



News Bulletin of the TRW Amateur Radio Club

DECEMBER 1984

Garrett/W6TRW Repeater: 145.32/- .600(2A-PL) -- UHF: 442.000in/447.000out

Tuesday	Dec 18, noon	Early Club Meeting. Vote for New Club Officers!!
Saturday	Dec 29, 8-11am	Swapmeet
Tuesday	Jan 8, after work	Executive Board Meeting. All members are welcome to attend.
Saturday	Jan 12, 1900 UTC	ARRL VHF Contest. Ends 0400 UTC Jan 14. Contact the club on 147.51 simplex to start.
Saturday	Jan 26, 8-11am	Swapmeet
Tuesday	Jan 29, noon	Club Meeting. R4/1041. New Club Officers Announced.

Paul Herbert, KG6CR

I live in a townhouse community of 200 homes in Santa Ana Canyon. When I obtained my license in late 1982 and set up my first station, I found a high (S3-S4) noise level. In mid-September of this year, the QRM level jumped to 10 over nine on the three lower bands, and to S6-S7 on 15 and 10 Meters, making my transceiver totally useless. Although I had missed the August meeting where the Edison RFI tracker, Mike Corn, spoke, John Keller, N6JLS, and others gave me some suggestions for tracking down the noise source. John had been trying to convince me for a long time that an S4 noise level was local interference and not atmospheric noise.

After many false starts, I became convinced that the source was from high-power transmission lines across the north side of our development, which is bordered on all four sides by these lines. I filed a formal telephone complaint with SCE's office in Santa Ana, and received a call from Henry Stoffers, who tracks RFI for SCE in Orange County. He explained that the lines on three sides carried 66,000 Volts.

Within a few days, he had located massive interference coming from the nearest pole to my house, about 120 yards away. SCE washed the pole, lines and insulators down with high-pressure hot detergent with no change. Mr. Stoffers finally succeeded in convening a meeting of appropriate decision makers in SCE at the site and showed them the noise. Five days later, the power company shut the power off for three hours while they replaced 30-year old insulators.

I arrived on the site as they were finishing. They showed me the offending insulator, which consists of ceramic disks supported by interleaved metal plates. To keep these plates from acting as a giant capacitor, the metal disks have interconnecting braided bonding straps. Two of these were broken, probably by a lightning strike. The lowest bonding strap was hanging down right next to the 66kV line, apparently generating a constant arc.

I couldn't even tell when they turned the power back on! The S-meter was sitting on zero! I can't believe all the signals that appear below S4. Late in the evening on 17 November, on 80 Meters, I heard England, Germany and Chile being worked by stateside pile-ups. On the same evening I worked a friend in San Jose, Costa Rica on AMTOR, getting perfect copy at a high data rate with a signal so weak the S-meter needle didn't move!

I have since talked to two hams who operate near noisy power lines owned by municipal power departments who will do nothing to correct the noise. And the FCC told one of them that their list of similar complaints was so long that his wouldn't be reviewed until 1995 (yes, 1995)!

Needless to say, I am delighted to find out how well my TS-430 does on weak signals, and grateful for the help and perseverance of Henry Stoffers in locating the noise source and getting Edison to eliminate it.

Membership Renewal

Bill Dews, K6AWO

Time to renew membership is upon us. This Crosstalk has a new membership application for you to pull out. Please take the time to attach a check and return it so that your membership will continue uninterrupted. If you need a Club badge add two dollars with your dues, and I'll see that you will get a TRW/ARC badge plus your new 1985 membership card.

NEW MEMBERS - - OLD MEMBERS

Welcome back to the TRW/ARC fold Steve O'Neal, N6CRR who has joined up for 1985. Also welcome new member Frederick Eriksen, KBØLF who is joining up for the first time. Hope to see you both at the next meeting.



The TRW Amateur Radio Club's Executive Board meets after work; everyone is invited to attend.
 Club meetings are held at noon on the last Tuesday of the month except December (3rd Tuesday) in Bldg/Room R4/1041.
 The Swapmeet is held the last Saturday of the month. To avoid conflict with Field Day the June Swapmeet is held one week early.
 Club picnics are announced in Crosstalk or by a special flyer.
 Any changes in the calendar will be announced in Crosstalk.

JANUARY Membership <u>Renewal</u> Time Now! Executive Board Meeting (EBM) Tuesday, January 8 Swapmeet, Saturday, Jan. 26 8:00 - 11:00 am Club Meeting, Tuesday, Noon, January 29 New Club Officers Announced	FEBRUARY Late <u>Membership</u> Renewal EBM, Tuesday, February 12 Swapmeet, Saturday, Feb. 23 8:00 - 11:00 am Club Meeting, Tuesday, Noon, February 26	MARCH EBM, Tuesday, March 12 St. Patrick's Day Observance Friday After Work, March 15 Club Meeting, Tuesday, Noon, March 26 Swapmeet, Saturday, March 30 8:00 - 11:00 am	APRIL EBM, Tuesday, April 9 Swapmeet, Saturday, April 27 8:00 - 11:00 am Club Meeting, Tuesday, Noon, April 30
MAY Club Picnic, Noon at Park, Pre-Field Day, Tues, May 7 EBM, Tuesday, May 14 Swapmeet, Saturday, May 25 8:00 - 11:00 am Club Meeting, Tuesday, Noon, May 28	JUNE EBM, Tuesday, June 11 Club Picnic, Noon at Park, Wednesday, June 12 Swapmeet, Sat, June 22, 8-11 Club Meeting, Tuesday, Noon, June 25 <u>Field Day Weekend</u> , June 28-30	JULY EBM, Tuesday, July 9 Club Picnic, Noon at Park, Monday, July 15 Swapmeet, Saturday, July 27 8:00 - 11:00 am Club Meeting, Tuesday, Noon, July 30	AUGUST Early EBM , Tuesday, August 6 ARRL Convention, Queen Mary, August 9, 10, 11 Club Picnic, Noon at Park, Friday, August 16 Club Meeting, Tuesday, Noon, August 27 Swapmeet, Sat, Aug 31, 8-11am
SEPTEMBER EBM, Tuesday, September 10 Club Picnic, Noon at Park, Tuesday, September 17 Club Meeting, Tuesday, Noon, September 24 Swapmeet, Saturday, Sept. 28 8:00 - 11:00 am	OCTOBER EBM, Tuesday, October 8 Swapmeet, Saturday, Oct. 26 8:00 - 11:00 am Club Meeting, Tuesday, Noon, October 29	NOVEMBER New Officer's Nomination <u>Annual Dinner</u> , Saturday, November 9 EBM, Tuesday, November 12 Club Meeting, Tuesday, Noon, November 26 Swapmeet, Saturday, Nov. 30 8:00 - 11:00 am	DECEMBER Vote! New Club Officers Early EBM , Tuesday, December 3 EARLY CLUB MEETING , Noon, Tuesday, December 17 Swapmeet, Saturday, Dec. 28 8:00 - 11:00 am MERRY CHRISTMAS AND HAPPY NEW YEAR

November Swapmeet Notes

Don Resor III, N6KAW

Do you honestly think a little rain would put a damper on the W6TRW Swapmeet? Not on your life. You're not messing around with a bunch of give up easy pansy types out here. The Swapmeet will go on, and it did. The high humidity didn't have any effect on the turnout at all. In fact I think we had more in attendance than last month! We marched on, buying and selling as usual with an umbrella in hand and plenty of plastic to cover the merchandise. So don't let the weather report fool you. Chances are the show will go on! There is a possible advantage to the wet weather. Have you ever heard of a "Rain Sale?" Hi Hi.

The winner of this month's Swapmeet Raffle was **Bill Dews, K6AWO**. A check for \$10.00 was awarded to Bill at the Club General Meeting of November 27. The prize is to be used toward a purchase at a future Swapmeet. Congratulations Bill!

This month I was assisted by **Ed Farnsworth, W6TEC** in handling traffic control and the general control of the Swapmeet activities and tasks. The Swapmeet went exceptionally well. Only a small traffic jam when some sellers left after a rain shower and one outrageously illegally parked automobile marred an otherwise good Swapmeet. Sellers abided by the "one seller - one parking place" rule for the most part. (Ed. note: One large rental truck of equipment came all the way from Las Vegas - it had started out as just one car full but quickly grew to a truckload. There was a lot of activity around their booth the entire 3 hours).

It was pointed out to the TRW/ARC by another club that the Swapmeet area was left quite a mess this time around. It may have been due to the impending rain and people wanting to get to dry ground in a hurry, but **ALL** sellers and buyers must realize that the parking lot we use is TRW private property and TRW can refuse to allow us to use it if it is left with a lot of litter covering the ground. TRW supplies trash receptacles and dumpsters for our use so please use them!! The Swapmeet rules clearly state **"Each seller must clean up his general area prior to leaving the swapmeet."** Please do not leave boxes of discarded equipment or magazines beside the dumpsters; put your discards into the dumpster. If TRW decides that the mess is getting out of hand they can shut the Swapmeet down which will only hurt everybody. If anyone has any questions about the rules for the Swapmeet you may write me in care of the TRW/ARC. Our address can be found on the bottom of the front page of the Crosstalk.

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On the rifle range the sergeant explained, "This type of bullet will penetrate two feet of solid wood.....be sure to keep your head down."

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Executive Board Meeting 4 Dec 1984

John Keller, N6JLS

Attending the meeting were Tom Armstrong, W4MNC, Jim Cox, Bill Dews, Paul Herbert, Bob Hume, John Keller, Walt Pearson, Don Resor III, Bill Schrecengost, Chris Wachs, Paul Weisz and Paul Wisiolek. President Walt Pearson called the meeting to order. Secretary John Keller accepted the minutes of the last Executive Board Meeting as printed in the Crosstalk. Treasurer Paul Herbert, while not having a formal report stated that the treasury is in good shape for the rest of the year. There is enough money to finish out the year and there is still some income expected from the November Swapmeet. Trustee Bob Hume stated that he has priced some towers to replace the present crank-up tower on Building 65. A 47 foot high tower 18 inches on a side in four 70 pound sections will cost \$943. This includes the base plate, rotor mounting plate for the Tailtwister rotor, thrust bearing

and hardware for attaching guy wires. The same tower only 12 inches on a side would be \$546. Decision to purchase a tower was put off for the new administration and the formulation of the 1985 budget. Bob also has plans for a 40 meter Quad antenna for the existing tower. Bob stated that he has received the 1985 Callbooks. Vice President Chris Wachs said that he will try to get an ARRL tape to show at the next club meeting. Chris was disappointed with the poor turnout at the Club Meetings. He stated that getting speakers for lunch hour meetings is difficult and then there are few members present to appreciate the effort put forth. Chris and Jim Cox reported on the E2 equipment room that houses our repeater and the transceivers for Security and Maintenance and the interference problem that exists since the new transmitter was installed. The responsible parties in TRW have been extremely happy to receive our help as consultants to create an installation that will satisfy all parties involved. New conduit is being run to the new antenna so that one conduit will not be shared between two parties. They are also willing to kick out the parties that are using the equipment room for storage of maintenance items. Jim has contacted the persons that Gary Komatsu had been in contact with and will continue to due the leg work in Gary's absence. Chris reminded the Board about the ARRL VHF Contest starting at 1900 UTC January 12 to 0400 UTC January 14. It was suggested that the contest materials go out under a separate mailing rather than include them in the Crosstalk as the package will take up about 5 pages. Rules for the contest can be found in the January 1983 QST and more info in the December 1984 QST. Chris pointed out the contest is based on grid squares and that from the Santa Monica Freeway south is grid DM03 so working the San Fernando Valley counts extra as it is another grid square. NOTE: you cannot use repeaters for contact and you cannot solicit contacts over a repeater, that is, contact someone on a repeater and ask them to work a simplex frequency for the contact. Convention Delegate Paul Weisz stated that preparations are being made for the Convention aboard the Queen Mary. There will be two categories of prizes, one an hourly ticket pull and then the prizes awarded during the Banquet. At the present time the hourly prizes are hoped to be HT's and the Banquet will have some very good HF gear as the top prizes. The Convention is being set up as a break-even venture so all of the proceeds after expenses will be turned into funds available for the prizes. Nobody will get a free ride, even the workers. Everyone must buy their own ticket. Membership/Nomination Chairman Bill Dews requested that the TRW/ARC obtain a room on the Queen Mary to use as a hospitality suite for use by TRW/ARC members only. This request was tabled until the new administration is in control. Bill stated that about 12 to 15 members have renewed their membership at this time. The list of nominees for the election is:

President	Walt Pearson, N6DZM
Vice President	Joe O'Brien, K6IL
Treasurer	Paul Herbert, KG6CR
Secretary	Paul Lukas, N6DMV
Activity Chairman	Jim Wike, W6GPE
Trustee	Bob Hume, KG6B

Paul Herbert stated that he planned to take a look at the color negatives for the new QSL cards later this week and to get new quotes for the printing. Jim Cox reviewed the work that he had performed on the W6TRW and W6NWP repeaters. Jim stated that a lot of logic changes were made to the W6NWP machine that were not documented. Jim suggested that a digital touch tone decoder be purchased for both repeaters as the present circuit tends to drift dramatically. Again, this action was tabled until the new administration take office and a budget is drawn up and approved. All members of the Executive Board expressed their appreciation to Gary Komatsu for the work that he had done on the repeaters up to this point. Paul Wisiolek volunteered to repair the two Quad antennas used for Field Day that exhibited a high SWR.

President Walt Pearson opened the meeting and eliminated the Secretary and Treasurer reports to give maximum time to the speaker. 21 members were in attendance. Nominations Chairman Bill Dews reported that the nominees for Club officers are as follows:

President	Walt Pearson, N6DZM
Vice President	Joe O'Brien, K6IL
Treasurer	Paul Herbert, KG6CR
Secretary	Paul Lukas, N6DMV
Activity Chairman	-- OPEN --
Trustee	Bob Hume, KG6B

(Ed. note: the Activity Chairman nomination has been filled by Jim Wike, W6GPE). Walt reported that he took a look at the membership roster and determined that 10% of the members are active in the club, 20% attend the Annual Dinner and 20% show up for the Club Meetings. Vice President Chris Wachs introduced the speaker, Mr. Mark Bergam. Mr. Bergam works for JPL and is also a member of the World Space Foundation. Mr. Bergam spoke about the World Space Foundation and their present project, The Solar Sail. The project is presently in the formative stage but a lot of the ideas of how to control the sail have been thought out. The project will attempt to first attain geosync orbit and then to move up into a lunar orbit for a moon fly-by. If the sail is still operative at that time it may be moved back to geosync and some of the features of the payload released to the Amateur Radio community. A repeater in orbit was one possibility as were video experiments using CCD cameras and slow scan TV. The item that would limit extra experiments is power not weight. The sail is large enough that in geosync orbit it would appear as bright as Venus. The total pressure on the sail will be about 1 gram and it is estimated that to reach circular geosync will take about 18 months and that lunar orbit would take another 2 years. There was a good question and answer period before the lunch hour ran out.

Door prizes included 2 pair of long nose pliers, 2 pair of diagonal cutters, 2 books entitled "How to use your Multimeter", a line filter/outlet box, a stop watch and an AM/FM Clock Radio.

Did you hear the one about the Novice that flunked his ZIP Code?



Lumberjacks are always stumped.



Tidbits from the Jolly Little S...

It's always nice to run across a nice tidbit to drop into this column and I got a real nice one from Al Lee, W6KQI, who (almost) retired to Tehachapi, thanking whoever wrote the little bit about his retirement. Al said it was factual except the gift certificate was really \$50. Al used it to purchase an 80 watt, 2 Meter amplifier. That purchase helps him get into the Keller Peak repeater real well and so he hangs out there a lot (146.985, -.600). However, if you happen to notice that he is on the W6TRW frequency a lot recently and somebody that looks like him is seen around TRW, well, it seems the retirement was short and Al is back in Redondo Beach as a consultant. I knew it was only a matter of time before I got on somebody's nerves with my reprint of "the Quad Antennas need to be fixed." Paul Wisiolek, K1TKL volunteered to repair/rebuild as necessary the two Quad Antennas for Field Day. Thank you, Paul.

Speaking of Field Day, Bob Hume called me as soon as he got his December QST to let me know how W6TRW did in the standings, and we did darn good! In our 7A Class we placed second behind W3SK. Here is how we compared:

W6TRW	W3SK
3357 QSO's	4164 QSO's
9649 Points	13476 Points

Of 1441 entries W6TRW placed 12th overall in QSO's and 21st overall in points!! We had 500 more QSO's than the closest "6" station reporting. A job well done by all!! Bill Dews, K6AWO, wanted to be sure that thanks be passed on to Bob Wartburg, K0LLO and J. Thorpe, WA6WZD for sending him copies of the manual for the EICO Model 710 Grid Dip Meter. By the way, as soon as Bill checks out the operation of the unit, it will be available to be checked out by TRW/ARC members.

A big tidbit of information out of the latest W5YI Report is that NASA has approved another "Ham in Space." The lucky astronaut is Dr. Tony England, W0ORE. He will be flying aboard mission 51-F presently scheduled for lift-off on 17 April 1985. In fact there will be two hams aboard that flight. Dr. England will be joined by John-David F. Bartoe, W4NYZ. NASA suggested that the ARRL and AMSAT begin arranging for the participation of schools and clubs as outlined in their proposal. Dr. England wants to try some experiments with propagation at 10 meters as well as the expected 2 meter activity. Robot Research of San Diego will be furnishing a "slow-scan" control box for use aboard the flight. There is the possibility that the system would be set up to capture uplinked slow-scan on 2 meters and then retransmitting it back to Earth on the 10 meter frequency. Power will come from the spacecraft and when the astronauts are asleep the slow-scan repeat will be left on. Slow scan will be something new for Dr. England - he's a 40 Meter CW man.