

C R O S T A L K  
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MEETINGS ARE HELD THE FIRST WEDNESDAY OF EACH MONTH IN THE PITMAN BOROUGH HALL, 3RD FLOOR, NORTH BROADWAY, PITMAN, NEW JERSEY.

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All material for publication in this paper should be in my hands during the first week of the month preceeding publication. Emergency deadline is the third Friday preceeding publication.

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CROSSTALK is a club paper of the GLOUCESTER COUNTY AMATEUR RADIO CLUB published monthly for it's members. Owing to the extensive coverage of this paper, paid advertisements from outside personnel will be accepted according to the rates set up by the club.

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It is the aim of the staff to get this paper into your hands prior to the monthly meetings, in order that you are better informed as to the club's business.

Have you ever taken notice that when a HOT news item breaks, the editor either puts it in big headlines or it occupies the front page? Well we are going to do the same thing this month by starting off "CROSSTALK" with the flash item demanding this spot.

"THE SENATE AND HOUSE OF THE STATE OF NEW JERSEY UNANIMOUSLY PASSES BILL NO. 432."

This is the bill that permits the Ham Operator who owns an automobile to obtain a license plate with his call letters rather than the conventional letters and numbers.

What happens now???? Here is where you come in. Every Ham must write a letter to GOV. RICHARD HUGHES, c/o STATE HOUSE, TRENTON, NEW JERSEY---- telling him that you are requesting him to consider this bill, as New Jersey now is the only state not having this privilege. Although the other politicians passed this bill, it must go to the Governor for his signature or veto. Then it goes back to the Houses and can be made a law over his veto. So the chances look very good for us to have this privilege this year if we can keep the Governor from pigeonholing this bill. So fellows, here's your chance - WRITE ---- WRITE ---- WRITE ---- WRITE ---- A letter addressed to our Club from Senator John White adds "You probably know that I am the principal sponsor of this bill and I will do everything possible to see that it is passed this year. I am not certain whether the Governor will sign it because we have introduced identical legislation in the past and he has always vetoed it. It might be well to have any affiliate clubs throughout the entire state write to their respective legislators and solicit their support." This letter is self-explanatory and does not need any comments.

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### LUMP OF CLAY

A legend tells of a man who went into a gift shop, and there found a lump of clay that smelled sweet. When he asked the lump of humble clay what made it so fragrant, it said that a long time before it had been close to a rose.

Lord, help me to live close to Thee so that, however lowly my station is, others will sense Thy presence in my life and be drawn to seek fellowship with Thee.

Let us see if we can't apply this lesson to our neighbors, fellow hams, and members of our club. Too many of us forget to realize that a coin has two sides, and nine times out of ten the caller will call for a head to appear thinking that the coin only has a head side. Life was not meant to be one sided, and this often may be the cause of trouble in any gathering.

Let's not have everything Radio; remember the XYL and YL's also are a part of our club; also there are the Harmonics! Future plans are including these PARTS. I have never heard of a Ham having surplus along these lines, have you?????

## SCUTTLEBUTT

1. Good News!! If you haven't seen the new club QSL Board, c'mon out to the next meeting and see it! By the way, brag along one of your QSL cards. tack it up on the Board, and help brighten up our meeting room. A fine work of art: credit goes to WA2PVI for an excellent job. FB Bill!
2. Sad News! Our Club treasurer for many years, W2LVW, is resigning his post. It's unfortunate, for this important job has been handled flawlessly and professionally for the many years Jim has been at the helm. Yet, who can blame him for wanting a well-deserved rest. His service to the Club in this and many other capacities has been unsurpassed by none over the years. 73's ESTNX to a top-rate Ham.
3. More Sad News! Woody, K2AQL is moving from the Gloucester County Area. He has accepted a new job down in Sommers Point, N.J. Let's hope it takes him years to find a new home down there. GCARC's loss is SCARA's gain, but we are sure to see him from time to time. Looks like we'll have to find a new coffee and doughnut man soon, a job Woody has faithfully carried out since the year one.
4. Congratulations to Charley Hatch for passing his Novice Ticket. By this writing he should have received his new call. Will listen for you on 40 CW Charley. FB.
5. WA2NPD, W2SUA, and WB2WKV still shivering from lowering WB2NNB's 20-meter beam, then the 15, then raising the 20 back up the 80-ft (seemed like 4080 ft) pole. The temperature was a brisk 30°, and a gentle 40-mph wind was blowing. WB2NNB enjoying it all from atop the pole (the other guys standing in the snow)!
6. W2KE at last checkup, still cursing and sweating it out with his new SB-101 bread board assembly. Will lay even money he has it on the air before WA2VEE does his (and without blowing any fuses in the house! Hi Hi Bill!).
7. Good to see WB2BPX out to last Club meeting. Hope the boss gives you a break each Wednesday night from now on Fred.
8. WA2NPD recently worked three stations in succession on Sunday afternoon March 24, from Bolivia, Peru, and Uruguay on 10 meters. And all three were Missionarys. Thus, Doug spent the whole day listening to sermons, and capped the day with his first 807 in almost 3 months. WA2NPD recently had nice QSO on 10 M with ZL2AUM, Doug on SSB and Nev on CW. A good trick; when the other guy's xmitter is S-O on SSB - send him to CW. This was a good example illustrating that CW still has a bit more punch than SSB.
9. WB2FJE moving up to big time with Gonset tribander and telephone pole. Will expect to soon get the call Bill for the raising. So, start doing your push-ups fellas, this looks like a hetty job coming up! Saw Bill's homebrew linear in action. A real first-rate professional job Bill, tough to tell it from a commercial model. Looks like TVI chariman WA2TSE and committee will really have its hand full now!
10. Many congratulations in order for Bill, WB2FJE, for passing his Advanced License. Believe he is the first one in Club to take this honor, should serve as a goal for the rest of us foot-draggers.

11. Great to see W2SUA out to last Club meeting after leave of absence?? Where have K2QGH, WA2WGA, WB2UPF, W2PZX, and W2YNR (now back to work) been? Hope we can still remember some of your faces. K2QGH put in a 5 by 100 over signal in here several weeks ago at about 2AM. Nice to chat with Howard on the air, if we can't get him out to Club meetings.

12. Good News Dept. I may be going out on a limb, but by this writing, K2SOL has rejoined the Club. Needless to say, we welcome George back in the fold. George looks in the best of health, has slimmed down, and hasn't regained a single strand of hair since his last membership card was issued.

13. President WB2WKV, at the urging of the Board of Directors, has issued a Proclamation that anyone showing up at the meeting without his name tag on, will cough up a .25¢ fine. Let's hope the treasury doesn't get fat on this kind of cash. So, WEAR YOUR NAMETAG!

73's de WA2NPD

Having talked once over the air on six meters to WB2VLD of Camden, N.J., my xyl and myself enjoyed a very pleasant visit from his xyl and himself last Sunday a week. A most pleasant couple who visited our Club once about two years ago. The result of this eyeball was that his wife is now studying for her ticket, taking a course at the Phila. School of Wireless. Both seemed very interested in our Club and, to me, are potential membership material. The OM name is Len Oshushek -

Camden, N.J. His vocation is Fire Chief. Let's see if we can't get them to join us.

FOR SALE\*\*\*\*

ART-13.....\$45.00, T-150.....\$45.00, NC-105.....\$35.00  
ARC-5 (4.-5.3 Mc).....\$5.00, ARC-3 (100-150 Mc).....\$10.00  
3" Scope (Military, like new).....\$50.00, 4CX250R.....\$5.00  
4CX250B.....\$5.00, 4 x 150.....\$3.00

Contact WB2ATR, Sid Bozarth

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WB2SCK, Robt. Baker, a Club member, submitted the following report to me.....DX CONTEST-Phone (SSB) - 1968 Band totals...20 mtrs. 43 QSO's in 31 countries.....15 mtrs. 152 QSO's in 55 countries...10 mtrs. 37 QSO's in 25 countries. Worked a total of 64 different countries in all continents. 232 QSO's with a multiplier of III. Total 77,256 pts for 28 hrs, FB. Bob holds the following awards....First place in the 1967 MINN QSO Party for SNJ... First place in the 1967 AJA QSO Party for SNJ...Third place in NJ in the 1967 International CHC/FHC QSO Party...US-CHA AWARD...300 counties confirmed in all 50 states...This certainly is a FB showing for a young lad just starting up the ladder, and by the looks of things certainly gives some of you older hams something to shoot at. I don't think that Bob has had his ticket much over two years. This is the kind of news that we want to have for our paper, so keep it coming in. You know it is with results like these that under the surface, one can see that some of GCARC is rubbing off on its members.

FOR SALE\*\*\*\*

80 thru 10., SE10 Apache., HQ 179...SS BAND Generator... Unit Price \$400.00....  
K2SOL George Stewart,

Official Bulletin No. 161 from ARRL March 28, 1968

Field Day 1968, June 22 and 23, will incorporate a number of new features. Suggestions from the field should make this annual test of emergency gear particularly challenging this year. Significant changes including combining Class D and E home stations into one category eligible for the d.c. input and emergency power multipliers. The Field Day period will be limited to 27 hours including setup time. Power multipliers have been rearranged to break at 10, 50, and 200 watts. Increased points for traffic and 100% emergency power will be offered. In addition, the 1.5 battery multiplier will apply to under 10 watts Class A as well as Class B and C stations. Full rules will appear in the May Issue of QST.

You have to make calls to get results.....

Official Bulletin from ARRL No. 160, March 21, 1968

FCC has made minor amendments to its rules governing the moving of a station from one permanent address to another. An application for modification must be submitted within four months after the move, and before any operation takes place from the new address. On the other hand, there is no longer a limit to the time such a station may operate as a portable once the application has been filed, and the operator need send a notice only to the district engineer having jurisdiction over the new address. Also FCC has coded its rules for preferred call signs into a new section 97.53, without changing its previously informal ground rules. Both matters will be covered in the May Issue of QST. The governments of Switzerland and Canada have agreed upon reciprocal licensing. Operators of one country may secure permission to operate in the other, effective immediately.

FOR SALE\*\*\*\*\*

1 KW GROUNDED GRID LINEAR-4-811's.....1500 volt 750 MA. POWER SUPPLY, SOLID STATE.....6 METER PHONE XMITTER-35 WATTS. All homebrew, but very nice. Power supply has a variac on Hi voltage. Contact W2YNR, Paul Walton,

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PLATE HEATING

Each electron upon striking the plate of a diode transfers all of its kinetic energy to thermal energy unless it causes the release of a secondary electron. The plate of a diode or other vacuum tube must be capable of dissipating the heat released by the impact of all the electrons forming the tube plate current. Neglecting the small energy transferred to secondary electrons, the total energy transformed to heat at the plate in a given time interval assuming a constant plate voltage is given.

## COLD-CATHODE TRIODES

The breakdown or ignition of a gas tube can be controlled by a grid placed between the cathode and anode. This is possible because the ignition potential of a gas tube is an inverse function of the spacing between the two electrodes. Closely spaced electrodes require a high potential before breakdown can occur because the short path length for the few free electrons present in the gas before ignition takes place makes the probability of these electrons colliding with gas molecules and ionizing them very small.

Hot-cathode gas diodes are principally used as rectifiers. For high-current power supplies, hot-cathode gas diode have the advantage over high-vacuum diodes of lower voltage drop, higher efficiency, lower filament power, and lower cost. They have the disadvantages of lower peak inverse voltage rating, production of r-f transients, and the requirements of a relatively long warm-up period. A control grid can be added to a hot-cathode gas diode just as in the cold-cathode gas tubes. Hot-cathode gas triodes are known as THYRATRONS.

A cathode follower is an example of a feedback amplifier which has 100% negative voltage feedback. This amount of feedback accounts for the lack of gain and low output impedance.

Class A1 push-pull amplifiers using beam tetrode and pentode.... Beam tetrodes and pentodes have an important advantage over triodes having the same plate dissipation ratings since the plate voltages of the tetrodes and pentodes can be reduced to a much lower value before there is an appreciable reduction in plate current. Higher efficiencies can, therefore, be obtained with tetrodes and pentodes since the path of operation along the load line can be extended closer to zero plate voltage. Typical efficiencies of tetrodes and pentodes used in Class A1 push-pull amplifiers are between 35 and 50%.

## PROGRAM

A tentative sked for Mr. Culpepper to speak on a timely subject for our May meeting has been set up by the Program Chairman. Most of our members are aware of the background he possesses and all of his talks are very informative giving you the opportunity of obtaining valuable information merely by just attending our meetings. However, should he be called out of town, another program will be substituted that will also have interesting material. When our program chairman goes to all the trouble to secure proper entertainment for the members, it is only fitting that we have a good turnout and support his efforts, for this certainly is a thankless job....A necessary one, but also one that sometimes fails to get membership support. Let's see if we can't have a large turnout this month. Some of you fellows who haven't been attending the meetings, come on out and see the progress we are making.

## THANKS

Since I have taken over being Editor of CROSSTALK, several of the members have sent me words of encouragement in the form of cards and letters, telling me how much they appreciate the paper and enjoy reading it. For this I want to thank all who have taken the time to do so as I do appreciate receiving these notes.....However, one purpose of this paper is to stimulate your interest in the Club. The consensus of opinion seems to be that not enough of the members are taking the time to participate fully in the Club that expresses your prime interest and hobby. If you wish to demonstrate your gratitude for the work being done on this paper, all you have to do is to regularly attend the meetings, participate in Club activities, show more interest in the Club, and get those dues in. As this is the third request for the payment of dues, and there are still about 17 of the members who haven't paid, we are using this means as a final reminder. You may forget, but your Club doesn't forget that it has expenses and obligations to meet. Your attention is called to the fact that the Treasurer would like to be able to close his books this year with all of the members who wish to continue their membership having paid their dues on or before the May meeting night.

Did you like the last edition of CROSSTALK? Don't you think that the paper is getting to be a little easier to read with the new type of printing that we are using. Favorable comments allow me the privilege to thank fellow member Doug Frohock, WB2UVO, who is handling the printing and doing a bang-up job. This is a tremendous contribution to the welfare of CROSSTALK and the Club. Many thanks to Doug.....