

C R O S S T A L K

December, 1974

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GLOUCESTER COUNTY AMATEUR RADIO CLUB

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TRUSTEES:	Rose Ellen Bills, WA2FGS
	Gurdon Cooper, W2PAX
	Milt Goldman, K3WIL
	John Kull, WB2GKH

CLUB NETS

6 M AREC	50.9----Sundays, 8 PM Local Time
20 M Rag Chew	28.8----Friday, 9:30 PM Local Time
Novice	21.115--Mondays, 8:30 PM Local Time
Friendship	7.265---Every 3rd Sunday of every 3rd Month, time and date subject to change with notice.

DECEMBER MEETING: WEDNESDAY DECEMBER 4th BEGINNING AT 8 PM.
PROGRAM: W2SUA TALKS ON DX, ALSO CLUB ELECTIONS--SEE PAGE 1 FOR
DETAILS.

**DEADLINE FOR SUBMISSIONS FOR THE JANUARY ISSUE IS SUNDAY, DEC-
EMBER 15, 1974. PLEASE MAIL ANY CONTRIBUTIONS TO: MARK WILSON,
WB2OSQ,
.**

DECEMBER PROGRAM TO FEATURE W2SUA

Traditionally, the December club meeting (Dec. 4th this year) is reserved for election of officers for the coming year. However, this year we have in store a most unusual treat--you won't just have to sit through the usual hum-drum of elections. Instead, we are present GCARC's premium DX'er, none other than Shorty, W2SUA. He will reveal some of his long sought-after DX secrets, know how, and talent.

In addition, he will describe how to dig up the rare ones, establish the QSO and receive the QSL. So if you are an avid DX'er or interested in becoming one, you won't want to miss this show! Of course you must put up with the show, our constitution demands it!

See you all on the 4th.

73, WA2NPD

PROPOSED OFFICER SLATE FOR 1975

The nominating committee has proposed the following candidates for 1975:

President-- Doug Gehring, WA2NPD
V. Pres.-- Rich Netherby, WB2OCR
Rec. Secty-- Harry McCormick, WA2SEA
Corres. Secty.--Della Parker, W2AFZ
Treas.-- Rose Ellen Bills, WA2FGS
4 Yr. Trustee --Bill Bachman, WA2VEE
2 Yr. Trustee---Bud Snyder, WB2TKN
1 Yr. Director--Steve Blaski, W2TDS
3 Yr. Director--Jack White, WA2MEM
3 Yr. Director--Bill Frambes, WB2FJE

A couple of people were nominated from the floor. They are: Wayne Welch, WA2VOY for Vice President; Steve Asay, WA2AXJ for 3 year director, and Mark Wilson, WB2OSQ for 1 year director. Bill Frambes, WB2FJE declined nomination for 3 year director.

Further nomination will be accepted from the floor at the December;4th meeting followed by the election. All should attend and vote.

FROM THE PRESIDENT

It has been a privilege and an honor to serve as your President in 1974. I was indeed fortunate to have an exceptionally qualified and dedicated staff of officers, directors and trustees whose steadfast and unstinting support leaves me with a deep sense of gratitude. My lasting impression, is that I could count on every one of them for wise counsel and total support devoted and motivated always toward what was in the Club's best interest.

Wonderful too, during my stewardship, was seeing some of our younger members willingly take on awesome responsibility--and take the criticism that always accompanies it, sometimes constructive and sometimes not, in stride and good humor. These observations considerably fortify my confidence that the future responsibility for GCARC's direction will be in good hands. Space limitations

President Letter (Continued)

prevent singling out individual members, officers and directors who quietly "did their job" without fanfare. On behalf of our Club please accept our and my personal deep appreciation for all your contributions toward making 1974 so pleasurable.

Participation and interest in all GCARC activities during 1974 continued at high levels; attendance of monthly meetings, contests, field day, club nets, and public service. Club programs presented were truly outstanding, I am convinced, a vital contribution toward the attendance and addition of new members.

The continued growth of GCARC is absolutely dependent upon individual and collective contribution. Merely paying one's dues and enjoying fellowship and the common interests of amateur radio will not, in itself, assure GCARC's future growth nor its ability to serve the community or viable advancement of amateur radio goals. Your willingness, asked or not, to assist our various committee heads is vitally needed. GCARC needs your active help in whatever area you prefer. A passive role, merely attending and never giving a little bit of your energy, knowledge, ideas, or just willingness to volunteer can only insidiously retard your club from being the kind of organization that you are proud to be a member of. If we all consider membership in GCARC as a high privilege we should ask ourselves from time to time "What have I done lately for GCARC and my fellow members?"

I shall continue, God willing, to actively support and lend whatever assistance I can to our new officers and committee chairmen in 1975. I would ask that you join me in giving a little of yourself to GCARC. Remind yourself as I do that stewardship of your club is not exclusively in the hands of your officers and directors--it is and should be shared by each and every member. Again, my deep thanks for letting me serve as your President.

de Jack, WA2MEM

QRP OPERATION (Part I)

For those who are newcomers, QRP means low power. There have been many interpretations as to what power level constitutes a QRP power level. Some say below 100 watts, others say below 10 watts, and still others say below 5 watts or 1 watt. I consider below 10 watts as being QRP.

I have been using QRP for almost two years now and have found it most enjoyable. During these two years, I have worked as far as the western U.S. and as far south as Puerto Rico. My power was only 2.5 watts and the antenna a doublet in the attic! It's really something to think about--working Colorado on 20 meters with 2.5 watts. It shows how far our technology of radio communications has advanced.

QRP Operation (Continued)

If you are interest in QRP, equipment is easy to find. There are several companies offering QRP transmitters, transceivers, and accessories; the leading manufacturer being Ten/Tec. There are also many qrp projects found in ham publications. This equipment is relatively inexpensive and easy to operate, build or repair.

Next month I shall give some equipment tips.

CONTEST CORNER

Only a few things to report this month. The 1974 SS is over and results will be in next month. Anyone having logs to turn in should give them to Ken, W2FBB at the December meeting or drop them by his house. The winner in past years, Doug, WA2NPD couldn't operate due to transmitter difficulty.

Field day 1974 results came out in QST at last. Our club did very well this year, placing 11th out of 32 in the 6A category.

The ARRL DX Competition, VHF Sweepstakes, and Novice Roundup are coming soon. More information next month.

PROTECTION CIRCUIT

By--Cecil DeWitt, WØRMB from "Ham Hum"

After one of the local hams had a power supply short out and put 28 volts on two (2) of his rigs, it blew the final transistors in both rigs. I got to thinking of how to prevent this from happening.

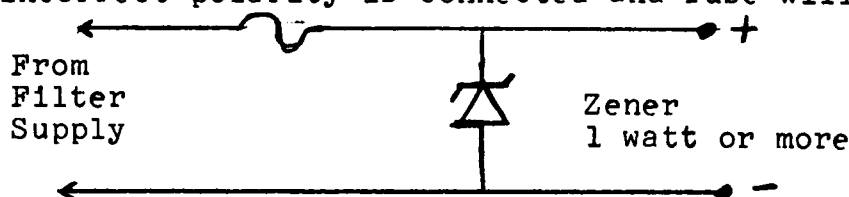
Borrowing a circuit from someone, I don't remember where, I found a very simple solution. Connect a Zener diode across the DC line either at the power supply or in the rigs, or both. This Zener diode will never, except when it is protecting equipment, draw current; so it doesn't matter how many are in the circuit.

If the power supply voltage should be 12 volts DC, Then we connect a Zener of a value voltage greater than this across the line.

If the unit is going to be used in an auto with a 12 volt system, the auto has a normal charge voltage of 14.4 volts. Therefore, a 15 volt or 16 volt 1 watt Zener would do the protection.

6 VDC-	8	volt Zener @ 1 watt
9 VDC-	10.5	volt Zener @ 1 watt
12 VDC-	16	volt Zener @ 1 watt
18 VDC-	22	volt Zener @ 1 watt
24 VDC-	30	volt Zener @ 1 watt

The Zener diode connected as shown in the drawings also protects equipment in case reverse polarity is applied. The fact that reverse voltage drop across Zener diode is like a voltage drop across a conventional conducting diode, Zener diode will be almost a dead short when incorrect polarity is connected and fuse will blow.



GCARC and the ARRL

A few remainders about ARRL membership follow. Did you know that if a person wishes to become a member of the ARRL or renew his ARRL membership, he could benefit the club? Any GCARC member may renew or become a new ARRL member through our club at no extra cost, and the club will receive a remittance from ARRL. Anyone interested in helping the club and at the same; join ARRL should contact Harry McCormick, WA2SEA,

The ARRL dues are going up to \$9.00 per year as of January 1, 1975. Anyone can join or renew for an unlimited number of years at the old rate of \$7.50 per year before the end of this year. Now is the time to renew. Remember the club benefit renewal as mentioned above.

SWAP SHOPPE

FOR SALE: Hammarlund HQ110, \$90. Heath DX-35, \$25. Contact:
Art Salin. WA2JRD,

FOR SALE: SG-2A Signal Generator, 333 Mhz--16 tubes and 20 crystals
--\$20 Government surplus-A1 condition.
Contact: Jim Klupar, WB2OER

FOR SALE: Heath DX-60B with VF-1 VFO. \$50 takes all.
Contact: Darrell Neron, WB2BVV

FOR SALE: HA-750 with DC power supply and Halo antenna, \$65.
Gladdy 25, crystals on all channels, \$150.
Contact: Bill Frambes, WB2FJE

FOR SALE: Heath HW-16, \$80; Heath DX-60A, \$40; both good CW
or Novice rigs. contact: Mark Wilson, WB2OSQ

WANTED : Commercially built transmatch. Must be in good condi-
tion. Contact: Bill Cardis, WB2IYB,

FOR SALE: HW-132A Complete \$130; without power supply and xtal
calibrator \$100. DX-100 \$60. Heathkit Tener \$25.
Hammarlund HQ100A--good condition \$85. Link 2M FM station,
includes separate receiver and transmitter, crystallized
controlled on any frequency 143-152 Mhz. Schematic and
handset also included. Contact: Steve Blasko, W2TDS

FOR SALE: 50 root tubular steel toxer.--\$75 or best offer.
Contact: Steve Asay, WA2AXJ

FOR SALE: RCA (commercial) plate transformer. Pri. 220V--Sec.
3000V @ 1 amp. Also matching filter choke. Hallicrafters
HA-6 six meter SSB transverter with power supply. Like new
condition. RME DB 23 preselector, 80-10 meters. FB Condi-
tion. Make offers on any of the above. Contact:
Phil Catona, W2JAV

If anyone has anything to buy, sell or trade, Crosstalk is
the place to advertise. There is no charge. Call Mark Wilson
to place an ad.

CLUB JACKETS

We still need 4 more orders to get club jackets. The minimum
order is 12 and only 8 members have ordered. Everyone should have
one! Each jacket has the member's call on the front and GCARC on
the back. Contact Rich Netherby, WB2OCR to place an
order or for further details.

LES BELLES by WA2FGS

How many times have you winced as a bottle of lovely nail enamel is given to a pair of hands wearing splitting, broken, or rippled nails? Yet, unlike a person of television commercial fame, you as an individual are not in a position to point out the difficulties. Coming right out and saying "May I recommend some nail care?" tends to put any lady on the defensive.

Hand grooming begins--and ends, if neglected--with healthy nails. Hand care, like other beauty care, begins with absolute cleanliness. At least once a day, scrub fingernails with a firm bristled nail brush, soap and lukewarm water (hot or cold water reddens the skin). Scrub backward and forward on top of the nail, then scrub from below to reach well under the nail. When drying hands, use the towel to push back the cuticles gently. Follow with hand cream.

If your nails have little color, you may have poor circulation. In this case, buff the nails briskly before you manicure to restore circulation and make nails pinker. Buff in one direction only; if you buff back and forth, you set up friction which may erode the fingernail.

Another must for beautiful hands is a weekly manicure. The basic tools are an orange stick and emery board, along with polish remover, clean lacquer, nail enamel and other nail cosmetic products, cotton and tissues.

A good home manicure requires the following steps:

1. Remove all trace of polish with remover.
2. Scrub hands thoroughly, as described above.
3. Clean nails with the orange stick; a metal file may scratch the underside of the nail.
4. Use an emery board, regular or permanent for shaping nails and trimming rough edges.
5. Nails in poor condition should be filed square with sides straight out for support until they grow long enough to shape.
6. Even for healthy nails, don't shape too deeply at the corners. The shape should be round rather than pointed; otherwise they will break too easily at the center.
7. Don't neglect the cuticles; massage them gently with your fingers. Push them back with a cuticle stick for a longer sweep of fingernail.
8. Chipped polish is unsightly and touch-ups usually show. Remove polish from the affected nail and re-do.
9. Apply a coat of clear lacquer or nail base to help prevent chipping. Apply polish, removing a tiny edge at the tip of the nail, in as many coats as required. Top with another coat of clear lacquer or nail finish for added protection.

Special insights into nail and hand care always attract attention-getters. Some down-to-earth recommendations follows:

- * Tobacco stains can be removed by rubbing the areas with a wedge of lemon, or by rubbing with cotton soaked in medicinal hydrogen peroxide.
- * Rubber gloves are a necessity for household chores. They should be worn when washing dishes and clothes, painting, cleaning silver, and any other messy household jobs.
- * Nails are not tools! Use a dailer or eraser end of a pencil to dial the phone. Unfasten metal watch and jewelry clasps with tweezers. Grasp objects with the cushions of your fingers, especially bobby pins.

LES BELLES (Continued)

- * Pry open the tops of containers with kitchen gadgets.
- * Dig your nails into a cake of soap before tackling any kind of gardening. Again, gloves are the best protection for hands and nails.

As you develop more beautiful hands you will display them more proudly and develop a taste for fine nail products.

73's Rose Ellen WA2FGS

THE WAY IT GOES

By Julian Jablin, W9IWI. From The Circuit Board (York R.C.)

You must understand that my grasp of simple arithmetic is sketchy, to say the least. I can get up to ten with the help of my fingers, but if the calculations get any more complex than 200×4 , I'm in trouble. For a radio amateur, this is not good. When I want to figure what frequency the crystal must be to get 14.298 multiplying four times, I take the problem to the office and ask the programmer to put it on the IBM 360.

So a new book, published by TAB, "Getting the Most Out of Your Electronic Calculator," was only of cursory interest when I first saw it. All I know about the little IC-LED jobs is that they can do more than I know how to ask them.

Which is just the point of the book. Apparently the author, William Hunter, has met people like me, and knows how feeble some human math intellects can be. So you won't find any nuts-and-bolts info on calculators in the book, much less logic theory, but there's a lot of "how/to" in it.

The information is realistic, to say the least. Hunter assumes that you'll take your calculator to the supermarket, it will be alongside when you figure the bad news for the IRS, you will check it when looking for a loan on that new car, and you'll ask pertinent questions of it before you start quoting prices to a new customer. He even expects your wife to pick the keys before she converts a recipe for six to a dinner for two.

A couple of chapters tell how to handle ratios, percentages, fractions, angles and other factors I still don't understand. As a matter of fact, the book leads off with a chapter on basic math, something that I seem to have missed in more than 20 years of formal education. The calculations involved are expressed in terms of the little machine, so that homework is done just as you are reading the text. Just to be sure I got the idea, he followed up that chapter with one on "homework." Preceding all of this is a section of generalities regarding calculators, so that when you go out to buy one, you'll know what to look for in terms of your own needs.

I suspect that anyone who knows what he's doing can get a lot more out of the book (and a calculator) than the mathematically uneducated. I can picture Ohm's law reduced to a couple of strokes of the finger, frequency conversions worked out like lightning--likewise more complex problems (like where's Oscar) solved in a few moments. Too bad Hunter isn't a ham. . .he could have given us some hard copy on this sort of thing. But it's a useful book altogether. I can see some very instructive hours spent with the book in one hand and a calculator in the other.

LAST CHANCE LAST CHANCE LAST CHANCE LAST CHANCE LAST CHANCE

LAST CHANCE TO
SEE JIM'S W2LVW'S
RADIO SHACK ALL
DECORATED
FOR CHRISTMAS
TOYS — FM STEREO
CALCULATORS
PARTS, ETC.

MERRY CHRISTMAS FROM THE STAFF OF RADIO SHACK!