

C R O S S T A L K

Published For and By The
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AREA NETS

GCARC RTTY NET
ARES NET:
Del. Valley Regional Emer. Net
Club Repeaters: 147.7B/.1B, 223.06/224.66, 447.10/442.10

Tuesday, 8:00 PM 147.78/1B Rptr
Sunday, 8:00 PM 147.78/1B Rptr
Sunday, 8:30 PM 224.66 Rptr

The Gloucester County Amateur Radio Club Meets the first Wednesday, of each month at the V.F.W. Hall in Woodbury Heights. Meetings begin promptly at 8:00 PM.

Please send contributions for CROSSTALK to Tony Starr, WS2FZB,

Deadline for submissions is ten (10) days before Club Meetings.

PRESIDENT'S MESSAGE -- JULY 1985

We are finally approaching a series of events that the club has volunteered to help with. They are Field Day, the Pitman 4th-of-July Parade, and the Bike-a-thon. How can we possibly man these events when you people will not come out and volunteer to help? There are too many of you who won't help for reasons such as you don't like a particular person; or somebody said something you didn't like. I think it's time we all grew up and let our feelings go. Let's take a long look at where we would like to better this club and how we can work together as a unit. If we don't start pulling together, our club is going to be in real trouble. We should put things in the past and start looking ahead. We need help in alot of areas, especially in the events I have mentioned. It's time we stopped talking behind peoples' backs and say what we think at the club meetings. We can't change things if we don't know what you are thinking. Let's work together to improve our club. I know you won't let me down.

I would also like to thank those who helped out at the horse show. It was a very good event but we could have used more help. Nevertheless, it went well. I also hope that Ed, KA2KMW, gets back on his feet soon.

73, Pres. Tom Gordon,
KB2GI

ATTENTION ALL MEMBERS:

The July general membership meeting has been changed to Wednesday, July 10, 1985, due to the Independence Day Holiday. The meeting will be held as usual at 8:00 PM at the Woodbury VFW Hall.

JULY PROGRAM

In lieu of a formal program this month, Joe, WA2GFK, will give us all of the details pertaining to the upcoming club picnic. This event will be fun for the entire family. Also, final plans will be made for the Bike-a-thon, which is just around the corner. These orders of business are likely to occupy a good amount of time, leaving little for a program. As any "regular" knows, our meetings are enjoyable with or without a program. So come out to the meeting and enjoy a fresh cup of coffee from our capable House Committee, or perhaps a tankard of brew from our friendly hosts.

Hope to see you there !!!

EDITOR'S NOTE:

Due to the date of this year's Field Day, it was necessary to advance the submissions deadline for this issue by one week. The Highlights of the Board meeting have been omitted, as the meeting had not yet occured by the deadline. The feature will resume next month.

Thank you, Ed.

S T O P P R E S S - - - - - F I E L D D A Y , 1 9 8 5

As this issue goes to press, we have just completed a gruelling session on the air. This year's event seemed to go smoothly, with no reported equipment failures. Scores have not been totalled yet, so it's too early to tell how we did in the competitive 6A class.

Obvious to the observer was our low attendance this year, but not so obvious was the fact that just about everyone who participated showed a level of enthusiasm unlike any we've had in recent years. Among band chairmen, we had mostly the "dependable regulars", with only one or two new faces. As a total team, we had an incredible concentration of true die-hard FDer's, those who feel that Field Day is THE event in ham radio. Conspicuously absent were those half-hearted souls who feel that Field Day is "just another contest." Evidence to this is the fact that everyone stayed on the air right up till 2:00 PM on Sunday, something that hasn't happened in years.

We will be publishing a full report in a future issue of Crosstalk, so until then, CQ Field Day from W2MMD, Make My Day !

ACS Bike-a-thon

We are less than a month away from the annual event. We have enlisted the help of some other area clubs to assist with this year's new and potentially more difficult route. We still need your help, though. This event recognizes GCARC as their official communications organization, and, whether or not we ask other clubs for assistance, we should not have to worry about whether we will have enough members out to man our own stations.

The Bike-a-thon is set for July 21 and will go from the Betsy Ross Bridge to Smithville, NJ. If you can possibly help out, please come to the club meeting and volunteer. We need you.

CLUB PICNIC

Many of you who have been GCARC members for a number of years can remember the good times had at the annual club picnic. We are pleased to say that the event has been re-activated. Picnic Chairman Joe DiNovi, WA2GFK, reports that the picnic will be held on August 4, at Lake Garrison. There will be NO CHARGE for anything. The club will pick up the entire tab for admission, food, and beverages.

This will be a family event, so bring the gang along, or perhaps a friend or two. Lake Garrison has reserved a section at the lake just for us. To get all the details, you must come to the general membership meeting on July 10. Joe will be glad to know that you will be there.

LES BELLES



Meet Barbara Lottridge-NC2Q (ex-KA2EAY) of Stone Ridge, New York (brother is our GCARC member-W2UNI). Barb has been licensed since 1979 and holds Amateur Extra Class. She and OM-Lew-KD2EC have visited my QTH with W2UNI and it seems only yesterday when she expressed a desire to get her ticket as soon as the time was permitted. Soon after getting on the air the shack became filled with some rare DX cards, many certificates and some changes in the rigs. The present rig (see photo) is Drake TR-7, Alpha 76A, six element Telerex Tribander, 80 and 40 meter dipoles and two-11 element beams for local coverage. The ICOM 211 and a couple of HT's fill that need. A recent retired high school teacher, Barb is still busier than ever as the organist in a Kingston, N.Y. historic church organized in 1659. They have enlarged all her music - perhaps being in IBM land this was easily done. Yours truly had the pleasure of attending one of the services while there for a SAYLARC meeting and heard NC2Q play "O Filii et Filiae" - Two Settings by d. F. Dandrieu, H. Willan for her prelude and "Christ lag in Todesbanden" by J. S. Bach for her postlude. Barb uses her HT to let the OM in on when she is ready to go home. See photos of this beautiful organ she does such a nice job on. Using both her Radio Shack and Apple com-

puters she takes care of the Secretary/Treasurer's job of SAYLARC - The Second Area YL Amateur Radio Club. At the recent spring meeting Barb had the group over to her house for breadboard snacks and fellowship. SAYLARC meets two times annually -- once in New York and once in New Jersey and is opened to all licensed YLs. Please see me if interested in joining this group.



HAMFEST -- AUGUST 1985

The Hamfest Committee is well under way. We are doing a swell job in pulling everything together.

At the July meeting there will be a sign up sheet for various duties, we ask the club members to please sign up; where you would like to help.

Talk In: Because we have a Talk In Group for the Hamfest who know the routes in which to direct traffic to and from the College, we would appreciate others not to use the Repeater or give directions on the repeater, please use the Club Simplex Frequency 147.54 MHZ.

Tickets: Please sell your tickets, turn in money and/or unsold tickets at the August meeting.

As Chairperson of the Hamfest this year I Thank everyone for your cooperation.

Hamfest Chairperson
Virginia Martin
N2FJM

DA'S & DIT'S

K2PSI is spending many enjoyable days with the young ones in the Pine Barrens and also engaging in horse-shoe pitching with some of the boys.

Someone would like to know who made China first - WA2PPN or WA2VEE.

AB2W says anytime you can't take the heat anymore this summer - stop in at his air-conditioned shop.

WB2YKS will be leaving shortly for Arizona - looking for greener pastures, I presume.

KB2GW sounds like most of us. Says he spends his lunch hour running errands.

Although we're told lightning doesn't strike twice, don't think WA2TOP would agree - ask him.

N2AJG and WA2VHR will be leaving this area. 73's and 88's and God Bless.

Everyone wishes KA2KMW a speedy recovery from his recent accident.

WB2UVB covers the Ham-Fest from Maine to Florida. He is also VHF Manager of Traffic Net 146-055 Repeater every evening at 10:30 P.M.

Now that WA2SEA has acquired CW tapes, he says it won't be long before he up-grades.

It goes on and on. WA2ZST recently had his antenna ripped off at a shopping center.

Is K3WIL having open house at his new shop? Also, is N2AIV going to be promoted to under boss?

* * * * * CATVI REPORTING PROCEDURE * * * * *
TO MEMBERS OF THE GLOUCESTER COUNTY AMATEUR RADIO CLUB

This memo is to establish a procedure for reporting CATVI problems to the RFI/TVI committee.

STEP 1. If you believe you are having interference from your local Cable TV: Contact the cable operator. Telephone or write to the Chief Technician and describe the problem. If you phone: (a) always confirm the conversation by asking the name of the person with whom you are talking; (b) mark down the time and date of the contact. If the Cable TV outfit requests you put your complaint in writing please do so. Send a copy of the report to your RFI/TVI chairman (K2JF).

If after 15 days there is no evidence of resolution proceed to STEP 2.

STEP 2. Send a letter to the cable operator and inform the company that you have perceived little or no evidence of solution to the interference problem. Send a copy of your letter to the RFI/TVI chairman. If within a reasonable time (15) days you have not received any response proceed to STEP #3.

STEP 3. If no response to STEP 2. call or write to the Chairman of your RFI/TVI committee (K2JF) and let him know that you have followed the procedure as outlined and you have not received any response. The RFI/TVI committee will now take over your problem.

If you need any help in preparing your letters to the Cable Company, please contact the Chairman of the RFI/TVI committee, we have sample letters that will be useful to you.

SWAP & SHOP

FOR SALE:	<u>Mosely</u> TZ-33JR 3 el. Beam	\$75
	<u>Heath</u> SA-1480 Remote Coax Switch	\$40
	15 foot Roof-top tower	\$25
	<u>Heath</u> SA-2040 Antenna Tuner	\$50
	<u>Bencher</u> Audio Filter	\$25
	<u>Hallicrafters</u> HT-32B Transmitter	\$75
	<u>Hallicrafters</u> SX-101A Receiver	\$75

For above items, call Vaughn, N2EJN

FOR SALE:	<u>Kenwood</u> TM201 2M XCVR w/PC Board	\$175
	<u>Yaesu</u> FT207R Synth. HT w/NC-3 4hr. rapid charger, $\frac{1}{4}$ wave & $\frac{5}{8}$ wave antennas	\$100
	<u>MFJ</u> 482 Keyer	
	<u>Macrotronics</u> T-3 Terminal Interface for TRS-80 Model 3 \$ 4-CW, RTTY, ASCII.	\$100
	<u>Swan</u> WM-3000 2kw Peak Wattmeter	\$50

Want all of the above? \$400!

Call Harry, WA2VXT

* * * * * ANTENNA TOPICS * * * * *

The last article that appeared found out how to calculate the effective surface area of yagi elements and booms. This article will see how to combine these two and get the effective surface area of the entire antenna.

First, we must recognize that when the elements are broadside to the wind the boom is not seen by the wind and vice versa. But, as the wind direction changes or the antenna is rotated both the elements and the boom become visible. If we define condition one, when the elements are broadside to the wind, as zero degrees and condition two when the boom is broadside to the wind, as 90 degrees we can determine the effective PROJECTED surface area of the boom and elements.

As the antenna transitions from condition one to condition two the effective projected surface area of the boom increases as the effective projected surface area of the elements decreases. In fact, the effective projected surface area of the boom, rotated to some angle, is found by multiplying the whole effective surface area times the sine of that angle. The effective projected surface area of the elements is found by multiplying their whole effective surface area times the cosine of that angle. The total effective surface area of the antenna at any angle is then found by adding the projected area of the boom to the projected area of the elements of that angle.

The total effective surface area of the antenna varies as it rotates from condition one to condition two with the maximum value usually occurring somewhere between 25 and 45 degrees, depending on the specific antenna geometry. Let's take a look at a hypothetical antenna similar to the one we used in the last article.

ANGLE	BOOM	ELEMENTS	TOTAL
0	0.0	6.2	6.2
10	0.5	6.1	6.6
20	0.9	5.8	6.7
30	1.4	5.4	6.8
40	1.7	4.7	6.4
50	2.1	4.0	6.1
60	2.3	3.1	5.4
70	2.5	2.1	4.6
80	2.6	1.2	3.8
90	2.7	0.0	2.7

AS YOU CAN SEE, THE MAXIMUM EFFECTIVE SURFACE AREA OF THIS ANTENNA IS 6.8 SQUARE FEET AT 30 DEGREES OFF STRAIGHT AHEAD. If you were stacking antennas you should perform this calculation on all the antennas in the stack then combine them at each angle to determine the maximum wind loading of the stack. Surface area calculations for any antenna installation should also include the area of the mast (calculated the same way as you would for a boom) and rotator. A Ham series rotator presents about one-third to one-half square foot of effective surface area.

The next article we will take a look at the torque placed on your tower when the wind blows. Torque may be harder on your tower than flat surface area, but no one ever talks about it.

Tnx K5NW/K2JF

DON WALLACE W6AM

"Mr. DX" has died at age 86. The legendary Don Wallace, W6AM, succumbed to a stroke at a Long Beach, California hospital at about 1:30 PM on Saturday, May 25. Wallace began his career in electronics in 1909, and built his first transmitter in 1911. Soon he had obtained his ship radio operator's license and began working on a vessel travelling between Los Angeles and San Francisco. He obtained his First Class commercial license in 1912 and was issued the call sign 60C. His career at Hamline College in Minnesota was interrupted by WWI when he entered the Navy. After several assignments he wound up as the radio operator on board President Woodrow Wilson's yacht, the George Washington, which carried Wilson to the 1919 Versailles Peace Conference. After the War, he returned to college and then went to work for National Radio Products and was assigned to territory in the southwest. In the early 1930s, Don was instrumental in obtaining a 120-acre site in Palos Verdes, California, for the Press-Wireless Corporation. In 1944, Press-Wireless moved to San

Francisco and W6AM bought the decommissioned site and converted it into his now famous rhombic farm. Don was dubbed "Mr. DX" by his close friends and has been at the top of the DXCC Honor Roll for the past three decades, with 366 confirmed countries. Several years ago, at the opening of the commemorative amateur station aboard the "Queen Mary" in Long Beach harbor, it was W6AM who was invited to make the first contact. Don Wallace is survived by two sons, a daughter and thousands of friends in the amateur fraternity worldwide who are sad at his passing. (Tnx WESTLINK)

CORDLESS PHONE MANUFACTURERS FINED

Three manufacturers of cordless phones have been fined \$2,000 each for repeated sale of cordless phones that failed to meet the FCC's radiated power limitation. Based on measurements taken by the FCC Laboratory, the Field Operations Bureau issued Notices of Apparent Liability to Monetary Forfeiture to Matsushita Technology, Secaucus, NJ; Pacific Electronics Programs, Los Altos, CA; and Webcor Electronics, Plainview, NY.

Despite official warnings to the manufacturers regarding technical violations, marketing of the cordless phones continued. On April 30, 1985, the manufacturers were informed of the fines. Replies and/or payments were required within 30 days.

CANADIAN AMATEUR SUED IN RFI CASE

In what is believed to be the first case of its kind in Canada, an amateur is being sued for allegedly interfering with non-radio equipment. Jack Ravenscroft, VE3SD, of Kanata, Ontario, was served with a \$35,000 suit after a neighbor complained that Jack's 20 meter transmissions repeatedly turned on a microwave oven and interfered with the sound from an electronic organ.

VE3SD is receiving help from several sources. CRRL Counsel Bob Benson, Q.C., VE2VW, has supplied legal background. CRRL Ontario Director Ray Perrin, VE3FN, has filed an affidavit in Bob's favor. The Ottawa Amateur Radio Club has set up the Jack Ravenscroft Defense Fund. Amateurs anywhere who are interested in contributing to this fund should contact the Ottawa Amateur Radio Club at Box 8873, Ottawa, Ontario, K1G 3J2. (Tnx CRRL News)

These Items TNX to "The ARRL Letter and K2JF".

RTTY HAS BEEN APPROVED for use on 160 meters, effective June 17, and without any subband restrictions. This decision was published in an FCC Report and Order on PR Docket 84-959, an ARRL request for expanded modes in the band. Also now allowed will be facsimile (FAX) and slow-scan television (SSTV). The American Radio Relay League is now working to develop a band plan in order to insure that all modes are given a proper home in

the "gentlemen's band." The further development of this band is beyond CW, AM and SSB is particularly timely with declining solar activity and lower Maximum Usable Frequencies (MUFs). The FCC, however, cautions that its decision to permit expanded privileges on 160 meters will not affect, in any way, its decision concerning the likely reallocation of 1900 - 2000 kHz from the Amateur Radio Service to radiolocation use, as outlined in Docket 84-874.

GREEN IS GONE

Wayne Green, W-2 "never-say-die," has severed his formal relationship with ham radio with his resignation as editor of 73 Magazine.

In an announcement made at his 1985 Dayton Hamvention seminar, Green noted, "I have resigned as the editor of 73, and I did this because I really don't want to continue writing editorials on how bad things are and I have no good news for you. We have some areas of amateur radio that are exciting and fun, but all you have to do is to look around this room and see how many people came with walkers and in wheelchairs and how few youngsters there are, and you will see what's ailing our hobby. And, if I continue writing editorials, you really would not want to read them.

"I know what needs to be done about this, but I don't know any way to make it happen. I have been going around to service clubs throughout New Hampshire and Massachusetts ... and explaining to them the incredible importance of amateur radio to their state and to their country.

"I believe that the future of the electronics industry in the United States lies in the health of amateur radio and dies in the sickness of amateur radio, and we have a very, very sick hobby." No successor has been named to Green's editorial post.

BYE-BYE MORE MHZ

The frequencies from 421 through 430 MHz may be lost to land mobile operation in 3 key northern US cities. As predicted by this news organization almost a year ago, the land mobile industry has taken sharp aim at our 420 MHz band.

With the cunning of a fox, land mobile has succeeded in persuading the FCC to issue a Notice of Proposed Rule Making aimed at turning over 421-430 MHz to land mobile in Detroit, Cleveland and Buffalo.

The Commission states that since these 3 cities lie in the so-called "Line A Canadian Protected Zone," the frequencies in question are no longer open to use by US hams who reside in them.

(The "Line A Protected Zone" was created in 1984 to protect Canadian land mobile interests from the "possibility" of interference from nearby United States amateur radio operations, and was not meant to be another excuse for the industry giants to again usurp what has traditionally been an amateur allocation.)

If this latest spectrum grab is successful, it will place an additional non-interference burden on US hams living close to, but outside the Line A Zone. If the NPRM is approved as written, amateurs in those portions of Cleveland and Buffalo that lie south of Line A will also be shut out of operation, in order to avoid interference with US stations operating in the Land Mobile Service.

The release is designated General Radio Docket 85-113 and carries a May 28 commentary cutoff date, with reply comments due by June 12.

These items TNX to
WESTLINK REPORT
and
K3WIL.

COURIER POST 6/11/85 **Council regulates dish antennae**

BERLIN TWP. — Citing the growth of cable television in the area, the council last night agreed to place height and size restrictions on pole and dish antennae used by residents.

Normal antennae that clamp on the roof are not affected by the law.

Under the new law, all poles and dishes must be placed in the back yard of a house and be hidden from public view. The structures may not be more than 8 feet high.

Also, dish antennae may not be placed on roofs, and satellite stations may only be used to receive signals.

In other business, the council agreed to have township officials meet with the Camden County Municipal Utilities Authority to discuss the possibility of including the township in the regional sewage treatment and collec-

BERLIN TWP.

tion system that is being built.

The township, along with others in the southern end of the county, is seeking to withdraw from the regional authority because the system being planned would not reach the southern communities.

Police to check on drivers

FRANKLIN — Township police will conduct spot sobriety checks on motorists beginning midnight June 15 and ending at 4 a.m. June 16.

The checks will be conducted at several undisclosed locations.

Police said the action was being taken to help prevent auto accidents.