



PACK RATS' CHEESE BITS



MT. AIRY V.H.F. RADIO CLUB, INC., PHILA., PA.
(50.2, 145.2, 221.4, 432.3 & 1296.3 Mc.)

CLUB CALL: W3CCX

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

MEMBER CLUB: DELAWARE VALLEY COUNCIL OF AMATEUR RADIO CLUBS

MEETING NOTICES: LAST PAGE

VOLUME XI

MAY 1968

NUMBER 5

OUR PREZ SAYS



LADIES NIGHT....MAY 11....what more can I say? This is probably THE most important event the club holds....all of you were mailed tickets and the rest is entirely in your hands. K3KTY, John has taken care of all the last minute details. A nice evening of dancing with good food and drink has been planned. Trophies to the contest winners will be awarded, and a few other awards of merit will be made, but I can promise there will be no long boring speeches. This is a night for the ladies to enjoy and for everyone to have fun. See you there....

JUNE QSO PARTY....8th and 9th...HILLTOWN, PA. site of the Buxmont Riding Academy. This year's field day contest will be held at the location above Chalfont, PA. where the contest was held for four years up until last year. We were pre-empted last year by a horse show because our request for the use of the property to the Hilltown Civic Association was a bit late. We shall try to see that this does not happen again. Hilltown is an excellent location for this event, boasting an elevation over 600 feet, adequate places to tie on the nose-bag nearby, outdoor plumbing, and plenty of space where a man can breathe. The operation will begin with the antenna party on Friday night, as usual, and all the equipment that is available will be tested. Anyone wishing to check out a converter on a good antenna can do so at this time if it has standard power connectors, or if power is provided. We can use all the help that we can get, and anyone wishing to camp out for either one or both nights is welcome to do so. If you want to cook, bring a charcoal grill, for I don't think a campfire would be in good taste.

Election time is coming up soon. Ed, W3HKZ has been appointed to the nominating committee and has selected K3IUV and WA3BIV as assistants. They will be looking for candidates for club positions. A private (or public) word to these gents will get consideration for a position on

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ARRL BULLETINS

PACK RATS' CHEESE BITS is a publication of the Mt. Airy V.H.F. Radio Club, Inc., Philadelphia, Pa., and is published monthly.

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DEADLINE FOR ARTICLES IS THE 20TH OF EACH MONTH.

ALL INFORMATION SHOULD BE SENT TO:

ELLIOTT T. WEISMAN, K3JJZ
8533 ALGON AVENUE
PHILADELPHIA, PA. 19152
215 - PI 2-3525

TRUSTEE OF CLUB CALL: W3CCX

W3SAO, FRANCIS BRICK
821 W. LINDLEY AVENUE
PHILADELPHIA, PA. 19141
215 - DA 4-7524

PRINTER AND SUBSCRIPTION MANAGER:

K3GAS, DOC CUTTLER
7815 NEW SECOND STREET
PHILADELPHIA, PA. 19117
215 - ME 5-1078

AWARDS CHAIRMAN:

W2ELF, JOSEPH KILGORE
#5 SUNNYBROOK COURT
STRATFORD, N.J. 08084

DIRECTORS' MEETINGS ARE HELD ON THE SECOND WEDNESDAY OF EACH MONTH AT DESIGNATED LOCATIONS.

CODE PRACTICE:

7:00 TO 7:30 P.M. MONDAY THROUGH FRIDAY, 50.2 MC. BY W3CL, HARRY STEIN.

MONDAY NIGHT NETS:

145.2 - 7:30 P.M.
50.2 - 8:30 P.M.
221.4 - 9:30 P.M.
432.3 - 10:30 P.M.

OFFICERS - 1967-1968:

PRESIDENT: W3LHF, DAVID ZIMMERMAN
VICE-PRES.: W3HSS, CHARLES LUSTICK
CORRES. SEC.: W3SAO, FRANCIS BRICK
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W3KKN, ERNEST KENAS
K3UJD, MARIO FONTANA
K3CIV, RALPH HERSH
(Ex-Officio)

PHILADELPHIA COUNTY ARPS:

E.C.: W3PST, WOODY HALDEMAN
1732 LONEY STREET
PHILADELPHIA, PA. 19111
215 - RA 5-1106

MEETINGS: FOURTH WEDNESDAY OF EACH MONTH AT 8:00 P.M.

NR 161, March 28, 1968

Field Day 1968, June 22 and 23, will incorporate a number of new features. Suggestions from the field should make this annual test of emergency gear particularly challenging this year. Significant changes include combining Class D and E home stations into one category eligible for the d.c. input and emergency power multipliers. The Field Day period will be limited to 27 hours, including set-up time. Power multipliers have been rearranged to break at 10, 50 and 200 watts. Increased points for traffic and 100% emergency power will be offered. In addition, the 1.5 battery multiplier will apply to the under 10 watt Class A as well as Class B and C stations. Full rules will appear in May QST AR

OUR PREZ SEZ Continued

the ballot. If you feel you would like to serve but don't get on the slate by a gentle hint, get a friend to nominate you for the position from the floor. This is our normal procedure, and I would like to see a real election this year.

MAY MEETING ARRL NIGHT...Ed Tilton will be the speaker on the evening, and a host of ARRL officials...SCM's EC's, HDQ Staff and the like have been invited. Should be a really big night. Let's be out in force gang and show them some good club spirit!!!

W3LHF, Dave

Know your constitution and by-laws adopted September 25, 1956.

Article 1 - Name

The name of this organization shall be the Mt. Airy V.H.F. Radio Club of Philadelphia

Article 1 - Ammended August 13, 1958

The name of this organization shall be the Mt. Airy V.H.F. Radio Club, Incorporated

W3SAO, Frankie

From Hi-Q Flatbush R.C.

Note found under the windshield wiper of a parked car:

'I just ran into your car. The people who saw the accident are watching me write this note. They think I am writing my name and address. They are wrong.'

NET SCHEDULES ON 6 AND 2 METERS

Paul WA3HT

Did you ever get on the air and call CQ for let's say five minutes or so and then have someone come back lambasting you for qrmng a net? Did you ever participate in a net only to have it qrmmed by a fellow ham in a QSO? Obviously no one qrms on purpose. Usually the people qrmng a net give two excuses for doing so. They don't know a net is on a given frequency or they can't hear the net. Okay, I'll go along with that the first time but you would think they would make a note of this net in their log books so they won't qrm it again. The fact is that the majority of hams don't do this. They are very lackadaisical when it comes to nets.

On the other hand, you have a newcomer who wants to get himself known on the airwaves. His most frequent question is "when and where are the nets". So you tell him about the two or three nets that you know. Obviously this isn't the complete list. If he is really net-conscious, he will have to ask about a dozen hams before he gets a list that resembles anything like the finished product.

Therefore, I decided to compile a list of net schedules and have it printed. I have been using this list myself for quite some time. On April 5, 1968, I was pinch-hitting for WA3FAB in the EPA Termite Net. Check-ins were low that night so in order to kill time I read off the complete list as printed below. One station in the net suggested that the list be duplicated so other stations could know what is going on. Steps are being taken in this direction.

I do not have to go into the importance of traffic nets. Social nets are also just as important. Not only do they bring fellow hams together, but they also have a great impact on non-hams. W3CL's 6 meter net was my favorite "radio program" for at least a year before I got my license. These nets should also be supported, even if you are only "in and out".

The list I have is not complete by any means. In fact, I suggest that if anyone has additions or corrections to this list, they can publish them in Cheese Bits or contact me via radiogram through the 6 or 2 meter EPA VHF Net.

Here is my list of 6 and 2 meter nets:

<u>Day</u>	<u>Est. Time</u>	<u>Band</u>	<u>MHZ Frequency</u>	<u>Sponsor or Type of Net</u>	<u>Net Control</u>
Mon.- Fri.	19:00	6	To be ¹ Announced	EPA VHF Traffic	WA3CQO
	20:00	2	146.150	EPA VHF Traffic	To be ⁴ Announced
Mon.	19:00	6	50.4	Pittsburgh VHF Society	K3YXJ, K3JTH K3BWV
	19:05	6	50.55	Wilkesburg Emergency (Traffic)	K3NDA K3YXJ
	19:30	2	145.2	Mt. Airy VHF Radio Club	W2EIF ²
	20:00	6	50.7	Germantown Radio Club	WA3GFZ
	20:30	6	50.2	Mt. Airy VHF Radio Club	W3CL ²
	20:30	2	145.2	Maryland Termites	WA3CBC
	20:30	2	146.25	Delaware Valley Radio Club	W3CTC/3
Tues.	19:30	2	145.2	Haddon Heights Net	WB2SZK WB2NOK
	20:00	6	50.2	Book Review	K3WEU
	21:00	2	145.2	Maryland Termites (NJ)	WB2MTU

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<u>Day</u>	<u>Est. Time</u>	<u>Band</u>	<u>MHZ Frequency</u>	<u>Sponsor or Type of Net</u>	<u>Net Control</u>
Wed.	20:30	6	51.045	Delaware Valley Radio Club	W3CTC/3
	20:30	2	145.2	Penn Wireless Radio Association	K3MEH
	21:00	2	145.3	South Jersey Radio Association	To be ³ Announced
Thurs.	20:00	2	145.2	Germantown Radio Club	WA3FOF
	20:30	2	145.2	Maryland Termites	WA3CYD WA3CBC
	21:00	6	50.2	Philadelphia ARPSC Traffic	WA3DZU
Fri.	21:00	2	145.2	Maryland Termites (EPA)	WA3FDB
Sat.- Sun.	19:00	6	To be ¹ Announced	SNJ VHF Traffic Net	WB2VVB WB2YEH
Sat.	21:00	2	145.6	Maryland Termites (NY)	WA2ZPD
Sun.	20:30	2	145.3	Baltimore and Ohio	K3VPW

- 1 At time article was printed, net frequency was 50.25 MHZ. A change was anticipated.
- 2 WA3CQO is alternate net control station.
- 3 W2UGL was net control station when this article was printed.
- 4 Alternate net controls. Listen for WA3CQO, WA3IDK, WA3FBK, WA3ADN or WA3HOT.

Even though this list is incomplete, I hope it can benefit every ham that reads it.

You can get acquainted with us locals by checking into one of our nets. So have fun. C U soon on the air. 73

Noise Diversity - Something New to Try on VHF
C. McCormick K8DFR

In the past we have had examples of the use of more than one antenna on a receiver or a transmitter and this is called antenna diversity. Many television distribution amplifiers also have used more than one tube in the RF stages of the amplifier, and this might be commonly called tube diversity.

For some time I have felt that the principle of paralleling parts, etc., to reduce noise, and to pick those of the lowest noise value has not been tried and tested enough on VHF. Let's cite an example - it is generally known that resistors contribute noise. A single resistor (for example) of 100K value plate load resistor adds a certain amount of noise to the circuit in which it is used. It is my viewpoint that four 400K resistors in parallel resulting in a 100K resistance, and used in the place of the first mentioned plate load resistor contribute less noise, and as a result give you a slightly better signal to noise ratio.

You may also try the same idea with other resistors in the first stages of your receiver. Why not try it? Resistors cost very little these days.

I have called my new idea - Noise Diversity.

432 AND UP
Bert Soltoff, K3IUU

A number of openings to the south have livened up the 432 net and band during the past month. W4JFU in Virginia has signed into the net and also worked a number of the local stations several times recently. Another Virginia station heard regularly is K4QIJ who can be found on CW at about 432.024. W3BSV, located in Salisbury, Maryland, and W4JFU have nightly schedules at 20:00 and are looking for contacts in this direction. Hal, W3HFY, is back on the net regularly, and his potent SSB signal should serve as an incentive to those of us who are still struggling with SSB on 6 meters! Also nice to hear WB2FDL, Joe, back on after an absence of nine months due to night shift work. Incidentally, my contacts with W4JFU are made with my antenna 10 feet above ground, and 20 watts out of both ends of the path. So how about you fellows with unconverted Link or RCA transmitters getting them on the air. W3RKN and W3CL take note!

Moving up to the next band, 1296, a lot has happened since the last report. K3DYO and myself achieved a two-way contact on 1296 over a two-mile path. The rig at K3DYO's consisted of an APX-6 receiver, a varactor tripler for transmitter, and a 1296 helical antenna. The rig at K3IUU's consisted of an APX-6 transmitter and a crystal controlled converter into the A4 for receiving. Antenna was my 432 colinear! I also tried a 2 meter beam, a 220 colinear, and a 1296 dipole in the basement. These all yielded poorer results, although the signal was heard with any of the antennas. With the 432 colinear, signal was about S-7. My next move is obvious. I expect to shortly get a decent 1296 antenna outdoors. Added news flash. One-way contact across the river between WB2IDE transmitting, and K3IUU receiving, still with said 432 colinear. Signal here was only S-1, but results are encouraging. Will keep you posted on developments as they occur.

Another news flash received from the North Jersey gang via W3VIR, Bill. A group of North Jersey 1296 enthusiasts used the 60 foot parabolic dish at Bell Labs on April 12 and 13 to operate moon bounce. They made two-way contacts with Switzerland, England, and three in California. They also received "heard" reports from a number of other stations. One of the stations in California (WB6IOM) was using only a ten foot dish. That is well within the capability of most of us so what do you say fellows, how about serious consideration of a moon bounce team. Harvy take note again - we need an aggressive team captain to organize it. Well that's it for this month - see you on the Monday net at 2200.

73,
Bert

FORMATION OF A RITTY ASSOCIATION FOR THE DELAWARE VALLEY

In talking with many teletype men in person and on the air, there appears to be a strong indication of a need and desire for a Ritty Association to serve the Pitty men of the Delaware Valley.

The general consensus is that many of the clubs, with which we are all associated, have varied and mixed emotions and interests, but nothing specifically devoted to the Ritty men.

Dick Urian, W3CPO, and Phil Catona, W2JAV - two of the foremost leaders in the propagation of the art of Ritty in this area - have agreed to share in the forming of an association.

A volunteer committee has been formed to determine how many Ritty/ers in this area are interested in cooperating in such an energetic endeavor.

The success of such an unique organization will be up to you as individuals.

Such details as a name, officers, a constitution, etc., were discussed at the organizing meeting on April 19. For further information contact:

Ray Gianchetti - WA2CUB, Chairman
Phil Catona - W2JAV, Advisor

Dick Urian - W3CRO, Advisor
Bob Scott - WB2AHF, Mailing

TWO METER ACTIVITY
David Zimmerman, W3LHF

It is nice to be able to report that the band has finally livened up some and that "2" no longer sounds like a ghost town on Sunday morning. The very nice warm days lead to very cool evenings and some form of inversion is to be expected every night. In order to catch the better ones, it is necessary to check the band every night.

A very nice opening all up and down the coast occurred on the 7th and a somewhat smaller version on the 13th. These nights both being Sunday should have found a lot of activity. There was not much in this area. I did hear Joe, W2EIF, working a few Maryland stations recently, and a Flock of NNJ stations working K4QIF in Virginia. Many stations in Connecticut and Massachusetts had to call repeatedly for contacts, however.

Like to mention again the sked between W8AEC, Bill, in WVA and W1MEH in Connecticut on Saturday nights at 2030 EST. Bill is usually at 144.070 on CW but he will listen at 145 up and shift to AM at 145 if called after his sked. Here is your best chance to pick up WVA if you need it.

Heard from an old friend of many of our members the other night.... K2YVE, Primo. He has been spending a large part of his summers in Maine and has recently purchased several hundred acres with a farm house. His plans for this summer are to fix up the house, and to install a good antenna system for two meters. This in preparation to moving up there when he retires. Primo has been around on the band for many years and has attended the picnic on several occasions, which he plans to do this year.

Like to mention also that "Hidden Transmitter Hunting" is about to begin once more. Some of you have been missing out on a good time by passing this event by. Check with a few of the expert sniffers from last year to see how simple this business really is and give it a try.

Still need a few more helpers for the June QSO Party on all bands. We will be holding the event at Hilltown again this year and expect to really pour on the coal. Sign up now.....73 and

CU on 2....Dave

RELATIVE POWER METER - From HAM HUM

Many modern transceivers include a meter which may be referred to as an output meter, relative power meter or similar designation. Can this meter be used for adjusting the transmitter controls for maximum output? YES!

Is a higher reading on this meter an indication of a properly tuned antenna? ABSOLUTELY NOT!

Odd as it may sound, the relative output meter will read less and less as the antenna is tuned or pruned to optimum. Why is this? These meters are usually simply uncalibrated R.F. voltmeters which read the R.F. voltage at the transmitter antenna connector. The antenna always presents its lowest impedance at resonance, i.e. non-reactive. Consequently, the relative power meter or R.F. voltmeter will be measuring the R.F. voltage across a minimum impedance when the antenna is correct.

As you move up and down the band either side of the frequency for which the antenna is resonant, you will find the relative output minimum at the point where you are actually radiating best. Don't be fooled by high readings on the relative power meter. It may be used for tuning the transmitter for maximum output and as a relative indication of whether the transmitter and antenna are still like they were yesterday on a given frequency.

Leon, W5VCE

SWAP SHOP

by W3ZRR

FOR SALE

- Heathkit AM Tuner BC-1A. \$7.00
 - Heathkit GC-1A Mchican SW and Ham Band Receiver. \$55.00
 - 2-M Phone Transmitter, 25 watts on 8 x 12 chassis complete with power supply and modulator. Uses 48 MC crystals, 3 meters - PA, GRID, FSM. \$25.00
 - 1-Hammarlund HQ-129X and commercial panadapter PC-1A, XTAL conv (417-A 2 meters), XTAL conv (6 meters), plus power supply for convert. \$135.00
 - 1-CW Transmitter 40-W, 80-40-20 meters VFO, 1614 PA with power supply. \$15.00
- CONTACT: W3NSI, Lynford S. Rowland
1822 Dallas Road
Philadelphia, Pa. 19126
HA 4-0875

FOR SALE

- 1 Interceptor B. \$225.00
- CONTACT: K3BPK, Dave Gindin
676-5571

FOR SALE

- Hammarlund HQ-170C-A-1 Condition (used only during contests). \$195
 - Comco 220 Transmitter with AC power supply, speaker and cables. \$25
- CONTACT: WA3EPS, Mort Mazer
657-2221

WANTED

- CDR Control Box
- CONTACT: K3GAS, Doc Cutler
ME 5-1078

FOR SALE OR SWAP

- Multi-Elmac PMR-7 RCVR with HB AC supply.
- CONTACT: WA3BIV, Carl Barish
LI 9-8765

WANTED

- Other receiver half of UHF Car-fones and/or low band FM receiver strip. Will buy or swap.
- CONTACT: W3HKZ, Ed Kushner
825-0775

FOR SALE (Estate of Dr. Phillips, W3JGH)

- Hammarlund HQ-170 receiver with clock, Ser. No. 9571
 - Johnson Valiant II mtr. 240-105, Ser. No. 1131
 - Astatic Microphone, Model UG8
 - Eico Model 315 Signal Generator
 - Eico Model 221 VTVM
 - Simpson Model 260 Multimeter
 - Triplet Model 2413 Tube Tester
 - Mars (Japan) Standing-Wave Indicator SW 10
 - 24-hour Clock
 - Miscellaneous Items
- CONTACT: W3PST, Woody Haldeman
725-1106 - 686-3695
Night Day

FOR SALE

- Pair - Telrex 2 meter 11E1 beams, new baluns and stacking harness (125' RG8V included). \$50
 - 432 X-titter 25W centimeg with relay and P/S. \$75
- CONTACT: K3IPM, Stanley Smith
133 Hogeland Road
Southampton, Pa.
355-2867

WANTED

- 2 meter FM taxi transceiver -solid state battery operated portable T.V.
- CONTACT: W3YZC, Al Schechner
Sherry Lake Apts. #122
Conshohocken, Pa.19428
825-2679

DID YOU KNOW THAT

K3IUUV, Bert Soltoff, in addition to all his other projects has decided to run for committeeman. His kids have given him a campaign slogan "Be Alert Vote for Bert". Good luck Bert. His other major accomplishment is a two-mile contact on 1296 MC with K3DYO. W3BVR, Ted Lief, is still in serious condition at Delaware County Memorial Hospital, Drexel Hill, Pa. 19026. Send cards to Room 338.

MEETING NOTICES

The next DIRECTORS MEETING will be held on May 8 at the QTH of K3HSS, Chas Lustick, 5924 Hasbrook Avenue, Philadelphia, Pa. 19120.

The next REGULAR MEETING will be held on May 15 at the West Oaklane Jewish Community Center, Sedgewick and Thouron Streets, Philadelphia. Guest speaker for ARRL Night will be W1HDQ, Ed Tilton, with a popular VHF subject and a presentation. Gil Crossley, W3YA
George VanDyke, W3HK
Ed Raser, W2ZI
Come prepared with questions for your ARRL representatives.

From Hi-Q Flatbush R.C.

Confucius Says:
Ham who run minimum of one KW asking for maximum of one year
From Honorable Frank Charry Charry
Ski, WB2THL

SLUG TUNED INDUCTANCES

Compiled by K3GAS

Page TA

Unless otherwise stated, all wire is enameled, close wound, phenolic forms, Inductance in microhenries.

<u>INDUCTANCE</u>	<u>TURNS</u>	<u>WIRE#</u>	<u>FORM</u>
.17-.27	5	24	3/13 Ceramic (Miller 4301)
.24-.4	5	28	1/4.
.27-.41	7	28	3/16 Ceramic
.35-1.0	6	20	3/8
.43-.85	8	28	1/4 (Miller 20A687RB1)
.64-.95	12	28	3/16 Ceramic (Miller 4304)
.65-1.3	10	28	1/4
.67-1.25	8	32	1/4 (Miller 20A106RB1)
.7-1.2	8	22	DSC to fill National XR50 form 3/8
.9-1.6	7	28	3/8 Ceramic (Miller 4403)
.9-3.0	14	22	DSC to fill National XR50 form 3/8
1.0	13	26	wind 1/2 inch on 3/8 form
1.2	10	24	3/8 Ceramic
1.3	21	24	1/4
1.5	18	28	1/4
2.0	16	26	3/8
2.2	32	24	1/4
2.2	18	24	3/8 Ceramic
2.5	19	20	1/2
2.8-5.0	18	30	1/4 (Miller 4504)
3.7	28	28	1/4
3.8	28	24	3/8
3.8-8.5	18	32	1/4 (Miller 20A68RB1)
5.0-9.0	23	30	1/4 (Miller 4505)
6.7-15.0	26	30	3/8 Ceramic (Miller 4406)
7.5	40	28	3/8 Ceramic
10	32	20	1/2
13.8	54	30	3/8
15.0-25.0	45	32	3/8 Ceramic
22	65	32	3/8

The ARRL VHF Manual shows RF choke values for VHF bands and how to make your own-page 312.

