

CROSSTALK  
PUBLISHED BY AND FOR  
GLOUCESTER COUNTY AMATEUR RADIO CLUB  
( W2MMD )

THE G.C.A.R.C. OFFICERS

PRESIDENT

~~██████████~~ PRESIDENT

TREASURER

RECORDING SECT.

CORRESPONDENCE SECT.

RAY MARTIN/WB2LNR

JOHN BOKOLES/W2KI

ROSE ELLEN BILLS/N2RE

MARY JO DARAKLIS/N2AJG

ROSLYN MARDER/N2AKL

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DIRECTORS

JOSH BREHM	AE2L
DAVID BACON	WB2ONW
SONNY GUTIN	WB2DXB
BILL HELMETAG	WA2VQG
GARY HITCHNER	WA2OMY
JACK KESSEL	AB2W

TRUSTEES

FRED COWGILL	WB2GEK
BARRY CAMPBELL	W2YZ
BILL FRAMBES	WB2FJE
JACK WHITE	WA2MEM

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THE REGULER MEETING OF THE G.C.A.R.C. IS THE FIRST WEDNESDAY OF EACH MONTH AT THE NATIONAL PARK MUNICIPAL HALL, NATIONAL PARK N.J. THE MEETING STARTS AT 8:00 PM. ALL HAMS AND GUESTS ARE INVITED TO ATEND.

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CLUB NETS:

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Send all articles to be printed in CROSSTALK to Jack Kessel/AB2W,

The cutoff date for articles for next month

Crosstalk, can be found elsewhere in this issue.

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-PRESIDENT'S CORNER-

Since this paper will be arriving after the festivities, here's hoping everyone had a blessed and safe Holiday Season. First on the agenda, I want to express my thanks to everyone, for there vote of confidence on electing me President for the new year. I will do my very best for the club in all aspects, weather its Ham Radio or whatever the Membership desires.

The first Board of Director's meeting for the year was held Dec. 20, at the home of John and Mary Jo Daraklis. On behalf of the Directors and myself I would like to thank them for the use of ther home.

Among all of the committees for the year we have come up with a few vacancies, they are; House Committee, Field Day Committee and if we so desire, Banquet committee. Hamfest and Picnic Committees.

Let me say that it looks like we have a good Board of Directors this year, with a lot of input on quite a few different catagories. So if any of the members have any problems what-so-ever, please contact one of the board members with your questions, or contributions.

So with that just let me say, that its a new year and we will all be looking fowaed to the very best for G.C.A.R.C. Hope to see all of you at the next meeting.

(Ray/WB2LNR)

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DIRECTORS MEETING

Dec. 20, 1978

The Dec. Metting came to order at 8:10 and in attendance was; Ray/WB2LNR, N2RE Rose Ellen, WB2DXB/Sonny, WB2ONW/Dave, AE2L/Josh, N2AJG/Mary Jo, N2AKL/Roslyn WA2VQG/Bill and AB2W/Jack.

WB2DXB suggested to have a check-in sheet at the meetings, and persons that don't miss a meeting for an undetermined amount of time, would receive award.

AB2W made a motion to send a donation to the ARRL, for TX and RX kits to be sent to a country trying to develope Amateur Radio.

WB2LNR is going to look into the printing cost of club stationary.

It was also decided to ask for volunteers to MC the nets that are listed on the front page of this paper. (15 meter cw and 10 mtr. SSB.

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NEW SCM, Bill Luebemann Jr. WB2LCC,

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A modification kit is available for a crowbar circuit for the Heathkit power supply, HP-1144, as used with the SB-104 and HW-104. Request it direct from Heath at Benton Harbor, MI. Without the kit overvoltage can destroy up to 55 semiconductors.

(WA2PFC & So. Chester Co. ARC.)

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NEW MEMBER, Bill O'Donnell WA2VRY,  
Glad to have you in the GCARC, Bill.

## PROPAGATION FORECAST - JANUARY 1979

Here we are in the middle of our Winter months, and the way Cycle 21 is continuing to meet and excel its requirements, this month is going to be a very good month for operating. For the H.F. boys the 20, 15, 10 meter bands are your daylight bands, while 160, 80 and 40 are the bands for you lower "freak" guys. No one is going to be disappointed this month. Even the the U.H.F. guys are going to get their "gigs" in during the day. Some good T.E. and very fine meteor showers from January 2 through the 4th, plus, from the 11th through the 14th you will get the first good sporadic-E on both six and two. The peak should be Jan 12th, North-South, mostly South for the 2 meter opening. This month Six meters should work Europe. Best time, mid-morning, then point your beams to the Caribbean and Central America about noon to about 1400, then move west. The propagation will drop fast as pure F-2 operation will cease after 1530. Anything after that on Six will be other than F-2 propagation.

160 and 80 are going to be quite good this month. Low noise and very good path lengths for some nice DX. But, please remember they are night time bands and Europe is five to six hours ahead of you, so you really don't start to show until around 2200 our time. Also, remember the best DX conditions are when the sunrise is on the Eastern-most terminal. Example, look at a globe, or the ARRL world map. Take Philadelphia 40° N. Latitude. ~~Go~~ across the pond and you find Portugal and Spain are on the same Latitude. Ok, because of this England, Germany and France who are further north get dark sooner, then us and they stay darker longer, so, when it is around 0100 here, it is 0600 there and the sunrise is just beginning. So be prepared to burn some midnight oil if you want Europe on 160 and 80 meters. They are there both phone and CW. Now please pay attention, as January moves on. The days are going to get longer which means the 20 15 and 10 meter bands will have longer life, especially true for the 15 and 10 meter bands and you CB/10 boys, will get a crack at some W5, 6 and 7<sup>s</sup> coming home from work.

ARRL VHF Sweepstakes 13-14<sup>th</sup>. You will have to listen good, keep your sets ready when the sporadic-E hits, then work them like mad. Two meters has a good chance for some good continental DX.

160 Meters	Europe	2100 - 0200
	Mediterranean	1900 - 0530
	Africa	2200 - 0230
	S. Pacific	0300 - 0500
	Caribbean S. Amer.	1900 - 0200
80 Meters	Europe	2000 - 0300
	Mediterranean	1900 - 0530
	Africa	2200 - 0230
	S. Pacific	0300 - 0500
	Caribbean, S. Amer.	1900 - 0200
40 Meters	<del>Europe</del>	<del>1700 - 0200</del>
	Europe	1700 - 0200
	Mediterranean	1900 - 0300
	Africa	1500 - 2000
	Caribbean, S. Amer.	1900 - 0200

CQ WW, 160 DX boys on the 26 to 28<sup>th</sup> will get a good crack at some real fine European DX on these nights. (cont.)



20 Meters

This band will be good to every part of the globe Except 2200 to 0530. Sunrise at 0600 will start the openings and will approach 0530, by the end of the month and close around 2230. Just before closing around 2000 Antarctica should be coming in good.

15 Meters

This band will be like 10 meters expect the band will peak an hour after the ten meter peak. This band and 10 are a toss-up as to the best DX bands.

15/10 Meters

Read above for 15

Europe	0800 - 1200
Middle East	0800 - 1000
Africa	<del>1600</del> - 1500
Far East	1800 - 2000
S. Pacific	1630 - 1830
Australasia	1800 - 2030
Carib. & S. Amer.	1400 - 1900 - peak 1700
Antarctica	1800 - 2000

H.F. GOOD DAYS.            1, 4-6, 23-24, 27 and 30-31.  
 U.H.F.                        5-6, 23, 31, (11-13 sporadic-E)

GOOD LUCK John/K2JF

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BAND OPENINGS AROUND THE CLOCK ???

Reading K2JF's propagation report for this month made stop and reflect a bit. The bands are in the best shape that I have ever seen them. Openings like we are having now are something that you only heard the old timers talk about. The 10 & 15 meter band was something to have local rag chewing on and it was real grate to have a short opening to 4-land for a short time. This year was very good for DX with the sun-spot numbers reaching up to the 50's for starters. Now they are around 100 and expecting to go to 175 by the years end. K2JF says that they will be going into the 180's by next year. It looks like in a few years we will all be able to tell the new-comers how it was back in 1979, when we "old timers" could work the DX any time, day or night. (AB2W)

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FOR YOU CB/10 guys, the American Crystal Supply Co. has engineered crystal conversion kits, for some 65 SSB units and 190 AM units. The ACS conversion kits range from \$19.95 to \$49.95 for SSB units and from 16.95 to \$22.95 for AM units. Information can be obtained by writing to ACS Co., P.O. Box 638, W. Yarmoth Mass. 02673. (K2JF)

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SAVE SOME BUCKS by paying your dues now. After FEB. you will have to pay the full amount. Also, if your QST is due, give your renewal card to Rose Ellen. (N2RE)



-AMATEUR AWARDS-

CQ CA AWARD

The County Award, is one that is very nice to have on your wall. It is one of the better looking awards that you can get in the U.S. You must have a special record book for this award and room is provided in the book for certification. The record book is available from CQ Magazine for a \$1.25. The address for applications is: Ed Hopper W2TP,

The identity of a county is determined by the official United States publication, P.O.D.26. If the county is not printed on the qsl card then the county is determined by the address on the card or, in the case of mobile stations, by the postmark on the card. A number of cities in the U.S. are called "Independent Cities" and are not part of any county. This applies specially to the State of Virginia. Cards from these Independent Cities count for only ONE of the adjoining counties and ONCE only.

The BASIC Award is for confirmed contacts with 500 different counties, with no restrictions. SEALS are given for: 1000 counties with at least 25 States 1500 with 45 States, 2000 with 50 States, and up to 3079 counties with 50 States. That being all the counties in the U.S. For this you get a special plaque. Good county hunting, and bring your plaque to a meeting when you get it. (AB2W)

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You never get a second chance to make a good first impression.

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Would everyone coming to the next club meeting please look up the phone number of the local Police, Fire and Ambulance Co. in your town and in the town next to you. I would like to print a good list for everyone to keep in their cars in case of an emergency. I would like the list to cover as many towns as possible in a three county area. Please do it now before you forget. Thank you. (AB2W)

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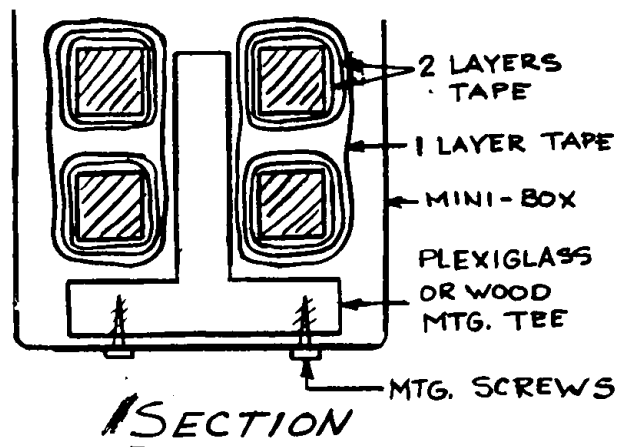
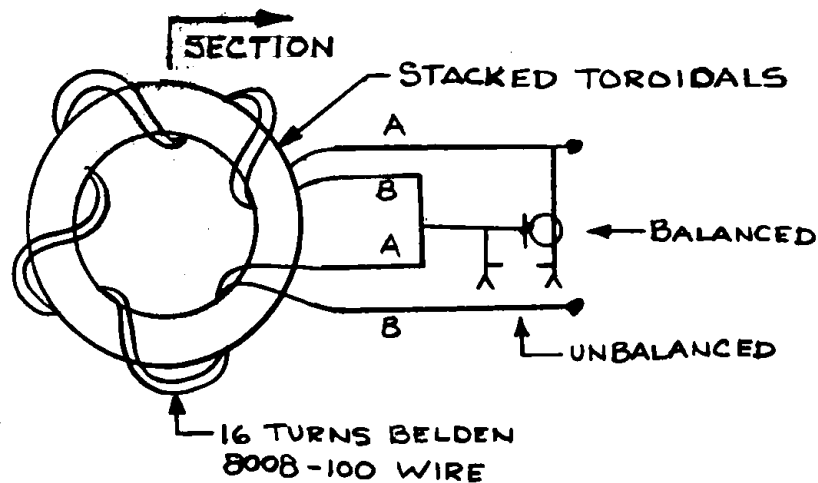
The Editor of Crosstalk needs articles to be printed in the paper. I can only make it as interesting as the information that I receive from the Membership. Whenever you see something that might be of interest to the other members, don't just talk about it to a few on the two meter rig, send it in to me for printing. (AB2W)

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SWAN ELECTRONICS IS looking for a sales trainee with Amateur License and technical background. Some travel will be required, Contact Whit Whitley at Swan if interested. (HR Report)

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HAPPY NEW YEAR TO ALL  
1979 - 1980



## 4:1 BALUN

### MATERIAL LIST:

- #1. Approx. 24 ft. Belden #8008-100 #12 AWG. hvy armored Polythermaleze Wire
- #2. Mini-Box, (4" X 4" X 2")
- #3. (2) Standoff insulators.
- #4. (1) S.O. 239 chassis mtd. coax connector.
- #5. (1) roll scotch # 27 glass cloth tape.
- #6. (2) ferrite toroids (340-3) Q-2 matr'l.

### IN SEARCH OF THE "ALL-BAND"

There comes a time in every Hams career, when after designing and building countless dipoles, he finds he has either run out of trees and posts or his yard looks like a spider web. This is when the search for the "All-Band" starts in earnest. The antenna shown in this article culminates about 3 months of brainpicking. You victims know who you are!

The balun is used to transform the 300 ohm balanced feedline to a 75 ohm unbalanced load, which is easily handled by most transmatches. The 300 ohm balanced feedline length is critical to some degree if antenna is to be used on 80 meters without a transmatch.

The Torrodials are purchased at a total cost of \$12.32 delivered from Permagg Corp., Jamaica, N.Y. (212-657-1818). The balun will handle 1000 watts of RF, from 1.8 to 60 MHz. Refer to Amateur Handbook for Further construction details.

The antenna is both horizontally and vertically polarized and when used as an inverted V, it has a low angle of radiation thus lending itself to DX and local communications. When worked by tying balanced feeders together and attaching to the random wire connection on the transmatch.

At this time the antenna is being used on the 10 thru 80 meter band as a dipole. It presents (with the murch transmatch in line) a flat line on all bands. It has demonstrated an ability to receive transmissions from vertical and horizontal antennas Equally. Mounting height is at about 35 ft. at center.

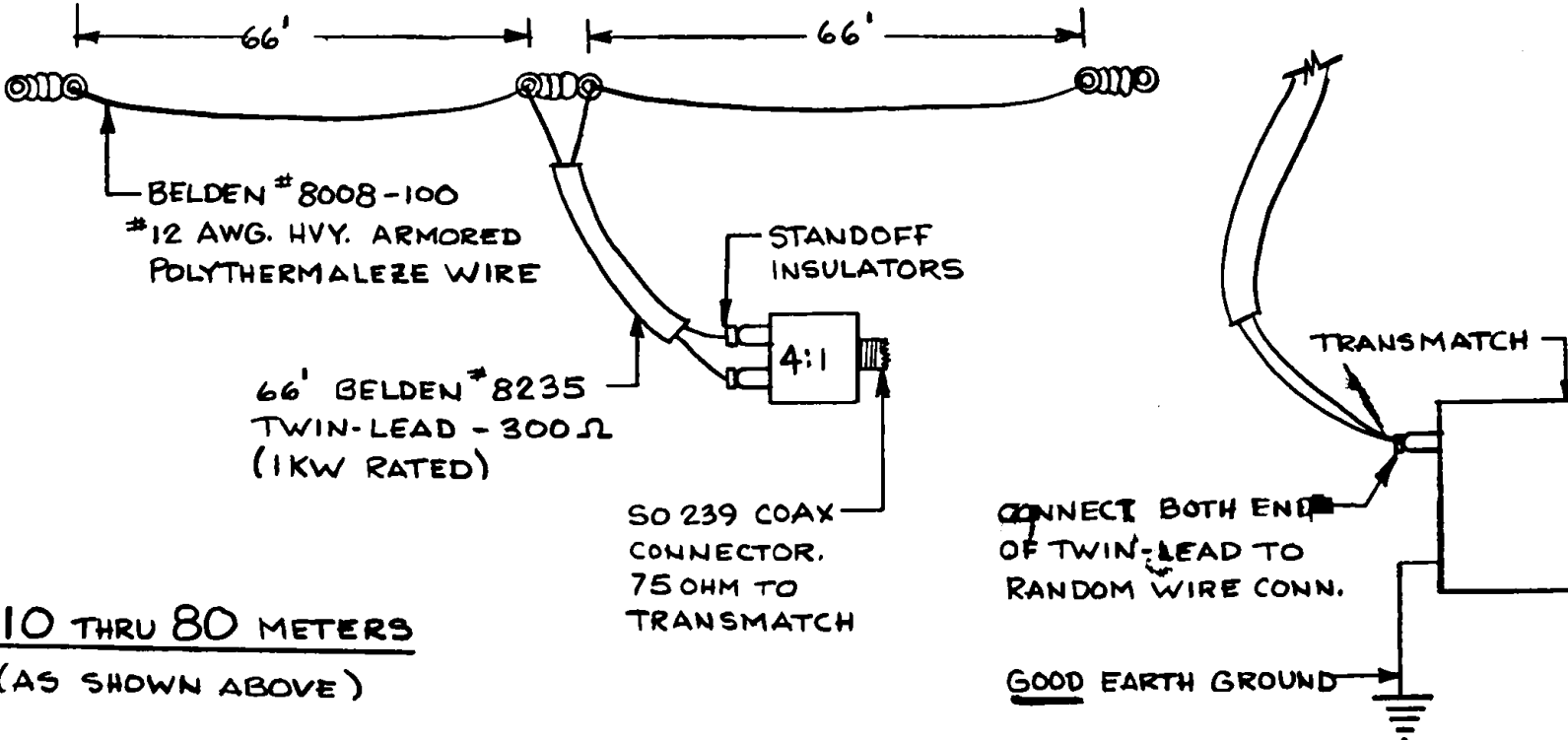
Good luck and for any further info call me and I will be more than happy to help.

(cont. on next page)

Bob/KN2QWO

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FOR SALE: Heath Marauder HX-10. 80 - 10 meters. CW-AM-SSB, EXCELLENT CONDITION. Extra finals and other spare components including manual. \$100.00 Jack/WA2MEM.



10 THRU 80 METERS  
(AS SHOWN ABOVE)

( All band by KN2QWO )

160 METER VARIATION

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SUGGESTED CB/10 FREQUENCY ALLOTMENT PLAN

Due to heavy SSB QRM on channel 4 (28.800) the CB/10 groups have reallocated a new suggetive plan. Using the higher frrequecies for AM. Channel 15-28.930 is to be used for local calling frequency. Channel 13 - 28.910 for local rag chew/mobil if channel 15 becomes too crowded. Channel 9 - 28.860, Emergency-Distress, Communication after initial contact on channel 15.

( TRANSCONTIENTIAL FREQ. )

CB CHANNEL--	TEN METERS
1	28.760
2	28.770
3	28.780 <del>CALL</del> ONLY
4	28.800 SSB CALLING
5	28.810
6	28.820
7	28.830
8	28.850

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( LOCAL AREA )

9	28.860 Emergency
10	28.870
11	28.880 Club news
12	28.900
13	28.910 Rag chew mobil

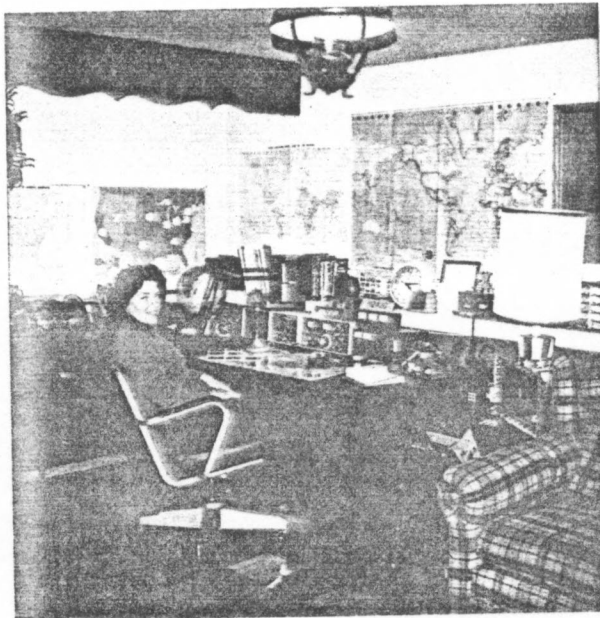
( LOCAL AREA )

CB	TEN METERS
14	28.920
15	28.930 Local calling
16	28.950
17	28.960
18	28.970
19	28.980
20	29.000
21	29.010
22	29.020
23	29.050

HAPPY NEW YEAR TO ALL.  
De JOHN/K2JF

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MARY JO DARAKLIS-  
N2AJG  
45 Rockville Drive,  
Bellmawr, N.J. 08031  
is our Recording  
Secretary for the  
year 1979. She  
joined GCARC in  
August 1978 and  
currently holds a  
GENERAL CLASS TICKET.  
We know her continued  
study toward the up-  
grade to ADVANCE will  
soon be a reality and  
look forward to this  
announcement.



As you can see, her  
equipment is a Yaesu FT  
101EX, Yaesu Y0100 moni-  
tor scope, Yaesu FC301  
antenna tuner, also  
a Standard land talkie  
and a Midland 13-510.  
She uses a vertical 30  
ft. in the air and a  
long wire. She had  
made about 95 contacts  
since receiving her  
license last August,  
the majority of which  
are in the States.

ONE OF THE 10  
YLS IN GCARC

OUR NEW RECORDING  
SECRETARY

OM IS JOHN  
WA2VHR

HAVE YOU HAD A CON-  
FIRMED QSO?

Mary Jo is presently involved in traffic handling, and she checks in every night at 10:30 to the Mercer County Traffic Net on 147.075. She also sometimes checks into the New Jersey Phone Net at 6:00 p.m. on 3.950. She got interested in traffic through WB2LCC who had given a talk on message handling for the Camden County ARES group.

Mary Jo became interested in ham radio due to her OM John, WA2VHR. He asked her to at least try the classes. Mary Jo became so interested and studied so hard that she passed her General Class test. Her first contact was AE2Y, Mary who is another YL in the GCARC, on 2 meters and WB4LRO from Philadelphia on CW.

Beside being a member of GCARC, Mary Jo is a member of the Camden County Civil Defense, RACES, ARES and the Gloucester County ARES groups.

Other interests beside ham radio are raising house plants. She is basically interested in raising African Violets from leaf cuttings.

We're very happy to have Mary Jo become an active member of GCARC and we know her part as our Recording Secretary and a member of the Board of Directors will help her become more interested in the different phases of amateur radio.