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February Issue 1969

Pitman, New Jersey

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The monthly Bulletin of the Gloucester County Amateur Radio Club  
published for the interest of its members and friends.

MEETING

THE REGULAR MONTHLY MEETING FOR FEBRUARY WILL BE HELD ON WEDNESDAY,  
FEBRUARY 5, 1969 AT 8:00 P.M. ON THE THIRD FLOOR OF THE BOROUGH HALL....

E X T R A

In this issue read about Amateur FM by Bob Spain, WB2RVE.

S E E

The list of dropouts that we want to get back into the club.

Help us by your attendance, and also bring a friend along.

## A Letter from the President:

Now that 1969 is really rolling along, I certainly hope that G.C.A.R.C. really rolls along. There are a lot of important functions in the Club that have to be done efficiently in order for the Club to keep its members and obtain more members. As all of the different committees go, so does Gloucester County Amateur Radco Club just to paraphrase an overworked statement.

There are still a few more jobs to be fulfilled in the Club and I hope that a lot of members will come forward and ask to be on one of them. Being part of the club in one of its many functions certainly seems a lot more enjoyable than to sit there from month to month and only criticise others who are trying to do a part in the Club. There are always a few "Let George do it" people in every organization.

The Club has been looking better than ever in the past few years. Let's keep up the good work, gang!

I'm looking forward to Field Day in June and hoping that it will be as good as the past two have been. I know everyone there had a real ball and hated to see the time end. There has to be a chairman for each of the bands operated and also an overall chairman for making sure that it will be a success. Scuttlebutt around the clubhouse at the last meeting indicated that a few members are interested in being band chairmen and this is good news to hear. So confront the President with your desire in being a chairman as soon as an overall chairman is appointed, he will know who they are.

I have asked Fred Bergmann to be membership chairman for this year. I know that he has been at this job for the past two years. The reason for asking him again is that he is also a director of the club and his term expires on December 31, 1969. So the next director with a year remaining as director will be asked to assume this job. The reason for this decision is to keep the new membership applications in the hands of a director so that they can be processed in the shortest time possible without the worry of mailing the same to a director or officer of the club and not being delivered in time for the Director's meeting.

It is good news to hear that Frank McCormick is going to reopen the interview section of the Crosstalk again. I certainly did enjoy reading about the members of our club and what kind of lousy gear that they operated the bands with. Ha! Ha! It is also good to read the various awards received by each of our members and then try to obtain the same status.

This is all for this month. Til next Crosstalk .....

The Prez  
WA2VEE

These are the former members that we want to get back into the Club. A copy of this paper is being sent to them with the hope that they will observe the interest being shown in the Club, and feel free to once again join the ranks that they had foresaken.

WA2KWM Pete Blew  
WA2WWF Bob Donley  
WB2LZW Frank Dux  
WB2DQV Les Mathews  
WB2GUN Joe Moffa  
WA2VMR Joe Prus  
W2STW Frank Andrews  
K2PEG Alva Bishoff  
Sam Boston  
K2ZFC A. Horanzy  
WA2PFJ Robert Hoy  
WA2LTY Helmut Leibfarth  
W2PQU R. Mahner, Jr.  
K2MLS Al Peacock  
Frank Yandish  
K2JWN Ernie Fox  
WN2VLT Tom Gianich  
Oscar Miller  
WA2WKC Ed. Sarama, Jr.  
WA2WUH Jim Denham  
WB2MSH Henry Feltman, Jr.  
WB2LNR Ray Martin  
WB2KEZ Al Miller  
K3ZNI Dick Wang

Keep this list before you and if you know these fellows, please contact them and see what you can do to get them back. This is only a partial list and will be added to as we are able to track down the names and addresses of former members.

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Official Bulletin #203

A strike by dockworkers along the Atlantic and Gulf Coasts has caused suspension of all regular sea mail, including QSL cards, letters as well as packages and magazines, between the United States and Europe, Africa, the near east and Caribbean islands. Sea mail to Central and South America, India, Pakistan, the Far East and the Pacific continues to be handled through the West Coast ports. Air mail and air parcel post shipments are still being handled to all points, and first class airlift mail to Puerto Rico and the Virgin Islands is still O.K.

Someone has said that there are three kinds of people; those who MAKE things happen; those who WATCH things happen; and a large majority who NEVER KNOW WHAT IS HAPPENING.

Think it over! It has been true since the early days of Christianity that the world moves upward by those who make things happen. It is true in every local church. By unselfish giving and serving we get into the top class, the class of those who MAKE things happen.

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Official Bulletin #202

New interstate tariffs filed by the various telephone companies with the FCC have been allowed to go into effect as of January 1, 1969, though many matters remain in dispute. Devices such as phone patches will be permitted through an interface leased from the phone companies. Installation charges vary widely, but monthly rentals of the interface are expected to be about fifty cents. In some states, interstate tariffs paralleling the federal rates have not yet been accepted by the public utilities commission.

Keep on the lookout for an interesting program to be put on by Jack Layton, former K2JKA and past president of G.C.A.R.C. Jack is engineer at Radio Station WTEL, in Philadelphia, and he told me that they have finished a big expansion program with the station and O.K. ed by FCC. His talk will be on this construction and development with pictures etc. Jack being a true Ham at heart, is able to apply this knowledge and his commercial knowledge in such a way as to provide a most interesting program. Note: This program is not for this meeting, but we are giving you a sample of something juicy for you to look forward to. Big things are being planned for the enjoyment of club members, so don't forget to put in your appearance at the meetings.

In the next issue of Crosstalk, we intend to publish the entire new staff working on this paper. We are still in need of material for this paper so some of you members who run up against interesting happenings in your work or schools should forward them to me.

While talking to Jack Layton over the air the other night, he told me an odd one; seems that Jack is working a lot of teletype now and is having quite a ball. He said that he was copying traffic from WIAW and when he finished a ham broke in from some town in Indiana wanting a Pennsylvania contact on teletype. Telling Jack that he is trying for WAS on teletype and had 46 states but none from Pennsylvania. Seems strange for according to Jack, Pennsylvania has the largest number of hams of any of the United States, namely 15,000. Here he had worked all of the hard to get states and one that should have been an easy one for him, turned out to be one of the hardest. You never know.....

I was approached by a person who had been a visitor to one of our meetings and inquired as to whether or not we were able to have a program put on pertaining to electronics in medicine. It seems that he has done a lot of work in hospitals where electronics are used in blood work. Telling me of some of the interesting work being done in this field,

starting me to thinking .... do you think that we could put on one of these programs???? If any member knows of anyone who could and would put on this type of a program should contact our program chairman for I really do believe that this would be a program that would draw a crowd. Something different. We must update our programs with some unusual topics. Let's GO GO GO .....

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Amateur FM - by Bob Spain WB2RVE

Mainline VHF Association

As amateurs, we share a common destiny. We are licensed by the Federal Government, under the clause that we would (or should) provide a public service. Despite our common hobby, we are all individuals, with individual habits and preferences. Some of us like to chase DX, while others get their satisfaction from handling traffic, rag chewing, etc. Still others of us (very few) like to operate on a clear, uncrowded band, and carry on a leisurely, noise-free QSO. Those of us who desire this form of communication have resorted to amateur VHF FM.

Amateurs have used FM in the VHF spectrum for many years, but activity has been minimal until recently. In the past three years, repeaters have sprouted up overnight, and the FM population on 2 meters has quadrupled. In some areas of the country, such as Wichita, Kansas, civil defense organizations and RACES and AREC have gone completely to 2 meter FM, complete with regional repeater systems. In the Delaware Valley, however, few of the amateurs on FM are actively engaged in AREC, RACES, or CD activities.

FM communication has both its attributes and detriments. By FCC regulation, amateurs interested in wide-band FM operation are restricted to frequencies above 52.5 mc. This was done primarily to conserve spectrum. In FM, the carrier frequency is shifted in proportion to the amount (amplitude) of audio applied to the grid of the reactance modulator. By mutual agreement, amateurs have adopted the same standards as used by commercial services (police, taxicabs, etc.). Normal carrier swing (deviation) for wide-band FM is plus and minus 15 kc. Narrow-band FM has a carrier deviation of plus and minus 5 kc.

Most of the amateur FM activity on the VHF spectrum is wide-band, due to the availability of commercial equipment (fire radios, etc.) on the surplus market that was used on frequencies near the amateur bands. In this section of the country, there is more activity on 2 meter FM than there is on AM. This is due to the availability of low-priced equipment, and because there are many repeaters covering the area.

A repeater is a relay station, in effect a two-way translator, which receives on one frequency and simultaneously retransmits on another frequency. In FM, frequency tolerances are so critical that channels are allocated and assigned on a mutual agreement basis. For example, amateurs in the U.S. have set up channels for FM activity on two meters, 60 kc apart, starting down from 147 Mc. (i.e. - 146.94, 146.88, 146.82,

etc.), and ending at 146.22 Mc. Most of the activity is on 146.94, the NCEF.

There are two 2 meter FM repeaters serving the Philadelphia area. One is operated by the Mainline VHF Association, and is located in Berwyn, Pa. This repeater has an input frequency of 146.34 Mc. and an output frequency of 146.94 Mc. The other repeater is located in Sellersville, Pa. This repeater has an input frequency of 146.28 Mc, and an output of frequency of 146.76 Mc. These two repeaters saturate the Delaware Valley, allowing mobile to mobile communication in excess of 75 miles.

Equipment convertible to two meter FM is inexpensive and widely available. Bendix railroad radios can be purchased for as little as \$15. Most of the equipment has been taken out of service while operating in the 150-170 Mc. Business band. This equipment was designed to operate anywhere between 145-175 Mc, so conversion to 146.94 Mc. amateur service is usually quite easy. The preliminary steps involve buying crystals for the appropriate frequencies, and peaking up the front end of the receiver.

All the equipment used in commercial service today has complete metering facilities, by means of jacks or octal sockets on the chassis. Using the alignment procedure shown in the equipment manual, tuning becomes a simplex chore.

The receiver front end can be completely aligned with a signal generator and a VTVM, taking only a few minutes. Likewise, the transmitter can be tuned up quickly by using a VTVM and a grip-dip meter.

In the Delaware Valley, the Mainline VHF Association has attempted to alleviate interference problems caused by adjacent channel operations by recommending allocations for channels. As set by K3DSM, area frequency co-ordinator, they are listed below:

- 146.94 - calling frequency
  - output of club repeater - WA3BKO
- 146.88 - Chester County RACES
- 146.82 - open for any use
- 146.76 - calling frequency
  - output of Sellersville repeater - K3HLN
- 146.70 - FM RTTY
- 146.64 - open for any use
- 146.58 - slow scan FM ATV
- 146.52 - open for any use
- 146.48 - WB2SKW intercom
- 146.46 - K2IEZ intercom
- 146.40 - open for any use
- 146.34 - input for club repeater - WA3BKO
- 146.28 - Input for Sellersville repeater - K3HLN
- 146.22 - Delaware RACES

Note: Many clubs and individuals (i.e. - Packrats, W. Mass. DX Assn.) use 6, 2, or 3/4 meter FM for intercoms. We respect their privacy, and private circuits are not listed here.

Much activity is appearing on 6 meter FM on 52.525 Mc. Also, Mainline VHF Association is building a 448 Mc. repeater, and adding 445 Mc. circuits toward Harrisburg and Baltimore, to tie the Philadelphia repeaters in with 2 meter repeaters in those areas, allowing 2 meter QSO's between the three cities on a continuous, noise-free basis.

Listed below are some of the 2 meter repeaters in operation on the East Coast. First frequency listed is input, second is output channel.

Philadelphia, Pa.  
WA3BKO-146.34-146.94  
K3HLN-146.28-146.76

Newark, N. J.  
K2IEZ-146.28-146.76

Reading, Pa.  
WA3ICC-146.34-146.76

Baltimore, Md.-Washington, D.C.  
WA3DZD-146.34-146.76

State College, Pa.  
146.34-146.76

New York City, N.Y.  
W2GHR-146.34-146.94  
W2CVT-146.34-146.76

Boston, Mass.  
WIALE-146.34-146.94

Miami Beach, Florida  
K4HYE-146.34-146.76

Tampa, Florida  
WB4AHE-146.34-146.76

Columbia, S.C.  
W4DCD-146.34-146.94

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### Scuttlebutt

I am convinced WB2WAK is a publicity hound -- what lengths would a ham traverse in order to make this column each month? Why simple, just permit his tower (just erected) to blow over and watch his quad fall down! I can smell another tower raising and the aroma of corned beef sandwiches. Note to WB2FJE and K2SOL: Get your VW's warmed-up. Keep it up Paul and you may close in on WB2PVI's record; (heretofore thought to be unsurpassable).

Good to hear our most recent club member-to-be John Scull, WB2JZY, on the 10 meter net the other nite. Welcome John and trust you will become a regular fixture on 28.6 at 2100 on Friday's.

See where our astute CrossTalk Staff snafu'ed last month; I did extra duty by writing a technical article and the editorial staff or perhaps the printing department failed to publish the Figures that were part of the article. For those of you who might want these figures please write or contact WA2NPD. Those who have the general ticket

or above draw your own; those who can't remember what the article said - forget it. I've learned my lesson; in the future, remember to clip a 10 dollar bill onto any figure submitted for publication in this epistle.

Great News Department!!! Bill Culpepper, WB2NNB, is not leaving the area after all. His job requirements now stipulate that the remain in this area at least one more year and possibly longer (we hope so). Anybody know where Bill can re-erect his 80 ft. pole? Or hang his hat, for that matter.

Rumor has it that John Kull, WB2GKH, is now on the air! I guess our perennial, efficient, and capable picnic chairman and chief Clubroom custodian has finally decided to give the rest of us a break and let us work him via 80 meters. Good show John.

Saw grand potentate, chief watchdog and straw-boss Bell System King, WA2WGA, flaying his lackeys hither and yon about and under the main drag in Wenonah some months ago. Certainly would like to see him mount the golden staircase some first Wednesday of some month (all for that matter).

Incidentally, don't miss the Club meeting this month (Feb. 5). Understand our newly formed technical committee (K2SOL at the helm) will present a most interesting program.

My congratulations to the typist last month who had the honor and privilege of typing this page - No mistakes! Let me know who you are and I promise an evening of fun and frolic (807's too). (Hope it ain't Wally).

Our WAS list grows longer; congratulations to WB2BVW, Bill Farr. Also a hearty congratulations to WB2SCK. Bobby just got his DXCC, a truly remarkable accomplishment for a ham only about 18 years young. Bill now joins the WAS crowd of WB2SCK, WB2EUU, WA4BMC, W2YNR and WB2FJE. Anybody else? Let me know.

WA2NPD just returned from two long trips (business) to W6 and W4 (Florida) lands respectively. Moral or story - never fly United. I will take trans-dogpatch first!

Its been over a year since WB2PVI erected our good looking club QSL board in the clubroom. I checked last month and, would you believe that about half of the club members have not yet tacked up their cards!! Next month, this column will initiate an eight-ball list especially reserved for those of you (i.e. youi calls) who have not gotten your card on the board. It would help the list-keeper if you would (i.e. those who have not yet responded with our card) fill out one of the following statements and send to me, WA2NPD.



- |   |  |  |
|---|--|--|
| 1. I am too lazy to<br>bring my QSL card.<br>_____ (call) | 2. I am too miserly<br>to hang up my card.<br>_____ (call) | 3. I am too modest<br>to get my card up.<br>_____ (call) |
|---|--|--|

73's de WA2NPD

ATTENTION

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The Club program for March will be a new first for GCARC. A truly unique show where our egotistical traits and emotions can be released.

We shall have a QSL card display and contest. There will be two categories; one for USA cards only and the other an open or optional category. Select your 12 best cards (more than one entry is fine; i.e. you may enter both the USA only and open categories), mount them via thumb-tack or tape on a rectangular piece of cardboard (or equivalent), and bring your display along to the March meeting. Displays will be judged as to Beauty, Humor, and Originality in both categories. In addition, there will be one winner for the rarest DX group display -- this winner to be determined by a rare-countries point system to be ascribed to each ARRL country, both past and present. Cards may be of any vintage -- the only requirement is that they must be yours. Hence, there will be a total of 7 winners in all. The Board of Directors assures us that the prizes to the winners will be useful and worthwhile. Judging will be done by an independent group of XYL's (not ours) so that no impartiality will be shown since they won't know any of our calls. So, start now to sift through your cards and scout around for a piece of cardboard for a mounting rack (new shirt inserts are great).

Also, and get this, we will have a show-off, or get-to-know-your-fellow-club-member show in the form of slides of each member's shack. So tidy up your shack now! Slides must be standard 2" x 2". You may be in the slide if you wish, but the slide must show all or most of your shack. During the meeting, you will be asked to give a 20 second description when your slide is shown. Slides should be gotten to Bill Shaw, WB2PVI, Pitman, N.J. or Doug Gehring, WA2NPD, Wenonah, prior to March 5. It would greatly help if you could take your own (or get your friend to), or, if impossible, contact either of the two hams above and we will see to it that someone takes your shack's picture. C'mon now, let's all get behind this venture and make it a real success. Let's not be bashful, even the one-tube homebrew station is more than welcome. More next month.

#### VHF Contest

For those of you who participated in this month's (or Year's) VHF contest be sure to mail or bring your log to chairman Bob Spain, WB2RVE. Remember, every little score (as well as the big one's) will help the GCARC Score!