



# CROSSTALK

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W2LVW James Peck.

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Circulation again a big assist from my two harmonics

W2LVW James Peck.

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MEETING NOTICE.... THE REGULAR MEETING OF THE G.C.A.R.C. WILL BE HELD AT THE OWENS-ILLINOIS CLUBHOUSE ON WED. EVENING SEPTEMBER 4th AT 8 O'CLOCK.....

THE PROGRAM FOR THE EVENING WILL BE A FILM ON "TRANSMISSION OF SIGNALS VIA SATELLITES". COME AND BRING A FRIEND..... AB.

Official ARRL Bulletin.....

All amateurs are invited to participate in the ARRL September Frequency Measuring Test, September 12th. Signals for measurement will be sent simultaneously from W1AW 0130 GMT September 12 on approximately 3506, 7016, and 14,047 Kcs. and at 0430 GMT on approximately 3519, 7051, and 14,039 Kcs. Complete details will appear in the Sept QST ar.

Ed's comments.... Anyone that has aspirations in getting an OO's appointment has to participate in these things in order to get and keep his appointment. So anyone that does get into these things should let someone in the club know it and possibly be put in for official OO in the county.

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Well just to give credit where proper credit is due I have to include this bit of information for the benefit of the club members and the parties concerned. Due to a last minute hitch the model airplanes were almost not available at the Hamfest this year. But due to the fact that someone made a bit of extra effort and largely due to Charles Kille K2VMN Haddonfield N.J. and Dave Silco WB2BGX Woodbury, who both are members of the West Jersey Radio Control Club, Inc, we all owe a debt of gratitude. So for the members of GCARC Charlie and Dave many thanks for the excellent performance at the hamfest and the conditions were far from being ideal for those planes either. Everyone enjoyed it very much and especially the KIDS. That is from 6 to 60. HI.

Just for the information of those club members who are interested in this sort of thing both Charlie and Dave were flying Dee Bee airplanes Dee Bee IV as a matter of fact. they were both equipped with Quadplex Proportional Control Systems. The weight of the airplanes was about 6 1/2 pounds and the top speed was 100 M.P.H. in level flight.

Both Charlie and Dave were good enough to come in as a last minute bit there as the original boys were at National competitions., in L.A. yet.

The cost of each airplane is approximately \$500.00

So again Charlie and Dave many thanks from all of who enjoyed your fine performance.

We found a good place to get xtals from at a very reasonable price. The more that you buy the lower the cost. So maybe some of the club members can get together and save some money by doing this. The AREC xtals were bought this way and the price was the cheapest around. So for what ever it is worth....

C W Mfg. Co. Box 2065 , El Monte , Calif.

Ed Sarama W42WKC has a SX-110

for sale with an R-48 spkr for \$100.00

I had the pleasure of motoring down to Dover Del. And lo and behold it was almost like going to a regular club meeting. At the Dover Del hamfest we ran into the following club members W42WWF Bob and his family, Charlie K2POD and his family, Paul W2YNR and Eric W42FMO, Howard K2QGH and XYL, W42SFY Max, Harry W42JAZ and his family, and the following friends of ours who either have been down at the club or may be (HI.) K2PEG Al and his XYL, Ray W42CUB and his family (and I had the pleasure of beating Ray at pitching horseshoes again and boy he is a rough guy to play with, I think that he closes his eyes when he throws the horseshoes and there is no defense against this HI. ) Phil W2JAV the rtty king and Sal W42LKF both from Hammonton, who were down to give us the RTTY demonstration a few months ago and last but not least Walt W3FGQ who is a friend of the clubs and has been down to a few of our meetings. Now I think that I have recalled everyone but sure as heck I will get blasted for not remembering someone that ran into us and said hello. But right now think that this was about it. It goes without saying that we all had a real good time and outside of Sal no one else , to my knowledge won anything. They did have some real good prizes too. Well thats the way it goes. Better luck to all next year. ar ar....

Congratulations to Bob W42WWF on his appointment as OBS. This came about as part of the A.R.E.C. program. Bob plans to give out with the bulletins once per week on the AREC net, once on the Monday RTTY net and once per week on AM on a night that he has not decided on yet. Bob please let me know and I will be glad to put it in CROSSTALK and help the club members get Bulletins when they want to . Good Luck Bob,

After last months "Where Are We Going? I guess that some people have branded me a critic of the club and its policies. Really, in the long run I am not being critical. I think that the present activities of the club are fine..... but let's have more of them.

Remember the old saying, "Good, Better, best, never let it rest 'till your good is better, 'till your better best". Do you honestly think that the club is doing the best that it can for its members?. If so you might as well stop reading this article right here. It is my humble opinion, however, that as a club we can do a lot more for the members. As an amateur radio club one of our main objectives should be to promote amateur radio. The better job that we do as a club to promote ham radio, the better off we as individual hams will be.

Why cant we have a seperate committee appointed each month to handle a special activity?. Would this be imposing too much, to ask 36 of our members to serve on a committee once a year? Three members a month?

How about a competitive venture that fits in with our daily hamming activities each month? For example:

January--The appointed committee would check the log of each club member for the past year. Certificates of award would be given to the winners in the following categories. The ham working the maximum number of stations. The ham spending the most hours on the air. The individual working the maximum number of DX stations during the year. The member working the most other club members etc.

February--The committee would poll the membership for the following information: What article in CROSS-TALK did you enjoy the most in the past year? What technical article did you get the most out of? The author with the highest number of votes would get a club certificate as well as an individual contributing the most articles to the club paper. This would encourage the participation of more club members in the club paper and in addition would single out those who contributed to the success of our paper.

March--- The home brew contest could be held as usual. The awarding would be held at the March meeting, the actual judging would be done during the month of February and each entry would be judged in the shack of the individual. Every one would be encouraged to enter. Points would be awarded for operation, neatness, etc. Entries could include a piece of gear, a schematic, an idea, a technical paper, etc.

April-- A hidden transmitter hunt or fox hunt would be held. The fox hunt being similar to the hidden transmitter hunt with the exception that the transmitter would be in mobile operation in motion. The first one to find the fox would be given a certificate of recognition. At a meeting prior to this event a program could be made out of the "How's of transmitter hunting" and some of the equipments used on hunts could be shown and explained.

May-- A mobile judging contest would be held. The committee would arrange a get together of all of the club members having mobile equipment and points would be awarded for the neatest, the most compact, the most efficient, the most bands mobile etc.

These, gentlemen, are just a few of my personal thoughts among these lines. Revisions, and additions will have to be made to these basic guidelines. A project of this nature will have to be undertaken as a long range program. We cant accomplish this overnight. The gears for this program should be set into motion in the next few weeks by the appointment of a committee to set it up and formulate the rules to regulate the individual activities. If this were to be started within the next few weeks we might hope to be able to initiate and realize the fruits of this by the beginning of next year.

We are affiliated with the ARRL, lets promote some ARRL activities... ARRL appointments such as OBS, OES, OPS etc. We certainly could use one or two OO's in the county, how about this?

When election time comes around, lets make it an election and not a

popularity contest. To assure the continued success of the club we must continue to elect our leaders on the basis of what canm they do for the club. We could reserve a month for a Mr. Ham of the year in Gloucester County Contest. Election time is not the time for this.

Let's set up a competent panel of people as a public relations and publicity committee. They could speak at various other organizations within the county on amateur radio in general and GQARC's role in the community. This committee could see to it that the newspapers in the county and radio stations in the area are kept up to date on amateur radio and GQARC activities. This would keep the public informed of our operations in the "Public Interest, Convenience and Necessity".

Most of all, if one of the club committee chairmen or club official deems you qualified to head up a committee or to serve on a committee and asks you to do so, get in there and lend a hand. This is your club, and the only way it can do more for you is for you to give it your support. You will only get out of your club as much as you put into it.

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Ed's comment: Well again to Jack, man! tnx for a fb article and it sure did say a lot of things that are timely and appropriate. I sure wish that all of the club members read it once more after they get to this page and let it kind of sink in a bit. I again extend an offer to each and every club member to get an article in CROSSMILK. This is your paper. There were many comments on the plus side about the Ham Profile's and yet this feature had to die a sudden death due to the lack of interest of the same club members that enjoyed it while it was current. All clubs are only as good as the weakest member in it... Dont be the weak link in GQARC..... Take an active part...

Here is your first chance.... Max W2SFY is the chairman of our Birthday Party Committee. He is looking for volunteers to help him out on the planning and this looks like a real good spot for someone to take an interest and get their feet wet on committee work. Who knows you may wind up liking it and be the president of the club in a few years. But all kidding aside Max cannot do it alone so a few of the members should give him a hand. We all had a real fine time last year and would like this one to be even better yet. But anything that comes out fine took a lot of effort on someones part and there were members behind it that made it come out that way. A real good example is our recent Hamfest. There was a lot of work behind it and that is why it came out as good as it did. These things just dont happen.

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#### PROGRAM FOR THE SEPT MEETING.

Bill Alexander, who was going to give a lecture on solid state circuitry was unable to make it and will be the program for the month of October.

Woody Franz W2AQL will show us a film on "Transmission of Signals Via Satellites. This should be very interesting and everyone should enjoy it.

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#### M E E T I N G   N O T I C E . . .

THE REGULAR MONTHLY MEETING OF GQARC WILL BE HELD AT THE OWENS-ILLINOIS CLUBHOUSE IN GLASSBORO ON WED NIGHT SEPTEMBER 4, 1963. 8 P.M. Bring a ham friend or another club member with you.

FOR SALE---NC-183 with speaker. Real fb shape.. contact JimPeck W2LWV      \$120.00

Official ARRL Bulletin NR 909 to all radio amateurs.  
FCC has granted approval for a propagation research program to be conducted by K6HME and W6MGI during the period Aug 16 through Nov 16, 1963. The experiment will investigate the actual propagation characteristics of ten meters as the sun spot cycle approaches its minimum. A beacon will be operated 24 hours daily on 28.6 Mcs modulated by a 600 cycle tone interspersed with the message Beacon.

After talking about coaxial lines in last month's CROSSTALK and pointing up the selling points of coaxial cables it might seem silly to now run them down in preference to open wire line, so in lieu of doing that I will just point out some of the advantages of open wire line feeders on antenna systems.

#### OPEN WIRE LINES:

One of the obvious shortcomings of coaxial type transmission line is the fact that even if we have a perfectly matched line which is long in terms of wavelengths we will start to get excessive losses due to leakage between conductors. This leakage is determined by the type of dielectric used in the cable. At higher frequencies this loss can be several DB's. For example a piece of RG-11/U matched perfectly at 150 Mcs. has a loss of 3 DB. This is half of our power. One way to get around this is to use open wire feeders. These lines are very difficult to handle as it is very easy to short them out on metal window frames etc. Care has to be taken to keep open wire lines from being in close proximity to other lines or metallic objects, as a certain amount of radiation takes place from these lines and we will end up with excessive losses or hot window frames. The main advantage of open wire lines is the fact that losses are nil, even at very high SWR ratios. As a matter of fact don't even try to match the transmission line to the antenna. Open wire lines operating at SWR's of 9 to 1 are common and quite acceptable. This type of line is known as a balanced feed system. This is because there should be equal amounts of RF voltage in each wire to ground. An interesting aspect of this type of line is the fact that very little radiation will take place due to the fact that the equal currents in both conductors are 180 degrees out of phase (or at least should be) and almost complete cancellation takes place. Care should be taken to insulate this type of wire in high power installations where it comes in contact with wood or any other flammable material. The high SWR presents high impedances at some points along the line and this in turn means that high RF potentials exist at these points. This at times could be enough to set off a spark and lead to the fire engines paying a visit to your house.

Most of the modern day transmitters are equipped to handle the coaxial type of transmission lines. (Unbalanced) This however is no great problem to get by. When we use open wire we must in some way convert the balanced system over to the unbalanced system as well as to reduce the SWR to some lower level that the transmitter can handle. This device is the old antenna tuner. It consists of simply a tuned circuit coupled to the transmitter output. Our open wire is then tapped on the coil of the tuned circuit. We now tune the circuit to resonance by watching the loading on the transmitter or with the aid of our old friend the SWR bridge connected between the transmitter and the antenna tuner. As you can well see now we have all of the conditions present for the proper operation of the open wire line. When we tapped the line down on the tuner coil we balanced it with respect to ground and at the same time we induced voltages of opposite polarity (Phase relationships) into the two conductors. In the link circuit we reduced the SWR to a reasonable value, brought the impedance of the whole system within reach of our transmitters pi-network and unbalanced output.

Open wire lines are especially advantageous in multi-band antenna installation and in VHF work where we encounter very long lengths of feed lines. A piece of wire 125 feet long fed in the center with open wire line and a suitable antenna tuner will yield good results on 80 thru 10 meters. For the chap who can't put up the ultimate in separate antennas for each band this will radiate a very respectable signal.

Commercially built open wire lines can be purchased at most radio stores for about \$4.00 per 100 feet.

In conclusion I might say that both open wire line and coaxial cables have their place in present day broadcasting and communications services. Coax is easier to handle, is more costly and has to be made to order for extremely high power installations. The open wire line can be tougher in respect to being in close proximity to other objects, it is more reasonable in cost, more difficult to bring into the hamshack, usually requires an antenna tuner, but in the long run has much less loss than its modern brother the coaxial cable. ...-.-