

Crosstalk is published monthly by the  
GLOUCESTER COUNTY AMATEUR RADIO CLUB

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CLUB NETS

2 M FM	78-18---Sunday, 8:00 PM Local Time
6 M AM	50.9---Sunday, 8:30 PM Local Time
10 M RAG CHEW	28.8---Friday, 9:30 PM Local Time
15 M SLOW NET	21.175--Friday, 7:30 PM Local Time

THERE WILL BE NO MEETING OF THE GLOUCESTER COUNTY AMATEUR RADIO IN JULY AND AUGUST. HOPE TO SEE ALL OF YOU IN SEPTEMBER 7TH, 1977.

\*\*DEADLINE FOR SUBMISSIONS FOR THE AUGUST ISSUE IS SUNDAY, JULY 20th, 1977  
PLEASE MAIL ANY CONTRIBUTIONS TO RAY MARTIN, WB2LNR,

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ar Members:

As of yet, I haven't received anyone's money for the picnic and that is very dishartening, a lot of work and preparation went into this, and its going to be a shame if it goes down the drain. Don't forget we have to sell 150 tickets. And if we don't I personnaly will feel like a fool, especially since I am friends with the owner of the lake. So gang, anyone who is going to participate in the picnic I would like to have some sort; of a verbal committment within a week after you receive this newsletter... either by phone or postcard, or on the Barnsboro Repeater 147.18 Mhz. If no one is interested it will have to be cancelled. But if I remembered right at the last meeting there were enough hands raised to more than cover the proposed 150 needed to make the quota.

Ray, WB2LNR

FCC NOTES:

From the June, 1977 issue of the SBE Journal, we learn that the FCC received over 80,000 CB and 2-way radio interference complaints last year, and anticipates 100,000 this year. Because of this, the Commission has prepared a comprehensive handbook entitled "How to Identify and Resolve Radio and Television Interference" with publishing date to be announced by the government printing office in July or August. This handbook offers home remedies for resolving identifiable interference to home electronic equipment, and includes a section for radio-transmitter operators in case the home remedies don't entirely clear up the problem.

Along similar lines, Senator Barry Goldwater has supported Senate Bill 864 (FCC Regulation of Consumer Electronic Equipment), which would give the FCC the authority to require manufacturer's installation of TVI filters. CB'ers aren't the only lawbrakers, however--the FCC denied the license renewal of an AM Broadcast station--some of the major charges.

1. Station installed a hidden relay, bypassing the day-night power switch, which made the meters indicate night-time power and pattern even though it was still in day mode.
2. Removal of transmitter interlocks.
3. Failure to make frequency checks.
4. Failure to have operators on duty when transmitter was on-the-air.
5. Falsification of logs.

In another move, the FCC has standardized CB fines, which were previously set on a case-by-case basis. The new fines are:

- |  |          |
|--|----------|
| 1. Excess power-or-out-of-band operation                               | \$100.00 |
| 2. Skip communications or overheight antenna                           | 75.00    |
| 3. Failure to reply to FCC correspondence or failure to use Call signs | 50.00    |

Due to several recent broadcast license renewal challanges by femenist groups, women engineers are in demand in Broadcasting. Due to recent court decision, NBC was forced to provide technical training to women enabling them to become engineers. Throughout the country, broad-casters are looking for female engineers so that their E.O.E. statements (equal opportunity employer) will look good at license renewal time.

Bob Spain, WBORVE

LES BELLES, July, 1977

By Rose Ellen

The food we waste makes our food bill much higher--DID YOU KNOW THAT --Let's begin to check food that is left after meals--over and above what we feed our household pets.

Stale breads will make croutons for soups and/or salads, filling for roasts and poultry, bread pudding, and delicious French toast.

Here's a way to turn your leftover bread into a weekend brunch that will please your family or guests:

ORANGE FRENCH TOAST

2 eggs	$\frac{1}{4}$ teaspoon ground cinnamon
*1 cup buttermilk	1 teaspoon grated orange rind
1 $\frac{1}{2}$ tablespoons sugar	6 slices very dry bread
1/8 teaspoon salt	Butter or margarine
$\frac{1}{4}$ teaspoon baking soda	

\*Use one cup of fluid whole milk plus one tablespoon of vinegar or lemon juice; or you can use one cup of fluid whole milk plus 1-3/4 teaspoons cream of tartar.

Method: Beat eggs in a small bowl. Stir in buttermilk, sugar, salt, baking soda, cinnamon and orange rind; pour into shallow pan large enough to hold bread. Soak bread in egg mixture for 20 minutes, turning once.

Melt about six thin slices of butter or margarine in griddle or skillet over medium-high heat and cook bread QUICKLY until lightly brown. Turn bread over and brown in another six thin slices of butter or margarine (do not allow to dry out). Serve on heated plates with maple syrup. Makes 3 servings. Add creamed chipped beef if you like the German touch.

SPRING BEING A TOUCH ACT TO FOLLOW, GOD CREATED JUNE. HAVE A HAPPY JULY.

73 - Rose Ellen, N2RE

SPUR:

(ARRL) the FCC has modified its First Report and Order in Docket 20777 concerning the purity of emissions in the amateur service. The earlier rules became effective April 15 and required, among other things, that the mean power of spurious emissions below 30 Mhz. from an amateur transmitter or external amplifier be attenuated at least 40 dB below the mean power of the fundamental without exceeding 50 milliwatts, and that spurious emissions between 30 and 235 Mhz. be attenuated at least 60 dB below the mean power of the fundamental.

Under the new modified rules, existing equipment now owned by amateurs is exempt from the above standards of spurious attenuation. In addition, equipment manufactured prior to April 15, 1977 and currently in the hands of transporters or dealers or other middlemen may continue to be sold until January 1, 1978. However, after January 1, 1978, all commercially manufactured amateur equipment must meet the above standards before sale.

RFI:

(HR Report) Extensive electronic con

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(HR Report) Extensive electronic controls used in 1977 autos are causing RFI problems. A recent Illinois Bell notice warned that the "cruise control" in '77 Cadillacs (and presumably other GM cars) is sensitive to strong RF fields, which could cause sudden speed up or slow down. Some electronic skid control braking systems have locked up from RFI, and complete engine failure in fuel-injected engines has been reported by two meter users.

10:

(HR Report) 18 year old general class, or higher, amateur license holders will be permitted to administer Novice exams effective June 13.

WARC:

10, 6, 2 and 1½ Meters all remain the same.

3/4 Meters: 420-450 Mhz unchanged, except Amateur Satellite has been proposed worldwide for the 435-438 Mhz. slot.

35 cm: 902-928 Mhz. shared unchanged.

In the 1215 Mhz band; Amateurs would lose 1215-1240 Mhz. and sharing 1240-1300 Mhz. The only other change is the restoring of 49.8-50 Ghz.

This proposal will be reviewed by the Advisory Committee on Amateur Radio, July 12 in Washington, D.C.

BBC:

(HR Report) BBC Electronics in Philadelphia is bankrupt, and any amateur having a claim against the Amateur-equipment distributor should file with Judge King, Bankruptcy Court, Eastern District of Pennsylvania, 3726 U.S. Court House, 601 Market St., Phila., Pa. 19106. In a bulletin from ARRL, Dick Baldwin noted a number of League members have complained of checks cashed but merchandise not delivered. QST and Ham Radio both dropped BBC advertising some months ago, but the June 73 has a full page BBC ad. BBC is still open for walk-in business.

WARC 79:

(HR Report) A new 13 Meter band, 15 meters back where it belongs, and 40 meters exclusively Amateur were the big pluses in the FCC's WARC Fifth Notice of Inquiry. On the negative side, the proposed 160-;90 Khz. band has been dropped entirely due to objections from the power-generating industry which uses those frequencies for carrier current telemetry and control of their high-voltage transmission lines and fears strong Amateur signals could cause them problems. Here's the latest band-by-band proposals:

WARC (CONT'D.)

1600 Meters: 160-90 Khz. dropped.

160 Meters: 1750-1800 khz. dropped; 1800-1900 khz exclusive; 1900-2000 khz restored, shared with existing services (Loran).

80 Meters: 3500-4000 Mhz. exclusive; 3900-4000 Mhz. shared (no change).

40 Meters: 6950-7250 Mhz. exclusive; 7250-7300 Mhz. dropped.

20 Meters: 13950-14400 Mhz exclusive (no change).

15 Meters: 20800-20950 Mhz. dropped; 20950-21200 Mhz. exclusive; 21200-21450 Mhz. exclusive (restored).

13 Meters: 25.76-25.86 Mhz new clusive.

CB TO 10 CONVERSION:

Your committee to investigate the CB/10 conversinn met and the following resulted:

The attached list of frequencies are suggested. The usage of those frequencies is also suggested.

The frequencies and their usage were derived from data received from various sources. Some of the sources were articles by WAQTSY, St. Peter Mo, W6RCL, Ghatsworth, Ca; W4NVH, Theodore, Al; SJRA; and the Frankford Radio Club. Letters have been written to the above people, or direct contact has been made.

Letters have been written to other areas as well as the above places to those that we know are interested in the CB/10 conversion. A very interesting reply was received from VE7CHI who has done conversion work on the TRC-47.

We have received an input about the possibility of getting 23 channel sets (new ones) at a "good-deal" provided we have sufficient interest.

Most AM CB sets can be converted with the change of six (6) crystals. at a price of approximately four (4) dollars a crystal, a soldering iron, a set of instructions, a diddle stick, multimeter, and a dummy load you can make from a couple 100 ohm carbon 2 watt resistors. The Conversion can be a quick conversion in about two (2) or three (3) hours. A set from the possible "good-deal" has already been converted and the know how is on hand.

A suggestion is: Would the membership want to try a "conversion week-end"? Some week-end in the fall when enough people are interested and ready, the club meet at some location and a mass conversion be made. Technical advise would be available, and just about all the instruments would be available. This way a group effort would make it easy on everyone and the club would now be ready for the coming winter and the 10 DX that is going to be coming along.

The Committee would like to have the wishes of the membership expressed in the September meeting. We are willing to assist all who wish to engage in a CB/10 conversion. The AM conversion listed is given for the least expensive, greatest usage. We will assist those who wish to convert SSB and PPL units.

K2JF

3/10 Conversion (cont'd.)

<u>Channel</u>	<u>Frequency</u>	<u>Proposed Use</u>
1	28.705	DX calling
2	28.715	Distress
3	28.725	Emergency Traffic
4	28.745	net (intra-club)
5	28.755	net (intra-club)
6	28.765	net (intra-club)
7	28.775	Local Rag chew.
8	28.795	Local Rag chew.
9	28.805	Local Rag chew
10	28.815	Local Rag chew
11	28.825	Local or DX RAG Chew
12	28.845	Local or DX Rag chew
13	28.855	Local or DX Rag chew
14	28.865	Local or DX Rag chew
15	28.875	Local or DX Rag chew
16	28.895	Local or DX Rag chew
17	28.905	Local or DX Rag chew
18	28.915	Mobile to mobile only
19	28.925	Mobile to mobile only
20	28.945	DX only short contact
21	28.955	DX only short contact
22	28.965	DX only short contact
23	28.995	Marine to marine

JULY PROPAGATION FORECAST:

- 1.8--2.0 Mhz. Poor Heavy noise. Daylight hours non-usable. Evenings 4-midnight short distance. If you really want to try for DX, the propagation fluctuations are such that openings will occur 2200--0000 and just before sunrise for South and West.
- 3.5--4.0 Mhz. High static levels but the band should be open to all areas of the world during the hours of darkness. Best along distance skip will appear from 2300--0500 EDT. During the daylight hours 300 mile distance will be good. At night one-hop F layer is the answer.
- 7.0--7.3 Mhz. Static levels will be greater this month than in June; but, the band will be open to all areas. During the daytime 100 to 800 miles openings, during the hours of darkness expect 300 to 3000 mile. Best time for long distance 2100--0600. For shorter range 2100--2300 (15 miles)
- 24--24.300 Mhz. It is wide open. Best condition for World wide communications. Best (very very good) conditions should be during the two-or-three hour window just after Sunrise and again late afternoon (0500--0800) (1600--1900). In the middle of the month look for very good over the pole and south Pacific multi-hop openings the night time openings will tend to come from the southern and tropical areas. However, this IS the DX band for July.
- 21--21.450 Mhz. Not as good as 20 meters but improving. Look for Caribbean and Central America from noon to 1700 EDT. During the late afternoon a switch will occur and Africa, Australia and South Pacific will start to be good. Here a beam is the thing to have for the DX man. Long DX from around 1100--1400. July 15 to 19 should be a good time.

JULY PROPAGATION (Cont'd.)

28--30 Mhz. Don't expect too much operation of DX on this band. Sporadic E propagation from time to time to Central America and the Caribbean. Possible in the late afternoon (1600--1800) F2 layer opening, but it will be very erratic. You are going to have to work hard on this band. Don't give up 10 meter short hop AM will do good, and as winter approaches with Cycle 21 becoming stronger, cross-country will be opening.

50--54 Mhz. Very intense sporadic-E propagation openings will give good distance 600--1300 miles, with the help of the F2 layer 2500 to 3000 mile stuff will come in. Look for some good Europe contacts. The openings are when you catch them. They will last from 10--15 minutes up to 3 or 4 hours. The best time few hours before noon and the around 1700--1800 EDT. If a front appears near the Rocky mountains stretching from Canada to the Gulf, have a ball. As it moves East, unless the front breaks apart, the reflected signal should give very good results. Again look at the weather forecasts and see where the "fronts" are. Enjoy the band is getting better. The Delta Aquarids meteor shower around. July 28 & 30 at 0200 EDT on the 29, you will really have a ball for the 6 meter enthusiast.

144-148 Mhz. Keep your rig hot. Watch the TV set, not necessarily the weather, channel 5, 9, look for Texas TV station KHOU. This will give you a hint as to openings. About the middle of the month look for an opening to Europe. It won't last long, but 15--17th should happen. Follow the storm fronts, and as on 5 meters be ready on July 28 to 30. During heavy humid weather tropospheric bending will give some very good results (1000--1500 miles). Look for a stuck Bermuda high, hot humid air will flow up from the Gulf across the U.S. and into our area. Just what you want for 2 meter DX. Of course everybody else will be cussing the three; H weather, but you'll have a ball.

220 Mhz. First time some freak results might come down the road during the Aquarids meteor showers. Other than that, line of sight.

Special interest for DX people. Very unusual solar activity is happening and the time period between the 7th and 14th, and the again from 18th to 26th. WWV at 18 minutes after the hour will give you the solar data. If used correctly it will help you get that DX you are looking for to complete your countries.

For your DX boys. Keep looking at the various beacons to give you an idea. Bermuda VP9BA on 28.165 Mhz.

Expect considerable number of SIDs this month. They are a condition of summer. We believe that a large solar flare will occur near the first quarter or third of the month, if it does high concentration of the F layers will give very good DX. for the 6 and 2 meter bands.

We are thru the summer solstice (June 21st) the season is now half way between the unsettled conditions of spring and fall, and the ionosphere will tend to be settled but will get highly stimulated by flares, etc. Daylight hours the absorption levels are high meaning the bands are unstable, and they tend to suppress action, but as Cycle 21 moves on things will get better.

INTEREST:

N2CAT is taking up home life at GEK place, ask about the new call there.

Glad to WB2EBB, Norm's 2 watt QRP rig here on 15 meter CW, is being heard in Clarksboro anyway!

Call Doo if you really want fishing experience (not much fish, but one whale of a lot of good fun and experience), with police, bugs, etc.

Seems GEK purchased a toggle switch for an electrical appliance, and found out that it has to be kept in position to keep the the equipment working. (Ask GEK about spring loaded switches, he will be glad to help you out).

Suggest that all Auto Patch user's read their letter again so you can access the Repeater properly, for a change.

August 21, 1977 is the 2nd Annual New Delmarva Hamfest. Location: Delaware Technical & Community College at Stanton, Delaware. Talk-in on 52/52 and 13/73 and also 3905 Mhz. There will be prizes and refreshments for all. \$2.00 by mail and \$2.50 at the gate. Children are free. Usual hamfest activities.

Seems that JEM finally got that Memory Keyer going after a long spell of worrying and scientific knowledge and a lot of guessing. Sure does look great John. Good luck with it!

Any body know how the scores for Field Day were this year? Sure has been quite about it!

Anybody wishing to join the Barnsboro Repeater should contact Fred, WB2GEK on the air or at home  
Your support is always welcome.