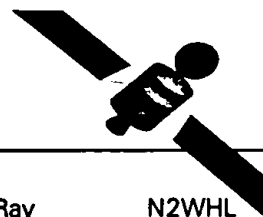


# W2MMTD



## Gloucester County Amateur Radio Club

### 1996 Officers

<b>President</b>	Bob Krukowski	WA2UDO
<b>Vice President</b>	Art Strong	KA2DOT
<b>Treasurer</b>	Al Arrison	KB2AYU
<b>Recording Sec.</b>	Sam Rosenberg	N2DWK
<b>Corres. Sec.</b>	Jack Stauffer, Jr.	KA7LAX

### Directors

<b>Three-Year</b>	Walt Seitz	KB2JCG
	Pete Butler	KA2DZF
<b>Two-Year</b>	Joe Wells	N2KLE
	Goldie Rosenberg	N2YNB
<b>One-Year</b>	Open	
	Open	

### Trustees

<b>Four-Year</b>	Stu Cleveland	N2WUP
<b>Three-Year</b>	Barbara Bielecki	N2SBP
<b>Two-Year</b>	Chris Chamberlin	N2IVN
<b>One-Year</b>	Charlie Olinda	N2SRQ

### GCARC Meetings

#### General Membership:

8 p.m., 1st Wednesday every month, Deptford Elks Lodge, Highland Ave., one block from Egg Harbor Road.

#### Board of Directors:

8 p.m., 3rd Wednesday every month, GCARC site, Harrison Twp. 4-H Grounds (approximately one mile south of Mullica Hill on Rt. 77).

#### Club Repeaters

147.780/180 Mhz      223.06/224.66 Mhz  
447.100/442.100 Mhz (CTCSS 131.8)

## 1996 Committee Chairpersons

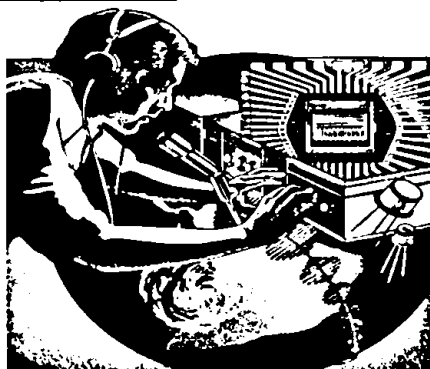
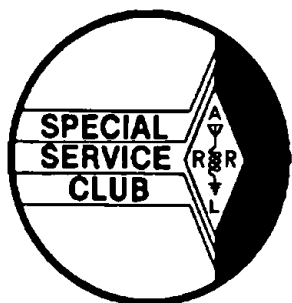
Advertising	Ray	N2WHL
ARES/RACES	Chic	WA2USI
Awards	Jack	K2ZA
Banquet	Bob	WA2UDO
Budget *	Bob	WA2UDO
Callbook Info.	John	K2JF
Clubhouse Site *	Stu	N2WUP
Constitution *	Ken	KN2U
Crosstalk	Greg	WN2T
	Don	N2WFM
	Kyle	KB2RVY
	Charlie	K2PQD
Data Processing	Open	
DX	Open	
Field Day *	Art	KA2DOT
Hamfest *	Open	
Help	Ken	KN2U
Hospitality *	Donna	
Legislation	Open	
Membership *	Sonny	WB2DXB
Nets	Dave	N2TVR
Nominations	Bob	WA2UDO
Publicity *	Ray	N2WHL
Repeaters *	Chuck	WA2TML
Scholarships	Greg	WN2T
Special Services	Al	N2FJQ
Special Events	Walt	WB2OYQ
Sunshine	Miriam	KB2EUA
Testing	Bill	NT2N
Technical	Open	
Training	Chic	WA2USI
TVI	John	K2JF
4-H Parking	Open	

( \* Standing Committee )

### NETS

ARES/RACES - Sundays, 2200 Hrs  
(147.780/180 & 223.06/224.66 Repeaters)

10 Meter - Sundays following the  
ARES/RACES net (28.350 Mhz)

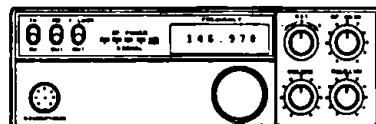


# GCARC

Sept. 1996

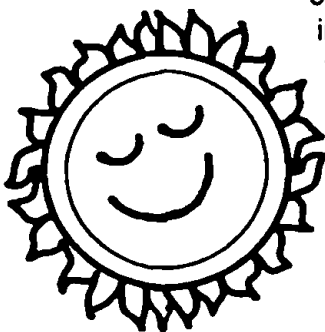


# CROSSTALK



## Formation of an ionized layer (Part Two of a Series) by John Fisher, K2JF

When ultraviolet radiation of a particular wavelength enters the earth's atmosphere from above, the waves penetrate to a depth at which the critical density of the medium is sufficient to absorb the larger portion of the incident energy in the process of producing ionization. Before reaching this depth, the air particles are dispersed so sparsely that only relatively few molecules of the rarefied gases become ionized. Upon reaching the level of critical density, a greater proportion of molecules are ionized, but the wave energy becomes so attenuated by the process of ionization that it is too weak to produce further ionization. Thus, an ionized layer is formed with the greatest intensity of ionization at its center and lesser intensities at its edges.



By means of ionospheric sounding, it has been determined that there are four distinct layers of the ionosphere. In order of increasing heights and intensities, these are called the D, E, F1 and F2 layers. The four layers are present in the atmosphere during the daytime when the sun is directed toward that portion of the atmospheric sphere. During the night, the F1 and F2 layers seem to merge into a single F layer and the D and E layers fade out because of the recombination of the ions composing them. However, the actual number of layers, their heights above the earth, and the relative intensity of ionization present in them all vary from hour-to-hour, from day-to-day, from month-to-month, from season-to-season, and from year-to-year.

D Region: Somewhere between the heights of 20 to 55 miles (50 to 90 KM) above the surface of

the earth, this region is the first one of pronounced ionization, known as the D Region. This region is not extensive and has little effect in bending the paths of high-frequency radio waves. The chief effects of the ionization in this region are the cause of weakening or an attenuation of the field intensity of high-frequency radio waves as the transmission paths of such waves cross through this region. The D region exists only during daylight hours and its intensity follows the variation of the sun's altitude, becoming the most dense at noon and fading out shortly after sunset because of the rapid recombination of ions at this atmospheric height (listen to 80 meters around 1100 to 1300 hours)

E Layer: At heights between 55 and 90 miles (90 to 145 km) lies the second region in order of height -- the E layer. Since the rate of recombination is large at this atmospheric level, the intensity of ionization of the E layer follows the sun's altitude variations closely, reaching a maximum at about noon and fading to such a weak level during the night as to be practically useless as an aid to high-frequency radio communication. Thus, the E layer is of great importance to radio transmission for distances less than approximately 1,500 miles. (Note: the timing is important for the folks who work 6 meters ... do not confuse this with Sporadic E.)

The next section will on the F1 and F2 layers.

### Stuff for Xtalk?

Please send on packet to  
WN2T via "Pitman"  
(N2SRO) on 145.770  
or E-Mail to:

Pott@voicenet.com.

Deadline for October

1996 issue: Sept. 22, 1996



Epson LQ-510 dot matrix printer. \$35.00 or BO.

HQ-1 Mini Quad, 6 mtrs to 20 meters, 2 elements. Needs repair ... will sell cheap! Make offer.

Also, want a 486-66 Mhz computer.

**Ed, WA2PFC**

**FOR SALE AS TWO GOOD STARTER RIGS**

ICOM:- IC-37A  
 DUAL VFO'S  
 FREQUENCY RANGE 220 - 225 MHZ  
 SIMPLEX OR DUPLEX OPERATION  
 INTERNAL TONE ENCODER NINE MEMORIES PROGRAMED, FULL AND PRIORITY SCANNING  
 DIGITAL FREQUENCY READOUT  
 OUTPUT 25 WATTS  
 BARGAIN PRICE \$100

ICOM:- IC-45A  
 DUAL VFO'S  
 FREQUENCY 430 - 440 MHZ  
 SIMPLEX OR DUPLEX OPERATION  
 DIGITAL FREQUENCY READOUT  
 MULTIPURPOSE SCANNING  
 YOUR COST \$90

BOTH UNITS HAVE MANUAL, MIC. AND MOBILE MOUNTS

FOR INFORMATION CALL  
 K2PQD, CHARLIE,

Would you like a monogrammed Club Jacket?  
 Call New Jersey Monogramming in Erial, NJ, at 784-2827. Ask about pricing and custom specifications.

**ARRL Bulletin 55  
 August 22, 1996**

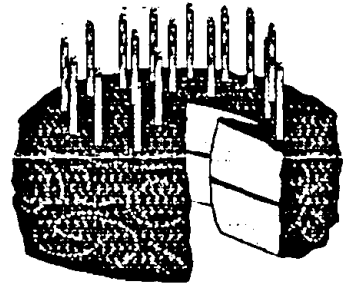
The FCC has announced that vanity call sign filing Gate 2 will open September 23. Under Gate 2, Amateur Extra class licensees may request a vanity call sign on or after that date. File requests on FCC Form 610V. Legibility is critical. If your application is not legible, you could experience a delay in processing, lose the opportunity to obtain a requested call sign or even obtain a call sign different from what you want.

Under Gate 2, you must hold an unexpired Amateur Extra class operator/primary station license to request

a vanity call sign for your primary station. To request a vanity call sign for a club station under Gate 2, you must also hold an unexpired club station license grant listing you as the license trustee. Applicants should refer to the licensee data base to verify that a requested call sign is not already assigned. A call sign is normally assignable two years following license expiration, surrender, revocation, set aside, cancellation, void ab initio, or death of the grantee.

Using Form 610V, provide a list of up to 25 call signs in the order of preference. The first assignable call sign on the list will be assigned to your station. Remember: When requesting

**Happy Birthday  
 for the month of  
 September from  
 all the members  
 of GCARC!**



CALL	FIRST	LAST	DAY
KA2KMW	EDWARD	WARGO	4
KB2FRN	JOSEPH	MITCHELL	5
WA2MFS	THOMAS	LOINS	6
WB2DXB	SONNY	GUTIN	7
KE2WC	MARK	MASTROGIACOMO	12
AA2YO	EUGENE	SCHOEBERLEIN	15
N2YIR	JOSEPH	GLESSNER	16
N2YIM	WILLIAM	HANSCH	17
WB2OZE	JOSE	LOPEZ	18
N2DWK	SAMUEL	ROSENBERG	19
K2UUY	FRANK	RITTER	20
KN2U	KENNETH	BOZARTH	22
N2WRJ	JEAN	SHISLER	24
W2DWE	DOM	FARINELLA	25
NJ2B	HARRY	SPIECE	26
KB2SVG	EDMUND	HOLOHAN	27
KB2VVU	MIKE	BRYANT	29
WA2QOY	HAROLD	BERRY	29

TKS, DATABASE - K2PQD, CHARLIE

a call sign under Gate 2 for your primary or club station, the call sign must have been unassigned for at least two years. As an Amateur Extra, class operator, you may request a call sign from any group, A, B, C or D.

Any call sign requested must be one designated for the region of your mailing address, as follows:

*One of the contiguous 48 states:*

*Regions 1 to 10*

*Alaska: Regions 1 to 11.*

*American Samoa: Regions 1 to 10, or Region 13 having numeral 8.*

*Commonwealth of Northern Mariana Islands: Regions 1 to 10, or Region 13 having numeral 0.*

*Guam: Regions 1 to 10, or Region 13 having numeral 2.*

*Hawaii: Regions 1 to 10, or Region 13 having numeral 6 or 7.*

*Puerto Rico: Regions 1 to 10, or Region 12 having numeral 3 or 4.*

*Virgin Islands: Regions 1 to 10, or Region 12 having numeral 2.*

For explanations of Groups A, B, C and D and the geographic Regions, see Fact Sheet PR5000 Number 206-S, Amateur Station Sequential Call Sign System. For more information, see Fact Sheet PR5000 Number 206-V Amateur Station Vanity Call Sign System.

Advanced, General, Technician Plus, Technician, and Novice class operators are not yet eligible to request by list. Advanced class operators will be eligible at Gate 3. Others will be eligible at Gate 4.

A separate Public Notice will be released providing guidelines for the implementation of electronic filing procedures for FCC Form 610V.

Tks, Ken Newman, N2CQ

## Club Site News

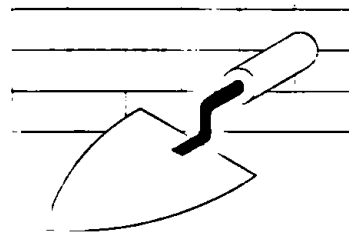
Work continues at the club site.

The 6 meter and 2 meter rigs are up and running in the middle room.

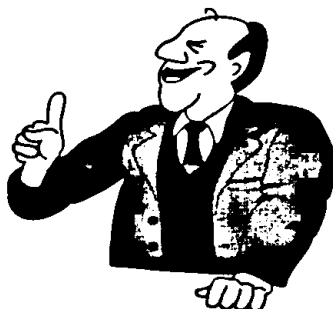
We are building shelves in the closets and adding electrical outlets in the middle room.

The hole for the new tower is almost complete.

I hope to complete the major inside work by September. Many thanks to ALL who have helped with the work to-date.



73, Stu, N2WUP, Site Chair



## An Opinion....

I know that I haven't been very active with the club recently, as I have had to work the days the events were held. I try though to help out whenever I can and however I can and have helped on numerous times at club events. It seems that I have been encountering a lot of flack from the club for trying to help out. I am not going to name any events I got flack from, because the point of this article is not to flame these people. Instead, I am writing this article to find out what the problem is with the seasoned hams.

Is the concern over the lack of Morse Code really the problem? No, I don't believe that it is. Amateur Radio is changing as new technologies have emerged. Many of us "New Breed" hams are attracted to newer forms of communications such as PACKET, ATV, or maybe we enjoy trying our hand out on those exotic bands such as 1.2 Gig, 900 MHZ, and yes, even 220 MHZ. Does this make us inferior just because we don't think code is a necessary tool for communicating anymore?

If this makes us inferior, then charge me GUILTY in the first degree, because I am more interested in emerging technologies than the older forms of communications. As I said earlier, I do not intend to flame anyone here, but rather I would like to help you! All I want is to be accepted for who I am and what my interests are (even though they may differ from interests of the seasoned hams).

I have been loyal to G.C.A.R.C. and have helped at any event I could make it to. What have I gotten for the most part? Pep talks on how WRONG it is to not love the CODE, and how I wasn't a HAM until I knew code -- YES, someone actually told me to my face that they didn't consider me a HAM, because I enjoyed talking on the radio more then I did repairing, building, and learning code!

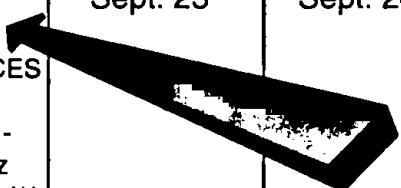
I am writing this article in Crosstalk because I love this club and just want the club to PROSPER and advance! With a little change in attitude towards our views on new amateur radio operators, we can pull together again and have a club we can all enjoy!

I think Rodney King said it best when he asked: "Can't we all just get along?" With a pleasant and welcoming feeling this club can become the best club in South Jersey.

Tks, Mike Mollet, N2SRO

**September 1 - 30, 1996**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p>Sept. 1</p> <p>20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz</p> <p>Radio Panama Test; Straight-Key Week</p>	<p>Sept. 2</p>	<p>Sept. 3</p>	<p>Sept. 4</p> <p><b>GCARC General Membership Meeting 20:00</b></p>	<p>Sept. 5</p>	<p>Sept. 6</p>	<p>Sept. 7</p> <p>All-Asian DX Test, Phone; LZ DX Test; No. Amer. Sprint, CW</p>
<p>Sept. 8</p> <p>20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz</p>	<p>Sept. 9</p>	<p>Sept. 10</p>	<p>Sept. 11</p> <p>YLRL Howdy Days</p>	<p>Sept. 12</p>	<p>Sept. 13</p>	<p>Sept. 14</p> <p>Worked All Europe Test, Phone; ARRL Sept. VHF QSO Party; 2nd Annual Amer. &amp; Canadian Islands Test</p>
<p>Sept. 15</p> <p>20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz Fest: Hamilton Twp. NJ</p>	<p>Sept. 16</p>	<p>Sept. 17</p>	<p>Sept. 18</p> <p><b>20:00 GCARC Board of Directors Mtg</b></p>	<p>Sept. 19</p> <p>VE Exams Bellmawr @ 7 p.m (Doors open 6:15 p.m.)</p>	<p>Sept. 20</p>	<p>Sept. 21</p> <p>ARRL 10 GHZ Test; Scandanavian Activity Test, CW; Wash. State Salmon Run</p>
<p>Sept. 22</p> <p>20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz Fest: Mt. Holly, NJ</p>	<p>Sept. 23</p>	<p>Sept. 24</p>	<p>Sept. 25</p>	<p>Sept. 26</p>	<p>Sept. 27</p>	<p>Sept. 28</p> <p>CQ WW RTTY Test; Scandanavian Activity Test, SSB; Fest: Horseheads, NY</p>
<p>Sept. 29</p> <p>20:00 ARES/RACES 20:30 10 mtr Net - 28.350 Mhz Tenn. QSO Party Fest: Yonkers, NY</p>	<p>Sept. 30</p>					



**Deadline  
October  
XTALK!**