



# CROSSTALK

JUNE 1964

VOL. 6 NO. 6

## G C A R C TO HAVE AIR SHOW AT JULY 26TH HAMFEST

The West Jersey Radio Control club of Haddonfield will again this year demonstrate radio control model airplane flying at the GCARC hamfest to be held on July 26th at Crystal Birch Lake near Glassboro. In addition there will be a swap and shoppe, transmitter hunt, prizes, etc. for the om's. as well as games for the kiddies and XYL's. Admission price is \$1.00 per individual or \$1.50 for the whole family. More details will appear in the July issue of CROSSTALK. Plan now on bringing the whole family!

### FLIGHT OF SIGMA 7 TO BE SHOWN AT JUNE GACRC MEETING

The NASA film Flight of SIGMA 7 and Project Gemini Mission Concept will be shown immediately following the June 3rd GCARC business meeting. Both films are in full color!

\* \* \* \* \*  
 \* TWO WAY INTER-CONTENTAL AMATEUR COMMUNICATION SUCCESSFUL ON 144 MC\*  
 \* SEE PAGE 7 THIS ISSUE OF CROSSTALK FOR MORE DETAILS \*  
 \* \* \* \* \*

## CROSSTALK

is the official publication of the Gloucester County Amateur Radio Club Inc. Deadline for the submission of material for publication is the 20th of the month. Any material contained in the publication may be reproduced by any non-profit amateur radio organization.

EDITOR K2JKA  
Jack Layton

PUBLISHER WA2KGD  
Clif Brown

CIRCULATION WB2JRU  
Sid Gantz

---

### MEETING NOTICE

THE REGULAR MONTHLY MEETING OF THE GLOUCESTER COUNTY AMATEUR RADIO CLUB WILL BE HELD ON WEDNESDAY JUNE 3 AT THE OWENS-ILLINOIS CLUB HOUSE IN GLASSBORO NEW JERSEY. THE MEETING WILL START PROMPTLY AT 8 PM.

---

Make sure brain is operating before placing mouth in gear!

---

Listen before you transmit  
Use VHF for local contacts

de K2JKA

Well it looks like the DX season on six meters has finally arrived with such calls as VP7CX, FG7XT, CO5CN and TI2NA making their appearance for the first time in 1964. One word of caution.....most of these exotic calls appear below 50.1 mc....and here in the U.S. phone operation is not permitted below 50.1. Take care that you don't end up with a pink ticket for out of the band operation.

June is the month for FIELD DAY. GCARC will as usual be setting up the rigs in the usual place, just off Focer Street in Glassboro. This is the last weekend in June. Why not set aside some time, even if it's only a few hours, and come out and have a good time. Complete details appear elsewhere in this issue. (I hope ED)

You might have noticed that the last few issues of CROSSTALK have been getting smaller and smaller. We need material to print. Why not write up your favorite gripe or rig in the form of an article? We'll reserve some space for it in next months issue.

Also don't forget the ARRL National Convention in New York in mid-August. These sort of get togethers are always a lot of fun. C U there?

## W E L C O M E

GCARC extends a warm welcome to the following new members:

Gregory Radcliffe	*****
Ronald Dolinski	*****
Meir (Mike) Baran	*****
Bertha Eggert	WA4BMC

We hope that you will take advantage of; as well as an active part in, the many GCARC activities that occur throught the year.

\* \* \* \* \*

The NIGHTS OF THE ROUND-TABLE out of North Jersey are offering a certificate for working their members. All contacts must be made after November 1, 1963 and confirmed by QSL. In this area you will need 8 contacts and QSL's. Send QSL's to WA2PVB. They will be returned. There is no charge for this certificate.

---

FOR SALE.....

xmter.....DX-100  
rcver.....S-40  
ant.....Gothem V-80  
Q multiplier.....

take all for \$110.00  
Ron Yanky WA2WTA

---

Please notify the editor of any address changes. We are not mind readers!

---

don't forget to  
SAY YOU SAW IT IN CROSSTALK  
even if you didn't

## T H A N K S

A big GCARC thanks again to Wayne Newhouse of WHYI television for presenting a very interesting program at the May meeting. We would like to have you back sometime in the near future with some more of those film clips. The story is around that some of the hams at the meeting went home a little seasick after that airplane ride over the top of the TV tower!

---

FOR SALE.....

National NC-300 revised up to date with xtal controled second injection osc. Has 100 kc calibrator and a vernier dial same as the NC-303. Price \$180. Also Viking I with complete TVI kit installed, VFO, match box, and lots of other equipment. Contact Phil Catona W2JAV

---

### FOURTEEN POINTS OF FRUSTRATION

1. Unable to load ant properly
2. Ant loads but not getting out
3. Fuse blows in plate position
4. Fuse blows in filamaat position
5. Lights in house go out when rig is on.
6. RF in shack causes ZAPP when keying
7. Carbon mic works in xtal pos
8. Xtal mic works in carbon pos
9. Linear amp develops conic characteristics
10. TVI on own set but OK for neighbors
11. TVI for neighbors but OK on own set
12. Carrier without modulation
13. Modulation without carrier
14. Bad signal reports

tnx to SCARA NEWS

April 1964

THE BOILED HAM

.....by Ruth Sketchley XYL of K2PQD

Did you ever decide to go into the shack,  
When you had nothing else to do,  
Just want to relax so you warm up the rig,  
And settle down for a nice rag chew.

You decide to listen around the band,  
And read the mail for a while,  
You dont seem to hear anyone that you know,  
So you look for a clear spot on the dial.

First you tune up, and then you tune down.  
The Q R Mary's beginning to mount.  
All that you hear is a whistler,  
And a fellow just learning to count.

You put out a CQ and keep trying,  
For the simple contact that you hunted,  
It turns out the one finally answering you,  
Is for a signal report that he wanted.

Then you get one that's all over the band.  
What does he think I am a retriever?  
And that fellow calling CQ where I am,  
Why doesn't he buy a receiver?

Ah, at last I am hearing from someone,  
Whose signal has a terrific punch.  
You get to the point where you think this is it  
Then (you guessed it) he's called for lunch.

You try once more and get hold of a guy,  
Who comes booming in with a thud.  
On about the second go-round  
He's dissappeared in the mud.

All of a sudden you're in a QSO,  
You don't know how, but it's grand.  
After talking for about an hour,  
An observer says you're out of the band.

You're sorry you ever went into the shack,  
By now you really are stawing.  
You pull the big switch, turn out the lights,  
And go see what the family's doing.

I think I'll get out of ham radio,  
Sell everything, it's just not for me.  
You say the bands will come back to their own,  
Well, maybe I'll wait and see.

---

don't forget to.....  
SAY YOU SAW IT IN CROSSTALK  
even if you didn't.....

---

KILOCYCLE CHATTER

The Salem County ARC net meets on Wednesday evenings on 50.9 mc at 9:00. Here's a good chance for some of you to get a little better acquainted with some of our ham neighbors in an adjoining county.

K2PQD plans to be on RTTY soon.

WA2WWF finally got the Seneca plate modulated. Sounds real good Bob!

Keep your ears opened for the rock-crusing donald duck signal about to show up from WA2KWM on six meter SSB.

It was real nice th have the SCM K2BG at the last GCARC meeting. Stop in more often Herb.

WA2SFY was heard knocking off the skip stations on six meters.

---

THIS SPACE WAS RESERVED.....

...FOR YOUR CONTRIBUTION .....

TO THIS MONTHS "CROSSTALK"....

where \$%#&#%\$%# was it?

---

ALMOST BUT NOT QUITE

That's the story as of printing date on the status of the call letter license plate bill here in New Jersey. Both the senate and the House have passed the bill and it is awaiting the gov-erners signature. While it is still fresh in your mind send him a QSL urging him to sign this bill.

CLUB DIRECTORY

---

A club directory is in the process of being compiled. This directory will contain among other things, the information asked for in this questionnaire. Please fill out this form and return it to Sidney Gantz, WB2JRU, 1023 Cumberland Ave., Deptford, New Jersey. or bring it to the club meeting. The sooner the info is in the sooner the directory will be available.

Name.....Handle on the air.....  
Address.....  
Call.....ex calls.....class of license.....  
year first licensed..... telephone no.....  
Occupation.....  
Other hobbies.....

xmtrs.....  
receivers.....  
antennas.....  
frequencies operated.....  
usual operating times weekdays.....weekends.....  
do you operate cw.....AM.....SSB.....RTTY.....other.....  
main interest DX.....Rag chewing.....building.....other.....  
Mobile operation.....what band(s).....

Do you belong to any other club besides GCARC? If so which ones? ..  
.....

REMARKS:

## THE PROPER MATCH

.....by Clif Brown WA2KGD

Matching the modulator plates to the class C amplifier load seems to be a problem to many hams. The proper load for the modulator is a must for optimum operation.

Let us use a "for instance". We are attempting to match a pair of 807 modulators to a pair of 6146's for maximum "talk power". After consulting the handbook or tube manual we know that the plate to plate load impedance of our 807's (operating at 600 volts on the plates) is 6900 ohms. Our 6146's are operating at 600 volts at 200 ma., therefore the modulating impedance of the class C RF stage is 3000 ohms. (the operating plate voltage divided by the operating plate current)

We must now determine the impedance ratio of the modulator plates to class C amplifier load. We divide the 6900 ohms plate load impedance by the 3000 ohm modulating impedance of the amplifier. Thus 6900 divided by 3000 ohms equals 2.3, therefore 2.3 to 1 is our impedance ratio. The turns ratio required in our modulation transformer may now be determined. Since 2.3 to 1 is the impedance ratio, the square root of this ratio is the transformer turns ratio. Or turns ratio primary to secondary equals  $\sqrt{2.3}$  to 1 or 1.517 (via slide rule) To simplify calculations we may use 1.52 since a perfect match is not of the utmost importance. These calculations can be confined into one simple formula

$$N = \sqrt{\frac{Z_p}{Z_m}}$$

where N is turns ratio pri to sec  
 $Z_m$  is modulating imp of the class C stage

$Z_p$  is Plate to Plate load imp of the modulators.

If you can work your turns ratio to within ten percent of the calculated value, you can consider such a match as a good one.

---

### GCARC HAMFEST TO BE HELD JULY 26

GCARC's big Hamfest will be held on July 26th at Crystal Birch Lake just east of Pitman. There will be plenty of fun, contests, games for the kids and prizes. Watch for complete details in the JULY issue of CROSSTALK.

---

### A R E C

Effective June 1 the regular Friday night nets of the Gloucester County AREC will be discontinued for the summer months. There will be informal gettogethers on 50.9 mc. on Fri evenings at 8. The regular net sessions will resume on Sept. 4

---

### TVI ADVICE

Good advice passed on by a former FCC chief engineer of the FCC Buffalo office, "don't discuss television interference problems over the air and do not test for tee vee eye. It only encourages TV viewers to ask, "if you admit to TVI then why don't you stop it?" This engineers advice will pay off well if followed. Regardless of your local conditions, don't mention TV interference even by reference to TVI.

from CHEESE BITS

## GCARC PICNIC CANCELLED

Due to circumstances beyond the control of the committee, the annual picnic scheduled for July 11 at Lake Garrison has been cancelled. There will be no regular meeting in July either!

---

## CHERRY HILL AMATEURS IN NEED OF ASSISTANCE

The radio amateurs of Cherry Hill have been confronted with a serious problem affecting all New Jersey hams involving the right of radio amateurs to have towers on residentially zoned land. The problem and results to date are briefly outlined as follows.

In spite of a prior New Jersey Supreme Court ruling affirming the rights of hams, WA2IEK of Cherry Hill Township was denied the privilege of erecting a tower. To make a long story short the case was carried to the New Jersey Supreme Court who decided in favor of the amateur involved. The Appellate Division in reviewing the record upheld the right of WA2IEK, and other amateurs in New Jersey, to build towers on their residential property up to a height of 100 feet in connection with their avocation of amateur radio.

The cost of the three year legal battle totaled \$1432. As a result of donations totaling \$1042 their indebtedness has been reduced to \$390. Any amateurs that would like to help the hams of Cherry Hill can do so by sending their donation to:  
Cherry Hill Committee for Amateur Radio, c/o Doug Kouns K2PMT,  
824 Kingston Drive, Cherry Hill,  
New Jersey.

## A W A R D S

by Dave Roberts WA2TOW

This month's award is WAVE, Worked All VE (Canada) It is offered by the Nortown Amateur Radio Club. The rules are as follows.

Work the nine provinces and submit two QSL cards from a different station on a different band for each of the nine different VE provinces.

New Brunswick	VE1
Prince Edward Isd.	VE1
Nova Scotia	VE1
Quebec	VE2
Ontario	VE3
Manitoba	VE4
Saskatchewan	VE5
Alberta	VE6
British Columbia	VE7/8

(VE8 considered part of BC for this award)

Remember two cards for two bands. Send the 18 QSL's to Norton Amateur Radio Club, PO Box 356, Adelaide Street Postal Station, Toronto, Ontario, Canada.

---

## TWO METER SIGNALS SPAN THE ATLANTIC

Two way communication on 144mc by means of moonbounce is finally an accomplished fact. Many amateurs have worked in this field for as much as 15 years, by heretofore the vital matter of exchange of information has been lacking. The successful operators are OH1NL of Makkila, Finland, and W6DNG Long Beech California. The distance is nearly 6000 miles and it is the first trans Atlantic communication by amateurs on frequencies higher than the 50 mc. band, as well as the first known use of the lunar path for two way communication on 144 mc. Details will appear in June QST.

F I E L D   D A Y   1 9 6 4  
Woody Franz K2AQL

There has been a considerable amount of effort, planning and money spent to provide the club with facilities to have the best "FIELD DAY" in our history. Last year we placed 21st out of 134 total competing clubs in the 4 transmitter class. We invite you to participate in our field day activity on June 27th and 28th to help put us in one of the first five places in the 4 transmitter class. Judging from our score last year and a new strategy planned for this year we should be able to do it.

The set up this year will be CW on 20, 40 and 80 meters (with break in operation on 40 and 80 meters) Phone operation is planned only for six and two meters at present. Any and all operators are needed to help in this operation and logging at each of the four transmitters. Hams of all classes will be able to join in the fun of field day and help put GCARC at the top. All operators who wish to get into the act see the chairman of the band that you wish to operate. The chairmen are as follows

6 & 2	Bob Danley	WA2WWF
20	Jim Peck	W2LVW
40	Glen Morgan	WA2QHQ
80	Richard Tully	WA2TTA

or see Woody Franz K2AQL the Field Day chairman.

The location of the Field Day site is the same as we have had for the two previous years. Go east off Delsea Drive on Focer Street .7 miles and turn left on dirt road and go to dead end at lake. Focer Street is just north of Glassboro High School. See you at field day June 27th and 28th.

---

FCC FEES NOW REQUIRED

This is a reminder that amateur applications must be accompanied by the appropriate fee. The FCC filing fee applicable to amateurs was published in full on page 79 of December QST.

---

SOUTHERN COUNTIES AMATEUR RADIO  
ASSN TO HOLD HAMFEST SEPT 20 TH

SCARA will hold their annual ham fest at Lake Lenape Amusement Park in Mays Landing on Sept. 20. Watch CROSSTALK For more details.

---

DON'T FORGET THE REGULAR JUNE

G C A R C

MEETING THAT WILL BE HELD ON  
JUNE THIRD. STARTING TIME 8 PM

---

.....don't forget to.....

SAY YOU SAW IT IN CROSSTALK  
even if you didn't.....