

CROSSTALK -- Official Publication of the  
 GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD  
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AREA NETS

GCARC RTTY NET:	Tuesday,	8:00 PM 147.78/18 Rptr
ARES NET:	Sunday,	8:00 PM 147.78/18 Rptr

Club Repeaters: 147.78/18, 223.06/224.66, 447.10/442.10

General Meeting: First Wednesday of each month at the V.F.W. Hall in Woodbury, NJ. Meetings begin at 8:00 pm sharp.

Contributions: CROSSTALK, Tony Starr,  
 Deadline: Ten (10) days before each general meeting.

\* \* \* \* \* III ATTENTION ALL MEMBERS III \* \* \* \* \*

DUE TO THE INDEPENDANCE DAY HOLIDAY WEEK, THE JULY MEETING WILL BE HELD ON WEDNESDAY, JULY 9, BY ORDER OF THE PRESIDENT AND BOARD OF DIRECTORS. YOU WILL BE DISAPPOINTED IF YOU COME OUT ON JULY 2.

\* \* \* \* \*

PRESIDENT'S MESSAGE -- JULY 1986

Well, the first day of summer is here and gone and the hot dry weather is all around us. There is one day each year we can count on to have rain (FIELD DAY). It's a well known fact that it will rain Saturday afternoon or evening. But I bet many of you may not know why, so I will tell you. It is a fact that clouds are a collection of positive and negative charged particles, which are so strongly bound together that they can support the weight of millions of droplets of water. You also know on Field Day our club has a great many antennas packed into a five hundred foot area.

These antennas, which also emit negative and positive charges, attract these clouds. As the clouds approach they are agitated and the molecules spread apart, leaving room for the water droplets to fall to the bottom of the clouds. These clouds which have water hanging from the bottom of them pass over our antennas which tear holes in them, and we get a down pour. While I'm on the subject, let me address the lightning problem. As I see it, lightning does not come from clouds. It is reflected back to earth from our antennas. Therefore, the more operators we have the more clouds we attract, the higher the antennas the more clouds we tear, the higher the power of our stations, the more lightning will be reflected by the clouds. That's why we enjoy "Field Day".

Our club has a new DX chairman. Bill Bachman has consented to fill the position and give it his all. We are looking forward to some good information from WA2VEE.

We also have a new historian, Charles Sketchley, K2PQD. Charlie has all the qualificaitons, he's retired, he can read, he has a computer, and most of all he said "yes" when I asked him.

In addition to the two positions mentioned above, we have a new club Chaplain, Ed Stetser, Sr., K2JJC. This position is important and unfortunately at times sorely needed. Ed will at the next club meeting conduct a memorial service for our friend and fellow amateur Rose Ellen Bills, N2RE.

I'm looking forward to seeing you at the next meeting.

73, Joe DiNovi, WA2GFK

JULY PROGRAM

This month, another informative program comes to us courtesy of our program chairperson, Ginny, N2FJM. Our Technical Manager, Chuck, WA2TMI, will be reviewing the features and operating procedures of our two meter repeater system, which is equipped with the sophisticated RC-850 microprocessor controller. Chuck will answer any questions you may have about this system and its' capabilities. We will, of course have our usual fresh coffee and donuts courtesy of Jim, N2AKI. There will also be a platoon of top-notch operators standing around to boast about what incredible scores we earned during this year's Field Day. So come on out and be with your friends, have a great evening, and remember, the meeting has been moved to July 9. See you there!

ROSE ELLEN BILLS, N2RE

It is with deep regret that we must inform you of the loss of one of our most active and respected members, Rose Ellen Bills, N2RE. This news is most certainly a shock to those of us who worked with her on so many club projects, some of them very recently. It is difficult for us to list all of the things she has done for GCARC and Amateur Radio, but we would like to tell you about some of her contributions, so please read on.

First licensed in 1957, Rose Ellen's original call was WA2FGS. She held this call for many years, and eventually, having earned the Extra class ticket in 1970, changed her call to N2RE. Rose Ellen was always quick to point out the value of a good "Elmer"; Hers was Della Parker, W2AFZ. A resident of Pennsville in Salem County, Rose Ellen had been employed by the DuPont Co. of Delaware. She had retired only in the past year or so, and this allowed her more time to pursue Amateur Radio activities. Her service to GCARC included six years as Treasurer, two years as Recording Secretary, and, as the first YL member at the helm, one year as President, 1980.

Rose Ellen was active in several YL ham clubs. She had recently served as President of YLRL, the only international women's Amateur Radio organization. Two other clubs she served were SAYLARC (Second Area YL ARC), and PJYL (Penn Jersey YLs). She was an active member of our Hamfest committee, and of course, a regular contributor to Crosstalk. As a member of the Crosstalk staff, Rose Ellen had single-handedly done the Hamfest Edition several times in the past few years. Her regular column, LES BELLES, appeared without fail every month for years, and last appeared only last month in the June edition.

We could go on at great length about Rose Ellen and her accomplishments in Amateur Radio, but space and time do not permit it. Let it suffice to say that when she was with us, she always gave us

110% of her capabilities, and now that she is gone she will be sorely missed. We hope that she will be fondly remembered for many years to come.

de WA2FZB, tnx K2JF and WA2NPD.

#### HAMFEST UPDATE

Another meeting was held at the site, and all plans are shaping up quite well. There isn't any important news to report this month, but next month we will be giving you the final report before the Hamfest, so be sure to read the August issue of Crosstalk. In the mean time, be certain to sell your allotment of tickets and turn in all proceeds, so that we will have ample operating funds for a smooth successful Hamfest.

#### FIELD DAY REPORT

As we go to press, Field Day is only hours away. We hope to report next month of a record score and all around success. It is very important that all logs AND DUPE SHEETS be turned in by the July meeting at the very latest. The Field Day committee wishes to thank all of you who pitched in your time and effort this year to help our club make a good showing in this important nationwide event.

#### REPEATER NOTICE

Several software changes have recently been made to the two meter repeater controller. The most notable of these is the new courtesy tone. This is the tone which indicates a timer reset on most machines. You hear it after a short delay upon un-keying your transceiver. Our new tone will indicate whether the autopatch is enabled. If you hear a double beep, or two-tone sound, this means the autopatch and auto-dialer are enabled. If you only hear a single tone, then the patch is not up. We feel that this improvement will be more useful to the users than the old system was. If you have any other questions, be sure to ask them at the meeting. de WA2TML.

#### CONTEST CORNER

Well, summer is here and contests fewer. It will be October before club competition contests start. July sports a new contest, introduced last year, the CQ WW VHF WPX Contest. There was a lot of interest last year with a lot of VHF enthusiasts entering from all around the world. I'll have forms (I hope) for this at the meeting. I still have forms also for the IARU HF Contest (was Radiosport). The rules changed somewhat, mainly shortening the contest to 24 hours.

A list of contests for the next six months follows:

MONTH	DATE	CONTEST
July	1	Canada Day Contest
	12-13	IARU HF Contest
	19-20	CQ WW VHF WPX Contest
August	2-3	ARRL UHF Contest
	9-10	European CW Contest
	23-24	All Asian CW Contest
September	13-14	ARRL SEPTEMBER VHF QSO PARTY
	13-14	European Phone Contest
	20-21	CRRL Can-Am Contest, Phone
	27-28	CRRL Can-Am Contest, CW
October	25-26	CQ WW DX Contest, Phone
November	1-2	ARRL SWEEPSTAKES, CW
	15-16	ARRL SWEEPSTAKES, PHONE
	29-30	CQ WW DX CONTEST, CW
December	5-6-7	ARRL 160 METER CONTEST
	13-14	ARRL 10 METER CONTEST

Hope to see you in one or more of these or other contests.

(Tnx to: CQ, ARRL, QST, & 73) de George, KB2GW

GCARC TO ASSIST LOCAL BOY SCOUTS

For several years, GCARC has assisted the Southern New Jersey Boy Scouts by operating field stations and exhibiting gear at local Scout shows, camporees, and demonstrations. Now, we have been asked to take the "Big Leap Forward"- that of setting up a station and instructing for the Radio Merit Badge (for those Scouts interested) during the entire Camp Roosevelt five-week summer season. Luckily for the scouts we have sufficient capable volunteers to conduct this ambitious undertaking and the effort is already underway.

The plan is to demonstrate and instruct on weekday evenings, Monday through Thursday beginning June 30 and ending July 31. Our volunteer hams have signed up on the roster of those nights available and convenient. Already the hard-working antenna crew of WB2OYQ, N2FKS, WA2GFK, WB2CAK, KA2OSV, and WA2NPD have installed a long wire for 80 and 40, a vertical for 20, and a long wire for SWL'ing amongst the trees at the camp-- not a simple task. This crew will be joined by WB2LNR and KA2DOT when instruction time rolls around.

Particular thanks must be extended to WB2GES, WB2OYQ, and WA2GFK for their generosity in lending their equipment for this operation. And, of course, special thanks to all those members who are participating in this very worthwhile endeavor.

Finally, we do need two or three more of you to assist during the five week period as instructors. Please call WA2NPD as soon as possible if you think you could give us a trick at the wheel.

Tnx and 73, de WA2NPD.

AMSAT OSCAR 10 FAILURE

AMSAT's OSCAR-10 satellite is in serious trouble and is currently off limits to general use.

On May 17, an on-board computer memory failure struck the AO-10 satellite, taking it off the air and causing widespread concern for its survival. By May 23, AMSAT control stations had taken measures to "stabilize the situation and to maximize chances of satellite recovery possibilities."

Ground command stations were obliged to reset the computer and attempt reloading the satellite's operating program. It now appears certain that radiation damage to the computer's memory is to blame for the system crash.

The high elliptical orbit of AO-10 takes it through the Van Allen radiation belt regularly, causing cumulative damage to the computer memory circuits. The AO-10 was designed several years prior to its launch two and a half years ago, so the design of its data processing and storage is of late 1970s technology, and does not use "radiation-hardened" solid state devices like those developed for spaceflight use in the last two to three years. AMSAT believes there is a reasonable chance of full recovery of the AO-10 satellite in a few weeks. Diagnostic routines to isolate the faulty memory cells are being designed, and when the defective area of the memory is located, new operating system software will be written to bypass it.

In the interim, the satellite will be off the air for about a month while the corrective measures are being taken.

Until now, the highly sophisticated error correction software -- part of the AO-10 operating program -- has been able to cope with any errors, but with increasing exposure to radiation, the satellite is becoming prone to more "hard errors", which are not software correctable.

The next mission in the OSCAR series is called the PHASE 3-C and is due for launch this October.

OSCAR 10 users are advised to listen to the regularly scheduled AMSAT high frequency nets for continued updates on the status of the satellite. Tnx "The Westlink Report" and K3WIL.

#### RADIO LINKS FOR COMPUTERS

The FCC, based on a petition from Motorola, Inc. has proposed that personal computers and desk-top terminals could communicate via radio links, thus eliminating the need for cables. Such a plan would allow immediate relocation of a computer terminal within an office without the expensive process of rewiring it to other terminals. The Commission estimated it costs a business over \$1000 to move a computer terminal from one spot to another in an office due to cable re-routing. The power would be 100 milliwatts (one tenth of a watt) and would have range of about 500 feet, on frequencies near 70 MHz. Tnx "The ARRL Letter" and K2JF.

#### NEW EXTRA CLASS QUESTION POOL

The FCC has issued the new Extra Class written element question pool, with a release date of April, 1986. Because the FCC's instructions direct that the new material must be used on exams no later than six months after its issuance, ARRL VECs will be putting the new pool into use in tests beginning October 1, 1986. Also, the ARRL/VEC will be changing the tests for the Advanced class on July 1, 1986. The ADVANCED CLASS LICENSE MANUAL second edition is due out soon, and will contain the newly revised question pool and answers. Tnx "The ARRL Letter" and K2JF.

#### A NOTE FROM THE EDITOR

Due to our need to complete this issue before Field Day, it was necessary to make the July Crosstalk somewhat shorter than the normal size of 8 to 10 pages of text. Many members of the Crosstalk staff are avid Field Day participants, so it took an extra effort to complete this edition amid all the FD planning. We have every intention of returning to a thicker letter next month, and as always, we invite all to contribute material. 73, Tony WA2FZB.