

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.

PRESIDENT'S MESSAGE -- NOVEMBER 1985

By the time you read this, the November meeting should only be a few days away. I hope you have taken some time to think about what I said last month concerning the people you would like to see in charge of the club during 1986. I am happy to report that the nominations committee met and is pleased with the results of their efforts. The club's proposed slate will be announced when we open nominations at the general membership meeting. If you know of someone who could serve the club well as an elected officer, feel free to nominate that person (with his or her permission, of course).

We got our new storage shed, and we need some volunteers to insulate it and install shelves. We will need some help afterwards to inventory the equipment and store it. If you would like to volunteer, see me at the meeting.

I am glad to see that the club is moving ahead in a positive direction lately. More people are getting involved in our activities and I hope it continues this way. We would like to get more activity going on a technical level. What technical information would you like to see? How do you feel about the technical articles we have published in the last year or so? Please take the time to let us know if you want these to continue.

Finally, several members have expressed their discontent about last month's "Letter From a Concerned GCARC Member". Some felt that the letter should have been signed. The author of the letter asked to remain anonymous and we felt it was important that it be published. Remember, your opinion counts just as much as any other member's. It may not be the same as everyone else's, but it is just as valuable to us. If you have the courage to put your opinion on paper, we will make it known to the club. Your identity can be withheld by request. The only bad suggestions are the ones that were never made. See you at the meeting.

73 President Tom Gordon, KB2GI

GCARC AN SSC! ACCEPTED INTO PRESTIGIOUS ARRL PROGRAM

Newington, CT -- The Gloucester County Amateur Radio Club has been appointed a Special Service Club (SSC) by the ARRL, as noted on page 74 of the October, 1985 issue of QST.

Being a SSC also carries some obligations on the part of the club. The purpose of this article is to help explain those obligations. These include:

1. Maintaining ARRL club affiliation.
2. Establishing a program in each of 5 major areas, plus 3 others from a 6th area.
3. Communicating regularly with ARRL HQ on club's progress.

4. Countering publicity in the club's area unfavorable to Amateur Radio.
5. Designating a member as the club's ARRL LIASON OFFICER to act as the contact point between the League and the club.
6. Establish a program to encourage members who haveh't joined ARRL to do so.

The 5 Major Areas mentioned above are: A) Public Relations, B) Emergency Communications, C) Training, D) Technical Advancement, and E) Other Activities (this is defined as one SUBSTANTIAL program in an area of particular interest to the club).

The 6th area is a miscellaenous category of over 20 items such as sponsoring a scholarship, supporting a Scout Post, setting up demonstrations, etc. (GCARC already is doing more than 3 of the items in this category).

While it is a feather in our cap to be a SSC, there is a fair amount of work involved. Think about this and be prepared to discuss it at the November meeting. Look at it not only as do we want it?, but also, am I willing to contribute my efforts to help earn it? See you at the meeting. 73 de KR1M/2 ... _._

TRIP TO WPVI - TV

The trip to Channel 6 for the taping of Larry Ferrari's show will be on November 11, 1985. Taping begins at 8:00 pm, so if you are going, plan to be there no later than 7:45 pm. Get in touch with Ed, WA2PFC, if you want to go. (Note: Carpooling would be preferred.)

LES BELLES

The SAYLARC (Second Area YL ARC) held their fall luncheon meeting in the Adirondack Mountains on October 5th. Meeting program was Jeannine M. Duane, WB3MBW, Space Ambassador, describing her connection with the NASA. After the luncheon we adjourned to the QTH of the current president, WB2JNL, Minerva, for more "eyeballing". N2RE and WB3MBW worked simplex the majority of the return trip back to NJ. Any YL interested in joining the SAYLARC's, please see N2RE.

Many of the YL's have unusual hobbies or occupations and several have requested I share some of these with you:

W2AFZ. - Della Parker, was employed as Head of the Message Center at RCA where she transmitted messages all day either by RTTY or the Key. She was the person (Elmer) who got me interested in obtaining my license. Upon passing, W2AFZ was more excited than I was!

N2FJM - Ginny Martin, while taking care of not only her two youngsters, has some of her friends' children there and at the same time

did a vy fb job of Chairing our 1985 Hamfest.

N2AKC - Myrtle Farnsworth, while being active with amateur radio, also is Ohio Representative of her Eastern Star Chapter.

KA2ESQ - Elsie Muller, is net control of one SAYLARC net and always brings each member one of her hand woven place mats. Another good reason to join and attend SAYLARC, gals.

WB2JNL - Minerva Fronhofer, calmly tells about her twelve (12) children being no problem, and when all children and grandchildren are home for any holiday there is a total of 47 people, Minerva has this as a sideline while being active on the air, working computers as well as doing much sewing, active president of SAYLARC, Eastern Membership Chairman of YLRL as well as Second District Chairman of YLRL. No spare time here.

WB2MBW - Jeannine Duane, along with her teaching, being involved in the space program, also enjoys cooking, painting, sewing, and gardening (perhaps looking for rocks!)

WA2NFY - Lia Swack (not Lie), is active on the air, busy entertaining DX visitors and in the meanwhile she has made stained glass windows for just about all of her house as well as German style hand crocheted curtains.

N2?? - Barbara Lottridge, sister of W2UNI, found a good way to have a three manual Moller pipe organ -- she accepted the organ position of Old Dutch Church in Kingston, NY. And, many Saturdays she also plays for one and sometimes two weddings. J.S. Bach would say if here, "she really does justice to Bach".

N9ADL - Donna Kowzan, enjoys fishing along with her hamming but her occupation is: COAL MINER!

SP2FF - Barbara Ulatowska, toured the USA last summer while coming for the International YLRL Convention in Las Vegas. She manages a department of photography, does much needlework and likes to swim. Says she learned much English on her trip and just could not believe everyone being so nice to entertain her.

K1YL - Claire Bineau, spends a great part of each year in the Netherlands using PJ8YL.

So all you YL's in GCARC, let me hear about what you have been doing. 73'es 33, Rose Ellen Bills, N2RE.

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We would like to wish a speedy recovery to Ray, WB2LNR, and Sonny, WB2DXB, both of whom have been on the air while recuperating recently.

SWAP & SHOP

FOR SALE:

COMCRAFT - CST-50 25 watt 2 meter/220 FM Mobile transceiver with dual VFO's and AM rcvr.

HAMTRONICS - 2 meter transverter with preamp.

ELECTROLYTIC - Caps (3) 22,000 to 68,000 uF at 30 volts DC \$1.00 each.

For above items contact Ed, WA2PFC

ICOM - IC-260A Multimode 2 meter transceiver with mike - memory scan dual-VFO's, continuous tuning 144.000- 148.199.9 - USB, LSB, FM, CW, 10 watts - .5 watt output. Excellent condition - \$300.00.

MIRAGE - B-108 80 watt 2 meter amplifier built-in preamp, variable SSB relay, remote keying, amplify both FM & SSB. Input 5 15 watts; Modes FM, SSB, CW; Preamp 10 DB gain 2.5 db noise figure; wtg 3 lbs. Excellent condition \$75.00.

Total package together \$350.00. (Instruction books included).

For above items contact John Fisher, K2JF.

YAESU "Twins" - FR101 Dgital rcvr 160-10 m. w/FM adaptor & CW filter, FL 101 xmtr SSB/CW/AM/FSK 160-10 m w/speech processor.

Mint condx--a real value ONLY \$500.00 for the pair! No wheeling or dealing. Contact Charlie Sketchley,

FCC: "YES" TO FEDERAL PREEMPTION!

"State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted." So saying, FCC, on September 16, 1985, adopted a Memorandum Opinion and Order in PRB-1, granting ARRL's request for limited Federal preemption over state and local regulations involving Amateur Radio facilities to the degree necessary to insure the safety and health of community residents. But, ARRL argued, such regulations must not be so restrictive that they could preclude effective amateur communication.

"Preemption is primarily a function of the extent of the conflict between federal and state and local regulation . . . we recognize here that there are certain general state and local interests which may, in their even-handed application, legitimately affect amateur radio facilities. Nonetheless, there is also a strong federal interest in promoting amateur communications. . . upon weighing these interests, we believe a limited preemption policy is warranted. State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted.

"Because amateur station communications are only as effective as the antennas employed, antenna height restrictions directly affect the effectiveness of amateur communications. Some amateur antenna configurations require more substantial installations than others if they are to provide the amateur operator with the communications that he/she desires to engage in. For example, an antenna array for international amateur communications will differ from an antenna used to contact other amateur operators at shorter distances. We will not, however, specify any particular height limitation below which a local government may not regulate, nor will we suggest the precise language that must be contained in local ordinances, such as mechanisms for special exceptions, variances, or conditional use permits. Nevertheless, local regulations which involve placement, screening, or height of antennas based on health, safety or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose."

So the preemption issue is not cut and dried. How many towns, villages and cities are there in the United States, with how many properties, how many citizens, how many amateurs in each town? The 11-page document we call PRB-1 is not an instant cure-all for difficulties we face now, nor does it guarantee friendly agreement on the placement of antennas and antenna supports everywhere in the future. Yet, FCC feels it has provided a valuable tool in PRB-1. "Obviously, we do not have the staff or financial resources to review all state and local laws that affect amateur operations. We are confident, however, that state and local governments will endeavor to legislate in a manner that affords appropriate recognition to the important federal interest at stake here and thereby avoid unnecessary conflicts with federal policy, as well as time consuming and expensive litigation in this area. Amateur operators who believe that local and state governments have been overreaching and thereby have precluded accomplishment of their legitimate communication goals may, in addition, use this document to bring our policies to the attention of local tribunals and forums."

W1AW carried news of the release of PRB-1 within minutes of its receipt from Washington. November QST will carry its full text -- food for thought, a tool waiting to be used, and recommended reading. Tnx
The ARRL Letter

JORDAN HONORS JY1'S 50TH BIRTHDAY!

The Royal Jordanian Radio Amateur Society has announced plans for "JY50" - a two week celebration of the 50th birthday of His Majesty, King Hussein JY1. All amateur radio stations in Jordan will sign the special prefix: JY50, followed by their regular two or three letter suffix in all QSO's between November 7 and 21. King Hussein, using the call sign JY50 is expected to join the 50 active Jordanian amateurs during the event. Stations will be on the air on 160, 80, 40, 20, 15 and 10 meters using CW, SSB, and RTTY. Several JY50's are expected to use the OSCAR satellite as well.

Amateurs seeking the special "Worked JY50 Certificate" should send copies of their log (no QSL's required) and either 10 IRC's or \$5.00 (U.S.) to the Royal Jordanian Radio Amateur Society, JY50 Celebration, P.O. Box 2353, Amman, Jordan. Tnx W5YI and K2JF

HAM PUBLISHES COMMODORE/HAM BOOK

If you are a ham and have a Commodore home computer, you might look into a new book entitled "THE COMMODORE HAM'S COMPANION."

The book is written by Jim Grubbs, K9EI. The 160-page paperback book contains over 80 sources for Commodore amateur radio software and hardware...and a bibliography of over 60 magazine articles and reviews about using Commodore machines in the ham shack. He concentrates on the VIC-20 and the C-64. The chapter on "how to use your Commodore computer to join the packet radio revolution" is worth the price of the book alone. Self-published by QSKY Publishing, (PO Box 3042, Springfield, IL 62708), "The Commodore Ham's Companion" is \$15.95 plus \$2.50 first class shipping/handling. (VISA/MASTERCARD accepted.) Tnx K2JF

NEW CONSUMER GADGETS

DWI's had better beware of SOBER (Safe Only Breath Energized Relay) catches on. Drunk drivers won't be able to start their car if they have alcohol tainted breath. The hand-held breath device test must be taken every time a car is started! A more expensive version uses the owner's dental-bite pattern to insure that someone else is not taking the test for the car owner! Tnx W5YI and K2JF

STANDBY FOR COMPUTER PRICE WAR!

Apple Computer has done particularly poorly. They have many problems. Profit margins have tumbled from 11.7% in 1981 to 4.2% in 1984. Inventory is growing faster than sales. Both Atari and Commodore have new models that could get the bulk of the important Christmas business. Particularly worrisome to Apple is the new Commodore Amiga and Atari's 520-ST. Like Mac, both are 68000 chip based, offer far more...and cost less. Tnx W5YI and K2JF

NATIONAL VEC ORGANIZATION FORMED

COUNCIL FOR AMATEUR RADIO EXAMINING (C.A.R.E.), has been formed. Already being considered are such things as mutually recognizing each others volunteer examiners, developing a common examination pool, establishing test standards, co-op printing and stockpiling of testing materials and cooperating in exam scheduling. C.A.R.E. will also serve as a national clearinghouse to gather and disseminate amateur radio testing. Tnx W5YI and K2JF

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N2FJQ, Al, and the Washington Township MUA, wishes to thank W2GSN, Ed, for his help with communication during a power outage Sunday night, September 29. Tnx N2FJQ - Al.

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THE EMISSIONS

Radio emissions are transmissions from your Amateur Radio station. The FCC rules use a number of symbols for the various types of emissions used in Amateur Radio. These emission symbols indicate how your transmitter reference frequency (the carrier) is modulated, the nature of the signal modulating the carrier, and the type of information transmitted. As a result of WARC '79, the familiar two-character emission designators (A1 for CW, F3 for FM phone, for example) have been replaced with new three-character designators. The new designators allow much more specific description of the characteristics of emissions.

The first character describes the type of modulation of the main carrier.

- N - Emission of an unmodulated carrier
- A - AM double sideband
- H - Single sideband, full carrier
- R - Single sideband, reduced carrier
- J - Single sideband, suppressed carrier
- B - Independent sideband
- C - Vestigial sidebands
- F - Frequency modulation
- G - Phase modulation

SEQUENCE OF PULSES

- P - Unmodulated
- K - Modulated in amplitude
- L - Modulated in width/duration
- M - Modulated in position/phase

- Q - In which the carrier is angle modulated during the period of the pulse
- V - Which is a combination of the above, or produced by other means
- X - Cases not otherwise covered

The second character describes the nature of the signal modulating the main carrier:

- 0 - No modulating signal
- 1 - A single channel-carrying quantized or digital information
- 2 - A single channel carrying quantized or digital information with the use of a modulating subcarrier
- 3 - A single channel containing analog information
- 7 - Two or more channels containing quantized or digital information
- 8 - Two or more channels containing analog information
- 9 - Composite system with one or more channels containing quantized or digital information, together with one or more channels containing analog information
- X - Cases not otherwise covered

The third character describes the type of information to be transmitted:

- N - No information transmitted
- A - Telegraphy for aural reception
- B - Telegraphy for automatic reception
- C - Facsimile
- D - Data transmission, telementry, telecommand
- E - Telephony
- F - Television
- W - Combination of the above
- X - Cases not otherwise covered

Here are a few examples of how the new designators describe emissions used by amateurs:

- J3E - Single-sideband suppressed-carrier telephony
- AlA - Continuous-wave (CW) telegraphy
- F1B - Frequency-shift-keyed radioteletype (RTTY)
- F3E - Frequency-modulated telephony

Tnx K2JF (SNJ ATC)

THE INDUSTRY OPPOSES NO CODE

The amateur radio equipment supply and publications industry has spoken out, albeit unofficially, on the advisability of "re-investigating" the establishment of a codeless class of US amateur license as suggested by Senator Barry M. Goldwater, K7UGA. They are

opposed to it, at least at this time. In conversations with several representatives of the newly formed and loose - knit Amateur Equipment Manufacturers and Publications Group, Westlink has learned that most of those involved in serving US hams consider No-Code far too volatile an issue among those they serve. They also note that their's is an industry geared toward progressive and orderly growth, and not prepared to handle any fad that might result from the creation of a No-Code license. While the structure of the organization precludes and one individual or company from being quoted as an "official source," we were told that the Group thinks the ARRL is on the right track with its so-called "Novice Privilege Enhancement" rules change request which has recently been nick-named the "ARRL Slow - Code Proposal." This request, designated RM - 5038, still requires applicants for a Novice license to be required to pass a 5 WPM CW proficiency test. The operating privileges would be expanded to give Novices limited data and radiotelephone operating authority. FCC officials we spoke with said that the Commission's official position is that No-Code is a dead issue as a result of the termination of PR Docket 83-28 in December, 1983. We are forced to speculate, however, that the Commission might be very hard put to ignore a request to reopen the No-Code issue if such a request were to come from someone of the stature of Senator Goldwater. Tnx The Westlink Report and K3WIL

MOTOROLA HAS PETITIONED FCC...

Motorola has petitioned the FCC to authorize computer local-area networks (LANs) to operate in the spectrum from 1700 to 1710 MHz. The company's request limits the RF power to 100 milliwatts, and would allow data to be transferred over a range of about 1,000 feet. Tnx The Westlink Report and K3WIL

RADIO HOBBYISTS WIN

Los Angeles attorney Joe Merdler, N6AHU, has been successful in his attempt to derail a proposed California law that would have outlawed public ownership of any receiving gear for the 800 - 900 MHz cellular band.

His July 31 meeting with State Senator Herschel Rosenthal, sponsor of SB-1431, has resulted in a number of important amendments to it. They dramatically alter its impact on everyone except those who are engaged in the professional eavesdropping of cellular radiotelephone conversations.

The amendments to the bill exempt all radio reception gear, except that which is specifically designed to intercept cellular radiotelephone conversations. In simpler terms, the measure is now limited to eavesdropping or spy type receivers, such as those used for industrial espionage purposes and similiar activities.

Scanners which have incidental coverage of this spectrum, ham gear

for the newly released 902 - 928 MHz ham band and RF test equipment would not be governed by the new law. Nor would the law be applicable to those who just incidentally listen to a cellular conversation.

This finalized version of the bill can only be viewed as a major victory for radio amateurs and SWLs, and a defeat for the high - priced lobbyists of the cellular industry.

While the battle in California may be at an end, a more intensive fight is expected at the federal level as various telephone companies attempt to persuade the FCC or Congress to ban all such gear. Tnx The Westlink Report and K3WIL

902-928 MHz BAND OPENING IMMINENT

Remember -- we've got it as of 0001 UTC September 28, 1985. It's available to all radio amateurs under FCC jurisdiction in ITU Region 2 holding Technician class licenses and above. Amateur use of the band must proceed on a secondary, non-interference basis; we must not interfere with and must accept interference from the Fixed and Radiolocation Services, and industrial, medical and scientific (ISM) devices there.

An in-depth report on the how, what and why of the 902-928 MHz band appears in October QST. But now hear this, especially amateurs in Colorado and Wyoming: "In the 902-928 MHz band, amateur radio stations shall not operate within the States of Colorado and Wyoming, bounded by the areas of latitude 39 degrees to 42 degrees North, and longitude 10 degrees West to 108 degrees West. The band is allocated in a secondary basis to the amateur service subject to not causing harmful interference on the operations of Government stations authorized in this band or to Automatic Vehicle Monitoring (AVM) systems. Stations in the amateur service must tolerate any interference from the operations of industrial, scientific and medical (ISM) devices, AVM systems and the operations of Government stations authorized in this band" -- this the text of added Limitation 14 to Section 97.7 of the FCC Rules, in addition to the restrictions on operation and output power imposed in and around the White Sands Missile Range for this band (see the LETTER, August 15, 1985); otherwise, the usual restriction of 1500 watts PEP output power applies. Emissions authorized are NON, A1A, A2A, A2B, A3E, A3C, A3F, F1B, F2B, F3E, G3E, F3C, F3F, F8E and P0N.

The interim 902-928 MHz band plan appears in the FCC RULE BOOK, the 1985-86 REPEATER DIRECTORY and in the August 29 LETTER.

One more thing. Among the ISM devices authorized for use in the band (at 915 MHz) are microwave ovens. This is a broad-as-a-barn-door hint that caution is needed if you're going to be getting close to radiated 920-928 MHz energy in your Amateur Radio pursuits. So -- be careful out there. Tnx The ARRL Letter