

CROSSTALK

Published By And For The
GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD

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Pinky Wilson, Typist	Al TrueBlood, KA2KGD, Circulation
John Sutocky, KB2GL, Printer	Milt Goldman, K3WIL, Publisher

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CLUB NETS

2 Meter RTTY Net:	Monday, 8:00 P.M.	147.54
ARES Net:	Sunday, 8:00 P.M.	147.78/18

The Gloucester County Amateur Radio Club meets the first Wednesday of each month at the VFW Hall in Woodbury Heights. Meetings begin promptly at 8:00 PM.

Please send any contributions for CROSSTALK to Doug Gehring, WA2NPD,

Deadline for submissions is 10 days before Club Meeting.

PRESIDENTS MESSAGE - FEBRUARY 1984

Well, the year looks like it is off to a good start and the momentum SEEMS TO BE BUILDING. I'd like to thank those that have volunteered to head the committees for our various activities as well as those that have already volunteered to work on the committees. Its going to be a busy year for us all but the rewards will be more than worth the efforts.

This month finds us participating in a Cub Scout demonstration at the Deptford Mall the weekend of February 4th and 5th. Make an effort to stop by over the weekend to help out our committee headed by Walt, WB2OYQ, if possible or if nothing more, just stop by and check out our activity and say hello.

Plans for our 25th Anniversary Dinner Dance to be held in October will be announced at the upcoming meeting. Roselyn, N2AKL, has come up with plans for both an evening to remember as well as a price that can't be beat. Plan to attend to get the details. In addition, plans will be announced for our upcoming Open House to be held March 7th. Your thoughts and ideas to make it a success will be greatly appreciated.

Don't forget, now's the time to pay your dues. See Bill, N2BK, before or after the meeting.

Harry, WA2VXT

PROGRAM, FEB. 1st MEETING

Tom, KB2GI, informs us that the program for February will be presented by our own Tom, N2BPN, on RTTY, Tom will concentrate on the operational aspects of RTTY with information on nets, frequencies, news of interest to amateurs, etc. You won't want to miss this talk by Tom. CU There. Sure hope N2AKI will have the coffee real hot this month (bless him).

CLUB REPEATER UPDATE

The 440mhz repeater is now on the air from the QTH of WB2FJE. It was announced last month that the 'PL' would be off for the time being. Until the tome control board is received, it will be necessary to leave the 'PL' turned on. It should be pointed out however, that the use of 'PL' allows the receiver to operate at maximum sensitivity which greatly enhances the range of the repeater. Also, the use of 'PL' is not intended to make this a closed repeater. The 'PL' frequency is 156.7 . Feel free to pass this info along to anyone interested in using the repeater.

(OPERATING HINTS)

1. When using any of the repeaters within our system, if a station breaks your QSO, please acknowledge and allow the station to transmit immediately before continuing your QSO. you never know when the breaking station is in an emergency situation.

2. Also, a strong reminder that the autopatch is not to be used for circumventing toll calls. The other day we had a W3 call over to two-land.

3. And a further reminder that use of the repeater autopatch for any commercial purpose is illegal. Even for calling your boss at work to report in sick! So, lets not abuse this in the future.

de Harry, WA2VXT

GOLDMAN SERVICE AWARD PLAQUE PRESENTED

The annual Milt Goldman Service Award plaque was presented at the January Club Meeting to Herb Schuler, K2HPV. A more deserving selection was hardly possible. Herb's multitude of accomplishments during his years with GCARC would almost require a special issue of X-TALK to give due credit. Some highlights include the Club Presidency (1977), vice presidency, Director, Treasurer, HamFest co-chairman, FD Band Chairman, 25th Anniversary Committee Chairman, Long Range Planning Committee, Contest Chairman, Awards Chairman, etc., etc. In addition, Herb is always, it seems, doing many other things like heading-up Club jacket procurement for new members, or assisting with Crosstalk. Herb is just simply a super, intelligent, competent guy who can do and will do almost anything to help-out the Club in any way he can. GCARC can truly consider itself fortunate to have the likes of Herb on its roster. Many congratulations Herb-you have certainly earned this fine award.

DUES R DUE!

DON'T FORGET!! Send your check to Treasurer Bill, N2BK,
or see him at the meeting.

CODE AND THEORY CLASS UPDATE

Chic, WA2USI, reports that the Novice and Technician Class is about completed for this year. Six (6) passed the Novice exam and eight to ten (8 to 10) students must still take the test. All are expected to take the Technician test later on.

The Advanced/Extra Class registration was on January 23rd and this class (theory only) is, by now, underway. This class is also being given at Glassboro State College, Monday evenings from 7 to 9:30 PM and is expected to run for about 16 weeks. There is, of course, still time to enroll. Chic, WA2USI, will also serve as instructor and he continues to do an outstanding job in this area.

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CLUB OPEN HOUSE SET

Clearview Regional High School Cafeteria has been reserved for our March 7th Open House meeting - program beginning at 8PM. This is our Anniversary year kick-off activity, so reserve that date now. All friends

and guests are cordially invited. Atlantic Division Director, Hugh Turnbull, W3ABC, will be present and many "specials" are being planned for that evening. Don't miss this one.

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25th YEAR PROGRESS

Chick, WA2USI, has volunteered to serve as Special Event Weekend Chairman for May 5th & 6th, Many thanks to Chic.

Also, as reproters elsewhere, Roselyn, N2AKL, is our Anniversary Banquet Chairman - The Banquet to be held in October. We could hardly have asked for a better Chairperson than Roz.

And, as in past years, Harry, WA2VXT, will chair The Bike-A-Thon. Obviously, the Bike-A-Thon is in good hands.

Relinquishing Hamfest Chairmanship this year is Harry, WB2GSF, having served faithfully and expertly these past several years. All is not lost, however, because an old Hamfest hand, namely Bill, WA2VEE, has offered to pick-up where Harry left off. We are happy that Bill is heading the show here.

And our new FD Chairman will be Jim, KA2OSV. Many thanks to Jim and a special thanks to Tony, WA2FZB for his good job in 83.

Finally, our new DX Co-Chairmen will be Tom, WA2OOS, and Barry, NC2V who will write the monthly article for CROSSTALK. A special thanks to Tom, KE2M, for a very faithful, great job during the past 3 years.

PARTICIPATION LOG

The Board of Directors has decided to maintain a log of those club members working-on and participating in the various Club activities during the year. It's not enough just to show-up at, for example, Field Day, shoot the breeze for a few minutes, then leave. One actually has to help-out in some way. This log will help the Board to see which activities are popular and which aren't, who does what, etc. Chris, KC2PC, and Herb, K2HPV, will gather the data. Charlie, K2PQD, will maintain the records. This is a voluntary thing, i.e. you - the club members, are responsible to see that your participation gets logged-in. 1983 will be the first year. So please jot down (in writing) those events which you participated in during 1983 and give the list to either Chris or Herb. Mny tnx.

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NEW NOVICE CLASS POSSIBILITY

As a further service to amateur radio, George, KB2GW, has volunteered to teach a Novice Class during March and April of this year. The Club will sponsor this class and it is free to the public. The class will be held 1 night/week for 2 hours. At this writing, a suitable location is yet to be found. If anyone has any suggestions as to a place (preferably near Woodbury), please contact George. Perhaps additional information will be forthcoming at the Club meeting.

4 SALE

1. Johnson Viking II - with VFO \$140.00
 2. Homebrew CW Keyboard \$ 50.00
- Contact Al Trueblood, KA2KGD

WANTED

1. Would like to borrow operating manual for Bearcat 300 Scanner, Al, KA2KGD (above)
2. 10 and/or 11 Meter Big Stick Antennas, Contact Russ, WB3JBX (Delaware).

HAMFEST NOTICE

The Shore Points Amateur Radio Club (SPARC) will hold their annual "Springfest 84" at the 4-H Fairgrounds, Egg Harbor City, NJ on Sat., March 10th, 9 AM to 4 PM. Large indoor selling space available. ADV. tickets are \$2.50; \$3.00 at the door. Sellers, \$5.00/space. Any questions write SPARC, Absecon, NJ 08201.

L E S BELLESNO CODE ??

How do you communicate when your mouth is swollen, your jaw is wired closed, and you're too weak to write on a pad? Why, you use c.w., of course

Doctors, nurses, and hospital staff at the Fox Chase Cancer Center, in Philadelphia, were all agog when Hugo-WB2IGD checked in American Oncologic Hospital carrying a code practice oscillator.

His XYL, Jan-WB2JCE not only conversed with Hugo via code, but also was able to translate his needs and requests to the hospital personnel caring for him following extensive facial surgery and a complete reconstruction of his lower jaw.

This was a "first" for these dedicated people who deal daily with patients unable to speak. They all agree that WB2IGD's means of communication is playing an important role in his recuperation. "U can't imagine the frustration of one day being able to communicate normally es the next day complete silence," says IGD in c.w.

Had the FCC not required code as part of the licensing exam for amateurs, in all probability, this means of communication would have been closed to Hugo and Jan. Hugo says he's never considered c.w. his favorite mode of operation on the air but is now convinced that it should definitely be a required portion of the test.

Until he regains his ability to speak, Hugo expects to use c.w. daily. And who knows, maybe there will be some new Novice licensees from Fox Chase in the near future.

I felt this story of interest as both Jan-WB2JCE & Hugo-WB2IGD have been faithful in attending our annual GCARC Hamfest.

73,
Rose Ellen-N2RE

(Ed Note: A real FB story. the FCC reads this)

DA'S & DIT'S

N2WMD (Repeater) - "Outside sources tell me we are doing an excellent job."
"Credit should be given to the GCARC Committee."

If there's a Ham Fest at the North Pole, WB2UVB and KA2CQX will be on their way with WA2MGV riding shot-gun.

WB2VOH back from Germany visited N2ZA and family over the Christmas Holidays.

WA2FZB has all his antenna equipment stashed away in this radio shack waiting for Spring.

Two Life time members: WB2LTV and N2ASN are thinking of taking up karate.

AE2V visited friends and relatives during the Holidays and is now back in South Carolina at the salt mine.

KA2OSW now an Extra learned the code listening to tapes while commuting between Glassboro and Atlantic City.

KA2DOT broke a rib and we hope he recovers quickly.

Good luck! AE2L - hope you and yours will enjoy yourselves in North Carolina. We'll miss you.

Someone wants to know if the N2BK cakes will continue now that he has become Club Treasurer.

de the Eavesdropper

CONGRATULATIONS TO:

George, KB2GW, who finished 8th in the SJ Section, 1983 VHF QSO Party.
Also, to all the guys who worked the VU7; WA2OOS, N2ATD, NC2V, N2SS, W2YC
(anyone else?)

DX DOPE, TNX to BARRY, NC2V, es TOM, WA2OOS

Throughout this year, Tom and I will attempt to keep you advised of Band conditions, DX operations and other events which are of interest to the Dixer.

1984 will bring us a year of failing propagation on 10 thru 20 meters and improved conditions on 40 thru 160 m.

During the next couple of years, 10 m will become almost useless for Dxing and you can also expect the conditions on 15 and 20 meters to degrade as well.

On a brighter note, the same solar activities, (or lack of), which produce poor propagation condition on 10, 15 and 20 meters will provide us with improved conditions and DX openings on 40, 80 and 160 meters.

BAND CONDITIONS

10M Very little DX activity. A few openings to South America in the evening but almost no openings to Europe, the Pacific or Africa.

15M Still the best band for daylight DX. Europe in the morning and afternoon and Africa in the afternoon.

20M Good openings to Europe during daylight hours with a few openings to the Pacific and Asia just prior to and during our sunrise and sunset.

40M Excellent DX band to Europe from mid-afternoon on thru the hours of darkness. Look for openings to JA and VK's just prior to and during our sunset. If you are a night owl, look for the Pacific to roll in around 1 AM.

80M There have been some excellent DX rolling in during our sunrise and sunsets. Look for Europe and Africa in the evening and the Pacific in the morning.

160M This band is much like 80 meters, but with fewer openings. Look for Europe in the evening and the Pacific in the morning.

CURRENT DX OPERATIONS

TA Turkey TALUA is looking for North America contacts on 21.025 KHZ from 1300 utc till 1500 utc on Saturdays. QSL via K1JA.

OA Peru The colvins are making a tour of South America. They have worked from HC8 and have just finished up their operation from Peru using the call 4T4WCY. They are working both phone and CW. They have 6 more countries on their schedule with Bolivia being their next stop, before returning home. QSL via YASME.

CURRENT DX OPERATIONS

VR6 Pitcairn Island VR6KY has been showing up regularly on or about 3806khz on Tuesdays and Fridays at 1100 utc. QSL via KC5GL or NE5C.

XU Kampuchea XU1SS has been off the air with rig problems, but, is now active around 14.025 at sunrise.

FR7AI/T, Tromelin, on 15M @ 1600Z, 21.025 (heard there on 1/24).

3B8 Mauritius 3B8CF can be found on almost a daily basis on the low end of 40CW or 80CW from 0130 to 0230 utc. QSL direct.

UP COMING DX OPERATIONS

ZL8 Kermadec Island - Jim Smith (VK9NS) has stated that he has obtained permission for a three week operation from Kermadec Island this February.

YVØ Aves Island - Possible operation by YVØAA the last week of February or the first week of March.

FR/G Glorioco Island - FRØFLO has indicated he will be operating from this location in the near future. If you work him, good luck in obtaining a card!

HERE IS THE ANSWER KEY:

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. . . . . Y . T R A N S C E I V E R
. . . . . A . . R . . . . .
. . . . . G . . O . . . . . C . . .
. . . E . . A . . . A S T A T I O N X .
. . . . K T . . . . . E . . . . M C D
. L . . O R E K A E P S N . . . . A . .
. . O R . . . . R . . . . I . . L E . .
W . . G . D . E . . . . . L L . B . .
A . . . I . V . . T R A N S M I T T E R
T . . P . I . . . . .
T . O . E F Q . . . . .
M L . C . . H U . A N N E T N A . . . .
E . E . . . . V A . . . . .
T R . . . . . D . . . . .
E . . . . . L
R . . . . . E N O H P O R C I M . . S .
. . . . . Q . .

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FIND THESE HIDDEN WORDS IN THE ABOVE PUZZLE

ANTENNA	BEAM	CALL	DIPOLE	DXCC
KEY	LINEAR	LOG	MICROPHONE	QSL
QUAD	RECEIVER	ROTATOR	SPEAKER	STATION
TRANSCEIVER	TRANSMITTER	VHF	WATTMETER	YAGI

(To last month's puzzle. Agn tnx to N2SS)

SWR, HOW HIGH IS BAD?

I am always amazed (and amused) at how some hams will work tirelessly at trimming the antenna to get their 1.5 SWR (which concerns them) down to an acceptable 1.1 which now (sigh of relief) they can live with. Is all this "trimming" work really necessary and worth the effort? In most cases, it is not, a complete discussion of this subject (see ARRL Antenna Book, for example) is beyond our scope here; but consider a typical situation—that of a 20M beam (3 elements) being fed with 100 feet of RG-8/U coax. The resistive attenuation loss for 100 feet of RG-8/U (solid dielectric) at 14 MHz is about 0.6 dB's. This means that if the SWR at the antenna (the load) were 1.0 (a perfect match), then the total power loss in the line would be 0.6 dB. The additional power loss at an SWR of 1.5 is less than

0.1 dB, an insignificant value. Recall that a change of 1 Db is the accepted standard whereby the human ear can just detect a change in audible level. In fact, in our example cited here, the SWR would have to be about 6.0 before the other station would detect a reduction in signal strength (i.e. 1Db. change).

Now, its true that we normally don't measure the SWR at the load, but at the transmitter end. Since the SWR increases going from transmitter to antenna, what would the 1.5 be at the antenna? Because of the comparatively low losses with RG-8/U, the SWR at the antenna would be about 1.65, and again the power loss is insignificant.

How about the effect of high SWR on the rig? If the coax terminates in a mismatch (high SWR), the output matching circuit of the rig is therefore not seeing the characteristic impedance of the line which, for RG 8/U, is about 50 ohms. If the rig's tank circuit has been designed to match a particular line impedance (most are) and has little or no range of adjustment, it may be impossible to resonate the tank circuit if the SWR is too large. And attempting to operate the rig off-resonance may result in arcing at the loading capacitor and may deplete the useful life of the finals. At best, the rig may not load up into the tuning circuit properly and slight changes in frequency will necessitate reloading. So how large does the SWR have to be before this unhappy situation is encountered? Most rigs have pi network matching circuits and will load properly within a 40 to about 150 ohms tolerance. Hence, if the SWR were, for example 3, the rig would still load satisfactorily.

So why bother trying to hack-away at the last few tenths of an SWR unit? It really isn't worth the effort.

de WA2NPK

(NOTE: The above article assumes the finals are tubes, not transistors - de Ed)

CONTEST CORNER

February is perhaps the busiest contest month of the year ! CQ Magazine lists 19 events for this month so it's impossible to list them all here but listed below are some of the more notable events:

Feb. 4 - 5	RSGB 7MHZ SSB Contest
11 - 12	Two Land QSO Party
18 - 19	ARRL DX CW Contest
24 - 26	CQ WORLDWIDE 160 Meter Contest
25 - 26	RSGB 7MHZ CW Contest
	French SSB Contest

The Club will again sponsor the Two Land Contest. Last year's DX contest showed two pressing needs; 1. more club members are needed to participate and your editor desperately needs help scoring the logs (look out WA2NPD, K2HPV and Co. you've been drafted!) If you would like to help out see me at the meeting.

The ARRL DX Contest is one of the year's premier DX and Contest events. Remember, the W2SUA trophy is awarded annually to the club member having the highest ARRL DX contest combined ARRL CW/SSB score.

Last year WA2OOS unseated W2YC, who was thought to have a "lock" on the trophy who will do it this year? Jump in - it could be you!

Rules for all of this months contests can be found in the various magazines contest columns.

Rules, logs and dupe sheets for the Two-Land and ARRL DX contests will be available at the meeting.

73

WB2GES

The WB3JVX-Metro Comm Repeater System is proud to announce two new additions to one of the most advanced systems in the Delaware Valley. These new systems provide complete coverate from North Philadelphia, PA to Elkton, MD and from Elkton back across the state of Delaware to Atlantic City, NJ on repeaters linked together on the following frequencies; 223.36/224.96, 222.38/223.98, 448.00/443.00, 448.05/443.05, 29.52/29.62, and 1240.0/1260.0. Metro Comm has added and linked a new 30 watt MELCO repeater high atop Caesars World Hotel in Atlantic City, NJ; with very good results across all of Southern New Jersey.

The Repeater is open, of course, as is all the Metro Comm System Repeaters. The number 2 add on is a RTTY mail box on the 224.96 repeater in Chester, PA. To get in on the fun at 60 WPM; hit space, space, J,V,X, - Return ...YOU WILL BE IN FOR A BIG SURPRISE. So you think 220 is dead? Not in the Mid-Atlantic States. Soon Metro Comm will be adding the 223.06/224.66 Gloucester County Amateur Radio Club Repeater to the System.

Hope to hear from you on Metro Comm.

73's WB3JVX

Russ Stafford

LEGAL HAPPENINGS (TNX to Westlink es K3WIL)

THE FCC HAS BEGUN ISSUING 10 YEAR new, modified and renewal amateur licenses. The longer term licenses were authorized in rule amendments adopted by the Commission October 6th, 1983. In addition to authorizing the longer term station and operator certificates, the changes also institute a two year grace period for renewals. The issuance of 10 year licenses was delayed until now so that needed changes could be made to the licensing program. The FCC says that the 10 year term is not a blanket extension, but will require that the older, 5 year licenses, be renewed in order to avoid flooding the Gettysburg processing facility with unnecessary paperwork. (Report Docket 83-337, December 20, 1983.)

THE FCC HAS FORMALLY REPRIMANDED an amateur who altered his license. On December 14, 1983, the FCC issued the reprimand against Raymond C. Bower, WA1NMC, who is alleged to have mailed an altered copy of his amateur radio license to the Radio Amateur Callbook magazine in an attempt to cause that publication to list him as an Extra Class licensee when he is only entitled to General Class operator privilges. In its official reprimand, the Commission said that this was a misuse of an FCC issued license and did not comport with the high standard of conduct expected by members of the Amateur Radio Service. (FCC Press Release/Public Notice 12/21/83.)