



CROSSTALK

MAY 1964

VOL. 6 NO. 5

GCARC GETTING IN GEAR FOR SUMMERTIME ACTIVITIES!

Field Day.....June 27 and 28
Picnic.....July 11
Hamfest.....July 26
ARRL CONVENTION.....Aug 21, 22 and 23

In This Month's Issue

An Interview With the CM
How Well Are You Up on Your Theory
DB's Made Easier
The Bite of the RED SCORPION
Club Meetings!
.....plus news and views of club
members and activities.....
and a complete MEMBERSHIP LIST.....

CLUB DIRECTORY PROPOSED

A motion directing the president to appoint a committee for the purpose of getting together the necessary material to print a club directory was made and approved at the April 22 Board-of-directors meeting. The directory will contain a short resume of each of GCARC's members along with a run down of equipment, operating habits, etc.

Individuals that are willing to work and do the necessary chasing around to get the information needed are asked to contact Paul Walton W2YNR.

This could prove to be a very worthwhile project for the benefit of all club members.

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 herein 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 AT THE OWENS-ILLINOIS
CLUB HOUSE ON MAY 6TH.

THE MEETING WILL START PROMPTLY
AT 8:00 PM.

DON'T FORGET TO.....
....SAY YOU SAW IT IN CROSSTALK
EVEN IF YOU DIDN'T !

Listen before you transmit...
Use VHF for local contacts...
Use minimum power necessary..

de K2JKA

Well here we are at the beginning of another summer; maybe not officially but the longer days and the warmer temperatures seem to speak for themselves. Hamfests and picnics are drawing near. The big outdoor event of the year FIELD DAY is just a little less than two months away. Now is the time to voice your intentions of lending a helping hand to this event. As in the past GCARC as a club will participate in the annual FD competition. K2AQL is the chairman of this event and will more than welcome any volunteers into the ranks of the committee.

As you read your monthly edition of CROSSTALK you probably don't realize that sometimes it is very difficult to sit here and try to imagine just what you want to read in YOUR paper. In this months issue I have reprinted an article from SCARA NEWS. I think that this article is an excellent addition to our club paper; it's very unfortunate, however, that we must look elsewhere for this material when we have so many talented people right here in our own club. Let's get on the ball and start turning out some material for CROSSTALK and in turn for the benefit of GCARC. The next time let's have someone else copy from us, and not us from them.

W E L C O M E

G.C.A.R.C. extends a warm welcome to the following new member:

WB2MSH Henry Feltman Woodbury

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

NEW PRODUCTS.....

...of interest to the ham

Amperex announces two new twin tetrodes, the 8457 and the 8458 for use as oscillators, class C amplifiers and frequency multipliers in mobile radio up to frequencies of 200 mc. The 8458 can supply 30 watts to a load with only 1 watt of drive at 175 mc. The 8457 is well suited for driver applications up to and including 200 mc. Both types are extensions of the 6360 family and the 8458 can be used in place of the 6360 for additional power output with only minor changes in the power supply. Both tubes are internally neutralized.

OSCAR III PROGRESS REPORTED

W6SAI reports that the problem of the transistorized linear amplifier for OSCAR III has been solved, bringing the satellites launch a step closer. Two tone tests at 144 mc. indicate one watt PEP output with intermodulation distortion products better than -27 db below peak output.

OSCAR III will weigh in at about 25 lbs, will be 6½ X 12 X 17 inches in size. It will of course be powered by batteries. A 25 mw beacon on 145.85 mc. will be included in the satellite. The hi keyer is included in the three planned telemetry channels. The repeater setup will receive a 50 kc. band centered in 144.1 and retransmit on 145.9 mc. at 1 watt PEP.

CODE AND THEORY CLASSES OVER FOR THE SUMMER

The code and theory classes that were sponsored by GCARC and held on Thursday evenings at Pitman High School wound up for the year on April 9. Out of some 39 that started the courses about 10 finished. Several individuals obtained ticket or at least took the test as a result of the training. Mal Mason W2MMD handled the code classes while Jack Layton K2JKA took care of the theory classes. As in previous years, no doubt there will be more classes starting in the fall of this year. The current class has 25 sessions of code and theory.

SCARA TO HOLD HAMFEST ON SEPTEMBER 20TH

The Southern Counties Amateur Radio Assn. will hold their hamfest at Lake Lenape Amusement Park in Mays Landing on September 20th. Watch CROSSTALK for further details.

OLD TIMERS NIGHT TO BE HELD MAY 2ND

The annual Old Timmers Night banquet will be held on May 2nd at the Stacy Trent Hotel in downtown Trenton. Guest speakers will include Mr. Clarence Tuska, ex 1WD, co-founder and first editor of QST. There will be the usual selection of door prizes and the dinner will consist of breast of chicken on Virginia ham. All of the above for the price of \$7.00 per ticket in advance and \$8.00 at the door. As usual this affair is stag. Advance tickets must be purchased by April 26th from A.G. Wentzel W2HX.

FOR SALE

2 meter GONSET COMMUNICATOR II
.....built in pre amp
.....mike and xtals
.....good buy at \$125.00

Sid Gantz WB2JRU

AN INTERVIEW WITH THE OM (WA2SEA)
by Rita McCormick

Over my objections the OM talked me into writing this interview, Harry McCormick, WA2SEA, and I live at
along with the six harmonics. Harry was born and raised in Williamstown New Jersey, Harry was born on February 4, 1921 and with the exception of nearly 8 years service with the US Army during and prior to WW II has lived in Gloucester County all his life.

He attended public school in Williamstown and is a graduate of Glassboro High class of 1939. For the past 19 years Harry has been employed at the Curtis Publishing Co. in Phila. as a printer.

Harry holds a General class amateur license and was first licensed as a novice in April of 1961. Prior to WW II while in the Army he worked at the Signal Corps laboratories at Ft. Monmouth, and was one of the first three enlisted men to become radar observers. After the start of WW II he went to radio communications school at Ft. Monroe Va. and studied radio operation and maintenance. Upon graduation he was assigned to the Army mine planter service and spent over four years on "Sea Duty" in the Atlantic.

Presently Harry works 80 and 40 CW with a Hallicrafters HT-40 and an SX-111 also works 6 meter phone at home and mobile, with a Clegg 99er and a three element beam and a HE-45-B respectively. Most of Harry's operating is done between the hours of 1:30 AM and 3:30 AM as he works on the 4 to 12 shift at the salt mine. Harry has RCC and GCARC award. He has 40 states and 4 countries confirmed. Harry is a member of the Glou. Co AREC.

he sure way to get along with a woman is to admit when you are wrong and keep your mouth shut when you are right.
tnx to WA2KGD !

FOR SALE

HQ-110-A Receiver
Excellent condition
100 kc. calibrator
\$200.....

12 watt 6 meter transmitter
with extras
\$50

GLENN SHIRLEY

KILOCYCLE CHATTER

W2LVW is going mobile once again. The antennas are growing from that new '64 chevy!

K2JKA now has a 1/2 KW on six meters.

Congrats to John Kull WB2GKH on getting his Tech License.

WA2XWM has a tough time keeping dates straight, he showed up for the directors meeting one week early!

K3ACR is reoperating from a fall while doing some antenna work (CHEESE BITS of the Mt. Airy VHF Club)

Anybody for climbing? Chanel 12 has been off the air for a couple of weeks due to antenna trouble. It's only 950 ft. up the tower!

AREC MOBILE BRILL HUGE SUCCESS

The AREC mobile drill that was held on April 3rd saw about 12 stations participating. About 8:00 PM the halo carrying cars converged on many sections of the county. Test messages were sent from the mobiles to various points. After the drill all of the participants converged on the Town Diner for some chow!

* DON'T FORGET THE REGULAR GCARC MEETING, WEDNESDAY EVENING MAY 6, 1964 8:00PM *

I am stationed at Lowery AFB in Colorado and am presently attending school. We occasionally copy some of the club members on SSB here in WØ land. Sorry we did not arrive in time to attend the April club meeting, but will be there for the August one. Will probably be on the air in a few months.

A3C William Uhland
AF 13805913

FCC NOW USING EDP EQUIPMENT

FCC has begun issuing amateur licenses with it's new electronic data processing equipment. Conversion to the new system has involved unavoidable delays in handling amateur applications the past few months, but it is expected that the back log will be cleaned up in a few weeks. Applicants for renewal who file before expiration date may of course, continue to operate beyond the expiration date.

The annual Armed Forces Day communications tests will be held on May 16 and 17. As usual certificates and special QSL cards will be issued. Consult page 28 of May QST for complete details.

ARRL 50th ANNIVERSARY MESSAGE...MAY 17

Fifty years ago the American Radio Relay League was formally organized. The first ARRL application blanks were printed in May 1914. Each membership then was in effect then a station appointment! League president Herbert Hoover Jr. W6ZH in an over the air commemoration of this occasion on May 17 will direct a special radio message to all radio amateurs.

W1AW will send this message on CW (18 and 7½ WPM) and voice, each hour all evening May 17. Starting with a voice transmission at 4 PM EDST and CW at 5 PM EDST, the official communication will be carried on all W1AW frequencies. CW and voice will be used on alternate hours until station closing time.

See page 10 May QST for full details.

HOW WELL ARE YOU UP ON YOUR THEORY?

1. If you wanted to match a 36 ohm antenna to a 72 ohm coax cable what value impedance line would you use for the quarter wave matching section?
2. If 100 watts of RF is fed into a 20 db attenuation pad what will the output from the pad be?
3. A transmitter final is running 500 volts at 100 ma. its efficiency is 70% and loss in the transmission line is 3 db, how much power is present at the feed point of the antenna?
4. A stage in a transmitter utilizes a combination of grid leak and cathode bias. The cathode current is 50 ma. the cathode resistor is 200 ohms, the grid resistor is 10,000 ohms and the total operating bias present on the grid is 60 volts. What is the grid current?
5. A power supply delivers 1000 volts DC, the value of the bleeder resistor is 100,000 ohms, what minimum power rating must the bleeder have in order to safely dissipate the heat?

answers on page 6.

DB'S MADE EASIER.....

.....by George Ell WA2WVY

Amateur radio men should all know that DB's are nothing more than ratios. These can be gains of amplifiers or losses through pads or transmission lines. In the majority of our work this is usually a power figure. To make some quick calculations using the DB, here are some simple rules that require no log tables, formulae or heavy math.

RULE #1. Three DB is either a double (2X) or 1/2 of the power at the input, irregardless of the amount of power. Examples: An amplifier with 3 DB gain has 1 watt input. The output is then 2 watts or 2 times the input....A coax cable with a rating of -3 DB attenuation has 1 watt fed in. The power available at the other end of the cable is .5 watts or 1/2 the input power.

RULE #2. Ten DB is either 10 times (10X) or 1/10 of the power at the input, irregardless of the amount of power.. Examples: A final stage in your modulator has a gain of 10 DB. With 3 watts input the output will be 30 watts or 10 times the input. A speaker pad has an attenuation of - 10 DB. With 1 watt into the pad there is 1/10 of a watt at the output.

Now to use rules 1 and 2..... An RF cable from your transmitter has an attenuation of - 33 DB at the final frequency. Your transmitter is feeding 100 watts out of the final. To find out how much power is available at the antenna do the following: 100 watts thru 10 DB is 10 watts, (1/10) 10 watts thru 10 db is 1 watt, 1 watt thru 10 DB is one tenth of a watt (.1 watt)..... .1 watt thru 3 DB is 1/2 or .05 watt. Now all we did was to use the 10 db rule 3 times for the 30 DB and to use the 3 DB rule once, to make up the 33 DB. Thus we have arrived at the answer with a minimum of effort.

This article was reprinted from the April 1964 edition of the Southern Counties Amateur Radio Assn NEWS.

Second application of Rules 1 and 2. An amplifier has a gain of 24 DB, with 1/10 of a watt input. (.1 watt) To do this one we will have to do it a little different. .1 watt with 10 DB gain is 1 watt (times ten) 1 watt with 10 DB gain is 10 watts, ten watts with 10 DB gain is 100 watts. Now we will use the 3 DB steps to go down to 24 DB, as we are at 30 DB at the present time. 100 w thru 3 DB (loss) is 1/2 or 50 watts, 50 w thru 3 DB is 1/2 or 25 watts. Thus the power out is 25 watts.

All we did was use the 10 DB rule three times for 30 DB and then used the 3 DB loss twice in the down condition for 24 DB. (30-6=24) By use of these two rules will allow you to get general workable answers for most of your everyday problems.

RULE #3. 0 DBM is equal to 1 milliwatt or 6 milliwatts. There is a difference here in that there are two standards. Most equipment is now being cahnged to the 1 mw standard but there is a lot of equipment still around that still has 6 mw ratings. Be sure of your standard before appling this rule.

If an oscillator has a rating of -9 DBM with a .001 watt standard, the output of the oscillator is .001 watt thru -3 DB or .005 watt thru -3 DB

(cont'd page 7)

ANSWERS TO HOW WELL ARE YOU UP ON THEORY

(on page 5)

- 1. 50 ohms
- 2. 1 watt
- 3. 17 1/2 watt
- 4. 5 ma.
- 5. 10 watts

DON'T FORGET MAY 6TH IS GCARC MEETING NIGHT...WILL YOU BE THERE THIS MONTH?

THE BITE OF THE "RED SCORPION"
by the Old Sock

The old timer starred in amazement as the young squirt staggered into the shack carrying a glittering, small, but obviously heavy load. With a grunt he lowered it to the bench and stepped back. "Well" he said, "how do you like it?" "Don't know" replied the old timer. "What is it?" The young squirt looked at him with scorn. "Don't you read the ads" he exclaimed. "That's my new RED SCORPION"

The old timer slowly walked around the rig, shielding his eyes when a reflection momentarily blinded him. "How do we turn it on?" he asked. In a few minutes the old timer beam and mike were screwed on and the "RED SCORPION" was plugged in. The young squirt paused with his finger on the switch, and then threw it on. Down the stairs came a scream "Right in the middle of my program" without a word the old timer walked to his junk box and rummaged through it for a filter. Again, in a few minutes, all 50 watts (PEP) were calling CQ on 20.

The first contacts were far from encouraging as weak signals, drift, and poor audio reports came in. The young squirt was dejected. "Lucky it's only on trial" he said sadly. "How much does it cost" asked the old timer? When the young squirt told him, he whistled. "My home brew only cost me $\frac{1}{4}$ of that. "But," objected the young squirt, "I hate to see my shack cluttered with home brew" The old timer puffed on his pipe for a moment. "Well, look at the advantages," he said. "You'll know every wire in it, and learn a lot about ham radio while you build it." "They tell me you can't save over kits" the young squirt exclaimed. The old timer thought a bit and said, "You don't if you use all new parts, but you have a junk box and so do I. Some of the most expensive parts can be scrounged from old TV sets.... why I'll bet we could build a rig with four times the power for $\frac{1}{2}$ the cost" The young squirt's eyes lit up. "Did you say we?" he asked. "Sure" said the old timer, "We'll have it together in no time." The young squirt slowly walked to the bench, unscrewed the antenna and mike and lifted the RED SCORPION. "Well" he said "Back to the drawing board". "Yup" said the old timer. "And bring your soldering iron.....maybe we'll win the home brew contest."

DB'S MADE EASY (cont'd from page 6)

is .00025 watts, .00025 watts thru -3DB
is .000125 watts or .125 milliwatts.

If a power amplifier has a rating of 36 DBM of the 1 mw standard, it's power output is 1 mw times 10 or 10 mw, times 10 or 100 mw, times 10 or 1 watt, (1000 milliwatts) times 2 or 2 watts, times 2 or 4 watts. This gives a total of 36 DBM. Remember that DB can only be read as power when the rating is in DBM and the standard is known, or if a power reading is known anywhere in the circuit. With a little practice, you will have these rules memorized and they will be a big help in your rapid calculations using the DECIBEL.

Say you saw it in CROSSTALK.....
.....even if you didn't.....

IT'S A FACT.....

from the Florida Skip
Ed, W4IYT, Andy Clark

There is a great possibility that within 90 days the FCC will step in and take some action regarding interstate phone patch operations. The movement has been gaining momentum and with the increased pressure being brought to bear by the various phone companies, along with the \$1 maximum station call to any city in the USA. Watch for public announcement along these lines.

WHERE WAS YOUR CONTRIBUTION TO THIS
MONTHS CROSSTALK? ? ? ? ? ? ? ? ?
WE DIDN'T GET IT! ! ! ! ! ! ! ! ! !

a members concept of.....

CLUB MEETINGS

.....by Wally Martin W2PLD

Why do you go to our club meetings? Is it to maintain personal contact with your fellow amateurs? Is it because you want to learn more about ham radio? Is it because of your interest in the various club projects? Or is it solely for entertainment? Maybe it is to listen to a lot of so called technicalities! It seems to me that our meetings should be kept simple and to the point. The simpler it is the better we will understand the goings on and the more that we will enjoy ourselves. I personally don't like sitting for a couple of hours listening to a lot of harranging that in the end accomplishes nothing. It seems to me that our intentions should be to keep abreast of amateur radio and not parliamentary procedure. There isn't anything that will disrupt a club more than a lot of petty differences.

Our club is supposed to be for the amateur and by the amateur! Let's keep it that way. Let's keep personal differences out of it, and most of all, anyone that is serving as an officer is doing so without pay, donating time and effort and therefore should not be subjected to personal insults on the meeting floor. Many meetings have lost their point solely because of their presentation and misinterpretation. Organization is a wonderful thing but let's look facts in the face; it can become too involved and defeat the purpose for which it was intended. A small club like ours should not demand all of the ifs ands and wherefores in order to gain a point; if we were a club of several thousand a different aspect would be present and justify these technicalities.

We should not have set up another club as a shining example to pattern ourselves after. Our club possesses enough people with capability of maintaining an A-1 amateur radio organization.

I have quite a number of years under my belt as a ham, as a matter of fact I started in 1918 and have belonged to many organizations and have also witnessed the downfall of many of them as a result of some of the afore mentioned incidents! I only hope that such a condition is not showing its ugly head in our club. To err is human; who are we to judge a fellow ham that has the

best interests of the club at heart?

Each club member being a part of our club should have the freedom of voicing a motion on the floor without being ridiculed so long as the motion is made in an orderly manner. If this policy is adhered to, a lot more work would be accomplished, members would have more time to learn about ham radio for which they joined the club in the first place, and the meetings would certainly be more interesting.

For the benefit of the new ham joining the club, his first impression will be one with the most impact, and to him will be the standard of operation. We want to make his attendance a pleasure and not a bore, which would give him the indication that he should not participate.

I like to attend meetings that are interesting, orderly, and where members are friendly. If in my small way I can contribute something from my past experiences that will help another member, I am only too willing to do so. This to me is the true ham spirit.

If any organization is attempted to be run by an iron-clad controlling board that attempts to make all of the decisions for its members, interest and membership will wane. Soon the club is in dire difficulty. We all don't see things in the same light, therefore each member is entitled to his own opinion and the majority of votes do the controlling, not a group of individuals. In the same light this group should

(continued on page 9)

FLASH

The annual GCARC hamfest will be held on July 26th at CRYSTAL BIRCH LAKE. Admission price \$1.50 per individual, \$2.00 for the whole family! Games and prizes for the kiddies! Activities for the XYLs! Swap and shopp for the OMs! Hidden transmitter hunt for the OMs! Complete details in next months edition of CROSSTALK.

Club Meetings (cont'd from page 8)

not be deprived of its duties as theres a time and place for every thing. I feel that their jurisdiction should have certain limitations for the welfare of the club and if this is followed through I am quite sure that harmony will manifest its self and the meetings will be a place to go to enjoy yourself, and give you a chance to find out why the other fellow is working more DX than you, or what new idea he has that can be of help to you with your problems.

HE'S A HAM RADIO NUT!

The March 23 issue of the Phila. Daily News carried a letter in the "Dear Penny" column from an irrate XYL. There is not sufficient space to reprint the entire letter. Here are some excerpts and Penny's answer. "I can't even enjoy the TV set because there is a lot of interference", "when I tell he he yells shut up", "he withdrew all of the money from our savings account to buy more equipment for his ham set", "I am building up so much tension that I am getting pains in my chest, and I am expecting soon."

Penny replies: "All that we can hope is that the call letters B-A-B-Y will awaken a new interest in your ham husband. We can pray that he will be as enthusiastic about tunig in on a infants happy gurgle and coo as on the squak box of a sender in Timbuctoo."

FOR SALE

Heathkit Mohawk Receiver & speaker good condition..... \$200 complete

Earl Rice

HAM RADIO THIS MONTH

- May 21CP Qualifing Run WLAW
May 6 GCARC Club Meeting
May 20 GCARC Board Meeting

So you think we have problems. Here is a quote from the APRIL issue of SCARA NEWS. "While most everyone attending the last meeting found it enjoyable, entertaining and enlightning, there were some expressions of dissatisfaction with regard to the meeting format. Stating it bluntly, we were accused of railroad tactics in not allowing more time for the business portion of the meeting." EDS note: Lots of luck.

Look for K2US the voice of the "WORLD'S FAIR" they should be on the air by now. The station is located in the Coca-Cola pavilion of the Fair and is open to visitors. Anyone producing a valid license is welcome to operate the station.

..... SAY YOU SAW IT IN CROSSTALK.....

WEDNESDAY MAY SIXTH IS G C A R C MEETING NIGHT. WILL YOU BE PRESENT ? ? ? ? ?

MINUTES OF THE APRIL 1964 BOARD OF DIRECTORS MEETING

The April meeting of the G.C.A.R.C. Board of Directors Meeting was called to order at 8:10 P.M. Wednesday, April 22. The minutes of the previous meeting were approved as read. Directors present were Hurst, Walton, Turner, Blew, Brown, Deuber, Parker, Layton, & Perry.

Treasurer's Report: Balance on hand as of 4/22/64: \$574.16.

Correspondence: Parker read letter from Assemblyman White with reference to the license plate bill being approved by House and Senate. Correspondence also from Cherry Hill Amateur Radio Group and potential ham from Camden. Walton noted having sent telegram to Governor Hughes asking that license plate bill be approved.

Committee Reports:

Membership: Walton in Sketchley's absence receiving application from WA4BMC, Mrs. R. W. Eggert, Lake Worth, Fla. Turner presented the following applications from Mason: Ronald Dolinski, Porchtown Rd., Newfield and Meir Baran, Harding Highway, Vineland. Both for associate membership. Walton presented the following applications from Bachman: for associate member: L. Gregory Radcliffe.

Awards: Certificate sent to WB2JRU for working 15 members. Two awards pending for working 30 members.

Publicity: No report.

House: Deuber reported one committee member dropped from the club.

Crosstalk: Layton reported normal progress.

RACES: Turner reported normal progress.

License: Deuber reported no applicants.

T.V.I.: Brown read letter from Jack Bowen to F.C.C. regarding Camden County complaints.

Hamshack: No report.

Field Day: Hurst noted having discussion with Frantz.

Hamfest: Hurst reported nothing further since last report. A discussion ensued as directors were advised of details.

Picnic: No report.

IX: No report.

AREC: No report.

Code Class: Seven persons completed the advanced class. Beginners attendance dropped to zero, but several members obtained novice licenses.

Old Business: Blew submitted Martin's report on plaque. Brown motioned and was seconded that the club purchase a plaque as recommended by Martin; 10" by 14" with 18 plates. The wording to be left up to the committee. Motion carried.

Blew submitted a \$12.50 bill for Constitution Copies. A motion was carried for payment of bill.

Parker submitted a \$17.00 bill for letterheads. Payment to be deferred temporarily pending a printing mistake.

Walton noted having bought an embosser for \$6.50. Not received yet.

Walton noted that Trustees report concerning club property was not yet complete.

New Business: Walton that a vote of thanks be entered in the minutes for Layton and Mason and allconcerned for conducting the code class.

Turner motioned that any special awards in the future must be approved by the Board of Directors. Motion carried.

Hurst motioned that the award be given Feck for outstanding work as editor and publisher of "Crosstalk" during 1963. Motion carried.

Walton offered to write a letter of conciliation to Charlie Sketchley concerning the misunderstanding arising over the award to Jim Feck.

Brown noted that K2ARY and K2GYM have reorganized a Salem County Ham Club and desire to meet with our club. Parker to write an invitation to our meeting.

Layton brought up the possibility of a club directory. Turner motioned that the board approve the publishing of a directory and the necessary funds involved, with the president to appoint a committee for same. Motion carried.

Walton noted the motion by Wally Martin which was defeated at the previous club meeting. The Board agreed that the president will decide in the future if a motion should be set aside for consideration by the Board.

Motion was carried that the meeting be adjourned at 11:10.P.M.

Respectfully submitted,

D.S. Blew, WAZKWM
Recording Secretary