

cross talk

NEWS BULLETIN OF TRW AMATEUR RADIO CLUB





Sponsored by Systems Employee Association

SEPTEMBER, 1980

NEXT MEETING: WED., NOON, SEPT. 24, 1980

LOCATION: R4-1041

SPEAKER: To be announced

ANTENNA ARTICLE

I have been beating the bushes trying to get original stories for Cross Talk; then last month a very good article by Bob Hume, KG6B, on equations for Horizontal Antenna relative DB power gain verses terrain tilt. No where did I give Bob credit, only excuse was that I was headed for a vacation and was rushed. Thanks Bob.

RECEIVER DATA

Credit was not given to Sherwood Engineering and Neal Hudson, N6NW for the data on the receivers. The data was not self-explanatory but no questions were received by the Editor, maybe I am wasting my time and SEA money? Thanks Neal and Sherwood Engineering.

Following information is used to understand data.

The following data, which we feel you will find of interest, was taken on current, popular receivers and transceivers. Dynamic-range measurements were made using two equal-strength test signals 2 kHz apart, to approximate a "reallife" pile up, plus the more normal 20-to 100-kHz spacing. Some units, due to limitations in their i-f filters or boards layouts, had excessive test-signal leakage, requiring measurements be made at 3- or 4- kHz spacing. AGC threshold, the point below which audio falls off rather linearly with signal, is listed in microvolts across the antenna input (assumed to be 50 ohms). Also listed is the drop in audio-output level at this AGC threshold, as compared to a 5 mV (typically S9 + 40 dB) signal. All tests were made using a 500- or 600-Hz CW filter. Receiver noise floor can be degraded by the reciprocal mixing of an adjacent strong signal with phase noise from local oscillators, LC amplifier stages, phaselocked loops, or synthesizers. Noise from the receiver LO chain is listed for a normalized bandwidth of 1 Hz at a given kHz offset in dB below the LO carrier (dBc). To calculate noise from the table for a given filter: Noise (dBc) = X minus 10 log (filter bandwidth in Hz). The effective dynamic range of the radio from a noise standpoint is given with its SSB filter. It is desirable to have the noise dynamic range at least 6 dB higher than the IMD dynamic range at a given offset from the test signal for the moise to be a negligible problem.

SUBSCRIPTIONS

With the cost of subscriptions going up some of us have decided to let a few run out and keep one or two instead of 3 to 5 per month coming at us thru the U S mails.

What this is all about is the club does receive QST, Ham Radio, World Radio, 73 magazine and Charley Speelman WA6RUZ has been doing a "Great" job keeping all the magazines in proper order over in the club station (building 65).

Come on by and signout for the one you wish to read, review, etc. and see the club station too. What else can you do now but save gas and your subscription money. Bring your ID club card to get key from the receptionist?

From The Pres. Al Lee, W6KQI

The executive board finally got smart and held the monthly board meeting at a local restaurant after work. Instead of 1 hour of discussion, we had 3 hours and really got our business properly taken care of.

Our treasurer reported that the operating funds are low and that other funds must be used or conservative measures will have to be taken in order to complete the year. Therefore, the existing Credit Union loan will be paid from the equipment fund, as a first step.

The swapmeet and auction resulted in a worthwhile profit for the efforts made by the usual helpers so a committee of Dews, Scheck and Weisz will look into additional changes for the shack such as a table mike for the VHF rig and an additional high performance VHF antenna. A motion was made and passed to purchase the Radio Shack 20 watt Public Address amplifier, that operates off of batteries as well as 115 VAC, for swapmeet use.

After a long discussion, it was decided not to charge sellers and not provide rest room facilities at our monthly swapmeets, however, the owner of the Chevron station will be contacted for possible use of the facilities there.

Our S/M chairman, Bill Schreck WA6EVS has been looking into samples for club jackets and hopes to award the volunteers at the swapmeets with free jackets. He is always looking for additional help so if you're willing, give him a call on ext. 51583.

A motion was made to change the date of the annual awards dinner to early or mid December and make it an installation banquet where the new officers will be recognized and begin their duties at that time. The motion was not carried therefore the annual dinner will be in November as in the past. Ed Thornley, W6RXD has again agreed to make the arrangements.

Ed has prepared a very detailed proposal for a constitution change regarding removal of club officers or members, per SEA request, in case the need ever occurs. This will be worked also by Bill Ivey, WA6QET before the final approval is made.

Dave Gilmore, WB6IDJ reported on the successful noon time picnic. It was so well received that we have decided to have another on the 18th of September. Look for your bulletin. There will be no further mention of the beverages as the last bulletin did not conform to Personnel Services requirements.

LAWS, THEORIES AND THEOREMS CONCERNING AMATEUR RADIO

As we all know, Murphy's Law may not have been invented by a radio amateur, but our fraternity has pioneered proof of it. That dictum, that "Anything that can go wrong, will," is proven somewhere daily by some intrepid ham building a new rig, trying to raise an antenna, or even push the right button to talk to a pal on two meters.

Less well-known are several other propositions of vital relevance to our beloved hobby. It is fitting and proper from time to time to remind ourselves of some of these hypotheses, some with more general application, some special to amateur radio.

Of the many laws, rules, theories and theorems that come to mind, one stands clearly above all others. Although seldom published and frequently violated, this rule, named after one of its foremost proponents in the W-6 call area, deserves repetition and a category all to itself because of its universality and stark but beautiful wisdom.

THE STAN JOHNSON RULE

"If it works, don't mess with it."

THE IVEY COROLLARY

"Any attempted improvement is first going to make things worse."

It should be added that things may be made worse permanently, and attempts to return the project to its original state may only make things worse again.

THE OLLIE SAUNDERS LAW

"Any time you find a rare DX station, he has just finished working the 6s."

THE SPLIT-FREQUENCY SYNDROME

(Part A): If you ever get your VFOs crossed in trying to work someone split, a loud voice will immediately he heard giving your full callsign and telling you that you are a nerd for operating "OUT OF THE BAND."

(Part B): Loud voices out of the band are never identified.

THE W6SCL PRINCIPLE

"Any wire antenna you want to install must be 20 feet too Long to fit in your lot." (Corollary: "If a wire antenna fits in your lot, the SWR is to high.")

THE FICKLE FINGER FACTOR

Part 1: "Rotors never break when the weather is nice."

Part 2: "The same goes for antennas."

Part 3: "The higher your beam the surer it is to break."

Part 4: "He who buys a new piece of equipment usually sees it on sale in the next issue of QST."

Part 5: "He who wants rain should take his new rig out for Field Day."

THE KOMATSU COMPLAINT

"The right part or tube is never available locally."

THE NEAL HUDSON RULE

"No QSL card ever comes fast enough." (This rule becomes invalid once you have a country confirmed.)

THE K6AWO THEORY

"You always think you can improve your station even wben you can't."

THE MEL ERB STIPULATION

"No CW station ever sends at the right speed."

DEHART'S LOT

"The repeater is always busy when you want to use the patch."

THE FAIL-SAFE PROPOSITION

"He who asks if the frequency is in use will usually be rewarded with silence. He who then starts calling someone will be told the frequency is in use."

THE ANONYMOUS MAXIM

Part A: "He who tries to assemble a BNC connector over a shag rug will lose the pin and wind up going back to the store for another one."

Part B: "He who goes back to the store for another one will find the first BNC pin three days later by driving it through the ball of his bare foot."

What does all this prove? Only that our eternal search for truth and beauty goes on today, as undaunted as at any time in our illustrious past. I feel confident that this brief bit of research, if taken in the right way by my colleagues within the hobby, will surely lead soon to further publications by others in proof of the one major theorem we had not previously noted. That is -- LAW OF SELECTIVE GRAVITY -- An object will fall in such a manner as to do the most damage.

THE CERTAINTY FACTOR

"There is always some one out there who can come up with a better "Law" than you can."

Tnx WB5TZZ and CORA

WELCOME ABOARD!

Travis Johnson WA60HD Bob Mocata WA6PLY Darwin Salisbury K61GU Al Key WA6FLL

George Arvanetaki WA1CKT

DOOR PRIZE WINNERS August

License Plate Holders

License Plate Holders

License Plate Holders

Al Lee, W6KQI

Bob Gorman, KA6FVF

Frank Pfeiffer, KJ6V

SEEN AT THE LAST W6TRW PICNIC

N D N II					WB6TCR Craig Davis
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Did you apply for a CB or Amateur Radio License between the years 1970-1975? The FCC has 31 million dollars it has to refund to those who paid a fee. "Clear instructions" and "simplified" forms are available from the FCC or Bill Schrekengost x 51583.

Our field day power engineer and vice president, Gary Komatsu, K6HPD, has provided our field day operations with sufficient power hookups for several years.



CLUB PICNIC

The club had a picnic today, the 21st of August. (35 years ago was 1st day at boot camp, San Diego, oh how I remember). Dave Gilmore, WB6IDJ, did a good job getting cheese and wine, soft drinks together. Wayne Hale, W6IZK, was saying to me we should be doing this on a quarterly basis. I hope this will come about, I find 51 has a lot of talk about what a good time we all had. To have a club is more than Field Day once a year, or meetings the last Wed. of the month, or an awards dinner once a year.

A club is having a swapmeet the last Sat. of each month so <u>all</u> amateurs can come from far and wide at no cost to trade off or buy someones goodie.

A club is being able to key up 51 and talk to someone you know as a W6TRW club member.

Club dues are not much (\$4.00/year) and you receive a monthly club paper (Cross Talk) keeping you up to date on what the club is doing. Keep up your dues and membership in an active club.

The reason many of you use 51 is you know you can communicate with someone local meaning 3 - 10 miles with QSB mobil to mobil. Gary, K6HPD, has been working hard to get the club W6TRW a repeater pair and it looks like we will be very soon. Read September 73, page 25, "Leaky Lines" and hope we won't have this problem.

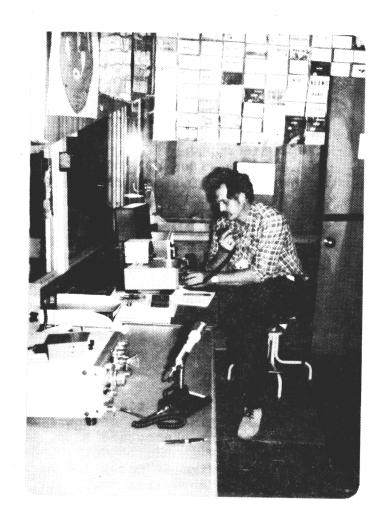
Membership Chairman, Dews K6AWO

HANDY TELEPHONE NUMBERS

AES Nevada	1-800-634-6227	Optoelectronics	1-800-327-5912
Radio World	1-800-448-7914	KLM	1-408-779-7363
Longe Elect.	1-800-633-3410	Comm. Specialists	1-714-998-3021
DSI	1-800-542-6253	Ham Radio Center	1-800-325-3636
MFJ	1-800-647-1800	Swan Elect.	1-714-757-7525
Henry Radio	213-477-6701 Collect	Spectrum Comm.	1-215-631-1710
Kenwood	1111 West Walnut, Compton	ICOM	1-206-454-8155
YAESU	213-633-4007	Comm. Center	1-800-228-4097
Ten-Tec	Sevierville, Tenn. 37862	Wilson Systems	1-800-634-6898
Longe Elect. DSI MFJ Henry Radio Kenwood YAESU	1-800-633-3410 1-800-542-6253 1-800-647-1800 213-477-6701 Collect 1111 West Walnut, Compton 213-633-4007	Ham Radio Center Swan Elect. Spectrum Comm. ICOM Comm. Center	1-800-325-363 1-714-757-758 1-215-631-173 1-206-454-815 1-800-228-409

Bill Schreckengost WA6EVS last seen at the new 2 meter rig during the Sept. VHF contest. Only two volunteers were available to run the station. Hardly enough to run up a respectable score on only 2 meters.

A 2 meter beam and rotator is scheduled to be put up in the near future. Standby for a working party, it can not be put up by two volunteers.



LOOKING WEST

I've just finished reading "Looking West", 73 Magazine, by Bill Pasternak, WA6ITF. Boy, he can really put the words all together. By the time you read this the ARRL Southwestern Division Convention at the Marriot Hotel, Sept 5,6,7 will be in the dark past. What I want you to note is Memorial Day week-end 17 St. Louis regional clubs banded together to put on the GARA event. They drew about 4,000 attendees and I believe some good guest speakers ARRL Harry Dannale, Personal Communications Foundation President, Joe Merdler N6AHU, Roy Neal, K6DUE of NBC News plus Bill Pasternak, the last not a speaker but one who saw something big in St. Louis.

We can't get that number of people together in Southern California each and every year. Dayton has a big GANG showing up too. Ever wonder what is wrong out here in Southern California? Just how many of you came to the ARRL Convention? To get dealers, distributors to show you have to show. How about it, next time come on out so we can show the East Coast CROWD we can get 4,000 people together too.

73 Dews K6AWO

The ARRL Southwest Division Convention at the Los Angeles Marriott Hotel is behind us now, and there seems to be general agreement that it was a great success. There were some 2300 registered visitors, the technical programs were interesting, and the leading suppliers of amateur equipment were well represented. All of us who attended the banquet were impressed with the high quality of the food and the interesting program.

The TRW/ARC participated in two modes: first as financial sponsors, along with 13 other Los Angeles area clubs; and second, we assumed responsibility for acquiring and awarding the door prizes for the convention. Club members supporting the Awards and Prizes activity included: Bill Dews, Dave Gilmore, Gary Komatsu, Al Lee, Charlie Speelman and Paul Weisz. Also representing the TRW/ARC, as Big Winners of Prizes, were Phyllis Gilmore, Beverly Weisz, and Steve O'Neal, who walked off with the convention grand prize, a Kenwood TS-180S.

For the statistics collectors, the awards and prizes effort returned to the amateur radio community, from the proceeds of the convention, 57 prizes with an over-the-counter value of nearly \$9,000. Be advised also that telling a winner about his or her good fortune is a real trip for both the teller and the tellee!

SWAPMEET

The August 30, Swapmeet was as expected, well attended and successfull. The new swapmeet site was approximately 75% full leaving us room for inevitable expansion. When we, the Swapmeet operators, arrived at 7AM the lot was loaded with sellers and buyers in full operation. The Swapmeet is supposed to start at 8 AM and is really getting started at 6AM - as we get set up for dispensing coffee and donuts at 7:15 AM a big crowd of hungry, thirsty Amateurs converge on us. Our club is really making a lot of friends in the Southern California Amateur Radio Community and it is satifying to see it. Lets keep it going.

The Swapmeet operaters were Bill Rodner (K6AWS), Bob Hume (KG6B), and George Lee (W6IOW). These guys were busy with traffic control and dispensed 28 dozen donuts and much coffee and softdrinks, we ran out of donuts again. So will try 34 dozen next time.

An auction was held to sell the donated equipment accumulated over the past few months. It got started late and the PA system used was too weak to get the attention of Swapmeet buyers so it wasn't to successful. Thanks to Gary Komatsu (K6HPD), Wayne Hale (W6IZK), Paul Weisz (K6YQ) for their efforts in holding it. They did their best with a poor, non-buying buying audience.

The Swapmeet operators for next month are Dave Gilmore (WB6IDJ), Stan Johnson (W6EKK), and we need a 3rd volunteer). See you all at the September 27 Swapmeet.

Bill Schreck WA6EVS

PREEMPTION OF ANTENNA LIMITS

Preemption of antenna limits by the Federal government, thus barring local communities from zoning or appearance ordinances against Amateur antennas, has been proposed by Personal Communications Foundation President N6AHU in Seattle. Speaking at a SEANARC 80 seminar, Joe suggested that such a preemption could be made part of the Communications Act rewrite and thus relax antenna limits for Amateurs to those of the FAA and FCC.

In His SEANARC Presentation, Joe also urged the ARRL to take a leadership position as a political activist in matters like this.