

CROSSTALK

Published By And For The
GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD*

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CLUB NETS

2 Meter RTTY Net: Monday, 8:00 P.M. 147.54
ARES Net: Sunday, 8:00 P.M. 147.78/18

The Gloucester County Amateur Radio Club meets the first Wednesday of each month at the VFW Hall in Woodbury Heights. Meetings begin promptly at 8:00 PM.

Please send any contributions for CROSSTALK to Doug Gehring, WA2NPD,

Deadline for submissions is 10 days before Club Meeting.

PRESIDENTS MESSAGE, SEPTEMBER 1983

It seems almost impossible that the month of September is already here. For most people vacation is now a memory, and work has resumed. The schools are open and the students are meeting new classmates and teachers. Sept. also brings to an end all of the major activities of GCARC. Both of the bike-a-thons and field day are now history as is the recent Ham/Comp fest.

The Hamfest gets bigger and better every year, and this year was no exception. To all of you who contributed so much of your time and energy to make this years Ham/Compfest a success, I say thanks on behalf of the entire club membership. All of the people who took the FCC tests and passed deserve a big congratulations.

GCARC theory and code classes start soon. Class orientation and registration is Sept. 12 at 7:00 P.M. The classes will be held in Room 101A of the Robinson Building at Glassboro State College right near the largest parking lot. If you know of anyone interested in obtaining a novice or tech amateur radio license, now is the time to let them know about this class.

Our annual auction will be held after the monthly meeting. Please bring your old junk or anything you wish to have auctioned. The auctioneer this year will be (?). All proceeds go to the club.

Hope to see you there

73 Russ N2ASV

P.S. I hope you all had a very enjoyable summer.

SEPTEMBER PROGRAM

The program for September consists of two exciting items. Number one is a followup discussion on the Sky Warn System. Bob, who spoke to us at last months meeting will be back with a representative from the National Weather Service. They have a short 15 minute program to present. Next on the agenda will be our famous White Elephant Sale. We've moved it up to September to allow you to unload all those good pieces of equipment you picked up at the Hamfest. Proceeds of the auction go to the club treasury.

Harry WA2VXT

BIKE-A-THON, 1983

Which, of course, is now history. From all reports GCARC did another splendid job and the Cancer Society was very pleased. We were fortunate that no major injuries occurred as happened last year and, except for comparatively minor scrapes and bruises, all bikers safely arrived in Atlantic City. There seemed to be a greater number of mechanical failures this year with the repair wagons overburdened with quick-fix work. As in past years, the local constabulary were furious at not being properly

informed about the Bike-A-Thon and the fact that many bikers still veer too far to the center of the highway. These, of course, are problems over which GCARC has no control. WA2VXT and KR1M, co-chairman, did another splendid job with organization and operation. Our vote is for them to handle this event every year ! Many GCARC members did a great job helping out this year and they are recognized as follows: WA2VXT, KR1M, WB2FJE, WB2GSF, WA2VEE, N2BK, KC2PC, N2AIV, KA2KMW, WB2OYQ, KB2GL, N2AJN, W2GSN, KB2GI, W2PAX, K2QGH, K2JF, K2HPV, N2ASV, KE2M, WA2TML, WA2DYO, WA2TDI, WB2DXB, N2RE, N2BPN, K3WIL, KZ2N, WB2KNY, N2ADD, WA2WOD, and WA2NPD. If we missed anyone, it was entirely inadvertant. Congratulations everyone, see you next year.

CODE AND THEORY CLASS - FINAL ANNOUNCEMENT !

DESCRIPTION: Basic electronics and radio theory and also rules and regulations to pass the F.C.C. novice or technician class license.

LOCATION: Glassboro State College
Robinson Building Room 101A
(near the colleges' largest parking lot)

DATE: 12 September 1983 -- Class orientation & in person registration
19 September 1983 -- Classes start
16 January 1984 -- Classes end

TIME: 7:00 PM to 10:00 PM Mondays

MATERIALS: Your own personal portable tape recorder and a text book.
The text book will be purchased form the instructor

COST: No charge for the course, but a \$2.00 registration fee is required by the college. Text cost approximately \$4.00.

*****GOOD LUCK*****

SPECIAL THANKS

to Charlie, K2PQD, for supplying and preparing our new club membership lists. This is a big job - but a very necessary and important job. Again, Thank you K2PQD.

FOR SALE

TRS-80 Model I computer System. 48 K RAM, Monitor, Expansion interface with lower case modification, double density disk controller and RS-232C. Asking \$800,00 Let's Talk

Harry - WA2VXT - 609-768-2788

CLUB JACKETS

We have more definite information on the club jackets. The four jackets we have ordered to use as size samples have arrived. I will have these jackets at the September meeting so everyone can try them on. The unlined version of the jacket will cost members \$10.00 each, including shipping. The pile lined jacket will cost \$15.00 with shipping. I will be ready to take orders for these at the September meeting so we can get an order to the manufacturer.

If you wish the jacket you order embroidered and/or to have the American flag and club patch put on the sleeve shoulders, you may have this done on your own. Club patches are available from the treasurer at \$1.25 each and I will have American flag patches available for 35 cents.

I must have the money in advance from you for all jacket orders. It would be best for me if everyone interested would make up their mind about their jacket order by the September meeting so we can get things rolling. Don't forget to think of family members when you are ordering because you won't find a jacket value as good as this anywhere!! We also have children's sizes available but I have no samples of these for sizing.

When you see the jackets at the meeting you'll be pleased with the quality and the value, I'm sure.

Herb Schuler - K2HPV

GCARC HAMFEST

A detailed article will appear next month. However, a few short blurbs here are in order.

It appeared to be another great success - even with some rain in the AM., 126 brave souls took the FCC exams; the QLF Key was magnificent, AND, our own Phil, WB2ONS, won the first major prize !!! The first time in recent years that a fellow club member won the major drawing! Great, Super! More later on, etc.

OTHER GUY'S HAMFEST.

Two big one's coming-up. The annual SJRA affair will be held on Sunday, September 18th, and the big one at Gaithersburg on September 11th. Expect to see many GCARC members in attendance there. Hope you all find the long sought-after item!

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FOUNDATION FOR AMATEUR RADIO

Which is administered by our Eastern Division Director Hugh, W3ABC, announces the 1983 winners of the 14 scholarships. Space prohibits the listing of all the winners here, but 2 were from the Atlantic Division area and one from central PA.

These scholarships were open to all Radio Amateurs meeting the qualifications and residence requirements of the various sponsors. The FOUNDATION is a non-profit organization representing fifty clubs in Maryland, the District of Columbia and Northern Virginia. It is devoted exclusively to the scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service.

Information regarding 1984 awards will appear in the April or May issues of the major amateur radio publications.

TNX to Hugh, W3ABC.

POWER MEASUREMENT IN THE AMATEUR SERVICE has been changed. The Commission has redefined power measurement in terms of output power, replacing the former input power standard. The change to Part 97 now describes transmitting power as "peak envelope power output," replacing definitions, limits and measuring procedures developed for Amateur Radio technology in the 1920's. In general, the P.E.P. output is set at 1500 watts maximum. The Commission noted that for much of present day equipment, the rules require complex and often dangerous procedures to measure input power. In addition, measurement of transmitter input power is difficult and impractical in the SSB mode and some other modern modulation techniques as well. The Commission said that the new definition of power would enable Amateurs to transmit at the same maximum across all bands. Power would not be limited by the decline in amplifier efficiency at higher frequencies, and the operator would not have to use upper margins of amplifier capability to maintain transmission power at higher frequencies. Also revised is the definition of effective radiated power based on transmitter power delivered to the antenna as measured in peak envelope power terms. While Amateur operators will be compelled to comply with the rules regarding station power delivered to the antenna as measured in peak envelope power terms. While Amateur operators will be compelled to comply with the rules regarding station power actually used, the Commission will no longer require Hams to keep specific equipment on hand to make power measurements. For DSB/AM, Amateurs will be permitted to continue to use the older input power level and measurement procedures for 7 years, after which they will be required to use the new techniques. Continuous modes such as CW and FM will fall under the new rules which become effective August 29th, 1983. (FCC PR Docket 82-624, Report and Order)

TNX to Westlink es K3WIL

LES BELLES

With our current membership being about 153+ do you realize 12 of this number are YL's?

Virginia Martin - an Associate Member is busy with Michelle Diane, aged 4 years as well as Laura Marie, aged two months - weighing in at 6 lb. 8 oz. on June 9th - and of course WB2LNR keeps her busy. To pass some other time she holds parties for the sale of lingerie -- if interested she would be happy to hear from you.

Margaret A. (Peg) Bergen - A General Class operator interested in CW mainly. She conducts CPR courses as well as emergency childbirth at the hospital and recently has been taking courses toward her medical degree.

Gladys S. Graves - has not been out to meetings lately. She holds a General Ticker and probably is busy with N2ASW. Let us hear from you sometime, Gladys.

Janice Bond - has her Technician Ticket and we note she keeps WB2UVB quiet most of the time.

Margaret Cassidy - has her Technician Ticket. And, has she been one of the lucky prize winners at many of our hamfests! Haven't seen you out to meetings lately, Marge. Let us hear from you.

Christine Sheridan - has her Technician Ticket. We need to hear more from you Chris.

Mary Jo Darakalis - has her General Ticket. Along with WA2VHR, and taking care of John, both recently completed school for Computer Electronics Repair. Mary Jo always helps with the food at Field Day and at most of the club booths at our Hamfest. She is active with Emergency Management Communications in Civil Defense, being NCS.

Roslyn Marder - has her Technician Ticket. Roz has been very active with club work, i.e. recording secretary, circulation of Crosstalk, food at both Field Day and Hamfests, or just about anything needed. I believe she is busy swimming in her pool and going to arobics now along with keeping WA2IBZ busy.

Rose Ellen Bills - a member trying hard to get some of the YL members to come forth and let it be known what they are doing. PLEASE LET ME HEAR FROM YOU.

Della M. Parker - Charter Member and active in many areas of the club activity and currently taking care of club history in preparation for our 25th Anniversary in 1984.

Clara Spracklin - has her Technician Ticket and interested in Bike-A-Thons.

Bertha Farr Eggert - even though in Florida - still interested in GCARC.

Lyn Kardas - KA2SFR - will enter 8th grade this fall.

Mary Frances Kardas - KA2SFS - will enter 6th grade this fall.

Perhaps you may notice during the past several meetings we have two young ladies helping their dad, N2BK, with the 50/50 drawings. Both Lyn and Mary Frances are willing to become active members of GCARC. It is their mother who makes the fb cakes some of us have been lucky enough to win.

Pat Connors - FCC Examiner. She has become an HONORARY MEMBER of GCARC after giving her time during our hamfests. We hope to see her some time out to a meeting.

It goes without saying --- we have many XYL's out there who have been very generous in making up refreshments for the many board of director's meetings, hamfest meetings and field day meetings. Without these gals fixing the goodies it might be difficult to get members out to the special meetings.

Speaking of something for a meeting -- Try this one:

Take 1/3 cup white karo; 1/3 cup peanut butter and mix with 2 cups of Rice Crispies. Place in a greased pie pan - put in freezer. Use any kind of ice cream (let it get soft enough to mix either pecans or any fruit, i.e. blueberries, peaches) put the mixture into the pie pan and place back in the freezer and it is ready for any emergency, drop in visitors, or meeting and will keep in your freezer up to 6 month's time. WB3JUT - Marge of Pottstown gave me this to try and I want to share it with you. Delicious.

Do you have any suggestions as to what you would like to read in your page for and about YLs - in or out of GCARC? All you have to do is let me hear from you -- drop a note, see me at meetings - just any way at all -- please communicate as I'll be happy to hear from you.

73

Rose Ellen Bills - N2RE

CONTEST CORNER

September is a busy contest month, with at least 18 different events, some of which are highlighted below:

Sept. 10 - 11	DARC European SSB Contest
Sept. 10 - 11	ARRL VHF QSO Party
Sept. 17 - 18	Scandanavian (SAC) CW Contest
Sept. 24 - 25	Scandanavian (SAC) SSB Contest

Rules for the above events are in the major magazines. Logs for the VHF QSO Party will be available at the Club meeting.

The 1982 CQ World Wide DX SSB results were in this months CQ magazine. The following club members made the list:

N2SS	- 1,559,948 pts., good for #4 in 2-land.
WA200S	- 933,812 pts., good for #7 in 2-land.
K2SNK	- 293,776 pts.
KC2ME	- 195,990 pts.

W2KI and KB2GW also made the list. Congratulations to all for a job well done. CQ magazine, September issue, listed 12 "Commandments" of Contesting! These tips offer good basic strategy and make interesting reading.

Space and time limit this months blurb, so and further discussion will have to be at the meeting - hopefully over a cold 807.

73's de Dennis, WB2GES

DA's & DIT's

Sounds like N2CME is going to take up Scuba diving.

With Fall just around the corner, N2ASN hopes to put it all together again and get back on 20 meters.

KA2OSV is Assistant Officer of Woodlyn, and he checks in on the Camden County RACES Net weekly.

How sweet it was at one of the gala events of the season - the WA2IBZ and N2AKL Swim Party.

KB2BF had hoped to reach the top of Mt. Washington to test radio equipment this year - but didn't reach his goal. Oh well! there's always another year.

KB2GF - it happens to all of us that mental block that seems to occur when a call sign is given to us while operating in mobile.

Yes! That's a Roger. N2AJN drove Jaguars in England.

During the summer months, KD2T found a pad where he could get crabs, beer and all the trimmings - FREE.

N2SS would like to know what happened to his beautiful green lawn of early Spring.

WA2SEA upgraded to a fifteen ton behemoth and is handling it very well.

Would like to know: How WA2KCG living on ten acres of land receives excellent input-output reception using indoor antennae.

Could WB2DXB be dreaming about a thire factory?

de Eavesdropper

DX DOPE, TNX TO SNEDXA es KE2M

Swaziland. 3D6AK is active on 16Ø meters. Look on 1832 KHZ at Ø42ØZ.

East Kiribati. T32AB can be found on 1418Ø KHZ around Ø3ØØZ.

Tuvalu. T2GSH and T2ADE are both active arouosalquscuq KHZ at 1ØØØZ.

Iraq. Y11BGD is available on Fridays at Ø4ØØZ on 1421Ø KHZ.

Uruguay. 16Ø meter activity by CX8DT takes place on weekends around 1827 KHZ.

Cape Verde. D4CBC is active on 142ØØ KHZ around Ø8ØØZ.

Juan Fernandez. Look for CE3FCM/CEØ or C FPFM on CW on 14Ø7Ø KHZ at Ø2ØØZ.

New Hebrides. YJ8RG is active around 14225 KHZ at 1100Z.

Solomon Islands. H44DX plans to be very active on 160 meters this fall and winter.

Liberia. EL2FR in Monrovia stands by for calls after a 1430Z sked on 21315 KHZ AR

Kermadec. ZL3AFH plans to be moving to Kermadec Island shortly as a weather station attendant. Warwick hopes to be active on amateur frequencies by the end of 1983.

Jan Mayen. BJOERN, LA5DW, is currently signing JX5DW on CW only. Look particularly on 20 and 40 meters between 2100 and 8300Z/

Macquarie. Graham, VK0GC, has been heard working U.S. Stations on 3798 KHZ and 7185 KHZ after 1030Z.

Campbell Island. John, ZL3HI/A, has been sporadically appearing on 80, 40 and 20 meters SSB only. QSL via ZL2QW.

Greenland. XPlAB is on 21295 KHZ at 1900Z and on 7062 at 2200Z. QSL to WA2TTI.

Norfolk Island. VK9NS checks 160 meters daily on 1804 KHZ at his sunset, 0700Z, and again at 0930Z. Jim reports that things are favorable for a February 1984 trip to Kermadec Island.

Taiwan. 12MQP reports that permission has been obtained for a two or three person operation which will be from September 18 to 28 on 10, 15 and 20 meters only. SSB and CW with possible RTTY operation is planned for at least 12 hours a day. Calls may be BV01, BV0ARI or 12MQP/BV.

SATELLITE HIT BY ITS OWN ROCKET

Payloads being launched into space are sometimes subjected to extremes of acceleration, vibration, temperature and other conditions. Few, however, have had to endure the mishap that befell the OSCAR 10 "ham" radio satellite after it was already presumably safe in orbit -- when it was struck from behind by the rocket that had put it there.

OSCAR 10 (short for Orbiting Satellite Carrying Amateur Radio, latest in a series that began in 1961, only four years after the first Sputnik) was launched together with another satellite on June 16 by the sixth of the European Space Agency's (ESA) Ariane rockets. Last September, a malfunction on Ariane 5 had left its two satellites on the bottom of the Atlantic (SN: 9/18/82, p.180), threatening Ariane's role in the commercial launch business, so officials had a double reason for concern about the next flight's success. Ariane 6 performed right on the numbers, first deploying the ECS-1 European Communications Satellite and about two minutes later releasing OSCAR 10. Both would then fire their own built-in "kick motors" to carry them up to their destined orbital positions.

ECS-1 behaved as planned. Just 55 seconds after OSCAR 10's deployment, however, telemetry from the rocket indicated an abrupt jolt, followed two seconds later by another. Subsequent signals showed the satellite to be incorrectly oriented in space, with its solar panels angled about 70° away from the sun, and instead of spinning at about 10 revolutions per minute (rpm) in one direction, it was turning at about 2.5 rpm the other way.

Analysis suggested that OSCAR 10 had been hit by the Ariane rocket's third stage, from which it had just been separated and which was apparently driven forward by the expulsion of left-over liquid oxygen (LOX) being vented from the booster's tanks. Such residual LOX is deliberately let out of the stage after use to prevent an explosion caused by expansion due to the sun's heat, which could create a clutter of potentially damaging debris in orbit. In this case, ESA reports, the venting produced a "higher than expected residual thrust," and planners of future flights are expected either to delay the venting procedure or to redirect the spent stage beforehand.

Fortunately, natural forces such as atmospheric drag combined to correct the satellite's misalignment, merely requiring a three-week delay before the first of two planned firings of the kick motor. Apparently, however, says an official of AMSAT, OSCAR 10's builder, the impacts did more damage than originally believed, because the helium pressurizing the motor's propellants drained away before the second firing could take place. The inference? "A crack in the plumbing."

The result is that OSCAR 10's orbit is tilted 26° to the equator instead of a planned 57°, so that the orbit's low point will shift more rapidly than planned into the Southern Hemisphere, away from where most of the world's radio "hams" are concentrated.

But at least the satellite is working. Its predecessor, which would have been OSCAR 10, never made it past the 1980 launch malfunction of Ariane 2.

TNX to K2JF

LEGAL HAPPENINGS, TNX to WESTLINK and K3WIL

THE ARRL ONCE AGAIN will seek to overturn the 10 meter linear amplifier ban. After learning that FCC General Docket 83-114 presented an opportunity to again make a case that the ban on 10 meter external amplifiers is an example of unnecessary regulation, the League's Executive Committee voted to direct its legal counsel Chris Imlay, N3AKD, to file comments reiterating the ARRL's continuing opposition to the moratorium.

THE ARRL AND CRRL seem to have split on the subject of further US phone band expansion. The ARRL submitted generally supportive comments regarding the "Further Notice of Proposed Rule Making" in Docket 82-83, in which they note that the Commission's proposal for expansion to the radio-telephone allocations for 80, 15 and 10 meters is consistent with action taken by its Board of Directors in July, 1982.

While the League Opposes 40 meter phone expansion in general, it does back a proposal to allocate 7075-7100 kHz for phone operation in the state of Hawaii.

The Canadian Radio Relay League has a different view. It filed with the Fcc in direct opposition to any US radiotelephone expansion. The CRRL said that Canadian Amateurs were particularly concerned about possible expansion on 80 meters, and warned that if the Commission proceeds with such a change, Canadian Amateurs are likely to petition their Department of Communications for phone expansion into the CW spectrum still lower.

THE ARRL will endorse the expansion of RACES. The Executive Committee voted to file comments supporting PR Docket 83-524 and will request that all 2 meter repeater frequencies be opened for RACES operation as outlined in the Rule Making Request.

The same body voted to oppose PR Docket 83-485, which seeks to expand the 10 meter repeater subband authorization down to 29 MHz from its current limit of 29.5 MHz. The Executive Committee took this action based on concerns about its impact on SSB, AM, FM simplex and especially satellite communications which presently use that spectrum, and suggested that the matter be reconsidered at a latter date. (Above from ARRL Executive Committee, July 23, 1983-Release #407.)