further steps as it wishes to eliminate the intrusion of K0JPK/R's signal into the W6NWG/R coverage area. TASMA will support the PARC to the extent it can. The Committee directed W9FQN to send to the FCC, Long Beach, a letter setting forth the details of the long-lasting K0JPK/R interference into our coverage area; and asking that K0JPK/R be ordered to cease operation on 146.730 MHz in view of K0JPK's continued failure to cooperate in solving this problem and his total disregard of TASMA's attempts to coordinate a solution to the problem.

The coffee and tasties were delicious. The September meeting is to be held at the WF6L QTH.

EXPIRED AND EXPIRING AMATEUR RADIO LICENSES

The Gin't Computer does NOT have info of any expiring licenses in 1987 after those listed for 9/87 in last month's issue.

If you want a reminder of the expiration of your ham radio license, get the info to Skip, K6RTD, on 146.730 MHz or to the Club's P.O. box, since Skip now does the the Gi'nt Computer's bidding. Warm yer Winterwagon!

FORESAIL

(I like the cut of your jib, son. It's no marconi - see the onions)

From the estate of K6ROR: Latest Yaesus: FT-2700 2M/450MHz xcvr w/en-de-coder, \$400; FT-270H 45W miniature 2M FM xcvr w/FTS-8 en/de-coder, \$300. ICom IC-37A 25W 220MHz FM xcvr, \$325. Astron RPS-12A, \$50; Kenwood KPS-7A 6amp pwr supply, \$50; Kenwood TR-2500 2M & TR-3500 450MHz HTs with leather cases, \$250 & \$225 each. Kenwood ST-2 base stand/btry charger for TR-2500/3500 series HTs, \$50. KLM 2M 11-elm beam, \$50; KLM 14-elm 450MHz beam, \$40; stainless steel J-Poles for 2M & 220MHz, \$25 each. Call Ralph, K6HAV, 727-5866.

Icom IC-451A 15W 430-440MHz xcvr w/AC/DC supply, TT mic, \$350; ICom IC-251A 144-148 MHz 10W xcvr w/AC supply TT mic, \$300; 40' of Rohn 25G tower including top sect. and base plate, CDE rotor, \$100. Call Bob, KB6QC, 931-8759 (leave msg).

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

Commodore C-64 computer w/1541 disk drive, 801 printer and monitor, \$350. AEA PK-64 W/HF-64 recently updated by AEA, never raced, \$300. Swan 700CX w/pwr supply, mint condx, recently rejuvenated by W6FT, \$500. Two prop pitch motor antenna rotators, \$75 ea; 3-elm. 10-15M beam, \$75. Call Buck, WW6E, 941-0867.

TI-59 programmable calculator w/programs & PC-100 thermal printer. Make offer. 2M Isopole directional (omni, that is) antenna. Call Dennis, N6KI, 271-6079.

Vic 20, Commodore tape deck, C-64 complete w/pwr supply & QBF word processor software, no display. Call Alma, KE6HI, 753-2542.

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

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$225; Astron RS-6A pwr supply, \$40; Yaesu YM-39 condenser hand mike, \$15. Call Ralph, K6HAV, 727-5866.

Homebrew linear amp. 400W output. Heathkit SB-614 2" monitorscope. AEA CP-1 RTTY/CW/ASCII computer interface and Hamsoft cartridge for C-64. C-64 w/1541 disk drive w/amber monitor, 80-column card, 64 Modem, Centronics printer interface, RS-232 interface, 80-column word proc. & spreadsheet, compiler, Basic enhancement, graphics, astronomy, many ham programs, 50 diskettes, books, manuals and more, all for \$525. Cubex III-PT 2-element tri-band quad, CDE Ham III/CD44 rotor, and Dentron Super Tuner, \$175. Call Alan, WZ6F, 723-7514.

Four new 872A hi-voltage rectifiers in original boxes. FREE. Call Nash, W6HCD, 728-3574.

Atlas 350XL w/pwr supply, mint condx, \$500. Call Clint, W6OFT, 729-0850.

Heathkit SB-201 HF xcvr w/A.C. pwr supply, in xlnr operating condx. RCA WR64A Color Bar/Dot/Crosshatch Gen. \$20. Call Stan, W9FQN, 749-0276.

Tek 465 o'scope, 100 MHz dual-trace, \$800. Call Lou, N6CKQ, 755-9179.

10-40M flagpole antenna (concealed trap vertical in a flagpole) w/40' of coax. Call Floyd, W6JSP, 741-8391.

MFJ 407 deluxe elect. keyer w/AC adapter, \$40. Call Tim, KI6GI, 469-2920.

Tri-Ex HM-354 3-sect., 54', crank-up, tilt-over, free-standing tower, new Alliance rotator, and 2-elm 3-band Quad. ICom IC-02AT 2M HT w/case, new, unused, \$300. Call Jack, W6QP, 724-3341.

Kenwood TS-180S xcvr w/DFC, \$350; Heath SB-200 1.2 KW amp., \$250; Yaesu FL-2100B amp., \$350; Kenwood TR-7950 2M 45W xcvr, \$250; Kenwood R-1000 rx, \$275. Call Duane, AA6EE, 789-3674 eves.

Collins 32S-1 and 75S-1 in good condx w/spare tubes, \$400. Galaxy linear amp. w/spare tubes, works well, \$200. Cushcraft A-3 beam, \$50; TV ant, \$20. FREE: 1959-86 QSTs, Hustler 4-band vertical, ERC audio active filter. Call Ed, WA6TBR, 765-0241.

WANTED

Will pay for a copy of the Heathkit manual for impedance bridge IB-2A. Also, would like to purchase a DM-81 grid dip oscillator. Call Mark, N6NNI, 748-8391 evenings.

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

AEA Memory Keyer; manual for IC-22A xcvr. Call Duane, AA6EE, 789-3674.

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.

* HAL JANSSEN, W6DOL, SILENT KEY *

* We are sad to report the passing of Hal Janssen, W6DOL, in June. N6KI *
 * received the belated word from Mrs. Janssen and was kind enough to pass *
 * it along. Hal had not been in good health in recent years. Those who *
 * knew Hal will be saddened to learn of his passing. He will be missed. *

Oct 87

FROM THE ARRL LETTER

The Society of Broadcast Engineers (SBE) has filed reply comments sharply critical of Docket 87-14 (would reallocate 220-222 MHz from Amateur Service to Land Mobile Service), saying it is unnecessary and would result in underutilization of the band.

Eleven individuals, groups and companies, in addition to the ARRL, have petitioned the FCC to be a Special Call Sign Coordinator. Many of the eleven are for-profit organizations, including Forest Industries Telecommunications (FIT), whose aims are in direct conflict with those of amateur radio. (FIT has filed a comment in SUPPORT of Docket 87-14, which would take away from the Amateur Service two megaHertz of the 220 MHz band, and in fact, recommended that it be three megaHertz instead of two!!)

RON PACKARD SUPPORTS HAM POSITION AGAINST FCC'S 220 MHZ GIVEAWAY PLAN

We are very happy to report that Congressman Packard has lent his support to the amateur fraternity against FCC General Docket 87-14, which would take the bottom two megaHertz of the 220MHz amateur band and give it to the Mobile Service. Congressman Packard has voiced his disapproval of this plan by letter to the FCC. His support is much appreciated by the members of the Amateur Service. He received correspondence from many of us individually; and from the PARC and the 220 Club of San Diego. It doesn't hurt to speak to your elected representatives. If you haven't written to Mr. Packard or your congressman, and to Senators Pete Wilson and Alan Cranston, it's still not too late to do so. We also received a call from someone in Congressman Packard's Washington office. We are very impressed!

REPEATER

John, WB6IQS, went to the mountain top and found all emergency power batteries in need of water. The batteries for the digipeater and for the repeater control circuitry are in need of replacement.

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.

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.

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

UP-GRADES: George Todd, N6PPN, to Advanced Class. Congratulations!

GNU CLUB MEMBERS: Bruce Stewart, Vista; David Mahlum, N6QDR, Fallbrook. Bill Leach, KB7LX, San Diego; Joe Martin, KB6QWI, Oceanside; Bob Abrams, KI6MP, San Diego; Ed Lutz, K4ACM, Ramona; Dave Zeiher, N6QCQ, San Diego. Welcome, we're glad you're with us.

RENUDE MEMBERS: Stan Shaut, W2AUO; Brian Comer, KF6C; Bob Dean, WD6DNX; Bill Salter, K6GJD; Kerry Banke, N6IZW; Maury Horrell, KB6QF; Ray Spangler, WA6THC. Eight renewals this month.

GNU CALL SIGNS: Charles Paige, N6QDK vice KB6QWH; Eleanore Call, N6QJE vice WB6OJL.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92041 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINERS PROGRAM

At our September tests we administered 23 test elements to 9 applicants. 8 applicants passed 11 test elements

Congratulations to PARC member George Todd, N6PPN, who upgraded to Advanced. Todd also merits condolences since he missed ONE of the 50 questions on the examination.

Our crew was: KG6VX reception; W6DEY and WA6HYB CW exams; N6INN, WQ6V, and W6YYV, examiners; and W6TFB and K6HAV on the computers. Thanks to Lloyd for volunteering to bring his computer in out of turn.

The Club has recommended a new VE Team Leader to SANDARC-VEC. Lu Albrechtsen, AA6DI, has been recommended and accepted by the VEC. She started getting her feet wet with this test session. We are very happy that the PARC VE Team's north county sessions will continue after my retirement as team leader after the October test session. Thanks to Lu for answering the call. I was afraid the Club wasn't going to continue to sponsor a team for lack of a volunteer for the Team Leader's job.

de Pat, N6INN

CODE PRACTICE ON W1AW

If you are interested in increasing your code speed, why not take advantage of the code practice sessions transmitted daily by W1AW, the ARRL station in Newington, CT? Best propagation to SoCal is via the 14.070 MHz frequency. Best local times for slow CW (5-15 wpm) is 1:00 p.m. on Tues, Thurs, Sat, & Sun; and 4:00 p.m. on M, W, & F. Best local times for higher speeds (35-10 wpm) are 1:00 p.m. on M, W, & F; and 4:00 p.m. on T, T, S, & S. Code practice sessions are also transmitted simultaneously on other bands. See QST for other times/frequencies. Thanks, N6AT for the above.

My personal experience with W1AW led me to copy it twice a day - once in the morning at 6:00 and then again at one of the afternoon sessions. A month of this, supplemented by code group tapes and a shot at QSO tapes just before the exam, got me by the 20 wpm hurdle. It can do the same for you. YOU need the receiver and the resolve to devote the one hour or so per day required to do the job. Get with it! Good luck!

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 FCC IN GETTYSBURG SAYS:

Licenses issued as of 9/1/87: AA6EB, KI6XO, N6QEO, KB6TSA.

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. Unfortunately, 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.

DOWN THE TOOBE

Thanks to Jack Hanthorn, KI6JM, who managed to come up with several copies of the SCOPE, dating back to circa early to mid '60s. These will be invaluable in trying to reconstruct the history of the PARC, as the copies currently on hand only go back to the early '70s. We are trying to put summaries of each year's issues of SCOPE into the computer so that we can print out a thumbnail history. These could become a series in the newsletter, or be printed in yearly volumes for those who are interested. Thanks to Jack for thinking about the Club when he found these old issues.

Interesting item from the L.A. Times of 9-19-87 sez New Jersey Bell is being permitted to test a service that will display on a small device attached to the phone the telephone numbers of incoming callers. This service will be available to 194,000 customers at a charge of \$6.50/month. Now you'll have the phone number of that obscene phone caller right there in front of you so you can do unto him..... But what if he has one too!!

On the morning of September 24th, John Campbell, WB6HSZ, in Vista, heard his dog barking and observed a man leave his garage after attempting to break into it. John got into his van and followed the suspect while calling for assistance on W6NWG/R. His call was quickly answered by N6QDK, in Oceanside, who yielded to a Vista station and the sheriff was phoned (911 was used because it appeared to be an attempted burglary IN PROGRESS). The sheriff dispatched four units to the scene. They contacted John (who had remained where he could observe), and quickly apprehended an apparent ring of four suspects and hauled them off to the Vista jail. Ham radio comes through again!

We're mailing 290 copies of Scope this month. Twelve copies go to other clubs, the ARRL, FCC, and advertisers. Our membership is about 290, but many are family members who do not get a separate copy of Scope, so the number we mail is about the same as our membership.

Our thanks to those faithful club members who help us get this thing on the street. K6RTD with the mailing list, club rosters, and mailing labels;

KB5MU with his Bytes 'n Pieces; W9FQN, N6PPN, W6TFB, K6RTD, WA6KZN, and WI6B who all do the job of getting the newsletters folded, spindled and mutilated and ready for the Post office; and WI6B who picks up and pays for the printing. Couldn't do it without yez.

"That's all", she wrote!

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 sometimes net control station, sometimes general factotum.

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.

GOT A FRIEND YOU'D LIKE TO HAVE JOIN THE PARC? GIVE THIS TO HIM/HER

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 _____

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ARRL MEMBER ? YES _____ NO _____ Remarks, appropriate and otherwise _____

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

-----Cut on leopard and mail-----

+++++
PAY ATTENTION! OUR CLUB MEETINGS WILL BE IN THE GYMNASIUM INSTEAD OF THE CAFETERIA AT LINCOLN MIDDLE SCHOOL STARTING WITH THE OCTOBER MEETING. SEE THE ITEM ON PAGE 2 OF THIS ISSUE CONCERNING THE MEETING/AUCTION, HOW TO GET THERE, AND WHAT TO DO AFTER YOU GET THERE.
+++++

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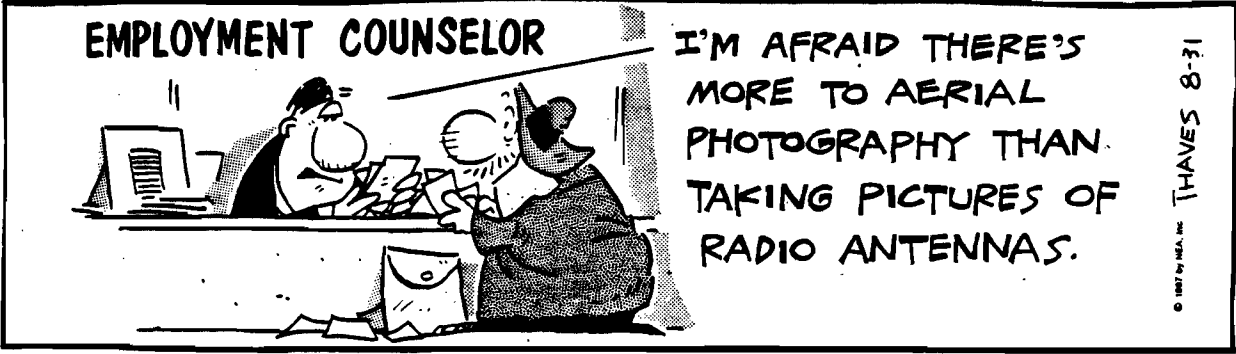
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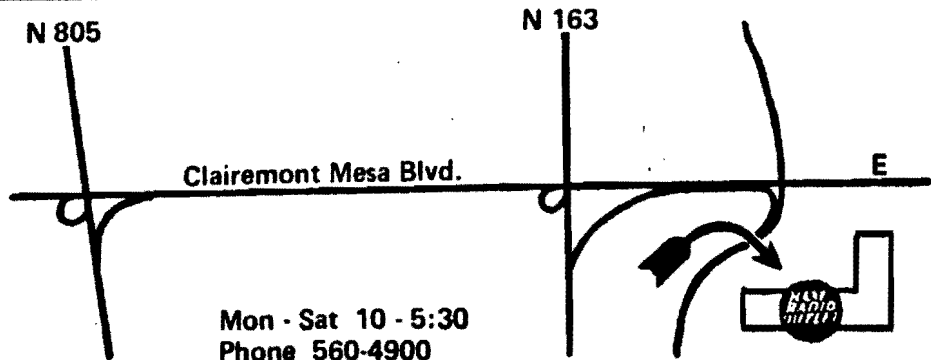
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BYTES 'N PIECES

By Paul Williamson, KB5MU

The ARRL Computer Networking Conference was held in Redondo Beach on August 29, 1987. As expected, there was a wide variety of excellent technical papers. The Protocol Wars, which have been on the back burner while everybody struggled to actually implement real networking, flamed anew. The advocates of the ARPA protocol suite, usually referred to as TCP/IP, were present in force and delivered a total of seven papers. The COSI (connection-oriented open system interconnection) fans delivered their message as well. TCP/IP is working now; COSI is scheduled for Beta test on November 1. There are some very interesting arguments on both sides of the Protocol Wars, many of which were presented at the Conference. If you're interested in packet, you should order the Proceedings of the conference from the ARRL for \$10.

The Conference wasn't just for bearded experimenters. There were several applications-oriented papers presented. One described a new program called FINDER that is used to track people in disaster shelters, an excellent application for packet radio technology in emergencies. Another described a way to send pictures by packet. A couple of papers even addressed the problems we see in the real amateur packet radio networks of today.

The ARRL Ad Hoc Committee on Digital Communications is working on proposals for digital communications modifications to the FCC rules. If you have any thoughts on this subject, please pass them on to the Digital Committee.

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

###---NOVICE/TECH/GENERAL CLASSES---###

PARC's first Novice to Tech/General training class in a long time is being held each Tuesday evening at 7:30 PM where we hold our club meetings at the Lincoln Middle School in Vista. Ages run from 69 years young to twins at 11 years old. Nine attended our first meeting and we now have 12 in the class. We could use some Elmers at 8:30 PM to help students with their specific exam booklet questions after the class lectures. If you can help, please give me a call.

###---FIRE FIRE FIRE---###

###---PALOMAR MOUNTAIN'S ON FIRE---###

Saturday, during my Daughter's birthday party, aerial fire bombers circled our house for a fire near us while two of the eleven girls had tears in their eyes and were afraid that their homes were going to burn up from a second fire (2,000 acres) going up Valley Center grade. The Palomar Mountain fire started in Pauma Valley from a "controlled burn" and ended up burning four homes and several thousand avocodo trees before jumping to Palomar Mountain to burn over 20,000 acres. The view from our second story porch revealed fires burning in every direction we looked. Some birthday party!

PARC came very close to loosing the PARC repeaters and our building in the ten day Palomar Montain fire. AC power was lost on Sunday and we went on 12 VDC

emergency power after the ARES 8:30 AM net. A group of us went up Monday to remove the four repeaters or charge batteries (4) with portable AC generators. We decided to stay on the mountain charging batteries while all the other amateur repeaters came off the mountain by Monday. Animal Rescue used the repeater most of the 1st Saturday in their rescue efforts of horses and small animals and the ARES Red Cross group out of Escondido (EARS) moved in on the repeater Sunday for Red Cross and fire traffic which took up the next nine days.

The EARS Red Cross ARES group of Escondido put forth a tremendous effort in organizing everything. Many PARC members helped to staff the fire positions and the club did an excellent job of restricting their use of the repeater during the 10 days the repeater was used for fire traffic. If we would have had another 2M repeater, life would have been much easier.

We learned that we need to "harden" the repeater site for fire: 1) replace the roof with a cement slab and 2) plaster the outside of the cement blocks or build a protective wall around the building. We would also like to extend the block walls upward about four blocks higher to give us more room for our filters.

I am amazed at the number of hams who monitored 146.730 during the fire and also the number of non-hams monitoring. I had

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calls from all over San Diego from people listening to 146.730 offering supplies and help. One local gas station operator had his scanner programmed with police and fire frequencies -- and 146.730 was the only amateur frequency!

We have a good general coverage 2 meter machine and it is too bad we have to compete with KOJPK/R to the north of us. They open my squelch for hours with no audio so they must not have a "time-out" timer on their machine or they are being "turned-on" by a packet machine. I know some of you have to put up with higher KOJPK/R signal levels than I do in Valley Center. TASMA (the two meter coordinator) has rejected the KOJPK/R 90 day test period for coordination and we have already sent a complaint letter to the FCC in Washington.

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

There is another Radio Shack TV(I) amplifier in Escondido (Elm Street) that is broadcasting raw AC signals into our repeater input and the EARS 146.880 machine. We hope to clear this problem up soon. There is another one probably to the North of Vista. N6ATQ-Craig from EARS is an expert in locating these oscillating Radio Shack TV amplifiers when connected up in the 300 ohm mode. There seems to be no oscillation in the 75 ohm coax mode.

PARC has been approached this month by two different repeater groups (147.735-KA6UAI) (147.360 & 446.750-K6VGP) to place repeaters in our repeater vault. One of the systems is the DARN network with Dick Vandyke's voice on announcements. The DARN system has access to L.A. and many goodies only for DARN members: remotes 80 to 70cm, talking beams, linking, etc. We would probably end up with the use of their 450 and 2m repeaters for free but you would not have access to their system in L.A. unless you joined the DARN group. We will be keeping you advised of our investigations into these systems as we find out more information about them. If you have any feelings or advice on the addition of repeaters to our vault, please contact the executive board immediately. All the frequencies in this range have

been "coordinated" so we just can't go out and set up another repeater of our own.

The executive committee over the past year has approved "in concept" an amateur television repeater, a microwave repeater and a microwave beacon but so far these groups have not been able to get anything up and running. Some amateur repeater groups pay as much as \$70/month to be on Palomar Mountain so if we let any group in "rent free" we will have to receive something in return! The San Diego 220 Club pays PARC \$25/month and our members can use their machine. At present, PARC is not as interested in the rent as much as we are interested in providing services to our members and the amateur community. Our site is very attractive to groups since we cover almost all of San Diego County west of the mountains and we are shielded to the north except for possibly high locations in the San Bernardino mountains. Several times a year we hear stations from L.A. making the repeater. They usually are using beams or high power and are trying to hit our repeater.

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

THANKS to all of you who have been sending me notes, clippings, and other bits of information (ie. WA6QQQ-Bob, N6GNB-Al, W6HCD-Nash, etc.). I wish I could find time to immediately thank all of you.

THANKS to all the club members who served at various fire camps on and around Palomar Mountain with unfamiliar sounding names: French Valley, Observatory Camp, San Jose, and Dripping Springs.

Also THANKS to those who went up with me Monday to remove the repeaters or charge batteries: N6GZI-Ed, WI6B-Ron, WW6E-Buck, and non-club members KA6UAI-Eric and N6JZB-Del (220 Club). Most of the time we had a lookout at the intersection of S-6 and S-7 so that the fire would not trap us with our two trucks at the repeater site. Generators were furnished by WI6B-Ron and KD6FY-Scott.

THANKS to Leo Wagner for the cabinet door boards and to WQ6V-Larry for the large sheets of plywood. These will be used in the club training program for demonstration boards.

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 GYMNASIUM 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 so! Tol' ya so!

NOVEMBER CLUB MEETING

The program for the November meeting will be by Nash Williams, W6HCD on the Flying Samaritans and their journeys into Baja California to provide medical service to isolated areas where none is available. This is an update of Nash's very interesting presentation of several years ago. Other club members involved in the Flying Samaritans are Alma Bourhenne, KE6HI, and Dr. Paul Bonds, N6PHR. This one will be illustrated by slides of the Baja clinics which the Flying Sams operate.

We'll be looking forward to more of Bill's good coffee and to the no-cal tasties which so many of our good members bring along for me to sample.

 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.

OCTOBER CLUB MEETING

At the October club meeting W9FQN informed the Club of the fire situation on Mount Palomar and the danger to the repeater. Volunteers were solicited to assist in the ARES effort in support of the Red Cross and the CDF at the fire camps related to the fire. Former club member Bob Hoover, KA6HZF, told of his efforts to support the CDF with packet radio. He solicited operators, but felt the five volunteers were inadequate to do the job.

The Club's annual auction was held, netting the Club in excess of \$400. It was a most successful auction. Stellar attractions were the beautiful cherry cheese cake which was baked by the sister of Lou, AA6DI, and donated to the Club, and the other cake and brownies likewise donated and auctioned. The auctioneer, Steve, WA6DCU, did an excellent job and, most important of all, knew what the items for auction were. A bit of nostalgia was added when a Viking I and a B & W 5100 were auctioned. The auction was very well organized and KB6QC did an excellent job of staying on top of the situation of identifying the successful bidders. Complaints were heard from the Treasurer who was stuck with the job of collecting the money at the close of the affair, but we didn't notice any after he'd counted the Club's take! N6OPP's coffee, the brownies baked and donated by AA6DI, and the other goodies brought for consumption were delicious and made it a very tasty evening (even if not lo-cal).

FIELD DAY RESULTS

According to the November QST, the PARC was 17th in the Nation in Class 4A, and second in California, first in So Cal and first in the San Diego Section. We scored a total of 6,254 points, just a measly 10,000 points below the nation's number one scorer! Wait'll next year!!

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 John, WB6IQS.

At the October meeting W9FQN reported on the activities on the mountain top when it appeared the repeaters would have to be evacuated for the fire; and a general discussion was held regarding the use of W6NWG/R by the Animal Rescue and Escondido ARES groups. The failure of the Escondido folks to request permission to use the repeater for their network bothered many of the members. W9FQN is to talk to them about the problem. K6HAV was appointed to head the Nominating Committee. W9FQN reported that the Honda generator which the Club wanted to purchase was no longer available. W9FQN reported that the new licensing course had held its first session with nine students attending. The coffee and tasties were delicious.

FORESAIL

(Yawl ketch on?)

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.

From the estate of K6ROR: Latest Yaesu rigs: FT-2700 2M/450mHz xcvr w/FTS-8 en/de-coder, \$350; FT-270H 45W miniature 2M FM xcvr w/FTS-8 en/de-coder, \$300. Westcom RS-7A pwr supply, \$30; Kenwood KPS-7A 6amp cont. duty pwr supply, \$35; KLM 14-elm 450mHz beam, \$30; stainless steel J-Poles for 2M & 220mHz, \$20 each; Heath Cantenna dummy load, \$10. Test Equip.: BK 501A Semiconductor Curve Tracer, \$??; BK 3050 Audio Sine/Square Wave Gen., \$??; Sencore FE160 Senior Field Effect Meter, \$??; Heathkit Digital Design Experimenter, \$??; Philips PM-3212 dual trace 0-25mHz scope, \$??; Measurements Model 560FM Standard Signal Generator, \$??; Heath-Schlumberger SM-110C 500 mHz Programmable Frequency Counter, \$??. Call Ralph, K6HAV, 727-5866.

Icom IC-451A 15W 430-440mHz xcvr w/AC/DC supply, TT mic, \$350; ICom IC-251A 144-148 mHz 10W xcvr w/AC supply TT mic, \$300; 40' of Rohn 25G tower including top sect. and base plate, CDE rotor, \$100. Call Bob, KB6QC, 931-8759 (leave msg).

Commodore C-64 computer w/1541 disk drive, 801 printer and monitor, \$350. AEA PK-64 W/HF-64 recently updated by AEA, never raced, \$300. Swan 700CX w/pwr supply, mint condx, recently rejuvenated by W60FT, \$500. Two prop pitch motor antenna rotators, \$75 ea; 3-elm. 10-15M beam, \$75. Call Buck, WW6E, 941-0867.

TI-59 programmable calculator w/programs & PC-100 thermal printer. Make offer. Atlas 215X xcvr 160-15M w/AC console & Shure 444 mike, \$295. AEA 2M Isopole w/mast, \$25. Call Dennis, N6KI, 271-6079.

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

Yaesu FT-720RU 10W 440 mHz mobile FM xcvr w/detachable control head, \$200; Astron RS-6A pwr supply, \$25; Yaesu YM-39 condenser hand mike, \$10. Autek Research AF-1A audio filter, \$??; Heath EIA-416 dual trace 15 mHz scope no book, \$??; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$??. Call Ralph, K6HAV, 727-5866.

Tristao 54' self-supporting, tiltover tower w/elect. winch, Mosely Classic 33 HF beam, 450 mHz beam, two 2M 11-elm. beams, rotator, Heath Cantenna, and low-pass filter, all for \$700. Call Jim Church, K6\$LA, 726-0772 during working hours.

Kenwood TS-520SE xcvr w/400Hz CW filt., \$375; Heath SB-200 80-10M 1.2 KW

amp., \$245; Spider mob. ant. w/spring mt, \$80; Kenwood TR-7950 2M 45W xcvr w/TU-79 PL, \$260; Kenwood TR-2600A 2M HT, \$185. Call Duane, AA6EE, 789-3674.

Collins 32S-1 and 75S-1 in good condx w/spare tubes, \$400. Galaxy linear amp. w/spare tubes, works well, \$200. Cushcraft A-3 beam, \$50; TV ant, \$20. FREE: 1959-86 QSTs, Hustler 4-band vertical, ERC audio active filter. Call Ed, WA6TBR, 765-0241.

WANTED

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

LIAISON "has no boundaries", and, with Friends of Mexico, Inc., needs old HF and 2M gear to link Calif. volunteers with Baja location. Also any family items appreciated. Call Wally, N6JZB, 237-5743, 5728, 5749.

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.

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.

FROM THE ARRL LETTER

The VHF Sweepstakes contest will take place January 23-25.

A reciprocal operating agreement with Mexico is a possibility in view of the recently concluded Conference of the Inter-American Telecommunications Conference (CITEL) held in Lima, Peru. The delegates adopted a proposal for a hemisphere-wide multilateral reciprocal operating agreement. The U.S. already has agreements with nearly all of the countries in the Conference, the important exception being Mexico, which at the Conference, worked for its adoption and therefore is expected to sign it, thus establishing reciprocity with the U.S.

REPEATER

John, WB6IQS, took new batteries to the mountaintop and replaced the digipeater/control batteries on Saturday the 3rd, the weekend of the start of the Palomar fire. On Sunday, the fire put the repeater onto emergency power. The use of battery power continued until Monday night, when SDG&E brought in a very large generator. Because of the long duration of battery usage and because it appeared that evacuation of the repeaters might become necessary, Stan, W9FQN, Ron, WI6B, Buck, WW6E, and Ed, N6GZI, went to the site on Monday afternoon, taking a generator and tools needed to remove the repeaters. The generator was put to recharging batteries and did so until the SDG&E restored power as previously noted. Stan and his crew remained on the scene until 2130 or so when it appeared that the fire situation had somewhat stabilized and the SDG&E generator was on line.

During the eight days the repeaters were used in support of agencies involved in the Palomar Mountain Fire, PARC members were notable for their courtesy and forbearance in the use of the machines while they were on battery power and in use for the fire.

Many members were, however, not aware that the "courtesy beep"-like tone on the 2M repeater is indicative of battery use. If you hear the beep, keep it short. Don't pause to think with the mike button depressed and don't bother to use the other guy's call sign except when calling him. Don't identify with every transmission. KISS, which I suppose could be the acronym for Keep It Super Short - or something like that.

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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 FCC IN GETTYSBURG SAYS:

Licenses issued as of 9/1/87: AA6EY, KI6ZI, N6QLO, KB6UGY.

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.

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.

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

Examinations are also given on the 1st Saturday at Normal Heights United Methodist Church, 4560 Mansfield St., San Diego; on the 3rd Saturday at St. Timothy's Lutheran Church, 2605 Morningside Dr., San Diego; and on the 4th Saturday at Bostonia Recreation Center, 1049 Bostonia St., El Cajon, and at Coast Savings & Loan, 1540 E. Valley Parkway, Escondido.

Applicants for examination must send a S.A.S.E., a completed, signed Form 610 (PHOTO-COPIES ARE NOT ACCEPTABLE) and a copy of license(s) and Certificate(s) of Successful Completion, if any, to SANDARC-VEC, Post Office Box 2456, La Mesa, CA 92044 ten days prior to the testing date. Form 610 may be obtained from the FCC. Applicants MUST BRING ORIGINAL LICENSES AND CERTIFICATES OF SUCCESSFUL COMPLETION (if any) with them.

VOLUNTEER EXAMINER PROGRAM

At our October tests we administered 12 elements to nine applicants. Eight applicants passed eight test elements with six applicants upgrading.

Congratulations to PARC member Todd, KI6ZM, on upgrading to Extra Class; and to Dr. John Egdahl, N6QMI, who passed Element 4A. N6KI's dad, Orlando, KB6SAG, was also one of those who upgraded - to Tech. Our crew was: KG6VX reception; W6DEY and WA6HYB CW exams; N6INN, N6NNI, and W6YYV, examiners; and W6TFB and K6HAV on the computers. Thanks to Lloyd for so faithfully bringing in his computer. Thanks also to the entire PARC VE crew, who have done such a fine job during my tenure as Team Leader. I'm sure you will continue to support the program with the same high quality of performance you have demonstrated from the beginning of the program to date. 73

de Pat, N6INN

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

UP-GRADES: George Todd, KI6ZM, to Extra Class; Doug McCartney, KI6PE, to Advanced Class. Congratulations.

GNU CLUB MEMBERS: Walt Hicks, W6UZL, San Diego; Ben Wyttenbach, K6KFY, San Diego; John Egdahl, awaiting license, Carlsbad. Welcome, we're glad you're all with us.

RENUDE MEMBERS: Herb Jr. & Judy Patchell, WA6IWK & KA6GHE; Rod Grant, N6OIG; Loren & Nancy Mitchell, NG6U & N6GDT. Five renewals this month.

GNU CALL SIGNS: George Todd, KI6ZM vice N6PPN; Doug McCartney, formerly N6MMD, is now KI6PE.

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.

SELLERS AT THE TRW FLEA MART PLEASE NOTE: New rules in effect at the December 26 flea mart. Sellers MUST BUY their space(s) and can do so in advance (up to six months). Walk in buyers are free. Details for SASE to PARC or at next club meeting.

OFFICIAL CLUB BADGES are available from John Tentor, W6OLQ. Unfortunately, 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.

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 sometimes net control station, sometimes general factotum.

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.

+++++
 ACHTUNG!! CLUB MEETINGS ARE NOW HELD IN THE GYMNASIUM INSTEAD OF THE
 CAFETERIA AT LINCOLN MIDDLE SCHOOL
 +++++

LATEST FROM THE FCC

(At 4542 Ruffner Street, San Diego, CA 92111-2216)

(Thanks to June Butler, Public Service Specialist, phone 619 293-5478)

The FCC will be conducting an extensive education and enforcement effort at the COMDEX computer show November 2-6 in Las Vegas. The FCC's objective is a continuing program to educate manufacturers, distributors, and retailers on compliance with the FCC's regulatory program covering computers and peripherals. The FCC's RFI suppression requirements for Class A computers (used in commercial settings) are not as stringent as those for Class B (home environment) computers which have more opportunity to cause RFI problems with TV, radio, and public safety communications.

DOWN THE TOOBE

We like to give our club members recognition for their achievements in ham radio and out. If we don't hear about them, we can't do it. Let us know!

Paul Stack, WA6IPF, got a nice writeup in the Vista Press for his traffic handling following the recent Whittier Earthquake. Five columns on the front page, and the Club basked in his reflected glory thanks to Paul's mention of his affiliation with it. Nice plug for ham radio and for the Club. Thanks and nice going, Paul.

Stan, W9FQN, also got some nice "ink" for ham radio in the Escondido Times Advocate, four columns with a picture, I hear.

New rules for sellers at the TRW flea mart. See Flea Mart item, page 7.

You can see what a tough one the VE Team Leader's job is. N6INN has lost 35 pounds or so since she's had it! Maybe SANDARC-VEC can sell it as a reducing program.

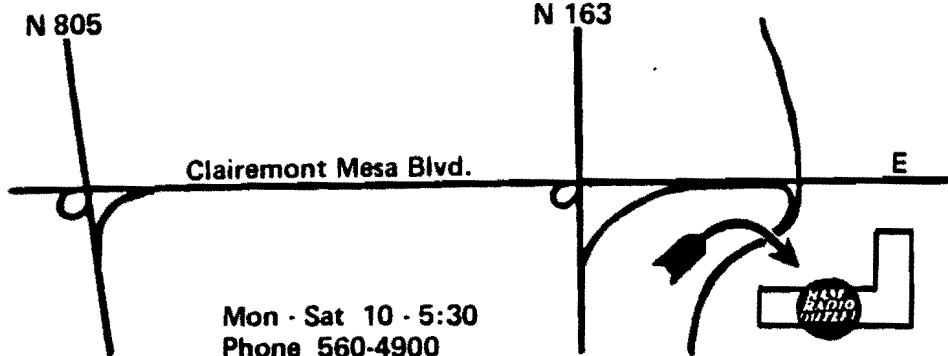
WB6HMY reports that Earl, W6YYV, is in the hospital, having suffered a heart attack. Joe says that he is progressing, according to Earl's XYL, Christie.

"That's all", she wrote!

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BYTES 'N PIECES

By Paul Williamson, KB5MU

The KA6IQA-1 digipeater at Torrey Pines will be turning into a NET/ROM node about the time you read this. This means that it will be able to do automatic routing and node-to-node acknowledgement like most of the mountaintops on 145.01 MHz do. Its "alias" identifier will be LJOLLA, since identifiers are supposed to reflect geographical location. Read up on the NET/ROM usage on the KA6IQA or WA2QMI mailbox if you haven't learned to use them yet. Or, you can continue to use it as a conventional digipeater if you prefer.

There are two main reasons for making IQA-1 a NET/ROM node. One, it has a good, reliable path to AA6TN-1 (BGBEAR). As a NET/ROM node, it should provide good communications to the east and northeast through that link. Second, there are plans afoot to add a second and perhaps even a third port at that site (220 MHz 9600 bps and/or 50 MHz 4000 bps are likely candidates). Multiporting NET/ROM nodes is very simple and easy to do. This approach is a bit more expensive than some others, but it has become apparent that time and ambition, rather than money, is the limiting factor for local network growth.

Some people (your author included) are not very excited about the idea of supporting NET/ROM, since it breaks with the packet radio tradition of distributing networking software freely for amateur use. However, there is presently no acceptable alternative that will serve the large base of existing user equipment. So, look for NET/ROM to continue to be an important part of our network for some time to come.

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NORTHERN SAN DIEGO COUNTY



THE PALOMAR AMATEUR RADIO CLUB, INC.

POST OFFICE BOX 1603

VISTA, CALIFORNIA 92083-0530

W6NWG

Scope

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1936 - 1987

DECEMBER, 1987

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

PRESIDENT: Stan Rohrer, W9FQN, Valley Center 749-0276
VICE PRESIDENT: Bob Brehm, KB6QC, Carlsbad 931-8759
SECRETARY: Phil Leonelli, WF6L, Oceanside 757-7008
TREASURER: Ron Wilhelmy, W16B, Rancho Santa Fe 756-3133

>>>>>>— President's Message —<<<<<<

###—REPEATER SITE NEWS—###

The Executive Committee, consisting of club officers and committee heads present, voted to allow KA6UAI-Eric to place his 147.735(-) repeater in our repeater bunker for a trial period of ninety days ending 14 days after the February Executive Committee meeting. Four pages of stipulations boil down to the following items:

- 147.735 will —>>
- 1-take ALL PARC overflow.
 - 2-take Animal Rescue/Emg.
 - 3-be a PARC backup repeater.
 - 4-receive support de PARC.

Eric's repeater, KA6UAI/R, is an "open" repeater, could really help relieve the congestion on 146.730 during MOBILE hours, net times, and long winded discussions. Just "XX7XXX" or "BREAK XX7XXX" into 146.730 and to tell your friend that you are "GOING UP ONE" even though it is 1.005 that you are moving up. Never say you are going to 147.735 or possible interference could move with you. When you finish your contact, you should "GO DOWN ONE" to 146.730 to monitor. Remember that his machine has a "courtesy" beep which you need to observe so you don't get timed out. Time out is 180 seconds while on 146.730 it is 100 seconds.

For the 90 day test I would suggest that you may want to program your memories as follows: simplex, 146.130, 146.730, 147.735, 147.135, simplex, etc. This will

allow you to easily switch among repeaters and check their inputs. The good thing about 7.735 is that with thumb switches on an HT it is easy to check the 7.735 machine only by changing the megacycle switch (5kc off doesn't bother receive) and they have the same downward split so you are almost ready to transmit as soon as you flip the 5kc switch. You can change frequencies in the dark!

At present, only 7.735 is suffering "desense" from the close proximity of our 6.730 repeater. This may easily be corrected with filters but until that is done, I'm afraid that HT's will have problems using 7.735 when 6.730 is on the air - at least for the present. We expect to run into various problems during the 90 day test so please keep your Executive Committee advised about what you think of this operation and the problems that you see.

For the present, PARC members have use of 145.050(P), 146.730(-), 147.735(-), 224.900(-), and 449.425(-) with the additional future possibilities of an ATV repeater, 911 auto-patch, 6M repeater, microwave beacon-repeater, and HF Packet and 220 Packet are still on the drawing board. We have also had suggestions of 80-10M SSB from Palomar Mountain with 2M or 450 input so that "Condo" hams would be able to work these frequencies with a handheld. SSB with something like a Yaesu 757 transceiver from Palomar Mountain would also probably help our Amateur Radio

Emergency Service (ARES) and Red Flag Patrol responsibilities in areas where our repeaters do not cover reliably. All these things take WORKERS, SPACE, and MONEY. At present, WORKERS seems to be the biggest limiting item of the three.

The repeater bunker is almost full now and we are considering an all steel (great EMP protector?) 8x20x8' cargo shipping container (\$1,700) next to the tower and converting the present bunker into a generator shed for our remotely controlled 110 VAC 3.5kw generator. We would also be able to use it for storage of surplus repeater materials connected with the site.

Again and again and again, thanks to all you who helped us so much in paying off the repeater site note. This note was taking about \$1,500 out of our operating budget each year which cut down on other things that we need to be doing. Several years ago, when I first really became active in the club, we had several amateur-commercial groups renting space in the repeater bunker but at present we have only one renter: the 220 Club of San Diego. Commercial spots on Palomar Mountain are going for around \$200/mo. and amateur spots for about \$70/mo. The 220 Club is paying \$25/mo. and allows PARC members to have unlimited use of their repeater although there is not much PARC 220 activity and most PARC members on 220 are already members of the 220 Club of San Diego. Rentals, where they do not interfere with PARC activities, should pay for most of the repeater site operation and release club funds for other amateur radio projects. One of our goals is to provide communications to San Diego County during emergencies and anything that helps us to fulfill this mission should be considered.

###---NETS/NEEDS---###

We have many people on the repeater talking about amateur radio related problems, computers, and about DX which should be getting better as the sunspot cycle increases. If anyone or group is interested in conducting a 9:00 PM net on Wednesday, Thursday, or Friday evenings, please contact me or a club officer if you

would like to help out in some way. There are many hams that have questions and problems in these areas who could profit from a well run net conducted like KB5MU-Paul's Packet Net or N6IZW-Kerry's Microwave Net. The computer net could start out by serving Commodore C-64's and IBM compatibles: equipment, problems, where to go, software, etc. The DX or Contest net could serve County Hunters, Contests, 10-10, and the latest DX with calls, times, and frequencies. It helps to know what you are talking about (like Paul and Kerry), but it is really not necessary the way they conduct these nets. They ask for net membership participation to solve most problems. We really could use an amateur radio net where people may come with their problems and expect their questions to fall on sympathetic ears: interference problems, antennas, where to get amateur radio related items, equipment problems, etc.

We also need someone or a small group to help monitor the signal strength of 146.730 periodically along with measuring the signal needed to key the repeater. Knowing these items helps us to have some idea if we are having equipment problems up at the bunker: antenna, output transistors, feedline, etc. The time involved would probably not be more than 30 minutes a week depending on the tests being run. WA6QQQ-Bob has been doing this for us over the years but usually only when we suspect problems. Contact me if you can help with this project.

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

And THANKS to all those amateurs with business operations who refrain from making "business like" calls on the repeater and THANKS to all those amateurs who refrain from making negative comments about other repeaters or individuals. Your forethought and observance of FCC rules and regulations helps keep the repeater one of the best in Southern California. And thanks to all of you who make new amateurs to the repeater feel WELCOME and for your invitations to them to join the club and it's many activities.

73 de Stan, W 9 F Q N

 LUB MEETINGS are held on the first Wednesday of the month at 7:30 p.m. in the GYMNASIUM 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 FUNCITON OF THE VISTA UNIFIED SCHOOL DISTRICT AND ARE NOT SANCTIONED BY THE BOARD OF TRUSTEES OF THE SCHOOL DISTRICT. Tol' ya a hunnert times.

DECEMBER CLUB MEETING

The program for the December meeting will be the Club's annual Christmas party with everyone bringing some goodies. The Club will provide coffee.

+++++
 ACHTUNG!! CLUB MEETINGS ARE NOW HELD IN THE GYMNASIUM INSTEAD OF THE CAFETERIA AT LINCOLN 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.

NOVEMBER CLUB MEETING

At the November club meeting the minutes of the October meeting were not read due to the absence of the Secretary in October. The Treasurer's report was read and approved. W9FQN informed the Club of FOUR prospective tenants for the PARC repeater bunker on Mt. Palomar, stressing that the Club would probably rather gain some additional repeater services than to receive rents from amateur radio tenants. Three of the prospective tenants are ham groups, and the fourth is a commercial user. The problems of monitoring the repeater were discussed and several members mentioned their desire for an autopatch to at least permit calls to 911. K6HAV reported that the Nominating Committee did not have a complete slate of officers for the new year, lacking a Vice President. The slate to date includes Stan Rohrer, W9FQN, President; Jo Ashley, KB6NMK, Secretary; and Ron Wilhelmy, WI6B, Treasurer. The Committee was directed to continue its efforts to find a Vice President.

The program for the evening was presented by Nash Williams, W6HCD on the Flying Samaritans and their journeys into Baja California to provide medical service to isolated areas. It was most interesting and showed the kind of good a dedicated group of volunteers can do for humanity.

Lou, AA6DI, brought a beautifully decorated cake, depicting a ham shack with a very well executed tower and beam. A real masterpiece of cake decorating, and most imaginative. The cake was raffled and Betty, KB6DSC, was the fortunate winner of this "no-cal" goodie.

A Charter PARC Member, Walt Huckabay, W6JRQ, put in a presence and reenlisted!

N6OPP's coffee, AA6DI's home-made no-cal goodies and those of WB6GXR, made for a tasty treat. The meeting was well attended in spite of very inclement weather.

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 John, WB6IQS.

At the November meeting the Committee discussed one commercial and three amateur groups desirous of becoming tenants in the PARC bunker on Mt. Palomar. The Committee voted to accept Linear Corporation as a tenant, the equipment to be installed being a small, two watt UHF machine. The Committee heard from W9FQN on the subject of the three amateur groups applying for tenancy and, after weighing the benefits to the Club, voted to authorize a 90-day trial for the KB6UAI group and its 2M repeater on 147.735 MHz (-). The possibility of increasing the available repeater space on the Club's property was discussed and will be explored further.

The cider and tasties were delicious.

+++++
+ ROY "MAX" MAXSON, W6DEY, SK +
+ Max, W6DEY, became a silent key on Sunday, November 8. Max was retired +
+ from the FCC and had been a PARC member for a number of years. He did the +
+ job of bird-dogging the Club's first repeater license application through +
+ the mazes of the FCC and found it after the Commission had lost it. Max +
+ conducted the CW examinations for the Club's VE team exam sessions, and +
+ developed and manufactured the equipment needed to permit the use of ear- +
+ phones by individual examinees. He was the Club's president in 1971-72. +
+ A truly gentle person, Max will be missed by all of us. A trove of radio +
+ lore is gone with him. +
+++++

FORESAIL

(Yawl ketch on?)

PERSONAL ADS FOR MEMBERS ARE FREE

Yaesu FT-726R all-mode tri-band w/plug-in modules for HF (15-10M), 6M, and 2M and built-in pwr supply, all for \$825. Same w/o 6M & HF modules, \$625. Call Ron, WI6B, 756-3135.

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

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.

Ten Tec Argonaut 509 w/405 amp. Both factory rebuilt, PS-12 pwr supply, key, mike, manuals, receipts. Asking \$350 for all. 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).

From K6ROR's estate: Latest Yaesu FT-270H 45W miniature 2M FM xcvr w/FTS-8 en/de-coder, \$300. Westcom RS-7A pwr supply, \$30; KLM 14-elm 450MHz beam, \$25; stainless steel J-Pole for 220MHz, \$20. TEST EQUIP.: BK 501A Semiconductor Curve Tracer, \$??; BK 3050 Audio Sine/Square Wave Gen., \$??; Sencore FEL60 Senior Field Effect Meter, \$??; Heathkit Digital Design Experimenter, \$??; Philips PM-3212 dual trace 0-25MHz scope, \$??; Heath-Schlumberger SM-110C 500 MHz Programmable Frequency Counter, \$??. Call Ralph, K6HAV, 727-5866.

Yaesu FT-720RU 10W 440 MHz mobile FM xcvr w/detachable control head, \$200; Astron RS-6A pwr supply, \$25; Yaesu YM-39 condenser hand mike, \$10. Autek Research AF-1A audio filter, \$??; Heath EIA-416 dual trace 15 MHz scope no book, \$??; Heath TV Post-Marker Sweep Generator IG-5257 w/book, \$??. Call Ralph, K6HAV, 727-5866.

Yaesu FT-209RH 2M HT; Heath HW-101 xcvr; Heath Numatic Key; Tandy 1000 computer system; Heath low-pass filter, Vector Scope 10-101; Heath SB-201 linear amp.; Heath 2KW ant. tuner; 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 W60FT, \$500. 3-elm. 10-15M beam, \$75. Azden 3000 2M FM xcvr, \$200; Tempo One 2M HT. Call Buck, WW6E, 941-0867.

TI-59 programmable calculator w/programs & PC-100 thermal printer. Make offer. AEA 2M Isopole w/mast, \$25. Call Dennis, N6KI, 271-6079.

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

Tristao 54' self-supporting, tiltover tower w/elect. winch, Mosely Classic 33 HF beam, 450 mHz beam, two 2M 11-elm. beams, rotator, Heath Cantenna, and low-pass filter, all for \$700. Call Jim Church, K6\$LA, 726-0772 during working hours.

Ten Tec Omni HF xcvr w/pwr supply & remote VFO; Kantronics interface. For sale or trade. Call George, W5OI, 723-1046.

Collins 32S-1 and 75S-1 in good condx w/spare tubes, \$400. Galaxy linear amp. w/spare tubes, works well, \$200. Cushcraft A-3 beam, \$50; TV ant, \$20. FREE: 1959-86 QSTs, Hustler 4-band vertical, ERC audio active filter. Call Ed, WA6TBR, 765-0241.

WANTED

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.

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.

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

At the November meeting several members reported the difficulty they had met in trying to find a monitoring station to call CHP or other emergency services while mobile during "prime time" (rush hour traffic periods). W9FQN stated that many base station ops stopped monitoring during "prime time" in furtherance of the Club's policy of keeping contacts short and leaving the repeaters for the mobile users (WHO ALSO SHOULD KEEP IT SHORT). It's obvious we do need more folks with base stations to monitor during "prime time" in case assistance is required - particularly during the inclement winter months.

It also behooves mobile operators to exercise judgment and restraint in long-winded QSOs and in calls for help. Let's not ask for a phone call for every car left on the freeway. Hazardous or potentially hazardous situations should be reported. Cooperation by all will get the job done and keep the repeaters' availability high during "prime time".

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.

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.

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.

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.

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 November tests we administered six test elements to five applicants. Two applicants passed one element and one upgraded. A rather unusual test session in that the only elements passed were CW elements!

Our test crew was: KG6VX and KI6ZM reception; WA6HYB CW exams; N6INN, N6NNI, and N6KI examiners; and K6HAV on the paperwork.

de Lou, AA6DI

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

FIRST LICENSE: Loreen Wilhelmy, KB6UKD; Mark Trapolino, N6QVA.

UP-GRADES: Loreen Wilhelmy, KB6UKD, to Tech. Congratulations!

GNU CLUB MEMBERS: Ray Harland, N6AMD, Escondido; Brian Selle, WB6TJN, Oceanside; Paul Lackey, N6ISC, Vista; Leonard Jacobson, Vista; Herman Broom, WD5BRT, Oceanside; Al Thiele, W7HGS, San Diego; Loreen Wilhelmy, KB6UKD, Rancho Santa Fe; Fred Klein, KB6NRL, San Marcos; Stan Barbee, WB6NVX, Rancho Santa Fe; Mark Trapolino, N6QVA, Carlsbad; Tom Parnell, WD6GIN, Carlsbad. Welcome, we're glad you're all with us.

RENUDE MEMBERS: Frank Ramme, WB6HFE; Chuck Golden, WB6YVT; John Campbell, WB6HSZ (two years); Walt Huckabay, W6JRQ (Charter PARC Member); Gene Good, KB6GYG; Aubra Tilley. WM6T. Six renewals this month.

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.

DOWN THE TOOBE

According to WA6QQQ's CGC COMMUNICATOR: "Changes proposed by the FCC to Part 15 of its Rules will allow LICENSELESS low power operation on just about any frequency desired. Apparently you can even broadcast political views over the local police or FBI repeaters as long as you don't cause "harmful interference" to normal operations. This gem is known Docket 87-389: a classic of misguided thought." Editor's note: We should really get together on this one and comment. It will open up a Pandora's Box of RFI problems if it is approved!!

We sure appreciate folks like Pete Glaser, W6OKG, who took the time to drop us a card with his change of address. This instead of finding out from the Post Office (which charges the Club \$.30 to tell us there is a forwarding order on file). At 30 cents a shot the \$3 subscription price just doesn't go very far. Also, the Post Office does NOT forward the Scope that month and we don't either. Thanks to you, Pete, and to all of you who have taken the time to let us know.

Earl, K6CLU, is back in town after a hegira to Oregon. Is it true you're planning on moving up to Grass Pants, Earl?

Thanks to Rosalie White, WA1STO, Assistant Manager of the ARRL's Club Services Department, we have more information of the PARC's origin and early officers. Rosalie, who may be the only person other than the editor and his preafrooder to read the SCOPE, says she noticed that we are working on the Club's history. She checked the PARC file at HQ and photocopied and sent us several pages relating to the Club's early days, starting with its origin in 1937 and on up to 1959. Most of the info was contained in the annual renewals of the Club's affiliation with the ARRL. Fortunately these contain information of the size of the Club, who its officers were, name of the club bulletin and other valuable information on our "roots". Thanks, Rosalie. We certainly appreciate your very thoughtful deed. Please keep on reading!

Earl, W6YYV, came out of the hospital after his heart attack, but went back in again on Friday the 13th after difficulty breathing. He is now back home and appears to be progressing nicely.

Charles, N6QDK, is back on the air after being off for some little time since his HT was stolen. He now sports an Azden.

We notice many of our good club members in daily contact with non-club members, and we hear the same non-members daily too. A roster published in this issue will help you determine whether or not your friends should be extended the courtesy of an invitation to the Club. Many are reluctant to ask about it and others just don't think of it, so you can do the courteous thing and extend the invitation. Then get the name, call and mailing address to any club officer.

Thanks to Mike, WB6CSH, for the Condor Network map in this issue.

"That's all", she wrote!

THE FCC IN GETTYSBURG SAYS:

Licenses issued as of 11/1/87: AA6FG, KJ6AJ, N6QVN, KB6UME.

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.

SELLERS AT THE TRW FLEA MART PLEASE NOTE: New rules in effect at the December 26 flea mart. Sellers MUST BUY their space(s) and can do so in advance (up to six months). Walk in buyers are free. Details for SASE to PARC or at next club meeting.

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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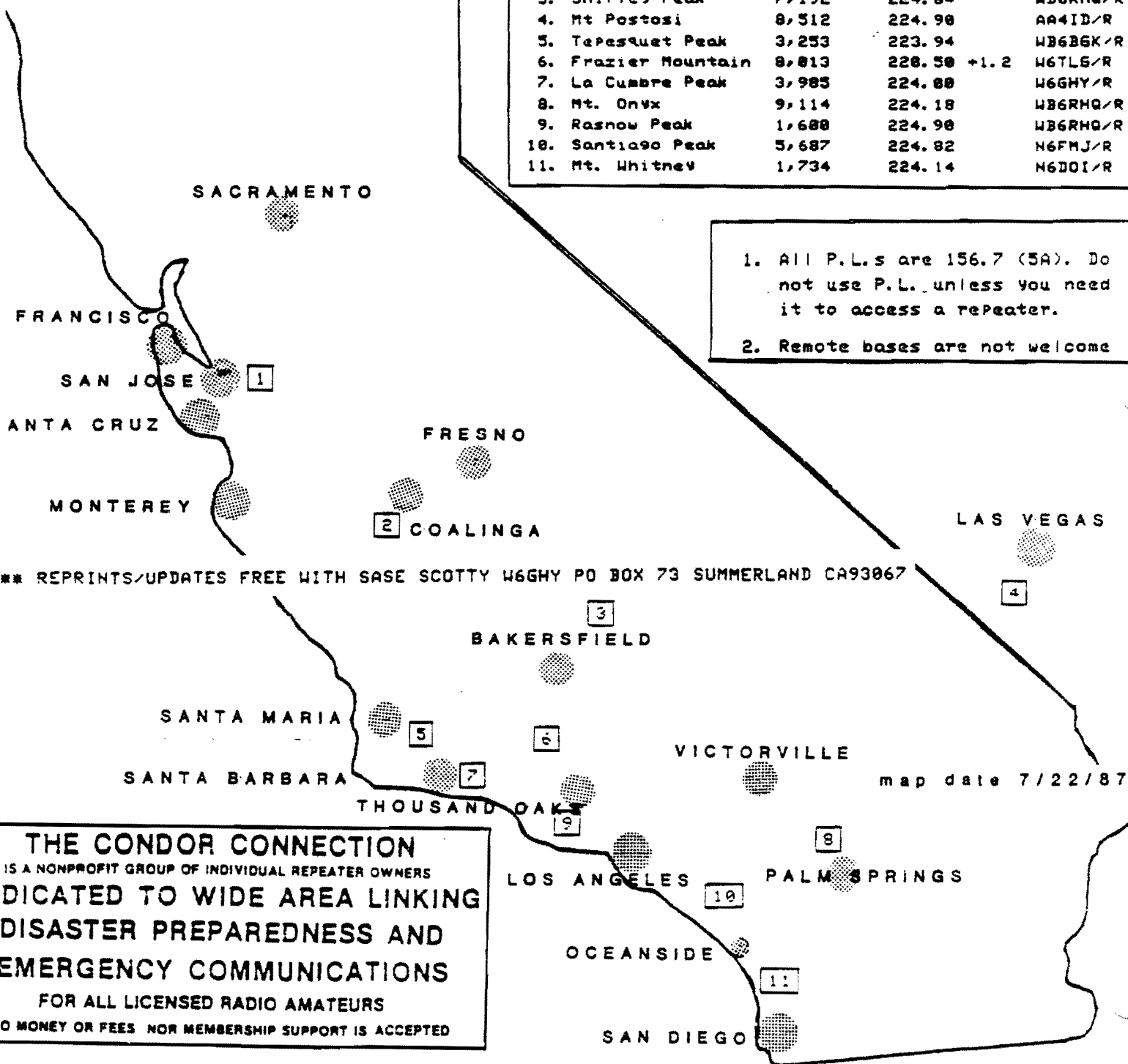
CONDOR CONNECTION

In our weekly net 8 pm Mondays

LOCATION	ELEVATION	FREQUENCY	
1. Mt. Hamilton	4,388	224.60	K6GZK/R
2. Joaquin Ridge	4,143	224.44	W6IYY/R
3. Shirley Peak	7,192	224.64	W6RHO/R
4. Mt. Postosi	8,512	224.90	AA4ID/R
5. Tepequet Peak	3,253	223.94	W6B6K/R
6. Frazier Mountain	8,813	226.50 +1.2	W6TLE/R
7. La Cumbre Peak	3,985	224.80	W6GHY/R
8. Mt. Oriz	9,114	224.18	W6RHO/R
9. Rasnow Peak	1,688	224.90	W6RHO/R
10. Santiago Peak	5,687	224.82	N6FMJ/R
11. Mt. Whitney	1,734	224.14	N6DOI/R

1. All P.L.s are 156.7 (5A). Do not use P.L. unless you need it to access a repeater.

2. Remote bases are not welcome



** REPRINTS/UPDATES FREE WITH SASE SCOTTY W6GHY PO BOX 73 SUMMERLAND CA93067

THE CONDOR CONNECTION
 IS A NONPROFIT GROUP OF INDIVIDUAL REPEATER OWNERS
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 EMERGENCY COMMUNICATIONS
 FOR ALL LICENSED RADIO AMATEURS
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N0OCPS VERNER PASCHKE
KD0CB STEPHEN JACK SMITH
W0DLW C. N. PASCHKE
W0EVV MARY N. PASCHKE
WB0RW ZEL HERMAN
WB0WCU SANDY WILLIAMS
WB0YCO HENRY KIRSCHNER
W2AU0 STANLEY SHAUT
WB2TSV LEO F. WAGNER
W2MRM STEVE MIELE
K2RTQ NATHANIEL W. HASSELL
N3BLB ROBERT E. BOLES JR.
K3FMT MARK DIVECCHIO
WA3HHC ALAN T. TOTH
K4ACM EDWARD LUTZ
N4KRA TOM MERZ
W4NYU HOWARD GATES
WD5BRF HERMAN BROOM JR.
N5GZP STEVE SELLERS
KB5MU PAUL T. WILLIAMSON
KB5MY LT. DANIEL L. HAMMILL
KA5Q KEN SEALS
KB6AI GUY ROWLETT
N6AMD RAY HARLAND
KB6AQS GEORGE A. SWENSON
N6AUV KEN LINT
N6AT FRANK CASSEN
WD6AXN THOMAS ANDERSON
K6AYJ EDITH NICHOLS
W16B ROBIN WILHELMY
W6BBD JOHN RESELY
WD6BEZ JUDY GONSETT
KE6BH BILL COUNTRYMAN
WB6BHE VANESSA HARVEY
W6BHF RAY DOBLER
W6BLK DON "RED" TRUAX
W6BLB JACK WILLIAMS
WD6BNB ROBERT V. DEAN
KB6PT MURTEL "SKIP" SKINNER
WD6BRY PAUL BROUILLET
WA6BSD STEVEN LANG
W6BXJ BOB COUP
KF6C BRIAN COMER
N6CKH TED DEMOS
N6CKQ LOUIS BROADBENT
K6CLU EARL LEAK
KH6CN JIM HARPER
N6C0U BILL WHIPPLE
WB6CSH MICHAEL HAMANN
K6CV J. G. BASTOW
K16CX GEORGE BOLLMAN
KB6DEM JUDY ROSS
KB6DGR BETTY MAHONEY
AA6D1 LOUELLA ALBRECHTSEN
W6DNX CARL LANGJAHN
KB6DSC BETTY BRUIN
WD6WE CLAUDE L. KIRKPATRICK
WA6DYV JOHN B. SWADER
W6GE BILL BUCKNER
WA6EEZ BILL BEERSMA
W6ESGL RYMOND MILLER
W6EYF ED CASTAGNA
WZ6E ART NICHOLS
W6FAY WARREN LINCOLN
N6FNK ALAN ORR JR.
WB6FMT JAY CARR
W6FN KEN KLIPPEL
KA6PPS BARBARA ROHRER
W6FTV EDWARD L. FALLS
WD6FWE DON JOHNSON
W6FXL ALBERT GOEPPINGER
KD6FY SCOTT BELFIELD
N6FYJ BILL RUTLEDGE
K6CAK RICHARD K. GARREN

N6GGDT NANCY MITCHELL
 WD6GEB BARRY K. ROBERT
 KA6GHE JUDITH PATCHEL
 KT6GI TIM HOY
 K6GJD BILL SALTER
 N6GJW RUSS FOLSOM
 N6GNB ALBERT FAHNESTOCK
 K6GOS HAROLD D. ESTERY JR.
 KA6GRG CHUCK CALVERT
 KG6GW RUSS AMES
 N6GW GORDON WENZ
 N6GJW MICKY FAHNESTOCK
 WB6GXR WILBERT "MAC" MC BRIDE
 KB6GYG GENE GOOD
 N6GZI ED ROSS
 KG6H V RALPH CROSSMAN
 W6GHC CHARLES I. HODGSON
 N6GCD NASH WILLIAMS
 K6GHE SANDY SANDBERG
 WB6HGR FRANK B. RAMME
 K6GHI CYNTHIA MITCHELL
 N6GHL ALMA BOURHENNE
 WB6HMY JOE CRAIG SR.
 N6GHO JOE LA POINTE
 W6GHW ERIC HANSEN
 W6GHSZ DALE COPPELY
 W6GHW JOHN CAMPBELL
 W6GHC VERN BAUMARTNER
 W6GHC BILL C. PUGH
 N6GCH THOMAS F. BROWN
 N6GHE FRED FERRANTO
 N6GIES THEODORE MITCHELL
 K6I I ED HOLM
 W6INI ART SMITH
 N6INN PAT CROSSMAN
 WA6IPD ART RIDEOUT
 WA6IPF PAUL J. STACK
 WB6IOS JOHN KUIVINEN
 W6IRM CHUCK INSKEEP
 N6ISC PAUL LACKEY
 W6IUG RICHARD O. WEST
 WA6IWK HERBERT PATCHEL
 N6IZW KERRY BANKE
 NC6J BOB CHAMBERS
 W6JJA GUIDO BIANCHI
 KI6JM JACK HANTHORN
 W6JRO WALT HUCKABAY
 W6JSP FLOYD HARVEY
 N6JTT DAVE BOTTEIFF
 WB6JVS HARRY A. ROUSE
 N6JZB WALLY COOK
 N6KAL BECKY MATROS
 W6KCB EDWARD JANKOWSKI
 N6KEU RICH MATROS
 K6KFF BEN WYTHEBACH
 N6K I DENNIS VERNACCHIA
 WA6KZN BOB HEITGER
 NU6L JOE COTOGENIS
 WF6L PATE LEONELLI
 K6LNJ ART PEARCE
 N6LTV JOHN HILTS
 N6LTV LEE HART
 N6LQO TED H. NIDA
 N6LXD BILL LISCOMB
 N6MAE JOHN GREER
 KB6MBL BETSY E. ROSS
 KB6MCU BILLY J. SMITH JR.
 W6MFT WILL O. NIELSEN
 KB6MI GEORGE SMITH
 N6MMP MIKE FISHER
 WA6MOS JOE PEVNEY
 KI6MP BOB ABRAMS
 XB6MPZ CAROLINE LINCOLN
 N6MOV WILL O. NIELSEN II
 K6MRK JAY BURRITT
 K6MSF CHET ATLAS
 N6MTL RICK HIER

K16MW CHARLES LITTLEFIELD
K6N5VZ BERTON CALDWELL
K6N5AU TEL. 421-2345
K6N5BH AL DOIG
K6N5NH RALPH NEIGER
K6N5FG WENDY MANDY
K6N5WJ STEPHEN B. MC KINNEY
WB6N1TJ DAVID MC LAREN
KB6N6MK JO ASHLEY
KB6N6NL A. J. ASHLEY
WA6N6NC BOB RIVERA
K6N6NT MARK M. SCHLESINGER
K6N6NP WILMA HEALEY
K6N6NQ THOMAS HEALEY
K6N6OG MARY BUCKNER
KB6N6RL FRED KLEIN
K6N6SU WILLIAM SCHMIDT
KB6N6UY WALTER COATES
WB6N6VX STANLEY N. BARBEE
KB6N6Z4 MARY BURGESS
KB6N6ZS SUSAN ROHRER
K6N6ZY CARL W. BURGESS
WB6O6BH PETE MAYES
W6O6FT CLINT CALL
N6O6TB RODERICK GRANT
N6O6TO BOB GRANT
W6O6KQ PETER GLASER
W6O6LO JOHN TENNOR
W6O6HJ RICHARD POWELL
N6O6PF F. L. BLACKMORE
KB6O6QE LARRY CHANDLER
W6O6VP DAVID KLEN
KB6O6XS DON TIPPIT
KB6O6XW JOSEPH F. MARTINA
KB6O6YZ PATRICIA STEDMAN
N6P6BM MICKEY JENKINS
KB6P6CF MARNI PARKER
N6P6DZ FRED BARKER
K16PE DOUGLAS B. MC CARTNEY
N6PEEA MARY BARKER
N6PHRR PAUL M. BONDS
W6P6NT FRED OLSEN
K6P6PP GENE HORRALL
KA6P6PD PAUL HEISMAN
N6P6PN GEORGE TODD
N6P6OO VINA DE MONTEGRE
N6PYD JIM MURDOCK
N6QB1 JEREMY SIMMONS
WA6QB0 RICHARD WILLIAMS
KB6QC BOB BREHM
N6QCC DAVIS ZEINER
N6QDC CHARLES PATGE JR.
N6QDR DAVID MAHLUM
KB6QEF MAURICE HORRELL
KA6QFF MATT MC CORMICK
KB6QHJ ROBERT GREGORY
KB6QJ JIM FRANKLIN
K6QJE MELVIN R. JANSON
N6QJ0 VICTORIA VICKERY
KB6QJ0 VICTORIA VICKERY
W6QMI JOHN ECAHAI
K6QO JACK FORBES
K6QO JOHN MORIARTY
WA6QOQ BOB GONSETT
KE6QV CHARLIE FAY
N6QVA MARK TRAPOLINO
N6QVW LYNN STACY
KB6QWI JOSEPH MARTIN
WB6R DUANE STEDMAN
K16RF JACK SIMMONS
K6RF TED CULLIAN
KB6RGF WALTER A. WATSON
K6ROR AURA SCHUTZE
K6RTD GEORGE 'SKIP' MAYNARD
WB6RTY JOHN NEUMAN
KB6RWf JIM BROWN
KS6S BOB RICE
KB6SAE LINDA SELLER

W6SAX MARSH PARKER
W6SCE JOHN MARTIN
W6SGKL ALVIN MARTIN
W6SGVN JOHN MORGAN
W6MOT HERB SCHNEIDER
W6B6TBA AUBRA TILLEY
W6B6TRO BOB GATES
W67C1 BILLY MC CORD
W67DC HARRY WILLIAMS
N67E LEE MILLER
W67ET HARRY BLUESTEIN
W67FB IVAN SIMPSON
K16TG LLOYD HUNT
W66THC CHUCK DOWLING JR.
W66TJN RAY SPANGLER
K670 BRYAN SELLE
W6B6TOF WILLIAM H. TAYLOR JR.
W67XK ALEX HALYBURTON
W67ZV RONALD C. EARL
W66U HAL CRISPELL
N66U WALTER PENNINGTON
KB6UKD LORREN MITCHELL
W66UZL LOREEN WILHELMY
W66V WALT HICKS
W6VDA LARRY DE MONTEGRE
KB6VNR BILL VLYMEN
KB6VVO JOE HYPNAROWSKI
W66VYV MARCEL SIEMONS
W66VYD CURSTEN BUD LINCOLN
W66VYD BURR CHAMBLISS JR.
N66V JOHN CHAMBLESS
W66WGT HARN AND TARK HARKER
W6WPO BILL PRIEST
W66WSZ JOE HARRY
W66WUZ OLIVIA FRANKLIN
KD6WK HERBERT PATCHELL SR.
KD6WZ FREDERICK FREY
K26X PAUL BUSCEMA
K16XJ JOHN ALBRECHTSEN
K6YJK GEORGE UMINSKY
W6YJU EARL SCHWEITZER
W6YLA JERRY BAKE
WB6YVT CHUCK GOLDEN
N6YX BOB BELL
W6YYV SAM BURDETTE
NG6Z WILLIAM H. DENTON
W66Z DELMAR E. PARTRIDGE
AD6Z JANE RICE
WB6ZJZ CHARLEY GIBBS
N7AMR ALLEN WILLET
N7AS GARY GRANT
W7BIA A. A. LEWIN
W7EAI WILLIAM STEELE
N7EQU BARRY MERRITT
W7GRW BOB TRAYNOR
W7HGS AL THIELE
KB7Y LEE LEACH
WB7OCR LEE EVANS
KA7PFI JUDY TRAYNOR
K7WIL BOB FELTON
N9AKB KENNETH CARLSON
W9FON STAN ROHRER
W9GNT MARTIN J. WITTING
ASSOC FRED ANDERSON
ASSOC HELEN ANDERSON
ASSOC KENNETH BORAKER
ASSOC ERICH M. WALKER
ASSOC NEIL CLASSEN
ASSOC J. N. TEALE
ASSOC DANIEL BARRY
ASSOC JERRY LOUNSBURY
ASSOC F. BRUCE STEWART
ASSOC LEONARD H. JACOBSON

K16MP ABRAMS, BOB
 K16XJ ALBRECHT, JOHN
 AA6DI ALBRECHTSEN, JOHN
 K6CGW ALLEN, LOUELLA
 ASSOC ANDERSON, RUSS
 ASSOC ANDERSON, FRED
 WD6AXN ANDERSON, HELEN
 KB6NML ANDERSON, THOMAS
 KB6NMF ASHLEY, A. J.
 K6MSF ASHLEY, J.
 W6YLA ATLAS, CHET
 N61ZW BALKE, JERRY
 WB6NVY BANCHE, JERRY
 N6PDZ BARBER, STANLEY N.
 N6PEA BARBER, FRED
 ASSOC BARBER, MARY
 K6CV BARRY, DANIEL
 W6HW BASTOW, J. G.
 KD6FY BAUMGARTNER, VERN
 W6XJA BELFIELD, SCOTT
 N6OPP BEL, BOB
 N6TE BLANCHARD, GUIDO
 N3BL L BLACKSTEN, F. BILL
 K16CK BOLES, JR., HARRY
 N6PHR BOLLMAN, GEORGE
 ASSOC BONDS, PAUL
 N6JTT BORAKER, KENNETH
 KE6HI BOTTEIFF, DAVE
 N6FMK BOURHENE, ALMA
 KB6OC BOWEN, BYLL
 N6CKQ BREHM, BOB
 WD5BRT BROADBENT, LOUIS
 WD6BBA BROOM, JR., HERMAN
 WB6RWF BROUILLLET, PAUL
 N61CH BROWN, JIM
 KB6DSC BROWN, THOMAS F.
 W6GE BRUN, BETTY
 N6HOG BUCKNER, BILL
 W6YTV BUCKNER, MARY
 N6NXY BURDETTE, SAM
 KB6NZA BURGESS, CARL W.
 K6NKR BURNESS, MARY
 K2GJ BURRITT, JAI
 N6HVZ BURGEMA, PAUL
 W6OFT CALDWELL, CLINTON
 N6QJE CALL, ELEANORE
 KA6GRG CALVERT, CHUCK
 WB6HSZ CAMPBELL, JOHN
 N9AKB CAMPBELL, KENNETH
 W6FAY CARR, JAY
 N6GAT CASSEN, FRANK
 N6GES CASTAGNA, ED
 WC6J CHAMBERS, BOB
 W6WVYD CHAMBERS, BURR
 N66VYC CHAMBLEISS, JR., BURR
 KB6OOE CHANDLER, LARRY
 ASSOC CLASSEN, NEIL
 KB6NUY COATES, WALTER
 N6EL COMER, BRIAN
 N6JZB CONTOGENIS, JOEY
 W6GHOM COPELY, WALL
 KE6BH COPELY, DAVE
 W6BXJ COPELTRYMAN, BILL
 W6HLB COUD, BOB
 W6TZV CRAIG, JR., JOE
 N6INN CRISPELL, HAL
 K6HAV CROSSMAN, PAT
 K6RF CROSSMAN, RALPH
 W6GV CULLIAN, TED
 N6PQQ DE MONTEGRE, LARRY
 WD6BNX DE MONTEGRE, VINA
 N6CKH DEAN, ROBERT K.
 N6GZ DEMOS, TED
 DENTON, WILLIAM H.

7027 DENNISON ST.
845 HAMPTON COURT
845 SEAMEN ST.
6594 ROSENDA CT. APT 238
4050 ROSENDA CT. #238
13010 PORTOFINO DR.
1365 LAS PALMAS AVE.
2133 FRANCIS VIEW TER.
746 HONEYDEW LN.
6026 POPPY ST.
P.O. BOX 1589
1341 PHILLIPS ST.
1345 PHILLIPS RD.
2455 EDGEHILL RD.
8733 ELFORD COURT
3700 OLDS RD. SP-86
17083 ABRA WAY
1926 ALEXANDER DR.
1020 ELEAN HEWES HWY #2
1345 ROWENS AVE.
5533 MOONLIGHT LN.
P.O. BOX 80092
1632 DOROTHEA AVE.
3270 SYME DR.
326 KILDEE LANE
2013 MELROSE WAY
484 CAMBERIDGE AVE.
2610 EL AGUILIN LN.
976 SANTA STELLA
243 DOUGLAS ST. APT 281
3131 MARY LANE
31201 MIRIA MESA AVE.
4433 KITTY WAKE AVE.
5573 MT. ACARA DR.
228 COLUSA WAY
228 COLUSA WAY
4718 WESTBRIDGE DR.
P.O. BOX 271543
PO BOX 27343
13228 EL REY VISTA
343 WHITEWOOD PL.
4150 ADAMS ST.
2448 JEFFERSON ST.
2448 JEFFERSON ST.
1574 GOODWIN DR.
481 EAST DR.
2705 SUNSET HILLS
3909 RECHER RD. SP-22
273 MARVIEW ST.
2247 W. JEWETT ST.
P.O. BOX 190
P.O. BOX 190
6380 FALMOUTH
4931 LOMA LAGUNA DR.
730 PEARWOOD ST.
609 WASHINGTONIA DR.
3428 ALABAMA ST.
P.O. BOX 296
1727 GREENTREE RD.
2806 MACDONALD ST.
305 SKYLARK DR.
4261 BARNWELL ST.
P.O. BOX 73
P.O. BOX 73
2108 BUNKER VIEW WAY
75 CRESTVIEW RD.
1360 CRESTVIEW RD.
73601 WOODSTOCK PL.
2218 MISSISSIPPI AVE.
9633 FARMINGTON DR.

SAN DIEGO, CA.
VISTA, CA.
VISTA, CA.
SAN DIEGO, CA.
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SAN DIEGO, CA.
DEL MAR, CA.
ESCONDIDO, CA.
ESCONDIDO, CA.
OLIVENHAIN, CA.
VISTA, CA.
LA MESA, CA.
LA MESA, CA.
VISTA, CA.
VISTA, CA.
SAN DIEGO, CA.
OJINARD, CA.
SAN DIEGO, CA.
ESCONDIDO, CA.
EL CENTRO, CA.
SAN MARCOS, CA.
LA JOLLA, CA.
SAN DIEGO, CA.
FALLSBROOK, CA.
CARLSBAD, CA.
OCEANSIDE, CA.
VISTA, CA.
CARDIFF, CA.
VISTA, CA.
CARLSBAD, CA.
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ESCONDIDO, CA.
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POWAY, CA.
ENCINITAS, CA.
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CARLSBAD, CA.
ESCONDIDO, CA.
FALLSBROOK, CA.
VISTA, CA.
SAN LUIS, CA.
SAN LUIS, CA.
LA MESA, CA.
OCEANSIDE, CA.
SAN MARCOS, CA.
SAN DIEGO, CA.
NESTOR, CA.
ENCINITAS, CA.
OCEANSIDE, CA.
VISTA, CA.
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SAN DIEGO, CA.
VISTA, CA.
VISTA, CA.
OCEANSIDE, CA.
VISTA, CA.
VISTA, CA.
FALLSBROOK, CA.
SAN DIEGO, CA.

[illegible]

K3FWT DIVECCHIO, MARK
W6BHF DOBLER, RAY
W6NBH DOIG, AL
K16TG DOWLING JR., CHUCK
W6TXX EARL, RONALD C.
N6QMI EGDARL, JOHN
K6GQS ESTERLY, J., HAROLD D.
WB7OCCR EVANS, LEE
N6GNB FARNNESTOCK, ALBERT
N6GWJ FARNNESTOCK, MICKEY
W6FTV FALLS, EDWARD L.
K6QOV FAY, CHARLIE
K7WLX FELTON, BOB
N61E FERANTO, FELIX
N6MHP FISHER, MIKE
N6GJW FOLSON, RUCK
W6OP FORBES, JASS
K6GHI FRANKLIN, OTIM
W6GNTZ FRY, OLIVIA
K6GAK GARDEN, RICHARD K.
WB6TBA GATES, BOB
W6NYU GATES, HOWARD
WB6ZJZ GIBBS, CHARLEY
W6OKG GLASER, PETER
W6FLL GOEPFINGER, ALBERT
WB6YVT GOLDEN, CHUCK
W6G000 GONSETT, BOB
W6B6EZ GONSETT, JUDY
K6G6YG GOOD, GENE
N7AS GRANT, GARY
N601O GRANT, ROD
N601E GRANT, RODERICK
N6MAE GREER, JOHN
K6BOH GREGORY, ROBERT
WB61OF HALTBURTON, ALEX
W6GCSH HAMANN, MICHAEL
K6GKX HANDEL, LITA DANIEL L.
W6CHOG HANSON, ELLIOT
K6GJL HANSON, MELVIN R.
N61JM HARTNORTH, JACK
WB6WCT HARKER, HARKLAND 'HARK'
N6AMD HARLAND, RAY
K6GCN HARRER, JIM
W6GWSZ HARRY, JOE
N6LTV HART, LANE
W6JSP HARVEY, FLOYD
WB6BHE HARVEY, VANESSA
K2RTO HASSELL, NATHANIEL W.
N6NNQ HEALEY, THOMAS
N6NNP HEALEY, WILMA
W6GEEZ HEERSMA, BILL
K66PPD HEITSMAN, PAUL
W66KZN HETTGER, BOB
N0BBK HERMAN, ETHEL
WB0RWV HERMAN, ZEL
W6UZZ HICKS, WALT
N6MTH HICK, RICK
W6HC HODGSON, CHARLES I.
K61I HOWE, ED
W6DDLW HOWE, 'JACK'
WB6SML HORGAN, JOHN
K6PPP HORGAN, GENE
K6B0F HORBELL, MAURICE
W6G6FM HOUSSER, JERRY
K16GI HOY, TIM
W6JRO HUCKABAY, WALT
W6TFB HUNT, LLOYD
W6VNR HYPNAROWSKI, JOE
W6IRM INSKIP, CHUCK
ASSOC JACOBSON, LEONARD H.
W6KCB JAKOWSKI, EDWARD
N6BPM JENKINS, MICKEY
W66FE JOHNSON, DON
N6WOW JOHN, L.
W6DWE KIRKPATRICK, CLAUDE L.

10435	MOUNTAIN GLEN TER.	SAN DIEGO, CA.
7142	CLIOUATO CT.	POWAY, CA.
419	EL DORADO DR.	ESCONDIDO, CA.
3549	CASTLE GLEN DR. #106	SAN DIEGO, CA.
11372	IRONWOOD RD.	SAN DIEGO, CA.
4208	HIGHLAND DR.	CARLSBAD, CA.
4633	EL PENON WY.	SAN DIEGO, CA.
18218	-150 PARADISE MTN RD	VALLEY CENTER, CA.
1499	E. WILSON AVE.	ESCONDIDO, CA.
1499	E. WILSON AVE.	ESCONDIDO, CA.
3352	CANONITA DR	FALLBROOK, CA.
200-93	N. EL CAMINO REAL	OCEANSIDE, CA.
4803	NEBLINA DR	CARLSBAD, CA.
1010	E. BOBBER # 76	VISTA, CA.
P. 0.	BOX 1757	RAMONA, CA.
P. 0.	BOX 1308	RAMONA, CA.
2355	SAN CLEMENTE AVE.	VISTA, CA.
2374	FOOTHILL DR.	VISTA, CA.
2374	FOOTHILL DR.	VISTA, CA.
1088	CORNELIUS ST.	CARLSBAD, CA.
1088	BENTLEY PL.	EL CAJON, CA.
10911	EDDINGTON RD.	OCEANSIDE, CA.
1213	WAKING DR.	CARLSBAD, CA.
219	NEVADA ST.	OCEANSIDE, CA.
2161	SUNSET DR.	ESCONDIDO, CA.
3001	LOUANA AVE.	OCEANSIDE, CA.
3388	NEPTUNE AVE.	ESCONDIDO, CA.
3388	NEPTUNE AVE.	ESCONDIDO, CA.
12610	ROBISON BLVD.	POWAY, CA.
17634	PLAZA ARICA	SAN DIEGO, CA.
15520	ANDORRA WAY	SAN DIEGO, CA.
15520	ANDORRA WAY	SAN DIEGO, CA.
69	RANCHO SANTEE FE RD.	OLIVERHAIN, CA.
6965	CASSELBERRY WY.	SAN DIEGO, CA.
9141	HEATHERDALE ST.	SANTEE, CA.
14169	HALF MOON BAY DR.	DEL MAR, CA.
510	VINE ST.	ESCONDIDO, CA.
1167	MEADOW DR	GRASS VALLEY, CA.
3872	CAMINITO DR TATAN	SAN DIEGO, CA.
1211	HIDDEN OAKS TRAIL	VISTA, CA.
6002	MARY VISTA	ESCONDIDO, CA.
142	PROVIDENCE RD.	SAN DIEGO, CA.
2438	-2 E. VISTA WAY	VISTA, CA.
1918	PAMLA LN	ESCONDIDO, CA.
1195	-33 LA MORREE RD.	SAN MARCOS, CA.
1195	-33 LA MORREE RD.	SAN MARCOS, CA.
27078	BOBCAT TRAIL-HWY 76	SANTA YSABEL, CA.
1145	IMPERIAL BEACH BLVD.	IMPERIAL BEACH, CA.
11008	TOROLE CIR	VISTA, CA.
1708	BONITA LANE	CARLSBAD, CA.
49355	FLIGHTLINE WAY	AGUANGA, CA.
49355	FLIGHTLINE WAY	AGUANGA, CA.
2671	ELYSSEE ST.	SAN DIEGO, CA.
8455	HYDRA LANE	SAN DIEGO, CA.
P. 0.	BOX 178374	SAN DIEGO, CA.
1851	ALTA VISTA DR.	VISTA, CA.
244	N. STAGECOACH LN.	FALLBROOK, CA.
2430	CALAHAD RD.	SAN DIEGO, CA.
1906	ALFA VISTA DR.	EL CAJON, CA.
1073	CYPRESS DR.	VISTA, CA.
P. 0.	BOX 7334	IMPERIAL, CA.
1047	SHAFFER ST.	OCEANSIDE, CA.
3747-102	VISTA CAMPANA S.	OCEANSIDE, CA.
3785	MT BLACKBURN AVE.	SAN DIEGO, CA.
631	S. CLEMENTINE	OCEANSIDE, CA.
1125	MEADOWLAKE DR #7	VISTA, CA.
28548	MAC TAN RD.	VALLEY CENTER, CA.
4815	STEPHANIE PL.	OCEANSIDE, CA.
3140	LINCOLN ST.	CARLSBAD, CA.
3920	HOLLY BREA LN.	CARLSBAD, CA.
1744	PACIFIC BEACH-DR.	SAN DIEGO, CA.

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WBOYCO	KIRSCHNER, HENRY	266 CARISSA DR.	OCEANSIDE, CA.	92056	N6BAD	REBER, JOHN	5968 TULANE ST.	SAN DIEGO, CA.	92122
KB6NRL	KLEIN, FRED	3505 BADILLO ST.	SAN MARCOS, CA.	92069	KSSGS	RICE, BOB	3130 MORNINGSTAR DR.	OCEANSIDE, CA.	92056
W6FN	KLIPPEL, KEN	4420 LA PORTALADA DR.	CARLSBAD, CA.	92068	ADGZ	RICH, JANE	3130 MORNINGSTAR DR.	OCEANSIDE, CA.	92056
WB6IOS	KUUVINEN, JOHN	P.O. BOX 4666	VISTA, CA.	92083	WAG1PD	RIDEROUT, ART	2233 GUM TREE LN.	FALLBROOK, CA.	92028
WB6HMY	LA POINTE, JOE	188 EVERGREEN PKWY.	OCEANSIDE, CA.	92054	WAGNMC	RIVERA, BOB	2233 VISTA GRANDE DR.	VISTA, CA.	92084
N6ISC	LACKEY, PAUL	1087 SHADOWRIDGE APT 106	VISTA, CA.	92083	WAGNMC	ROBERT, BARRY K.	8010 VALDOSTA AVE.	SAN DIEGO, CA.	92126
WA6BSD	LANG, STEVEN	832 OLEANDER PL.	ESCONDIDO, CA.	92027	WAGNMC	ROBERT, BARRY K.	30311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
W6DNX	LANG, JAHN CARL	4644 CORDOBA WY.	OCEANSIDE, CA.	92056	WAGNMC	ROHNER, STAN	30311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
KB7LY	LEACH, BILL	5415 CLAIRMONT MESA BLVD.	SAN DIEGO, CA.	92117	WAGNMC	ROHNER, SUSAN	30311 CIRCLE R LANE	VALLEY CENTER, CA.	92082
K6CLU	LEAK, EARL	1242 GRANDVIEW RD.	VISTA, CA.	92084	KB6MZ	ROSS, BETSY E.	1252 DIAMOND ST.	SAN DIEGO, CA.	92109
WF6L	LEONELLI, PHIL	3564 STRAWBERRY PL.	OCEANSIDE, CA.	92056	KB6MZ	ROSS, ED	1419 GOLDEN GATE DR.	SAN DIEGO, CA.	92116
WA7BIA	LEWIN, A. A.	1166 WOTAN DR.	ENCINITAS, CA.	92024	KB6JVS	ROSS, JUDY	328 CROUCH ST.	SAN DIEGO, CA.	92106
W60VP	LIEN, DAVID A.	18215 CORTE DE CASARES	SAN DIEGO, CA.	92128	KB6JVS	ROUSE, HARRY A.	2813 TURNBULL ST.	OCEANSIDE, CA.	92054
KB6WVZ	LINCOLN, CAROLINE	1345 HYMETTUS AVE.	LEUCADIA, CA.	92024	KB6JVS	ROWLETT, GUY	1510 ESPERANZA WAY	ESCONDIDO, CA.	92054
KB6WVZ	LINCOLN, CHESTER 'BUD'	1286-88 DISCOVERY ST.	SAN MARCOS, CA.	92069	KB6JVS	RUTLEDGE, BILL	1327 PHILLIPS ST.	ESCONDIDO, CA.	92054
W6EYF	LINT, KEN	4119 THOMAS ST.	OCEANSIDE, CA.	92056	KB6JVS	SANDBERG, SANDY	1138 E. RUSTIC RD.	ESCONDIDO, CA.	92054
N6LYD	LISCOMB, BILL	7034 FERN PL.	CARLSBAD, CA.	92009	KB6JVS	SCHLESINGER, MARK M.	13633 CATAWBA DR.	POWAY, CA.	92024
K16MV	LITTLEFIELD, CHARLES	439 LADO DE LOMA DR.	VISTA, CA.	92083	KB6JVS	SCHMIDT, WILLIAM	920 STRATFORD DR.	ENCINITAS, CA.	92024
ASSOC	LOUNSBURY, JERRY	357 ALAMEDA BLVD.	CORONADO, CA.	92118	KB6JVS	SCHUTZ, AURA	2333 MABLEE DR.	VISTA, CA.	92084
K4ACM	LUTZ, EDWARD	1078 5TH ST.	RAMONA, CA.	92065	KB6JVS	SCHWEIZER, EARL	P.O. BOX 532	CARDIFF, CA.	92007
N6ODR	MAHLUM, DAVID	1198 SENWOOD AVE.	FALLBROOK, CA.	92028	KB6JVS	SEALS, KEN	2807 ATADORE COURT	CARLSBAD, CA.	92008
KB6DGR	MAHONEY, BETTY	121 ORANGE AVE. SP 84	CHULA VISTA, CA.	92011	KB6JVS	SEALL, BRYAN	4631 BRIAR RIDGE RD.	OCEANSIDE, CA.	92056
W6NFG	MANDY, BILL	7240 EL CAJON BLVD. # 2	SAN DIEGO, CA.	92115	KB6JVS	SELLERS, LINDA	4232 FIESTA WAY #8	OCEANSIDE, CA.	92056
WA6SGK	MARTIN, ALAN	1135 CREST DR.	ENCINITAS, CA.	92024	KB6JVS	SELLERS, STEVE	4232 FIESTA WAY #8	OCEANSIDE, CA.	92056
W6SE	MARTIN, JOHN	1135 CREST DR.	ENCINITAS, CA.	92024	KB6JVS	SHAUT, STANLEY	12850 CAMINO DE LA BRECIA	SAN DIEGO, CA.	92128
KB6QWI	MARTIN, JOSEPH	619 FLORA DR.	OCEANSIDE, CA.	92056	KB6JVS	SIMMONS, MARCEL	4718 CORDOBA WY.	OCEANSIDE, CA.	92056
KB6QXW	MARTINA, JOSEPH F.	4462 IBIS WAY	OCEANSIDE, CA.	92056	KB6JVS	SIMMONS, JACK	4637 ORCHARD AVE.	SAN DIEGO, CA.	92107
N6KAL	MATROS, BECKY	452 E. WASHINGTON ST.	RAMONA, CA.	92065	KB6JVS	SIMMONS, JEREMY	4637 ORCHARD AVE.	SAN DIEGO, CA.	92107
N6KEU	MATROS, RICH	452 E. WASHINGTON ST.	RAMONA, CA.	92065	KB6JVS	SIMPSON, IVAN	3669 JEWEL ST.	SAN DIEGO, CA.	92109
WB60BH	MAYES, PETE	1700 KINCLET RD.	SAN MARCOS, CA.	92069	KB6JVS	SIMPSON, MURIEL 'SKIP'	1424 LOS AMIGOS	FALLBROOK, CA.	92028
K6RTD	MAYNARD, GEORGE 'SKIP'	643 PLUMOSA AVE.	VISTA, CA.	92083	KB6JVS	SMITH, ART	4513 ROSALAWN ST.	SAN DIEGO, CA.	92117
KB6GIR	MC BRIDE, WILLERT 'MAC'	9493 EMERALD GROVE AVE.	LAKEVIEW, CA.	92040	KB6JVS	SMITH, GEORGE	1325 DEL LAGO DR. C-1	NATIONAL CITY, CA.	92050
K16PE	MC CARTNEY, DOUGLAS B.	3535 SITTO BAVA	CARLSBAD, CA.	92009	KB6JVS	SMITH, STEPHEN J.	3295 PAGE ST.	LAGUNA HILLS, CA.	92653
KB6THQ	MC CORD, BILLY	122 WASHINGTON ST.	VISTA, CA.	92084	KB6JVS	SMITH, BILLY J.	3772 PINE RD.	SAN DIEGO, CA.	92115
KA6QFQ	MC CORMICK, MATT	1020-134 E. BOBIER DR.	VISTA, CA.	92084	KB6JVS	STACK, PAUL J.	753 POMEROY DR.	CARLSBAD, CA.	92008
N6NUN	MC LANNY, STEPHEN B.	804 1266 LEE DR.	RANCHO SANTA FE, CA.	92087	KB6JVS	STACK, LYNN	3322 AVENIDA HACIENDA	ESCONDIDO, CA.	92083
WB9EJU	MERRITT, BARRY	2292 CALLE DE CALA	DEAN, CA.	92014	KB6JVS	STEDMAN, DUANE	1614 EDILBEE DR.	CARDIFF, CA.	92007
N6KKA	MERZ, TOM	4617 34TH ST.	SAN DIEGO, CA.	92116	KB6JVS	STEDMAN, PATRICIA	1614 EDILBEE DR.	CARDIFF, CA.	92007
N6MRM	MIELE, STEVE	39 EDGEWOOD AVE.	OAKDALE, NY.	11769	KB6JVS	STEELE, WILLIAM	4444 EASTGATE MALL #7	SAN DIEGO, CA.	92121
W6TDC	MILLER, LEE	630 CORTEZ AVE.	VISTA, CA.	92084	KB6JVS	STEWART, F. BRUCE	867 EVERGREEN LANE	VISTA, CA.	92084
N6EOB	MILLER, RAYMOND	4658 S. MISSION RD.	FALLBROOK, CA.	92028	KB6JVS	SWADER, JOHN B.	1455 S. ALTURA SP# 118	FALLBROOK, CA.	92028
N6LPM	HILLS, JOHN	142 POLK ST.	OCEANSIDE, CA.	92056	KB6JVS	SWENSON, GEORGE A.	6460 CONVOY CT. #115	SAN DIEGO, CA.	92117
KB6HGR	MITCHELL, CYNTHIA	9139 BERKVIEW LN.	SPRING VALLEY, CA.	92077	KB6JVS	TAYLOR JR., WILLIAM H.	3744 BLUEBIRD CANYON RD.	VISTA, CA.	92084
NG6U	MITCHELL, LOREN	10485 VIACHA DR.	SAN DIEGO, CA.	92124	KB6JVS	TEALE, JR.	2704 EL CAMINO DEL NORTE	OLIVENHAIN, CA.	92024
N6GDT	MITCHELL, NANCY	10485 VIACHA DR.	SAN DIEGO, CA.	92124	KB6JVS	TENTOR, JOHN	1012 AVENIDA MARIA	SAN DIEGO, CA.	92129
N6IES	MITCHELL, THEODORE	9139 BERKVIEW LN.	SPRING VALLEY, CA.	92077	KB6JVS	THIELE, AL	3444 LADY HILL RD.	SAN DIEGO, CA.	92130
K6QO	MORIARTY, JOHN	10070 PASEO MONTRIL #802	SAN DIEGO, CA.	92129	KB6JVS	TILLEY, AUBRA	P.O. BOX 429	PAUMA VALLEY, CA.	92061
N6PYD	MURDOCK, JIM	3608 CHESHIRE AVE.	CARLSBAD, CA.	92008	KB6JVS	TIPFITT, DON	2233 S. STAGECOACH LANE	FALLBROOK, CA.	92028
N6NEH	NEIGER, RALPH	1337 PARK HILL LN.	ESCONDIDO, CA.	92025	KB6JVS	TODD, GEORGE	822 LA SALINA PL.	OCEANSIDE, CA.	92054
WB6RTY	NEUMAN, JOHN	822 LAURELWOOD CT.	SAN MARCOS, CA.	92069	KB6JVS	TOTH, ALAN T.	1015 ROSE DR.	VISTA, CA.	92083
W6EVL	NICHOLS, ART	1473 WINTERWARM DR.	FALLBROOK, CA.	92028	KB6JVS	TRAPOLINO, MARK	6417 LA PALOMA ST.	CARLSBAD, CA.	92009
K6AYJ	NICHOLS, EDITH	1473 WINTERWARM DR.	FALLBROOK, CA.	92028	KB6JVS	TRAYNOR, BOB	12414 SEMILLON BLVD.	SAN DIEGO, CA.	92131
N6LUO	NIDA, TED H.	1021 DEERHAVEN DR.	VISTA, CA.	92084	KB6JVS	TRAYNOR, JUDY	12414 SEMILLON BLVD.	SAN DIEGO, CA.	92131
W6MPT	NIELSEN, WILL O.	1731 REPUBLIC ST.	SAN DIEGO, CA.	92114	KB6JVS	TRUAX, DON 'RED'	7915 SHADOW HILLS DR.	LA MESA, CA.	92041
N6MQV	NIELSEN, WILL O.	2438 STOCKTON LN.	VISTA, CA.	92084	KB6JVS	UMINAKI, GEORGE	13976 MYRA MONTANA DR.	DEL MAR, CA.	92014
W6PNT	OLSEN, FRED	10680 CARMENITO DERECHO	SAN DIEGO, CA.	92126	KB6JVS	VERACCHIA, DENNIS	8423 COWTAN ST.	SAN DIEGO, CA.	92126
W26F	ORR, JR. ALAN	1665 PARVENU LANE	FALLBROOK, CA.	92028	KB6JVS	VICKERY, VICTORIA	1830 HAMPTON COURT	VISTA, CA.	92083
N6QDK	PAIGE JR., CHARLES	711 ARTHUR AVE.	OCEANSIDE, CA.	92056	KB6JVS	VLYMEN, BILL	1440 JESSIE AVE	LA MESA, CA.	92041
N6NAU	PAKASKI, TED	3731 PARK DR.	CARLSBAD, CA.	92009	KB6JVS	WAGNER, LEO F.	3492 DESCANSO #8	VISTA, CA.	92083
KB6PCF	PARKER, MARNI	4166 TAOS DR.	SAN DIEGO, CA.	92117	KB6JVS	WALKER, ERICH M.	1029 S. NEVADA	OCEANSIDE, CA.	92069
W6SAX	PARKER, MARSH	4166 TAOS DR.	SAN DIEGO, CA.	92117	KB6JVS	WANDSCHNEIDER, HERB	P.O. BOX 234	JAMUN, CA.	92054
W6Z	PARTRIDGE, DELMAR E.	10675 RED CEDAR DR.	SAN DIEGO, CA.	92129	KB6JVS	WATSON, WALTER A.	1733 S. DITMAR ST.	OCEANSIDE, CA.	92054
N6OEV	PASCHKE, MARY	9209 SAMANTHA CT.	SAN DIEGO, CA.	92129	KB6JVS	WATT, BILL	1055 BANGOR ST.	SAN DIEGO, CA.	92106
N6CPS	PASCHKE, VERN	9209 SAMANTHA CT.	SAN DIEGO, CA.	92129	KB6JVS	WENZ, GORDON	10711 CHARBONO TERR.	SAN DIEGO, CA.	92131
WA6IWK	PATCHEL, HERBERT	3634 JENNIFER ST.	SAN DIEGO, CA.	92117	KB6JVS	WEST, RICHARD O.	1605 WAGON WHEEL DR.	OCEANSIDE, CA.	92056
KA6GHE	PATCHEL, JUDITH	3634 JENNIFER ST.	SAN DIEGO, CA.	92117	KB6JVS	WHIPPLE, BILL	P.O. BOX 2448	RANCHO SANTA FE, CA.	92067
KD6WX	PATCHEL SR., HERBERT	4920 DELLA PL.	SAN DIEGO, CA.	92117	KB6JVS	WILHELM, LOREEN	P.O. BOX 2448	RANCHO SANTA FE, CA.	92067
K6LJX	PEARCE, ART	3580 TWILIGHT LN.	OCEANSIDE, CA.	92056	KB6JVS	WILHELM, RON	4722 BIRCHWOOD CIR.	CARLSBAD, CA.	92008
W6U	PENNINGTON, WALTER	3529 PEAR BLOSSOM DR.	OCEANSIDE, CA.	92056	KB6JVS	WILLETT, ALLEN	1914 HOWE PL.	ESCONDIDO, CA.	92025
WA6MOS	PEVNEY, JOE	4134 SKYLINE RD.	CARLSBAD, CA.	92008	KB6JVS	WILLIAMS, BILL	1330 PHILLIPS ST.	VISTA, CA.	92083
W6OML	POWELL, RICHARD	3535-275 LINDA VISTA DR.	VISTA, CA.	92083	KB6JVS	WILLIAMS, HARRY	3820 MARGARET WY.	CARLSBAD, CA.	92008
W6WPO	PRIEST, BILL	3535 LINDA VISTA DR.	VISTA, CA.	92083	KB6JVS	WILLIAMS, JACK	32001 VIA AKARAT DR.	BONSAI, CA.	92003
WA6HYB	PUGH, D. C.	4660-125 N. RIVER RD.	OCEANSIDE, CA.	92056	KB6JVS	WILLIAMS, NASH	P.O. BOX 177	SAN LUIS REY, CA.	92068
WB6HFE	RAMME, FRANK B.	331 REDONDO DR.	OCEANSIDE, CA.	92056	KB6JVS	WILLIAMS, RICHARD			

WBOWGU WILLIAMS, SANDY
 KB5MU WILLIAMSON, PAUL T.
 W9GNI WITTING, MARTIN J.
 K6KFY WITTEMBACH, BEN
 N6QQC ZEIER, DAVIS

1914 HOWE PL.
 6583 EDMONTON AVE.
 CHAPLIN OFC. 1ST FSSG
 6951 BATISTA ST.
 4466 COLLEGE AVE.

ESCONDIDO, CA.
 SAN DIEGO, CA.
 CAMP PENDLETON, CA
 SAN DIEGO, CA.
 SAN DIEGO, CA.

92025
 92122
 92055
 92111
 92115

By Paul Williamson, KB5MU
TIDBITS FROM THE CURRENT EVENTS FILE:

- * AA6TN-1 (NET/ROM node BGBEAR) has installed a 4800 bps port on 51.120 MHz using a K9NG modem. it is hoped that using 6 meters will bring the mountains closer together. Other mountaintops have plans to add 6 meter ports "soon".
- * Commodore 64 users can get on packet with just software (free) and a simple modem (\$20 worth of parts). The Digicom 64 software that makes this possible was written by German hams, and is available from W2UP or local users. This is the cheapest way to get on packet if you already have a C-64.
- * The KA9Q software for TCP/IP networking will soon support full AX.25 protocol for both TCP/IP and plain type-back-and-forth QSOs. Long-rumored ports to the Macintosh, Amiga, and Unix SysV are also scheduled for release soon.
- * WA4DSV's 56 kbps modem boards have been distributed to experimenters around the country, but apparently no one outside the original group has completed one. Turns out that acquiring all the parts is a bit of a challenge.
- * A subcommittee of the ARRL Digital Committee will be meeting in January in Washington, D.C. to consider proposals for Version 3 of the AX.25 Level 2 protocol standard. They will have a difficult task: improving the protocol without obsoleting the tens of thousands of TNCs already in the field.
- * Thanks to funding from SANDPAC, the San Diego Packet Radio Association, KA6IQA-1 is now a NET/ROM node (alias LJOLLA).

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